



GENDER DIFFERENTIAL IN LIVESTOCK PRODUCTION WITHIN AGRO-PASTORAL HOUSEHOLDS IN IDO LOCAL GOVERNMENT AREA OF OYO STATE, NIGERIA

Ayinde, Y. O., Epunam, V. E. and Oyesola, O. B.

Department of Agricultural Extension and Rural Development, Faculty of Agriculture and Forestry, University of Ibadan, Ibadan, Nigeria

Correspondent contact details: yewandeyinde@yahoo.com, ob.oyesola@mail.ui.edu.ng

ABSTRACT

This study examined gender differences in livestock production within agro-pastoral households in Ido Local Government Area of Oyo State, Nigeria. A purposive sampling technique was employed due to the concentration of agro-pastoralists' camps in the study area. 120 respondents were sampled for this study which was subjected to interview schedule in collecting data and data were analysed using descriptive and inferential statistics. The study revealed that 98.3% of the respondents were married, mostly of the Islamic religion (99.2%) and had no formal education. All the respondents were from Fulani ethnic background. 45.0% had a relatively large household size of 6-10 persons. Male agro-pastoralists engaged in cattle rearing, sheep, goats, while the females engaged in milk processing, fowl rearing, and trading. Also, 92.5% were faced with a lack of livestock safety due to free range system of production as their main constraint in the study area. A significant difference existed between male and female agro-pastoralists income in the study area ($t=3.156$, $p=0.002$) while there was no significant difference in access to production resources between male and female agro-pastoralists ($t=0.293$, $p=0.770$). It was concluded that differences exhibited between male and female in livestock production in the study area. It is recommended that sensitisation should be done by gender production resources and management towards increasing their herd sizes and livestock products.

Keywords: Gender, livestock production and agro-pastoralist

INTRODUCTION

Livestock remain a lifeline for many of the world's poorest people because it is considered as key asset for rural households and a primary livelihood resource for rural communities. About 752 million of the world's poor keep livestock to produce food, generate cash income, manage risks and build up assets (FAO, 2012). According to Okali (1998), Thornton (2001) and FAO (2011) rural livestock-based economies, rural women comprise two-thirds (approximately 400 million people) of low-income livestock keepers whereas, in particular, activities related to small livestock production (poultry, sheep, and goats), milking and processing of milk, are carried out mainly by women and, to some extent, by children. Women and men experience different challenges when accessing, managing and controlling livestock assets. Despite their important contribution and roles in livestock management, women often face greater constraints than men in accessing natural resources, extension services, marketing opportunities and financial services as well as decision-making powers. Pastoralism as a mode of production has existed in Nigeria for hundreds of years under varying ecological conditions and it has proved to be an important economic and socio-cultural activity (Iro, 2003). About 70 percent of the world's rural poor both women and men engaged in the production of Cattle, goats, sheep, pigs, chickens and other farm animals as part of their livelihood activities. For many smallholder farmers, livestock production has become a source of income allowing millions of the poor to save and build assets and to insure themselves against shocks such as crop failures, accidents and illnesses. Such "assets" and insurance are

particularly important to women, who remain the backbone of global smallholder agriculture, and also one of the best hopes for ensuring future global food security.

Gender is a relational term that includes both women and men. It refers to the socially determined differences between women and men Odebode (2007). Gender roles are learned and vary across cultures and over time, they thus change. But the issue of gender equality is a process of being fair regardless of anything to both women and men and to ensure fairness measure available to compensate for historical and social advantages for both women and men operating at the same level while equity can be understood as a means where equality is the end, that is, equity leads to equality.

The effects of the gender imbalance are heavier for women especially in developing countries. gender imbalance in the developing nations

These often occur as a prevalent factor in the societies whereby, inhibiting women from reaching their full potential especially in the agricultural sector, including livestock production, and therefore compromise the achievement of overall household food security and nutrition. Thus, when rural women have access and control over livestock or livestock products owned or managed, these tend to increase household coping strategies since, women economic activities primarily aim at their immediate household, resulting in a positive impact on overall household well-being and nutrition (IFAD, 1999 and FAO, 2012).

The Agro-pastoral practice has made a significant contribution to the nations' economy. Two preconditions for pastoralism include the



domestication of several animal species by early farmers; and the appearance of more efficient ways of using these animals (David, 2009). Despite the contribution of the agro-pastoralists to the nation's economy, they are among the neglected ethnic group in Nigeria and are able to perform their economic and political rights (Juul, 1996 and Iro, 2003). Moreover, there is an inequity gap in decision making, rights access to production inputs and the control over production resources. Several works of literatures abound in livestock production and processing; Ayoola and Odiaka (2004) studied gender perspectives on Agricultural Development; a case study of Benue State, Nigeria where he reported described gender as a socio-economic parameter that is useful in analysing the roles, responsibilities, opportunities and constraints for both men and women along different ethnic, religion and ecological lines Tangka, Jabbar and Shapiro (2000) examined gender role and child nutrition in livestock production systems in developing countries where he opined necessary condition for the maintenance and reproduction in livestock production for socio-economic system. But, there is limited information on gender access to production resources in the specific role performed and constraints faced by both male and female in livestock production. However, it is imperative that this study needs to recognize and address the existing differences among gender especially in livestock production. It is against this backdrop that this study provided answers to the following research questions:

1. What are the personal characteristics of the agro-pastoral households in the study area?
2. What are the constraints faced by male and female within agro-pastoral households in the study area?
3. What is the level of access to livestock production resources between male and female agro-pastoralists in the study area?
4. What are the livestock enterprise characteristics (Type of livestock kept, size and method of production between male and female within the agro pastoral households in the study area?)
5. What is the significant difference in the constraints faced in livestock production between male and female within agro-pastoral households in the study area?
6. What is the difference in livestock size between male and female within the agro pastoral households in the study area?
7. What is the difference in access to production resources between male and female agro pastoral households in the study area?

METHODOLOGY

The study was carried out in Ido Local Government Area of Oyo State. The target

population constitutes adult male and female within agro-pastoral households. The local government comprises of 19 rural communities while 4 communities were purposively selected due to the concentration of agropastoralists camps in the area. Thirty (30) respondents were selected randomly in each of the communities constituting females and males to give a total of 120 respondents.

Interview schedule was used in collecting the data for this study. Descriptive statistical tools such as frequency counts, percentages and means were used to describe the data collected, while inferential statistical (T-test) was used to test hypotheses.

RESULTS AND DISCUSSION

Personal characteristics of respondents

Results from Table 1 reveals that the majority of male respondents (30.9%) were between the ages of 20- 40 while the female respondents (16.7%) are between the ages of 31 - 45. The mean age of the respondents is 41.7. This implies that the respondents are still in their active ages to participate in livestock production since it is their primary occupation in agro-pastoral camp. This finding is in conformity with the reports of Ekong, (2003) and Jibowo (2000) which stated that most Nigerian farmers are between the ages of 41- 50 years. This Table 1 further shows that majority of male respondents (64.2%) were married while a few (0.8%) were single. Also, 35.0% of female respondents were married while 1.7% was single. This suggests that most of the respondents were married in the distribution. This is in agreement with Oladele (1998) that marriage provides additional farm labour for the farmers.

Education is an essential tool for any development. It enables individuals to broaden their minds and assist in taking important decisions regarding acceptance of innovations. Table 1 shows that majority of the respondents both male (40.8%) and female (20.8%) had no formal education while few among males (25.8%) and female (12.5%) had the Quran education. These justify the inclusion of nomadic education in the National Policy of Education to take care of the majority of pastoralists that do not have the advantage of formal education (National Policy on Education 1998). Most of the male (64.2%) and female (35.0%) respondents were Muslims while just a few of the male respondents (0.8%) were Christians. Furthermore, 33.3% of the male respondents had 21 to 40 years of experience in livestock production while 27.5% had 10 to 30 years of livestock production experience, with a mean of 30 years

Also, 29.1% of the male respondent had 10 to 30 livestock in term of size while 25.8% had between 31 to 50 livestock, among which the highest (15.8%) in female distribution kept



between the number of 5 to 15 livestock in term of size. This implies that the males were more involved in livestock rearing than female especially cattle production as this could influence their level

of production and at the same time translate to the financial assets since male tends to have more financial responsibilities than women because they are mostly heads of the family.

Table 1: Distribution of respondents by personal characteristics

Variables	Male		Female		Mean
	F	%	F	%	
Age					
20 – 40	37	30.9	9	7.5	41.7 years
41 – 50	14	11.7	20	16.7	
51 - 60	17	14.1	10	8.4	
Above 60	12	10.0	1	0.8	
Religion					
Christian	1	0.8	0	0.0	
Muslim	77	64.2	42	35.0	
Marital status					
Single	2	1.7	0	0.0	
Married	76	63.3	42	35.0	
Educational attainment					
No formal education	49	40.8	25	20.8	
Koranic	31	25.8	15	12.5	
Years of experience					
2 - 20	27	22.5	33	27.5	30.0
21 - 40	40	33.3	2	1.7	
41 - 60	8	6.7	3	2.5	
61 - 80	5	4.2	2	1.7	
Livestock size					
10 - 30	35	29.1	19	15.8	33.0
31 - 50	31	25.8	16	13.3	
51 - 70	4	3.3	6	5.0	
71 - 90	8	6.6	1	0.8	
	120	100.0	120	100.0	

Enterprise characteristics of Agro-pastoral households

Table 2 reveals that 55.0% of male respondents kept cattle out of which 50.0% had total control over it, 62.5% kept sheep out of which 52.5% had total control over it while 58.3% kept goat out of which 40.8% had total control over it who are the majority in the distribution. 33.3% of Female kept local chicken out of which 18.3% had total control over it while 34.2% of female respondents are only involved in cheese production out of which 29.2% had total control over it. This implies that male respondents kept cattle, goat and

sheep in which, they had total control over them since males are the predominant ones that get involved in keeping large ruminants. Also, the number of female respondents that get involved in keeping non-ruminant (local chicken, guinea fowl) and cheese production were below half of the respondents while a few (1.6%) of them involved in keeping guinea fowl. This may be due to agro-pastoralist nature of households in the study area or due to the rare nature of guinea fowl in the study area since it thrives most in its peculiar nature of the agro-ecological zones.

Table 2 Distribution of respondents based on livestock ownership

Livestock	Male	Female	Total control	Partly control	No control
Cattle	55.0	0.0	50.0	2.5	2.5
Sheep	62.5	0.0	52.5	6.7	3.3
Goat	58.3	0.0	40.8	10	7.5
Local chicken	0.0	33.3	18.3	14.2	0.8
Guinea fowl	0.0	1.6	0.8	0.8	0.0
Cheese	0.0	34.2	29.2	0.8	4.2



Decision making in livestock production

Table 4 indicates that 53.3% of male owned cattle and always take decision on it, 3.3% of female owned sheep and occasionally take decision on it, fifty eight percent of male owned sheep and always take decision on it, while 27.5% of Female owned cheese and always take decision

on it, 1.7% of Male owned cheese and occasionally take decision on it. This implies that male respondents that owned cattle, goat and sheep had them more and always take decision on them but female fully involved in product from livestock such as cheese production.

Table 4: Distribution of respondents based on decision making

Livestock	Husband only	Wife only	Both	Frequency	
				Always	Occasionally
Cattle	53.3	0.0	0.0	53.3	0.0
Sheep	58.3	3.3	0.0	58.3	3.3
Goat	44.2	13.3	1.7	44.2	15.0
Local chicken	1.7	26.7	0.8	28.4	0.8
Guinea fowl	0.0	1.7	0.0	1.7	0.0
Cheese	1.7	27.5	1.7	29.2	1.7

Constraints faced by the respondents

Table 5 indicates that majority (92.5%) of the respondents had lack of livestock safety due to free range system of livestock rearing as most severe constraints and 89.2% had finance as a severe constraint while the least of very severe and severe constraints were lack of close market (1.7%) and lack of storage facilities(3.3%) respectively. The result from Table 6 further depicts that lack of livestock safety ranked 1st with a mean score of 2.9

while livestock feed ranked last with a mean score of 1.3. This is because livestock feed serve as a main food for livestock survival in which could not be a problem for livestock keepers in making the livestock having regular access to feeds as to enhance the economy growth of the agropastoralist since livestock growth and development depends on their intake. Also, the bigger the livestock grows the increase in potential income of the agropastoralists.

Table 5: Constraints to livestock rearing in the study area

Constraints	Not severe	Severe	Very severe	Mean score	Rank
Lack of livestock safety	4.2	3.3	92.5	2.9	1 st
Inadequate information	0.8	16.7	82.5	2.8	2 nd
Inadequate transport system	84.2	13.3	2.5	2.1	6 th
Lack of close market	92.5	5.8	1.7	2.0	8 th
Lack of contact with extension agent	7.5	6.7	85.9	2.8	2 nd
Finance	2.5	89.2	8.4	2.1	6 th
Sales	1.7	87.5	10.8	2.0	8 th
Land acquisition	6.7	35.0	58.3	2.5	4 th
Veterinary needs and care	70.8	23.3	5.9	1.7	10 th
Feed	55.8	41.7	2.5	1.3	12 th
Cleaning	49.2	37.5	5.8	1.4	11 th
Water	7.5	60.0	32.5	2.2	5 th

Grand mean=2.2

Access to production resources

Table 6 shows that the majority do not have access to drugs (90.0%), storage to facilities (90.8%), water (81.7%), fund (67.5%) and electricity (81.7%); while they only have easy access to livestock feed. This could be due to the agropastoral camp situated and the level of rurality

of the area where they have no access to social infrastructures. This implies that the limited access to production resources will affect the yield and productivity of the pastoralist and as likely not being encouraged to produce in a very large quantity.

Table 6: Distribution of respondents based on access to production resources

Production resources	Very easily accessible	Easily accessible	Not easily accessible	Not all accessible
Feed	4 (3.3)	102 (85.0)	8 (6.7)	6 (5.0)
Drugs	4 (3.3)	6 (5.0)	108 (90.0)	2 (1.7)

Production resources	Very easily accessible	Easily accessible	Not easily accessible	Not all accessible
Water	1 (0.8)	13 (1.8.0)	98 (81.7)	8 (6.6)
Fund	2 (1.7)	30 (25.0)	81 (67.5)	7 (5.8)
Storage facility	1 (0.8)	2 (1.7)	109 (90.8)	8 (6.6)
Electricity	1 (0.8)	13 (10.8)	98 (81.7)	8 (6.6)

Hypotheses testing

There is no significant difference in the constraints faced by the male and female agro - pastoralists on livestock production in the study area

The result of analysis in Table 7 reveals that there was no significant difference in constraints faced in livestock production (t-value of 0 .109 and p =0.913) between male and female

agro pastoralist in the study area. This implies that the constraints faced across gender do not differ in their livestock production since they equally need available and accessible production resources to facilitate and enhance their production. Therefore, the more constraints faced by the respondents in livestock production, the less they produced in livestock production.

Table 7: Test of differences in the constraints faced in livestock production between male and female Agro-pastoralists in the study area

Cases	Mean score	Standard deviation	t-value	p-value	Decision	Remark
Male	27.9375	4.84792	0.109	0.913	Not significant	Accept Ho
Female	27.8500	2.11890				

There is no significant difference in levels of access to production resources between male and female agro pastoralists in the study area

Table 8 reveals that there was no significant difference in access to production resources between male and female agro pastoralists in the study area (t=0 .013 p>0.05).

This implies that the respondents access to production does not differ from another since they both carry out their operations in the same area where they both exposed to the same constraints in that locality. This corroborates the result shown in Table 6 that they have no access to production resources except livestock feed

Table 8: T-test of difference on access to production resources among male and female Agro-pastoralists

Cases	Mean score	Standard deviation	t-value	p-value	Decision	Remark
Male	12.9500	1.45741	0.293	0.770	Not significant	Accept Ho
Female	12.8500	2.25945				

CONCLUSIONS AND RECOMMENDATIONS

It can be deduced based on the findings that more male participated in livestock production in terms of type and size. Most of the respondents were married, of the Muslim religion, non-indigenes and within the active ages (that is young adult) with no formal education. Male respondents were actively involved in decision making on their production. Both male and female respondents had equal access to production resources. Also, lack of storage facilities, Inadequate information, lack of contact with extension agent and inadequate transport services were identified as the major constraints and does not differ across gender.

Based on the conclusions drawn, the following recommendations are made: Intervention in terms of training on community safety strategies and provision of safety enclosures should be provided for agro pastoralists in order to curb the high occurrence of cattle rustling and incessant of night robbery of their livestock as a way of

improving production output level in terms of herd size and livestock products hence, enhancing the income level of agro pastoral production. Also, educational facilities such as schools, literacy centres should be provided within the agropastoralists settings for them to be educated as a means of empowerment and at the same time embrace any developmental programmes that will promote their productivity.

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