

GENDER CONSTRAINTS OF GOAT FARMING IN ABIA STATE, NIGERIA
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Abstract

The paper evaluated gender constraints of goat farming in Abia state, Nigeria and found out the management practices carried out by female goat farmers in the state. It examined the gender-related socio-cultural constraints militating against the production of goats in the state and determined the gender-related economic challenges affecting the production of goats in Abia state. The study population consisted of women goat farmers drawn from four local governments across Abia South and Central senatorial districts, through multi-stage sampling technique. The study adopted a descriptive survey research design, while descriptive statistics of frequency, percentages and mean were used to analyse the results. Findings revealed that female goat farmers were confronted by both gender-related socio-cultural and economic challenges which affect the productivity of the goat business. Among the economic challenges identified were: the absence of practical training (3.8), inability to secure the recommended breeds of goats (3.7), failure to access credit facilities (4.1) as well as high price of veterinary medicine (3.6). The socio-cultural challenges observed among the respondents included: lack of available grazing land (3.7), family/household responsibilities (3.7) poor educational level (3.8), among others. The paper therefore concluded that even though the greater proportion of the women were in their productive years, their output in goat production was poor owing to these challenges. It therefore recommended that efforts should be made by the government and other relevant agencies to strengthen extension work and ensure steady flow of information on the recommended practices on goat production.

Keywords: Goat production, Gender constraints, Female goat farmers, Goat management, Extension service

Introduction

It is often stated that women are responsible for more than half the world's overall food production, and produce up to 60 to 80% of basic food stuff in Africa (Fabiyyi, Danladi, Akande, & Mahmood, 2007). Agriculture is the main economic activity in every zone of Nigeria, and although men are more likely than women to participate in agriculture, the difference is minimal. Across the nation, 57 percent of all households are involved in agriculture; the figure does not vary much between male-and female-headed households, of which 60 and 48 percent

participate, respectively (Oseni, Goldstein & Utah, 2013). Livestock production shows a more marked gender divide, as men are more likely to own and control larger and more valuable livestock, such as cows, bulls, and oxen. Women, however, tend to own and control smaller and less valuable livestock, such as goats, sheep, and poultry (Oseni, et al, 2013). Women play critical role in food production and food security. In Nigeria, many smallholder farmers and food producers are women, though as in most of Sub-Saharan Africa, women are accorded lower status than men, which has a significant impact on access to resources and assignment of roles and responsibilities (BMGF, 2008). Nevertheless, women take active part in farming activities and in processing of farm products, in addition to their domestic and reproductive responsibilities.

In Nigeria, the agricultural activities of women go beyond crop production to other agricultural aspects such as fisheries, poultry, as well as sheep and goat farming. Goat production constitutes a very important part of the rural economy with more than 95% of the rural households keeping goats, which ranks next to cattle in income generation and economic sustenance (Duku, Price, van der Zijpp & Tobi, 2011). As a multipurpose animal, goats provide meat, milk, hides, skins and manure. Goat production plays a significant role in the improvement of human nutrition (Adam, Atengdem & Al-Hassan, 2010), and contributes about 17% of the total meat and 12% of milk production in Africa (Lebbie, 2004). Goats are owned by rural farmers within all age range and genders. In particular, ownership of goats allows women to meet family and social obligations such as purchase of clothing, caring for children and other household expenditures. In a study on the role of women in livestock enterprises in Nigeria, Ayoola and Ayoade (1992) cited in Adeleye, Alli-Balogun, Afiemo, & Bako (2016) reported that the respondents kept poultry, goats and sheep primarily to meet immediate household needs, and also to supplement family income. Accordingly, goats play important role in the socio-economic life of the people of Nigeria. They play a significant role in the food chain and overall livelihoods of rural households, where they are largely the property of women and their children (Lebbie, 2004). In the same vein, goat production is an integrated part of the cultural life and system of Nigeria's peasantry (Ajala, 2004). However, even though the contribution of goat production to improved livelihoods in rural areas has been reported, (Anyanwu, Ohaeri, Iheshiulor, & Etela, 2010) there is a dearth of information on the gender limitations faced by women who are into goat production as a source of livelihood. More so, the production of goats is still at the subsistence level as a result of the local extensive/ free range system practiced in states in the southeast (Enwelu, Ezeuko, & Machebe, 2015). Their management is still largely in traditional hands. Ozung, Nsa, Ebegebulem, & Ubua (2011) reported that the potentials of these animals have not been fully explored by livestock farmers and government livestock establishments. Also, there seems to be basically few or no standard, well constructed, modern goat farms in most places where they are reared. These ruminants are housed in dilapidated locally constructed houses where they are vulnerable to diseases, pests and predators. Consequently, in order to

achieve the agricultural policy objectives of reducing hunger and poverty in a sustainable manner, the lives and wellbeing of female farmers must be supported through methods that engage and empower them to achieve productivity gains in spite of prevailing gender roles and patterns in their communities. By gaining a more in-depth understanding of women's role in agriculture in Nigeria, the government, civil society, and other actors could more effectively reduce constraints to women farmers and increase the impact of agricultural programs and policies (Oseni, et al, 2013). Against this backdrop, this paper aims to examine the gender-related limitations faced by women and its impact on goat farming in Southeast, Nigeria.

Statement of the Problem

Goat rearing is one of the most useful way of women earning while staying at home. Proper participation of women in goat rearing, creates employment opportunities and increases income generating activities. Regrettably, in Nigeria many smallholder farmers especially women, are accorded lower status, which has a significant impact on access to resources and assignment of roles and responsibilities (BMGF 2008). Moreover, efforts by women farmers, and agricultural groups to improve and encourage commercial goat production have not yielded the expected outcome owing to poor production and management practices (Poole et al., 2013). This may be as a result of insufficient veterinary services, high disease risk, cost of feed, poor infrastructure and unavailable credit facilities, among other constraints affecting the goat business. Women goat farmers face high production costs with limited revenue, poor market channels, and thus need adequate support and training to improve output and productivity (Thornton, 2010). The low levels of farm size, technical and economic inefficiency coupled with low technological uptake have further held back productivity and development of goat production system in Nigeria. The need to increase women's agricultural outputs especially in animal husbandry is therefore the core of this study; hence, this paper mirrors the gender constraints faced by women goat farmers in Abia state, and the impact on goat farming.

Objectives of the Study

The main objective of this paper is to find out the gender-related constraints by female goat farmers in Southeast, Nigeria. Based on this, the specific objectives are to

- i. investigate the management practices carried out by female goat farmers in the state;
- ii. examine the gender-related socio-cultural constraints militating against the production of goats in the state; and
- iii. determine the gender-related economic challenges affecting the production of goats in Abia state.

Research Questions

- i. What are the management practices applied by female goat farmers in Abia state?
- ii. What are the gender-related socio-cultural constraints militating against the production of goats in the state?
- iii. What are the gender-related economic challenges affecting the production of goats in Abia state?

Methodology

The study population is made up of 80 respondents drawn from four local government areas in Abia state, comprising Umuahia North, Ossi sioma-Ngwa, Aba North and Aba South. Multi stage sampling procedure were employed. Abia state has 17 local government areas which fall into three (3) senatorial districts. They are: Abia North comprising of Bende, Ohafia, Isiukwuato, Umunneochi, and Arochukwu. Abia central has Ikwuano, Umuahia north, Umuahia south, Isiala Ngwa south, Isiala Ngwa north; while Abia South has Aba north, Aba south, Ugwunagbo, Obingwa, Ukwu east, Ukwu west, and Osisioma.

In the first stage, out of 17 local government areas, four local governments were selected from two senatorial zones: Abia central and Abia south. The local government areas were: Umuahia North, Ossisioma-Ngwa, Aba North and Aba South. In the second stage, one autonomous community was randomly selected from each of the selected local government area. The third stage involved the random selection of two villages from each of the community, making it a total of eight villages, out of which 20 women were selected from each village, making a total 80 respondents. Nevertheless, only 76 (95%) women accepted to participate in the survey. Four others declined without comments. To generate relevant data for this study, a survey method was adopted. The survey method involves the use of questionnaires to draw responses from participants. Descriptive statistics of frequency, percentages and mean were used to describe the socioeconomic characteristics of the goat farmers and method of production system in the study area.

Results

In table 1, the age of the respondents ranged from less than 40 years (40.8%) to 61 and above (17.1%). Those that were less than 40 years (40.8%) constituted the majority, followed by those between the ages of 41-50 years (23.7%), while the greater proportion of respondents were married (75%). In addition, the greater percentage (40.8%) of the respondents had secondary education, while the smaller proportion (10.5%) had no formal education. Those with household size between 6, to 10 persons (68.4%) constituted the majority, just as majority (53.9%) had between 1 to 5 goats. Lastly, only an insignificant proportion of 27.6% belonged to an association of goat farmers

Table 1: Socio-demographic information of respondents

Age (Years)	n	%
≤40	31	40.8
41-50	18	23.7
51-60	14	18.4
61-and above	13	17.1
Marital status		
Single	19	25
Married	57	75
Academic Qualification		
Primary	23	30.3
Secondary	31	40.8
OND/NCE/B.Sc.	14	18.4
No formal education	8	10.5
Household size		
1-5 persons	16	21.1
6-10	52	68.4
11 and above	8	10.5
Size of goat herd		
1-5	41	53.9
6-10	23	30.2
11-15	10	13.2
16 and above	2	2.6
Membership of Goat Producers Association		
Yes	21	27.6
No	55	72.3

The goat management systems of the respondents are presented in table 2. Findings indicate that, majority (80.3%) of the women were engaged in semi-intensive management system while only 14.4% used practiced intensive management system. Others (5.3%) adopted free range, while none of them used extensive or tethering management system.. Proceeding, findings show that the primary objective of keeping goats was basically to augment family income (77.6%). Additionally, 51.3% made annual income of between 31,000 to 40,000 naira from goat production, while the major means of growing their flocks was through births (44.7). Data further shows that the major sources of information on goat production and management among the respondents were fellow women (51.2%) who are into goat rearing, while 53.9% barely had contacts with extension agents in a year. Nevertheless, 11.8% maintained contacts with extension officers once in a month, while 13.2% did

so twice in a month. The sources of animal healthcare services also indicate that a greater proportion (61.8%) relied on self knowledge as well as the knowledge and experience of fellow goat farmers (23.7%).

Table 2: Goat Management System Practiced by Women

Goat management system	n	%
Free range	4	5.3
Semi-intensive	61	80.3
Intensive	11	14.4
Purpose of keeping goats		
Consumption	3	3.9
Events/Ceremonies	5	6.6
Support family income	59	77.6
Way of life (culture)	7	9.2
Status	2	2.6
Annual income from goat (NGN)		
20,000 – 30,000	19	25
31,000 -40,000	39	51.3
41,000-50,000	11	14.5
51,000-60,000	7	9.2
Mode of acquisition		
Purchase	15	19.7
Lease	18	23.7
Gift	9	11.8
Born stock	34	44.7
Source of information on goat production		
Associations	13	17.1
Radio	10	13.2
Television	6	7.9
Extension agent	8	10.5
Fellow women	49	51.2
Number of extension Contacts		
Twice in a month	2	2.6
Once in a month	9	11.8
Once every three months	1	1.3
Twice in a year	10	13.2
Once in a year	13	17.1
None	41	53.9

Goat management system	n	%
Source of animal health care services		
Extension agent	8	10.5
Veterinary clinic	3	3.9
Local knowledge by farmer	47	61.8
Local knowledge by other farmers	18	23.7

Table 3 points out that the gender-related socio-cultural challenges affecting women goat farmers included: lack of available grazing land (3.7), family/household responsibilities (3.7) and poor educational level (3.8). Another challenge pointed out but not regarded as a major problem was the absence of goat rearing women associations (2.8). Other factors identified by the women as challenges were: difficulty in obtaining goats feeds (3.8) as well as the lack of supplemental feeding during dry season (3.0).

Table 3: Gender-related Socio-cultural Constraints to Goat Farming

Socio-cultural Constraints	($\bar{X}$)	Remark
1. Lack of available grazing land	3.7	
2. Family/household responsibility	3.7	
3. Poor/low education	3.8	
4. Absence of Goat Rearing women association	2.8	
5. Difficulty in procuring feeds	3.8	
6. Lack of supplemental feeding during dry season	3.0	

Table 4 demonstrates the gender-related economic challenges confronting female goat farmers. From the findings, the absence of practical training (3.8), inability to secure the recommended breeds of goats (3.7), failure to access credit facilities (4.1) as well as high price of veterinary medicine (3.6) all received statistical support. Other difficulties mentioned by the respondents include, poor access to extension services (3.5), loss of goats through morbidity/mortality (3.2), poor market demands (3.3), and unstable market prices (3.0).

Table 4: Gender-related Economic Challenges

1. Absence of practical training	3.8
2. Inability to secure/lack of recommended breed	3.7
3. Lack of capital/credit facilities	4.1
4. High price of veterinary medicine	3.6
5. Poor access to extension services	3.5
6. Loss of goats through disease, death, theft	3.2
7. Poor market demands	3.3
8. Unstable market prices	3.0

Discussion of Findings

In table 1, the age of the respondents ranged from less than 40 years (40.8%) to 61 and above (17.1%). Those that were less than 40 years (40.8%) constituted the majority, followed by those between the ages of 41-50 years (23.7%), while the greater proportion of respondents were married (75%). This means that goat rearing is common among adult women in Abia state. The finding agrees with Ajala (2008) who observes that women in this age category are economically viable and might be more involved in the domestic obligations of their households. On the other hand, Chidebulu and Ndjon (1998) counsels that younger generation should take more active part in the business of goat production since age poorly affects the adoption of new technologies. In addition, the greater percentage (40.8%) of the respondents had secondary education, while the smaller proportion (10.5%) had no formal education. Here, Adeleye, et al. (2016) put forward that quality education offers women the capacity to use appropriate information and skills for enterprise development and generation of income, while Chidebulu and Ndjon (1998) add that, education constitutes a major factor in the adoption of new technologies; hence, female goat farmers should improve their educational level to enhance their expertise in the business. Those with household size between 6, to 10 persons (68.4%) constituted the majority, which means that, there would be a lot of pressure to attend to household responsibilities, thus, putting a strain on the women's goat production abilities. Majority (53.9%) had between 1 to 5 goats. This number appears to be too small especially for those who see goat rearing as a business venture, and for family upkeep. Consequently, it would be more profitable if larger herds were kept by the women. This result further agrees with the work of Sumberg and Mack (1985) who reported an average flock size of between 2 and 4 for sheep and goats in South-eastern Nigeria. The small flock size confirmed that small ruminants are not kept in commercial sizes and are actually kept to support family earnings. Lastly, only an insignificant proportion of 27.6% belonged to an association of goat farmers.

The goat management systems of the respondents are presented in table 2. Accordingly, findings indicate that, majority (80.3%) of the women were engaged in semi-intensive management system while only 14.4% used practiced intensive management system. Others (5.3%) adopted free range, while none of them used extensive or tethering management system. The reason might not be unconnected with the need to protect the goats and prevent them from destroying people's farm. This finding is consistent with the position of Ndofor-Foleng, Osita, & Machebe (2012), who found that by the means of their mobile upper lips and very prehensile tongue, goats are able to browse on foliage not normally eaten by other domestic livestock, hence their peculiar feeding habits.. Proceeding, findings show that the primary objective of keeping goats was basically to augment family

income (77.6%). The goats served as sources of quick cash especially during emergencies. The goats were sold to raise money for household needs such as payment of school fees, hospital bills, and contributions to women meetings, among others. Thus, Ajala and Gefu (2003) report that, small ruminants are kept as an addition to the main business of farming. Additionally, 51.3% made annual income of between 31,000 to 40,000 naira from goat production, while the major means of growing their flocks was through births (44.7). Data further shows that the major sources of information on goat production and management among the respondents were fellow women (51.2%) who are into goat rearing, while 53.9% barely had contacts with extension agents in a year. Nevertheless, 11.8% maintained contacts with extension officers once in a month, while 13.2% did so twice in a month. The sources of animal healthcare services also indicate that a greater proportion (61.8%) relied on self knowledge as well as the knowledge and experience of fellow goat farmers (23.7%). Adeleye, et al. (2016) opines that, this deficiency in quality information on best practices on goat production is likely to negatively affect the growth of goat production and further discourage investments in the business. This therefore highlights the need for quality advisory services from relevant agricultural agencies, particularly extension workers, as the findings from this work shows very minimal to non-existing contact between extension agents and the women. According to FEPSAN (2013), insufficient extension services in Nigerian agriculture have being identified as a major limiting factor in agricultural production; meanwhile, Ayansina (2011) observes that the number of extension contacts has been shown to have positive effect on the adoption of suggested practices on agricultural production.

Table 3 points out that the gender-related socio-cultural challenges affecting women goat farmers included: lack of available grazing land (3.7), family/household responsibilities (3.7) and poor educational level (3.8). Another challenge pointed out but not regarded as a major problem was the absence of goat rearing women associations (2.8). Other factors identified by the women as challenges were: difficulty in obtaining goats feeds (3.8) as well as the lack of supplemental feeding during dry season (3.0). Thus, the findings agree with Fabiyi, et al. (2007) who notes that, women barely own lands in Nigeria, despite their active participation in agriculture. As a result, since women do not own lands or other assets, it becomes difficult for them to bank loans or other forms of credit through the banking system. This lack of land prevents women from improving their expertise in animal husbandry (Fabiyyi, et al., 2007). Similarly, the low educational level of farmers' knowledge, skills, experience, and poor awareness of new techniques and technologies often result in poor goat production (Ali, Tegegne & Banerjee, 2002). Consequently, goat farmers face high production costs with limited revenue, poor market channels, and thus need a clear supported training to improve output and productivity (Thornton, 2010). In the same vein, obtaining goats feeds has become tedious and labourious mainly due to urbanization. In actual fact, forages are being

pushed farther away from family settlements, warranting the need to travel far distances to secure feeds for the animals. Chidebulu and Ndjion (1998) therefore suggest that agriculturalists should come up with innovation that is geared toward packaging goat feeds in a way that it can be obtained conveniently, and in bulk to enable producers increase their herds' size. They add that the shortage of land and labour supply may limit the chances of fodder banks and alley cropping.

Table 4 demonstrates the gender-related economic challenges confronting female goat farmers. From the findings, the absence of practical training (3.8), inability to secure the recommended breeds of goats (3.7), failure to access credit facilities (4.1) as well as high price of veterinary medicine (3.6) all received statistical support. Other difficulties mentioned by the respondents include, poor access to extension services (3.5), loss of goats through morbidity/mortality (3.2), poor market demands (3.3), and unstable market prices (3.0). Accordingly, this result is in consonance with the report by Adeleye, et al., (2016) who stated that the absence of training in small ruminant production, poor market infrastructure and absence of credit facilities might have affected the expansion of small ruminant production. Also, Ozung et al. (2011) reported that goat farmers have no access to improved species and as such cannot experiment with available new breeds; while Chidebulu and Ndjion (1998) added that goat producers complained of the lack of recommended breeds of goat for easy purchase; hence, goat farmers relied on guess work, personal knowledge and the opinions of fellow goat rearers to purchase goats with twinning and mothering abilities. Unstable market prices further constitute a challenge to women goat farmers. Ajala (1995) relates this to the demand pattern for goats, as the sale of goats peaks mostly during celebrations, cultural and religions festivities. However, the current economic difficulties in the country have further limited the abilities of families to purchase goats, thus putting a downward strain on the price. Furthermore, the challenge of losing goats through morbidity and mortality (3.2) is supported by the reports by Kirk and Anderson (1982) cited in Enwelu, et al., (2014). They opine that a significant reduction in lamb mortality rate and subsequent increase in profitability at the farm level can be achieved by identifying the specific cause(s) of mortality in a specific location. Regrettably, to compound this situation is the lack of veterinary services and drugs in particularly in rural areas. According to Chah, Igbokwe, & Chah (2009), small ruminants are largely in the hands of rural farmers who are scarcely aware of veterinary and improved management services. In some cases, many of those who are aware of the services cannot afford to pay for them because they are expensive. Ezekwe (2009) therefore stress the need to overcome morbidity and mortality among ruminants by avoiding overcrowding of animals, yearly vaccination, routine de-worming and supplemental feeding with concentrates.

Conclusion

The study found that female goat farmers are confronted by both gender-

related socio-cultural and economic challenges which affect the productivity of the goat business. Among the economic challenges identified were: the absence of practical training (3.8), inability to secure the recommended breeds of goats (3.7), failure to access credit facilities (4.1) as well as high price of veterinary medicine (3.6). The socio-cultural challenges observed among the respondents included: lack of available grazing land (3.7), family/household responsibilities (3.7) poor educational level (3.8), among others. Thus, even though the greater proportion of the women was in their productive years, their output in goat production was poor owing to these challenges.

Recommendations

Based on these findings, this paper recommends as follows:

- I. There is need to make available, alternative sources of goat feeds for the women, so as to ease the strain of going in search of quality feeds for their stock.
- ii. Efforts should be made by the government and other relevant agencies to strengthen extension work and ensure steady flow of information on the recommended practices on goat production.
- iii. Relevant agencies in the agricultural sector should do well to train and educate women goat farmers as this will enhance increase in output and utilisation of opportunities for increase in profit returns..
- iv. Credit facilities in form of young goats, high quality feed materials and veterinary drugs should be made accessible to women involved in goat rearing to encourage them to expand their goat rearing venture.

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