SHEEP AND GOAT FARMING IN IMO STATE SOUTH EAST NIGERIA: A TRADITIONAL VOCATION AT THE VERGE OF EXTINCTION?

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Abstract
This study investigated the current state of sheep and goat farming amongst households and possible options for economic improvement. Structured questionnaires were distributed to farmers randomly selected from three Local Government Areas (LGAs) in Imo state for a focus group interview. The results revealed significant reduction in sheep and goat farming amongst the households across four generations. Lack of interest due to poor policy framework, low productivity of existing breeds, difficulty in feed supply and high cost of breeding stock was identified as constraints while older people are more directly involved in sheep and goat farming than youths. 59.6% of the farmers were females, and 31-50% of the farmers were between the ages of 31 and 50 years. Farming was observed to be the most common occupation amongst the households while trading was the next occupation. Results also showed that 73% of the total families had a history of sheep and goat keeping. It was also observed that 33.7% of households were involved in poultry enterprise and 25.3% involved in fish farming as an enterprise. Only 4.8% engaged in sheep and goat farming. Results obtained also revealed that 48.3% of the identified sheep and goat farmers kept breeds of sheep and goat from northern Nigeria 34% of respondents believe that access to grants and credit facilities, 25 % believe provision of land in urban areas, while 21% think improvement in small ruminant feed technology, would improve production. If this current situation is to be reversed, adequate incentives such as grants and a revival of the moribund extension services should be provided for sheep and goat farmers combined with new technologies given the high literacy rate within the area to improve input and output respectively.
Keywords : sheep and goat farming, south eastern Nigeria, west African Dwarf breed, extension services

Introduction
Sheep and goats represent the predominant ruminant animals in south eastern Nigeria and the west African dwarf breed is indigenous to this area. In terms of contribution to house hold meat supply by aggregate demand, goat meat is second to beef followed by poultry (Aborishade and Carpio, 2017). Regrettably, over 90% of animals slaughtered within the region are supplied from northern Nigeria (Francis, 1990).In fact, the west African dwarf breed of sheep and goat just like the west African dwarf cattle, is at the verge of extinction. The west African dwarf breed of sheep and goats are adapted to the humid rainforest zone, along the Atlantic coast , which stretches from Nigeria to Cameroun, Congo to the east, Benin, Togo, Ghana, Liberia up to the Fouta Djallon highlands of the Gambia (Williamson and Payne , 1978). They are typano-tolerant and represent an important component of the crop-livestock farming system of the indigenous population. Besides provision of food, they act as a reserve of wealth, a living bank, a source of income, employment, manure, raw material and part of the social and customary ceremonies. Their size and

adaptability and short generation interval make them the most preferred among domestic animals and makes for easy management among women and children. The short generation interval makes them easier to replenish stocks after disease outbreak. It is also a form of insurance against crop failure. Despite these advantages, an important vocation for small holder farmers, is at a danger of extinction. Sheep and goat production is largely concentrated in the hands of small holders who apply little if any, modern techniques required to meet the demand of meat in a fast changing world where technology holds sway. Ownership of small sheep and goats is regarded as an investment since they could be sold to meet compelling family needs and obligations, slaughtered for consumption at home or at festivals. In addition, very little capital investment is required in buildings, maintenance and upkeep and purchase of stock since families could receive initial breeding stock as a gift or tied to joint sharing of offspring. Currently, there are four identified production systems. Subsistence system which is characterized by a small number of holding often less than 5. Extensive system allows the animals to graze and browse large areas of marginal land usually unsuitable for cultivation under the care of a herder. However, this system has given rise to frequent resource conflicts between crop farming communities and migrant herders within the southern parts of Nigeria. It is on the grounds of appraising the current state of production and strategies for economic improvement that this study was initiated.

Materials and Methods

The study was conducted in three Local Government Areas (L.G.As) namely; Oru West, Ahiazu Mbaise and Ezinihitte Mbaise. Imo state lies within latitudes 4°45'N and 7°15'N, and longitude s6°50'E and 7°25'E with an area of about 5,100sq km (Wikipedia,). Oru West lies within latitude 5.37° N and longitude 6.57° E. It has an area of 93 km2 (36 sq mi) and a population of 117,492 (NPC, 2006). Ahiazu Mbaise is situated within latitude 5° 32' 55.259" N and 7° 16' 8.364" E. It has an area of 114 km² and a population of 170,902 (NPC, 2006). Ezinihitte Mbaise lies between latitude 5° 28' 43.5" (5.4788°) North and longitude 7° 19' 34.5" (7.3263°) East. The study was conducted with the aid of structured questionnaires, using focus group and personal interviews and observations within the different communities of the three Local Government Areas (LGAs). The communities were selected using a stratified random sampling and thirty respondents were interviewed in Ahiazu and Ezinihitte Mbaise and twenty nine in Oru West making up a total of eighty nine (89) respondents overall.

Results and Discussions

The results indicated that 71.9% of respondents were rural dwellers, 20.2% peri-urban dwellers and 7.9% urban dwellers showing that the study area was majorly rural. The respondents were within the ages of 21 to over 70 years. While 42.7% were between the ages of 31-50 years, 37.1% were between the ages of 21-30 and 15.7% were between the ages of 51-70 while 4.5%. were above 70 years. Results also indicated that there were more females- (59.6%) than males- (40.4%) as shown in Table 1. 56.2% of respondents were married and 43.8% were single, indicating that the current production methods may not be attractive to the single youths, a development which can be addressed by providing the enabling environment for youths to go into commercial sheep and goat production (Anyanwu *et. al.,* 2010). The educational status of the respondents showed that 32.6% had secondary education while 31.5% had tertiary education. About 16.9% had primary education while 19.1% had no formal education. We can report from this result that most of the respondents were educated. Access to education is related to the capacity of respondents especially women, to use appropriate information, technologies and skills for enterprise development and generation (Adeleye *et.al,.* 2016). Most of the respondents (15.7%) had a household size of 10, 14.6% had

a household of 6, 12.4% have a household of 7, 9.0% have a household of 5, 6.7% have a household of 15, 9, 8 and 4 respectively. 2.2% have a household of 14, 11 and 3 respectively. It was also recorded that the primary occupation of most of the respondents (49.4%) was farming, 19.1% were involved in trading, 13.5% were civil servants, while 7.9% were students and businessmen respectively. Furthermore, 53.9% reported farming as secondary occupation, 30.3% as trading, It was also recorded from the study that 84.3% of the total respondents are engaged in agriculture whereas 15.7% were not.

Production systems and choice of enterprises

An analysis of the data revealed that 33.7% of the respondents preferred poultry as livestock enterprise of choice, 25.3% fish farming, 18.1% piggery and /marketing respectively while a very small number of respondents (4.8%) indicated sheep and goat as a livestock enterprise of choice. This is in agreement with the previous report by Okoli *et. al,*. 2004 that poultry business enterprise in Imo state, Nigeria is attractive and an enterprise of choice where practitioners are willing to continue in throughout their lifetime Again, 33.7% of the respondents affirmed that they would venture into crop farming if given a startup capital, 25.3% declared marketing of agricultural products as a choice enterprise, 18.1% also chose fishery and others respectively. Whereas a little number of them (4.8%) chose livestock as a choice of enterprise upon having access to loan. It was also recorded that 76.4% of the respondents indicated that their communities had a history of sheep and goat farming while 73% of the households had a family history of sheep and goat keeping. The practice of sheep and goat keeping along the successive generations declined from , 48% for the great grandparents,,22% grandparents, 17% parents to 11% for the respondent The major reason for sharp decline in sheep and goat production among the respondents (30.3%) was lack of interest. Other reasons for sharp decline in sheep and goat production (14.6%) was low productivity of existing breeds. 10.1% recorded that lack of innovation in production system and high cost of breeding stock was the major reason for the sharp decline respectively. Incidence of pest and disease was recorded to be 7.9% and 5.6% was drudgery and high labour involvement. From the above results, it can be reported that low productivity of the existing breeds of sheep and goat and lack of innovation in production system resulted to lack of interest could be the major reasons for sharp decline in sheep and goat production in the study area. About 40.35% of the respondents practiced subsistence system of sheep and goat production while 37.1% practiced intensive system, 16.9% also practiced extensive system and 5.6% also practiced semi-intensive system. This is in contrary to the report from northern Nigeria that small ruminants were mostly managed under extensive system (Ajala and Gefu J,O. 2003). The subsistence system confirmed that small ruminants are not kept in commercial sizes and are actually kept to augment family income..

Strategies for economic improvement

The most workable solution to revamp sheep and goat production as consented by the respondents (33.7%) was the advancement of credit facilities. Other workable solutions to revamp sheep and goat production in order of importance was the provision of land by government in peri-urban centres for cluster sheep and goat farming (24.7%), improvement in ruminant feed technology (21.3%), establishment of planted fodder banks (12.4%) and innovation in housing and feeding systems. So, presumably, advancement of credit facilities such as loan or grant to the farmers can be a good workable solution to revamping sheep and goat production in the study area. This can be augmented by the government providing land in peri-urban centres for cluster sheep and goat farming as well as the improvement in ruminant feed technologies. The reports given by the respondents (59.1%) showed that the total annual income generated from agricultural enterprise per year was below ₦120,000 which was below the current minimum wage of public sector workers. Furthermore, 30.7% earned between ₦121,000 - ₦240,000 while 6.8% reported earnings between

₦481,000 - ₦1,000,000. This low income reported by this households could be the reason for the declining interest in sheep and goat farming. This could be explained by subsistence production system prevalent in the study area probably due to lack of capital and appropriate technologies to commercialize aspects of the enterprise value chain. 25.8% of the respondents affirmed that delivery of new research technologies to target farmers can best enhance sheep and production in the study area. Furthermore, 24.7% consented that technology can enhance sheep and goat production in the study area through improvement in genetic potential. 14.6% of the respondents reported that access to marketing information by linking farmers with consumers using cell phones can be useful in the technological enhancement of sheep and goat production in the study area. Also, 11.2% affirmed that use of ready-made packaged feeds and modified housing for urban and peri-urban producers can be another innovation to enhancing sheep and goat production in the study area respectively. In addition, only 9.0% reported that oestrus synchronisation can be used to enhance production. Overall, majority of respondents , 60 % agreed that deployment of new technologies holds the key to economic improvement..

Conclusion

It could be concluded that lack of interest in sheep and goat farming was the major constraint which could be attributed to the low productivity of existing breeds and low income derived from the enterprise relative to other farm enterprises. It was also recorded that lack of innovation in production system and high cost of breeding stock were also contributing factors. There should be concerted effort by government to revive this industry through the provision of incentives and a revival of the moribund extension services so as to bring the innovations and new technologies to the farmer.

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Table I: socio-economic characteristics

Parameters	Class	Frequency	Percentage
Locality	Urban	7	7.9
	Peri-urban	18	20.2
	Rural	64	71.9
	Total	89	100.0
Age	21-30	33	37.1
	31-50	38	42.7
	51-70	14	15.7
	Above 70	4	4.5
	Total	89	100.0
Sex	Male	36	40.4
	Female	53	59.6
	Total	89	100.0
Marital Status	Single	39	43.8
	Married	50	56.2
	Total	89	100.0
Level of education	None	17	19.1
Primary occupation	Farming	44	49.4
	Trading	17	19.1
	Student	7	7.9
	Business	7	7.9
	Teaching	12	13.5
	Tailor	1	1.1
	Nursing	1	1.1
	Total	89	100.0