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Characteristics of rural goat production and marketing in Kumi and Lira districts, Uganda

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Abstract

A cross sectional survey was conducted to establish the characteristics of rural goat production in Kumi and Lira districts. This was necessary to establish a baseline benchmark against which the impact of the NARO/DFID goat project could be gauged. Systematic sampling techniques were applied to 120 households in both districts to capture the necessary baseline data. The study found that most people in Kumi and Lira districts tether their goats followed by herding. Most people give crop residues to the goats and water once a day. Water is mainly drawn from spring wells and the maximum walking distance is 3.0 km. All labour for looking after the goats is offered by the family (100%). No labour is hired in the two districts. While in Lira most people have their own breeding bucks, those in Kumi use mainly bucks from their neighbours. Bucks are mainly chosen for breeding because of their size, colour or the ability to sire twins. There was a level of inbreeding in both districts as evidenced by the long duration bucks are kept for breeding purposes (3-5 years). Most people in the two districts sell goats in local markets for cash. The main buyers are local traders and butchers. On average, a buck costs 22,000 Uganda shillings and a doe 25,000 shillings in Kumi district, while in Lira a buck and doe go at the same price of 21,000 shillings. Most people keep 1 to 11 goats. In Kumi most goats belong to children while in Lira they belong to men. Goats are mainly used for cash and in the two districts it is the men who take the upper hand in deciding whether to sell a goat or not. In the two districts, goats suffer mainly from worms, ectoparasites, diarrhoea, eye diseases and skin diseases. To treat the above conditions, most people approach the veterinary staff. Most goats are housed in temporal shelters constructed mainly by women. The majority of the people in the two districts use goat droppings as manure. This study revealed that rural goat production was still very rudimentary and needed improvement in terms of management.

Key words: Baseline information, breeding bucks, goat rearing, local markets

Introduction

In Uganda the majority of people live in rural areas. These people practice subsistence farming which hardly meets food requirements for the household. The rural areas offer little opportunities for employment; this compounded by the fact that the rural populace is mostly illiterate and unskilled and hence cannot be employed in formal sectors found mainly in urban centres.

Despite the economic shortfall in rural areas these exists potential for harvesting and utilizing the existing resources for improved productivity for better living standards. Among the resources available to the rural farming community are the indigenous goats. It is estimated that 80% of rural households in Uganda keep goats (MAAIF, 2003). They are easy to acquire, manage and their reproduction and production are high enough to realise faster income generation and this often makes then one of the easiest entry points of many poverty alleviation projects and programmes.

Indigenous goats have, however, low productivity for meat and milk. Previous research work has shown that improved goat performance could be realised under good management practices (Oluka *et al*., 2003; Ssewannyana, *et al*., 2004).

More concerted research and development efforts should be made to sustain indigenous goat production for poverty reduction and better standards of living. Research should study the rural goat production system, identifying priority constraints and opportunities; this should arguably lead to initiation of appropriate intervention measures.

This study was conducted to characterise rural goat production and marketing in Kumi and Lira districts of Uganda. The aim was to establish a baseline benchmark against which the impact of the NARO/DFID goat improvement project could be ganged.

Materials and methods

A baseline survey was carried out by a multi-disciplinary team comprising researchers in animal breeding, nutrition, management, health and socio-economics, and extensionists in livestock production. A representative transect across a cluster area was selected in which farmers were randomly sampled. The sampling frame was 2 parishes per district, 3 villages per parish and 10 households per village, making a total of 60 farmers sampled in a district.

Questionnaires were administered to the 60 indigenous goat farmers in each district. Questionnaires were designed to elicit information pertaining to all areas of management and production of indigenous goats. These included goat numbers, use of indigenous goats, ownership, feeding, housing, disease control, traditional medicine, breeding strategies and gender roles. Farmers were interviewed individually, questions asked in the local dialect and observations were recorded.

All data obtained were collated and analysed as absolute figures or as percentage of totals.

Results and discussions

Management practices

From Table 1, one can see that most people in Kumi and Lira districts tether their goats followed by herding. Most people give crop residues to the goats and water them once a day. Water is mainly drawn from spring wells and the maximum walking distance is 3.0 Km. Looking at men and women, in Kumi it is the men who mainly provide the water to the goats while in Lira it is the women. All labour for looking after the goats is offered by the family (100%). No labour is hired in the two districts.

Goat numbers, ownership and acquisition of goats

In the two districts, most people keep 1-11 goats (Table 2). This number reflects a low subsistence production system which has an insignificant offtake per year and cannot allow reasonable incomes to the goat keepers. This observation means that some research interventions would be very relevant in this area. In Kumi, most goats belong to children while in Lira they belong to men (Table 2). This observation becomes very interesting when interpreted in light of Table 3 which talks about taking decisions on goats and Table 4 which talks about care for the goats.

In the two districts similar methods are used for acquiring the goats, ie. buying, gifts, through dowry and project donations (Table 2).

In the two districts, men take the upper head in deciding whether to sell or give away a goat (Table 3). As indicated above, although in Kumi most goats belong to children, they have almost no control on the decision taken on their goats. (Table 3). Similarly, women tend to care for the goats (cleaning goat houses) more than any other member of the family (Table 4), but they have less control on decision making. We observed a similar trend in a separate study on gender relations in livestock production (Esenu *et al*., 2004).

Housing, care and use of goat droppings

In both districts, most farmers provided some sort of housing for the goats (Table 4) but what the farmers termed as "houses" were mainly temporal structures or sheds under house or kitchen verandas. Lack of proper housing for goats was an indication of the poor management accorded to indigenous goats and a lack of knowledge as to the importance of housing. This area was, therefore, identified as a crucial area to be addressed during the training. Housing could possibly increase production as it prevents losses due to predation and thieves and pneumonia particularly in kids.

Constructing the goat "house" was a domain of the men while cleaning the goat "house" was mainly done by women (Table 4). The observation that in both districts women appear to care for the goats more than any other member of the family means that project activities on rural goad improvement should target women mainly. In many cases, this is the only source of livestock ownership they have. Moreover rural goat production integrates well with other farm activities which are mostly a woman's domain.

Breeding

Table 5 shows some breeding aspects in rural goat production. While in Lira most people have their own breeding bucks, those in Kumi use mainly bucks from their neighbours. In the two districts, bucks are mainly selected for breeding because of their size, colour or the ability to sire twins. There was a level of inbreeding in both districts as evidenced by the long duration bucks were kept for breeding purposes (3-5 years). This observation put breeding on the forefront during the training.

Animal health problems, solutions to them and types of local medicine used

In the two districts, goats suffer mainly from worms, ecto-parasites, diarrhoea, eye diseases and skin diseases. To treat the above conditions, most people approach the veterinary staff and a few use local medicines of various types (Table 6)

The observation that most people approached the veterinary staff to solve the goats' health problems indicated that goat health care was affordable by rural farmers and that goat farming could be a good business to undertake. The use of local medicines to treat goat ailments is an area which needs further research in light of the growing interest in indigenous technical knowledge (ITK).

Main uses of goats

The main uses of goats are given in Table 7. In the two districts, goats are mainly used for sale as live animals to earn cash. The findings also showed that people in Kumi eat more goat meat than those in Lira. On the other hand, the

people in Lira use goats in marriages more than those in Kumi.

Formerly, when Teso and Lango regions used to have a lot of cattle, cattle were the main items used in marriages. But due to the civil strifes of the late 1980s, many heads of cattle were lost. On that background, the goats became increasingly used in marriages.

Marketing

Most people in the two districts sell goats in local markets for cash; a few goats are bartered or exchanged for cattle (Table 7). The main buyers are local traders and butchers. On average, a buck costs, 22,000= and a doe 25,000= in Kumi district, while in Lira a buck and doe go at the same price of 21,000=.

Looking at the problems the farmers encounter in marketing the goats, they observed that the indigenous goats are small and of poor breed and therefore fetch a low price. This calls for research interventions to address the size and breed issues in the efforts to improve goat farming in Teso and Lango farming systems.

The observation that goats can be exchanged for cattle is an indication that they can be a good entry point for those people who crave for cattle but cannot afford them.

Table 1. Farmers responses (%) on management practices in Kumi and Lira districts

Practice	District	
a) Management system	Kumi	Apac
Tethering	64	64
Hoding	34	32
Free range	2	4
b) Feeding crop residues		
Yes	87	68
No	13	32
c) Provision of Water		
Yes	98	100
No	2	0
d) How often is water provided?		
Once a day	98	44
Twice a day	2	35
Ad lib	-	21
e) Who provides water to goats?		
Man	38	12
Woman	8	37
Children	13	7
All	41	44
f) Source of water		
Spring well	94	93
Borehole	2	7
Swamp	4	-
g) Distance of water source from homestead	0.10-3.00Km	0.15-1.60 Km
h) Type of labour for rearing goats		
Family labour	100	100
Hired labour	-	-

Table 2. Goat numbers, ownership (%) and methods of acquiring goats in Kumi and Lira districts

District	No. of goats per household	No. owned by men	No. owned by women	No. owned by children	Joint ownership	Method of acquiring goats
Kumi	1-9	16	25	40	19	Buying, gifts, dowry, projects
Lira	2-11	63	6	24	7	Buying, gifts, dowry, Projects

Table 3. Control (decision making) on sale or giving away goats

By who	Kumi	Lira
Man	52	50
Woman	26	15
Children	3	6
All (joint decision)	19	31

Table 4. Farmers response (%) to housing and use of goat droppings in Kumi and Lira districts

District	Housing provided		Type of housing			Construction of house				Cleaning the house			Use of goat droppings		
	Yes	No	Special	Shared	Temporal	Man	Woman	Children	All	Man	Woman	Children	Manure	Thrown into bush	Burnt
Kumi	60	40	30	21	49	70	10	13	7	9	77	14	84	16	-
Lira	70	30	1	14	85	100	-	-	-	18	60	22	85	13	2

Table 5. Breeding aspects in rural goat production in Kumi and Lira districts

	Kumi	Lira
Source of buck		
Own	32	46
Neighbour	55	15
Borrowed	13	39
Special attributes for selecting bucks	Size, colour, twinning rate	Good libido, size, colour, twinning rate
Duration the buck is kept for breeding	1 week – 60 months	1 week-36 months

Table 6. Animal health problems, solutions to health problems and types of local medicine used in Kumi and ira dis

Parameter	District	
	Kumi	Lira
a) Health problems	Worms, ticks, diarrhoea, high drug prices and shortage of veterinary staff	Worms, ecto-parasites, diarrhoea, cough, T.B, eye diseases, skin diseases
b) Solutions to health problems		
Veterinary staff	75	88
Veterinary drugs from shops	19	-
Local medicine	6	12
c) Types of local medicine used	Ekolit, Emujajut,Tamarines, Magadi salt, Roots of various herbs, Euku, Ongaroi	Kadoburu, Marijuana, Obwolo mixed in water, Abade as a drench, Te “Acug” for diarrhoea, Opium mixed in water

Table 7. Farmers response (%) to main uses of goats in Kumi and Lira districts

District	Cash	Meat	Gifts	Marriage	Other Ceremonies
Kumi	55	26	3	16	-
Lira	43	14	-	25	18

Table 8. Marketing aspects in rural goat production in Kumi and Lira districts

Parameter	District	
	Kumi	Lira
a) Mode of sale		
Cash	77	91
Barter	23	9
Others	-	-
b) Market for goats		
Local market	96	98
Local butchers	2	2
Exchange for cattle	2	-
c) Distance from home to market	0.1-20Km	0.8-4.8Km
d) Main buyers of goats	Businessmen and local butchers	Businessmen and local butchers
e) Average price		
Bucks	22,000=	21,000=
Does	25,000=	21,000=
f) Problems encountered while marketing goats	-Long distance to markets -High market dues -Small goats fetching little money -High transport charges	-Long distance to markets -High market dues -Small goats fetching little money -Poor breeds -Price fluctuations

Conclusions

Indigenous goats are an integral component of rural households. Despite low productivity, they contribute towards the nutritional status of the household and are a source of income. They, therefore, play an important role in poverty alleviation in individual households.

The baseline information obtained in this study has indicated that rural goat production is still at a subsistence level, implying that the system is amenable to improvement in order to raise household incomes. The data will also help in assessing the impact of the NARO/DFID goat improvement project in Kumi and Lira districts and can also be a reference for any other intervention in rural goat improvement in Uganda.

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