

a glance at LinkS

LinkS project case study
No. 3 • February 2003



Livestock and Gender: The Tanzanian Experience in Different Livestock Production Systems¹

■ The traditional livestock sector and local knowledge ■

Livestock production in Tanzania is organised under two main sectors-- the commercial and traditional sectors (See Box 1). The traditional sector counts up for about 99% of the country's cattle and 85% of the poultry (chickens). Animals kept under this sector include mostly indigenous breeds such as the Tanzania shorthorn zebu (98%) whereas pure beef and dairy breeds constitute 0.8% and 1% respectively.

It is clear that the economic potential of the traditional livestock sector has not been fully exploited. Despite the numerous new technologies and trained personnel, collaboration with traditional livestock production systems seems to be negligible. As in many agricultural sectors, for the most part, formal livestock technology development and education have not paid enough attention to the different needs and priorities, skills, experience and knowledge of local men and women livestock producers.

Yet, traditional livestock keepers have ways of handling adverse situations and efficiently managing resources at their disposal (e.g. moving livestock to minimise effects of drought and disease). Researchers at Sokoine University of Agriculture suggest that, in terms of agricultural policy development, researchers and policy makers have made little effort to understand the importance of this experience and knowledge.

BOX 1

Tanzania's Livestock Sector

Agriculture, including livestock, plays a main role in Tanzania's economy. Livestock production provides men and women not only with food (milk, meat, blood), but also draught power, fertiliser, manure, hides, skins, wool hair, employment, and a system for capital accumulation (banking system & insurance). The livestock sector provides about 30 per cent of the agricultural GDP. In terms of its contribution to GDP, about 40 percent originates from beef production, 30 percent from milk production and another 30 percent from poultry and small livestock production.

While once dominated by a few parastatal dairy and beef farms, the commercial sector has recently been privatised. This sector includes urban and peri-urban private commercial poultry and small-scale dairy farms and accounts for about 15% of the total livestock population in the country.

According to the 1984 Census, Tanzania has a large livestock population comprising 13 million cattle; 3.7 million sheep; 6.4 million goats; 275,000 pigs and 22 million chickens.

FAO's Animal Genetic Resources (AnGR) programme is currently conducting a survey of indigenous breeds for 13 countries of SADC region (Southern African Development Community), which also includes Tanzania.

■ Studies on gender and livestock ■

Over the past several years, the Sokoine University has conducted several studies that looked at the gender roles and local knowledge, skills, practices and beliefs associated with different livestock production systems in Tanzania. These studies are crucial to increase the dialogue and understanding between

¹ This article is based on: Maeda-Machangu, A.D. et al. (1999) "Gender roles, local knowledge, food security and biodiversity in different livestock production systems in Tanzania", and Maeda-Machangu, A.D. et al. (1995) "Local knowledge in animal health and production systems: Gender perspectives". The article is written by Catherine Hill, Consultant with the Gender and Development Service, FAO, January 2002.

² Maeda-Machangu, A.D. et al. 1995.



community members, animal health care providers, formal animal health and production practitioners, national policymakers and international agencies active in livestock production. This case study is drawn from these studies.

Seven regions were included in the 1999 study: Kilimanjaro, Mara, Mwanza, Morogoro, Iringa, Tanga and Mbeya (see map). The regions were selected because of the different livestock production systems in those regions. The three main livestock production systems identified are pastoralism, agro-pastoralism and small-scale intensive specialised system. Among other reasons, these systems have developed over time because of:

- ▶ agro-ecological factors;
- ▶ socio-cultural importance given to livestock by a particular society (ethnic group), and;
- ▶ animal species and breeds present in the area.

The study looked at aspects such as:

- ▶ the gender division of labour in the household;
- ▶ the differential local knowledge of livestock parasites and diseases and their treatment, and;
- ▶ access to and control of livestock.

A sample of key informants was selected from each village to participate in group interviews. Two groups, one women only, the other including both men and women - were interviewed in each village. Farmers were selected based on their experience and knowledge in livestock-keeping. For the individual interviews, a random sample of 30 households was selected with the assistance of the extension officers and village leaders.

Gender issues in each livestock system

OWNERSHIP AND CONTROL OF RESOURCES

In the *pastoralist* livestock systems of Tanga and Morogoro, 98% of the respondents indicated that cattle belong to men. Children and women mostly own smaller livestock such as poultry and rabbits. Women can control those cows allocated to them by their husbands, as well as decide upon different milk usage and produce. In male-headed households, family resources and assets are controlled by men.

In the *agro-pastoralist* systems of Iringa, Mwanza and Mara, women may own some animals through inheritance; they may also purchase them with money earned from their income-generating activities or the sale of surplus food. Children may own animals through inheritance or by gift.



In male-headed households, women do not generally own land; they access it through their husband or his family. Women typically grow food crops on plots allocated to them by their husbands for their family's use and sell the surplus for cash. Men generally control cash crops; women food crops for the family. Women in female-headed households own and make decisions about livestock in consultation with the male-in-laws or their sons (i.e. slaughter, sale, etc.)

In the *intensive* systems of Kilimanjaro, respondents noted that land belongs to men (or their clan). In case of a man's death, the eldest son takes control of the land, livestock and other assets are divided between sons if there are many. The wife can take care of the assets on behalf of her sons if they are still young; the deceased's male relatives act as "advisors". Coffee, which is a cash crop, is controlled by men. Food crops such as bananas, maize and beans are controlled by women, but once they gain value in commercial terms, men take control. Milk was formerly controlled by women, but nowadays it is controlled by both women and men since it represents the main source of household income. Women have access to the income, but do not have full control over it. Poultry (chickens) are mainly owned and controlled by women and children.

GENDER DIVISION OF LABOUR

The *pastoralist* groups of Morogoro and Tanga are irregularly transhumant moving their herds and parts or all of their settlements to areas where livestock will be certain to survive during extremely long dry seasons. The daily work of attending the herds is assigned to the uncircumcised boys (ilaiyoni), who due to such arrangement miss out on formal education. They are helped by Murran (young males) if the pastures are far from the settlements and are responsible for taking animals to dips or water points.

LOCAL KNOWLEDGE

The majority of respondents have substantial knowledge of livestock diseases and health problems.

Poor health as a result of tick transmitted disease, tsetse-flies and worms was high in all the studied areas.

Disease seems to be the main constraint in livestock production due to lack of drugs, increasing prices of veterinary drugs and services, non-functioning dips and lack of adequate extension services. To tackle livestock health problems, pastoralists, agro-pastoralists and farmers from intensive agro-pastoral systems use all options available including transhumance, local herbs and modern veterinary drugs. For example, in Arusha, the Maasai will not graze animals in areas where wild beasts have recently furrowed as they shade the causal agents of the fatal cattle disease, Malignant Catarrhal Fever². In the agro-pastoral systems of Iringa, to treat East Coast Fever, about 75% of the farmers use local herbs and methods, 19% of the farmers queried use modern treatments, and 6% combine both local and modern treatments.

Murran also buy and sell livestock at the auctions, medical treatment of the sick animals, the branding of animals, as well as any service which the elders might demand of them from time to time. They also build the kraals or bomas for small animals. Calves are tended by both boys and girls.

Women are responsible for preparing the daily food, milking cows twice a day, and looking after the young animals, which have to be brought to their mothers twice a day and separated from them again. Other duties include fetching water for the cattle, as well as cleaning and repairing the shelters where calves are kept. (Male) elders are responsible for the management of the herd, including those cattle of their children and wives. Older men are responsible for managing all matters of public interest, i.e. settling legal disputes, marriages, bride-prices, marital problems and arranging ritual ceremonies. Table 1 provides an example on the particular gender roles in the pastoral system.

In the agro-pastoral system, herding is done by boys who have left school or by vacationing children. In some cases, the male head of the household will graze his animals or use hired labour. Men and male children usually water the animals. During the dry season when water is in short supply, the male head of household must dig a well at the bottom of a river or ferry water from permanent wells using oxen carts. Construction of kraals and special houses for calves, small ruminants and chicken are also men's responsibility. Identifying livestock in heat, or those who are pregnant or sick is done by the family, especially those who have been herding the animals.

Children care for the young livestock; adult men and women may also help. By tradition milking is done by women, mostly

BOX 2 Livestock systems as defined by research team

Pastoralist systems are migratory and do not involve permanent settlement. Farmers derive most of their sustenance and livelihood directly from livestock.

Agro-pastoralist systems combine crop and animal production, using outputs from one to feed into the other, e.g. manure for crops, fodder for livestock. This is the most common mixed farming system in Tanzania.

Small-scale intensive and specialised production systems are mainly crop-based -- animals play a complementary and essential role. In densely populated areas, cattle and goats are kept by small-holders mainly for milk and manure for crops. These animals are prevented from damaging crops by stall feeding.

girls. Processing milk to ghee is a woman's job, as is the marketing of fresh milk, skimmed milk and ghee. However, there is an exception in the Sukuma tradition, where milking is done by men, but the milk is passed on to the wife for distribution.

In intensive and specialized production systems, workloads are distributed among the family members by gender. Especially for activities focusing on domestic/household and crop/livestock production the main responsibilities linked to labour and resource use are clearly defined within the farm household. Women concentrate more on the activities related to food crop production, while men are responsible for the cash crops and livestock management. Few farmers use tractors in crop production. These tractors are fully controlled by men.

DECISION-MAKING

In the pastoral society, despite their considerable labour input in the care and maintenance of the herd, women are excluded from major decision making. Cultural laws and traditions rationalise this exclusion, creating clear distinctions

TABLE 1 GENDER ROLES IN THE PASTORAL SYSTEM, MOROGORO ³

Activity/Role	M-adult	F-adult	Children			All family	Hired labour	Others
			m	f	all			
Ownership of cattle	98.1	1.9	-	-	-	-	-	-
Construction of Bomas	51.7	-	11.7	-	0.0	5.0	23.3	8.3
Cattle herding	33.3	1.7	21.7	3.3	26.7	3.4	3.3	6.6
Calf rearing	-	13.4	20.3	3.4	55.9	3.4	0	3.6
Goat herding	-	-	26.3	5.8	57.6	3.4	0	6.9
Sheep herding	-	6.9	20.8	5.2	56.9	3.4	1.7	5.1
Watering the livestock	93.2	-	3.4	1.7	-	1.7	-	-
Livestock selection	91.8	2.1	-	-	-	4.1	-	2.0
Livestock Identification for:								
- mating/heat	70.7	-	2,3	-	-	23,6	1,7	1,7
- pregnancy	70,0	1,7	-	-	1,6	25,0	1,7	-
- sick	65,5	2,8	8,6	1,7	-	20,7	-	0,7
Milking	3.3	82.7	-	14.0	-	-	-	-
Milk marketing	3.3	95.0	-	1.7	-	-	-	-
Slaughtering	70.7	5.2	-	-	-	-	24.1	-
Livestock advice	77.8	22.2	-	-	-	-	-	-

- No data provided in original table.

between gender roles. Women give first priority to satisfying the milk needs of their children, while men put the needs of the herd first. The clear division in gender roles is also noted where there is labour shortage. In such cases women can and do perform male tasks such as herding and watering animals, but men seldom perform female tasks except where they might gain control over assets with potential for increased value.

In the agro-pastoral system, a wife cannot decide to sell or slaughter her animals without consulting the husband, but she can decide to use her money from the sale of surplus food crop to buy livestock. Alternatively, they can dispose of chicken without seeking permission.

In the intensive specialized production system, women's access to money is dependent on their opportunities for earning money in the village and surrounding areas. Apart from income-earning activities, a married woman's access to money is dependent on the attitude of the husband and the resources available. When the need for slaughtering of cattle arises (special occasions), the head of the household, typically male,

makes a decision in consultation with his wife. A wife decides on the slaughtering of chickens and ducks without seeking permission from her husband. Sometimes children are consulted if they own poultry. Both the husband and wife will decide on any addition of livestock to the household; this will be financed mainly from the sale of milk.

POLICY AND PLANNING IMPLICATIONS

Clearly, rural communities are not homogenous. This case study has shown the broad variances in the gender division of labour and decision-making between three livestock production systems in Tanzania. Planners and decision-makers must notice these gender differences and avoid planning interventions that try to "meet the needs of all".

Different communities and indeed different livestock producers and users in those communities may have different priorities and needs. They may have different livestock production problems in terms of access to services (extension, veterinary services), credit and resources (land, water, food), depending on their socio-economic and agro-ecological context. To neglect these gender differences, or make improper assumptions about the roles or responsibilities of producers, will only lead to more unsustainable and inappropriate livestock development efforts.

Livestock producers within the different systems will undoubtedly also have different local knowledge and experience. This requires actively listening to farmers, communities, different producers and users therein, and recognising the local knowledge and skills already supporting a production system to understand such differences. Sometimes all the technology in the world cannot triumph over good observation, active learning, and participatory planning that builds on farmers' knowledge, experience, and expertise.

LinkS Project Gender, biodiversity and local knowledge systems for food security

The LinkS project works to improve rural people's food security and promote the sustainable management of agrobiodiversity by strengthening the capacity of institutions to use participatory approaches that recognise men and women farmer's knowledge in their programme and policies. The LinkS project has three main activity areas, which are capacity building and training, research and communication and advocacy. The project is funded by the Government of Norway.

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