Gender Issues in Dairy and Beef Value Chains in Tanzania

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Abstract

This study was conducted to assess the role and level of participation of women, men and youth in the dairy and meat value chains. The study also focused on gender constraints and challenges that hinder equitable involvement of women and men in the chains. Using Kilimanjaro, Arusha and Dar es Salaam as study areas, interviews with key informants were conducted using a checklist of questions. Desk review of relevant literature was also done. Content analysis was used to analyze the information collected. The study found out that men and women play important role in both milk and beef value chains, but the extent of their involvement differ significantly. Women were found to be concentrated in lower and insecure nodes of the milk and beef value chain. However, few women who are milk producers have been able to engage or develop horizontal linkages by forming processing and marketing groups. Though there is use of improved technologies, some of these seem to increase women workload. Generally, socio-cultural issues hinder women from fully participating in the beef value chain. Thus, the study recommends that simple and appropriate dairy and beef technologies be developed so as to promote women’s participation in the chains. Also, awareness creation to community members is important to sensitize the people on the role women can play in both dairy and more so in beef sector.

Keywords: Gender relations, milk and beef value chains, Tanzania

Introduction

The Tanzania livestock population ranks third in Africa after Ethiopia and Sudan (URT, 2008). In all regions livestock plays a significant role in the socio-economy of the people. Livestock is among the major agricultural sub-sectors in Tanzania. The industry accounted for 5.9% to the total GDP in 2006, of which beef, dairy and other stock provided 40%, 30% and 30% respectively (Ngowi et al., 2008). Cattle contribute to national food security by providing meat and milk. It also provides manure and draught animal power, thus contributing to sustainable agriculture. Farmers in rural areas keep cattle not directly for the production of beef, but for milk and income generation. Production of livestock and livestock products in the country has mainly been for the domestic market. The livestock industry has maintained a steady annual growth of over 2.7% during the last decade (Njombe & Masanga, 2009). This is lower than the rate of human population growth of 2.9%, and the MKUKUTA targets for livestock industry growth. The target is for the sub-sector to grow at 9% by the 2010, in order for it to have a significant contribution on poverty reduction and food security. Out of the 4.9 million agricultural households, about 36% are keeping livestock; out of which 35% are engaged in both-crop and livestock production, while 1% are purely livestock keepers (ibid.). More than 90% of the livestock population in

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the country is of indigenous types kept in the traditional sector, having a characteristically low productivity, yet well adapted to the existing harsh environment, including resistance to diseases (Covarrubias et al., 2012). Livestock of different types are kept at different levels in regions, ranging from those regions known to be predominantly livestock production ones with over and above 500,000 heads of cattle; which include regions such as Shinyanga, Mara, Mwanza, Arusha, Tabora, Dodoma and Singida. Other regions such as Mbeya, Rukwa, Morogoro, Lindi and Coast had few livestock in the past, whereas as of recent the number is increasing due to migrations from the northern regions.

The dairy and beef sector is a relatively small industry in Tanzania, although there is a great potential for improvement. These sub-sectors are among the key components of the livestock industry, which have great potential for improving national income as well as living standards of both men and women involved. Men and women are involved at different stages in dairy and beef value chains; and take different roles as producers, processors, marketing agents and consumers along the value chain. However, inequalities in participation, access to, and control over resources and benefits accrued in some levels of value chains are common (Mayoux & Mackie, 2008). Dairy and beef value chain nodes are socially located, involving both men and women at all points of their activities. Therefore, gender relations underlying these activities have an important influence on the way value chains function. Hence, it is important to explore women and men’s roles and capabilities, and their distribution throughout the chain so as to get information on how to better support men and women actors in the chains. A careful incorporation of gender in the value chain is likely to encourage creative thinking about the range of potential strategies for upgrading value chain as a whole, and also protecting interests of most vulnerable groups in the chain. The intention of this paper, therefore, is to present the analysis of men’s and women’s participation and constraints in the dairy and meat value chains, in view of providing suggestion for improving women’s involvement in the chains.

**Gender Dimensions in Development**

The importance of gender as an issue in development cannot be over-emphasized. According to the United Nations (1995), women’s work in the productive and social sector is a key aspect in development. The inclusion of gender issues is not only beneficial, but also crucial for the success of economic development (USAID, 2006). Agriculture, which includes both crops and livestock production, is predominantly the main economic activity in most of the developing countries such as Tanzania, in which women forms the significant labour force. Though women contribute significantly to the sector, they disproportionately enjoy fewer benefits than their men counterparts. According to Mayoux and Mackie (2008), inequalities in participation, and in access to and control over benefits accrued in the agricultural chains.

Gender equity and women empowerment are human rights that lie in the heart of development and achievement of the Millennium Development Goals (MDGs). Literature on gender and development confirms an important lesson for development effectiveness. Failure to address gender issues in project development
interventions can lead to inefficient and unsustainable results, and also exacerbate existing inequities. Gender biased social and economic roles and the division of labour in communities can affect development outcomes in unanticipated and adverse ways, and distort the distribution of benefits and opportunities between men and women. Addressing gender concerns in economic and social development status promises major payoffs not only at the individual level but, most importantly, at the societal level. Development affects people in different parts of the world in different ways. Thus, it also affects people differently, depending whether they are male or female.

Gender Mainstreaming in the Value Chains
Value chains have become a key concept in international discussions on development, and many organizations have adopted value chain approaches to agricultural development (Risgaard et al., 2010). However, gender differences and inequalities operate at all levels of value chains, affecting not only women’s right but also poor development goals. In recent years, there has been a growing interest on understanding the impact of value chain interventions on women. Gender mainstreaming— as the process of ensuring that both women and men have equal access to and control over resources, decision-making, and benefits—is important in the milk value chains. Gender mainstreaming in milk and beef value chains will ensure that gender, as one of the important variable, is examined to ensure effective performance all along the chain.

The analysis of value chains needs to incorporate gender as an essential element if their functioning is to be fully understood. As the value chain approach incorporates analysis of the network of agents that facilitate the range of activities along the chain, it is important to examine these actors within the context of the socio-economic environment in which they operate. Such analysis will allow the analysis of gender relations at every node along the chain. This will help us understand, at a more integrated level, gender differentiated roles and benefits/rewards within the value chain; as well as individual access and control over resources, and how these are affected through the operation of the chain. The strength of a value chain approach lies in its ability to analyze all aspects of design, production, and marketing through to consumption; but the totality of that analysis can only be achieved if gender is included as an integral part. This also has policy implications in terms of strategies to combat gender inequality and enhance women’s access to upgrading of their skills and rewards in the chains.

The dairy and meat value chain start at raw milk and meat production, and ends when processors, institutions and consumers utilize products that were created in the value chain. According to IIRR et al., (2006), some individuals and firms can grow rich if they can exploit the advantages in the chain at the expense of other individuals, especially the poor (women and youth). A careful incorporation of gender in the value chain development is likely to encourage creative thinking about the range of potential strategies for upgrading value chain as a whole, and also protecting interests of most vulnerable groups in the chain.
Research Approach and Methods
The study was mainly qualitative, where interviews and consultations with key informants and various actors in different nodes, in both dairy and beef value chains, were done. In addition to these, relevant documents were reviewed. Field/site observations was also done to corroborate the findings from other methods used in the task.

Discussion with Key Informants
Interviews and consultations with key government and private stakeholders, for instance the Ministry of Agriculture and Food Security, Ministry of Livestock and Fisheries, and other relevant actors were done. Interviews were held with representatives of women and youth involved in the different nodes in the beef and dairy value chain not only to ascertain their level of participation, challenges and constraints faced, but also to get their views and experiences on the usefulness of the technologies in use. Field visits to the identified sites (Arusha, Kilimanjaro and Dar es Salaam) were carried out, whereby interviews and discussions with relevant stakeholders were done. Using gender analysis tools, different information were collected on the participation and roles of both men and women in the dairy and beef value chains. Using access and control profile, gendered access and management within the chains were explored. It was important to distinguish between men and women’s active role in the production activities within the chain, and the actual management of the chains. Study questions include: What role do women and men play in the management of the chains? Who takes decisions at what levels, and who takes up leadership positions? How might gender relations constrain the acquisition of resources at particular nodes in the value chains? What barriers impede women’s access to, participation, as well as management activities in different nodes in the chains? The study also sought to seek information on gender specific needs, and technology in the dairy and beef value chains.

Literature/Documentary Review
Review of relevant documents was done to solicit important information of the study. The various documents reviewed included the national livestock policy, the Dairy Industry Act No 8 of 2004, the Dairy Industry Regulation of 2007, hygienic milk production, hygienic measures in the dairy value chain, gender policy, trade policy, milk and beef sectors reports, research and academic publications.

Data Processing and Analysis
Data analysis and processing was done qualitatively, and directly analyzed and reported to express the real situation in the studied value chains. Content analysis was used to process data from key informants, and from secondary information sources.

Findings and Discussion
Gender Roles in the Production of Dairy Cattle
Women were found to be responsible in daily management of cattle kept at zero grazing, while men had the supervisory role and control of the dairy cattle. Zero grazing system is believed to be more labour intensive, compared to other
management systems (Bareeba & Kabi, 2007). Men were less involved in the activity, with lack of time to spend at home being given as the reason. Various equipments are used at the production node, such as sickles and pangas to cut grasses for feeding animals. Fetching of grass in the dry season is quite demanding as women need to walk long distances for it. Since all activities are done manually, there is an increased women workload. In view of this, women opted to employ hired labour—mainly of boys—to do all the daily management of cattle. Milking is done manually, and mainly by women. It was noted that gender roles changed as technology improves. Men were reported to be attracted at this node because with the improved technology, dairy cattle management is made easier, and the value of milk increases. Generally main decisions making at production level is done by men as they are the owners of dairy cattle. However, women take some decisions at the managerial level.

Selling of milk is controlled by women, except at hawker’s level where men dominate. Hawkers sell milk direct to individual households, hotels, and kiosks; and to a lesser extent to milk collectors. There are few women/girls working as hawkers because the job demands many working hours in a day, hence making it very difficult for women with multiple responsibilities at home. Similarly, married women are not easily permitted by husbands to carry out such a business as it makes them stay away from homes for long hours. Before starting the business, hawkers enter into an informal agreement with producers to collect milk on daily basis. Based on this, it is quite difficult for women to engage in such business because they often come across situations where they are forced to remain at home attending to domestic chores. It was also noted that hawking is considered to be a risky business, as explained by one of the women hawkers in Moshi town: “Hawking activity is a high risk business as milk collected might be adulterated to the extent that it need to be discarded". It is also seen as a difficult business into which women cannot venture. Thus, a majority of women/girls were seen selling milk and other dairy products at kiosks and milk bars as they are known to attract buyers.

At the processing node, value addition is done to produce various products. Women constitute a large proportion of actors at this node because most of the activities done here, for instance boiling fresh milk, are regarded as female activities. Majority of the women processors have access and control over the processing technologies and the equipments used. This is because the majority of small scale processing plants are owned by the women group association. As for processing, which is done at household level, men have the control over the processing equipment. Most of the processors use improved technology in milk processing. These equipments include: cheese churning machines, cheese presser, lifting pulleys, biogas and boilers. These machines were reported to reduce the drudgery in processing, although it was reported that women found it hard to use some of these technologies, e.g., lifting pulleys.

**Gender Differences in Access and Control in the Dairy Value Chain**

Traditionally, milk was for family consumption; and it was controlled by woman. They had the mandate to decide on how much the family could use, and how much to sell. But as stated previously, women had control over milk, but with technological
improvement, men are also started to engage in the production of milk; hence having a control over milk too. Men are also main controllers and the owners of dairy cattle; and are the ones who usually make major decisions, such the sale/slaughtering of cattle. Unless the processing equipment belongs to a group, men are generally the controller of the equipments. With regard to income obtained from the milk and milk products sale, it was reported that women have a greater control over it. It is even more so when these women belong to a certain dairy group.

*Gender Specific Challenges in Dairy Value Chain*

Feeding animals at zero grazing entails fetching of grass from distant places, especially during the dry season where grass is scarce. For those women who cannot afford employing help boys, grass fetching increases their workload. The use of crude technologies at the production node limits the performance of both men and women. Lack of initial working capital was mentioned as one of the major challenge facing women processors. A majority of them acquired capital through external support. This is a limiting factor when expansion and general maintenance of feeding and milking equipments is required.

It was also reported by milk processors that there are gender-related problems connected to income. As income from dairy products increases there are less gender problems, especially in the wet season because there is enough income for the family consumption. However, in the dry season there is more gender conflicts related to income due to unfulfilled family requirements. When milk production is low, there is low income for home consumption, and then men tend to control all the income. It was also noted that when men have separate sources of income, there is less gender-related conflict. This situation was observed in Kilimanjaro where men used to have full control over coffee production. However, during high (milk) demand season, some men prevented their wives from selling milk at processing centres, and instead sell the milk to individuals who offers higher price. In this way, women lose control over milk and the income obtained from its sale.

*Gender Roles in the Production of Beef Cattle*

Gender roles were assessed along the beef value chain; from production to the consumption. The nodes at which women are mainly involved are shaded as shown in Fig. 1. Gender roles differed from one node to another in the value chain. For instance, in the production of cattle, as owners of the animals, men play the role of being the overseer of cattle, while the management of cattle is done by both men and women. Men and boys take animals for grazing, while women are responsible for feeding the calves around their homestead. Treatment of the cattle is the responsibility of men. Because the animals that are meant for beef production also produce milk in relatively small amounts, women are responsible with milking and how the milk is being used. Milk produced from beef cattle is controlled by women, who usually use for it for home consumption, but also sell some amount of it. Any income obtained from milk sale belongs to women, who have full control on how it is used. Generally women access and control milk produced from beef animals, but the animals belong to men.
Gender Roles in Value Addition/Processing

Generally, there are slaughtering slabs and few abattoirs in the country. Few women are involved at this point. For example, at Sakina abattoir in Arusha, I found no women taking part in the slaughtering process, except one who was working in administration tasks. When asked as to why there are no women in the slaughtering business, she said the slaughtering job is considered by both men and women as ‘hard work’. She further said that there are few women job applications at the slaughter house, and a female who used to be a general manager at the abattoir quit the job because of mistreatment from men.

The slaughtering process start very early in the morning, around 1.00 am, to make sure that by 5.00am meat is already in the butchers. As suggested by a meat trader interviewed at Vingunguti, the timing of these activity limits women from participating as many are expected to be at home; and it is considered unsafe for women to be out in late hours at night. For married women, their husbands could not allow them to be out from home at such hours. Also, because of their reproductive roles (pregnancy and lactation), women may not be in a position to do such jobs because of time limitations.

At Vingunguti, few women were found to be employed to clean the intestines and some were selling food (tea, chapatti, and soup) to people who come to work very early in the abattoirs. Many women were found selling feet (makongoro), heads, tails and intestines outside the slaughtering premises. A number of men were also seen
selling *nyama choma*, and others sell raw meat bought from meat traders in the slaughtering premises. Some men were seen carrying water in carts to be sold within the slaughtering premises. Generally, there are a number of side-businesses near slaughtering houses, which are done by both men and women.

Generally, most meat from the butchers is sold to customers unprocessed. Beef, which is sold to meat processing industries such as Meat King in Arusha, is processed into sausages, mince and chops. In this industry trained women were found processing beef sausage and other products. No women were found working in butchers in the areas visited. When asked as to why there are no women in butchers, it was revealed that a woman cannot handle meat because they are traditionally regarded as unclean to handle meat. Upon probing, they revealed that women undergo menstruation on monthly basis, and this is considered to be a ‘dirty period’. One of the key informants in Arusha said: “*A woman cannot cut meat for men; that is culturally unacceptable.*” It was also said that when women are pregnant, they do not want to handle meat. Apart from selling meat to meat traders/butcheries, some of the beef from slaughter houses is sold to food vendors (*mama ntiele*), and people who run *nyama choma* business. There is a clear division at this level. *Nyama choma* business is mainly run by men; and *mama ntiele* is predominantly a women business.

**Gender Issues in Marketing of Cattle and Meat Products**

Generally men control the animals and make decisions as to when an animal can be sold. As observed in the cattle primary and secondary markets visited, only men were found selling the animals. Women and girls were seen only engaging in other activities like sale of food and drinks, traditional medicine, gourds, and some traditional ornaments and decorations around the primary markets. In Arusha secondary auction (Meserani), women were observed selling water and hay to feed the cattle waiting to be sold. These are traditionally known to be women’s stereotype kind of activities. When asked as to why there are no women selling cattle, some informants reported that cattle-selling is not women’s business; that women and their children handle and control milk only. Also, there was a small number of women as cattle/meat traders. This is attributed by the fact that traditionally, cattle are seen as big animal that can be handled by men only. The few women found at this node admit that it is challenging because this node is dominated by men, but still women who are determined and have capital can still engage in the business by employing men. Few women are in a way involved in meat trading through family businesses, but not as sole traders. Similarly, most of the middlemen or meat traders who buy cattle from these markets are men. There is a lack of information on the market requirements in terms of quality and quantity of cattle needed. Traders—both men and the few women found at the auction points—mentioned weight as the preferred quality because it is used in price determination. They had no other market information on other market requirements such as the health condition of an animal and its size.

At the slaughtering premises meat is sold to individuals, or sold in bulk to wholesalers, known as *besela*, to be taken to the butchers, or for processing for supermarkets and hotels. Some of the meat traders have their own butchers, and thus slaughter to meet their demands. Again, no women were found to run a butcher; and
if they do, it is in collaboration with men, or as a family business. Generally there were no women working in all butchers visited in both study locations. In one of the butchers visited, there were seven working staff but there was no woman among them. One of the employees said: “Meat processing and sale is a hard task for women. Women are there to get married and not do hard jobs.”

Income obtained from animal or meat sale is usually controlled by men, and women have no right to ask of its use. A cattle producer in Vigwaza primary auction market was ask on how he will spend the money. He said: The money belongs to me, so I will spend it the way I want. I can use it on beer or anything I like.”

Gender Specific Opportunities/Challenges in Beef Value Chain
Generally, socio-cultural issues hinder women from fully participating in the production of beef cattle. Big animals, such as cattle, have always been associated with men; hence few women are found to engage in beef cattle production. Few trained women were found to work in the medium/large scale processing industry probably because some of the operations are done by machines that are easy for women to operate. This implies that if these kind of processing industries are established and strengthened, the number of women involved at this node will be increased. Technologies used in the beef value chains, such as those used in slaughtering process, are simple and traditional ones. Stunning, a method used to kill animals, is considered very hard to be done by a woman. After portioning, meat pieces, which are relatively big and heavy, are lifted by hand and carried into meat vans by men as meat lifting tools are also not available. Generally, in butchers meat is chopped on a piece of wood by axe and pangas. These tools are seen to be difficult for women to use. Few butchers have imported chopping and mince machines, which could be easily used by women. As mentioned earlier, other socio-cultural factors also account for there being no, or few, women at this node.

Capital to run the business was also reported to be a challenge. Few women were employed in beef processing and sale of processed products. Moreover, socio-cultural issues hinder women from participating in beef value-adding and processing as meat is associated with blood, which the society find as impossible for women to handle. Women’s number in cattle marketing and trade is low because of challenges involved in this business. Sometimes traders have to go to several auction markets away from home looking for cattle for a number of days or weeks. Traditionally, women are expected to stay at home looking after the family, hence rendering them unable to engage in cattle business which involves long distance travelling.

Another challenge is women’s low ability to negotiate for a profitable price for the cattle. Generally women are expected to be submissive; hence it becomes difficult for them many to engage in profitable cattle price negotiations. The negotiations during the cattle sale transaction occur with both the buyer and the seller trying to maximize their profits. Therefore, those with low negotiation power—who are most likely to be women—tend to be on the disadvantage side. Culturally women are expected to give in and act according to men’s will. Generally, women seemed to have low negotiating power; while the nature of the business requires high negotiating powers to win a good
and profitable price. Disorganized (no use of weighing scales and auction rings) cattle marketing and weak enforcement of regulations is working to women’s disadvantage because of their low negotiating power.

Cattle marketing require relatively high investment as business capital, which in most cases women lack. An indicative price for a cattle ranges between TZS 200,000 and 1.5m, depending on the animal live weight, plus other costs as taxes and levies. It was reported by the few women involved in the cattle marketing that women are harassed more at check-points compared to men when it comes to transporting the cattle from one point to another. Such nuisance discourages women from doing this business. Also, women are not fully represented in meat industry boards; hence their views may not be heard. Even where it is proposed to have one representative from livestock producers, one wonders how such a person can be a woman, as culturally women do not handling large livestock decisions.

Conclusion
The study has brought out a variety of lessons to be learnt, and to be taken into account when designing future milk and beef value chain interventions. It has found out that both men and women play important role in both milk and beef value chains, but the extent of their involvement differ significantly. Women are concentrated in lower and insecure nodes of the milk and beef value chain. Insecurity in the chain is related to low incomes generated at those low nodes. However, there are few women who are milk producers and are able to engage or develop horizontal linkages by forming processing and marketing groups.

Also, the study has identified a number of gender specific constrains and challenges that hinder the performance of both men and women in the chains. The lack of mobility, access to assets and markets, and linkages to other value chain actors are the major gender-based constraints found in the study. Gender constraints related to conservative social norms and culture were also among the gender specific constraints identified. Though some of the technologies were designed to reduce women’s workload in the chains, they indeed increase women’s workload. Therefore, there is a need to develop simple and appropriate dairy and beef technologies that will promote women’s participation in the chains. This will be possible through research and involvement of all sectors in the chain.

Value-addition for milk has led to improved income of the actors concerned in the chain. This has increased women’s contribution to the family income, and reduced some of the gendered quarrels related to income use. On the other hand, as milk values increases, men also tend to be attracted in the chain, something that has gender implications. The study also noted some of the gender role transformation leading to a reduced workload to women because men are participating in the management of cattle. Therefore, understanding the position of women in the value chains, and promoting women empowerment is an issue that also affects men. Hence, it is necessary to remain attentive to the local context, and place gender in the context of intra-household bargaining, and of broader social processes.
References


—, (2003), 2002 Population and Housing census, Dar es Salaam: NBS.


