CARING FOR LIVESTOCK. BORANA WOMEN'S PERCEPTIONS OF THEIR CHANGING ROLE IN LIVESTOCK MANAGEMENT IN SOUTHERN ETHIOPIA

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ABSTRACT

Livestock management in the Borana pastoral production system is performed by all family members and the functioning of the system depends on their capability to conduct these activities. However, in recent times, multi-level changes seem to have affected these activities and the related division of labour and demand for labour. In this study we used an actororiented approach to understand how Borana pastoral women in southern Ethiopia perceive and evaluate their current role and work in livestock management under the increasing influence of these changes. Based on information gained through 58 semi-structured and nine narrative interviews, women's perceptions of the activity 'fodder collection for young stock' are presented as an example, as this activity is affected by both environmental issues and government policies that have led to changes in labour needs and division of labour between Borana women and men.

KEYWORDS

Borana livestock management, gender, pastoralism, women's perceptions, southern Ethiopia.

INTRODUCTION

In dryland ecosystems where crop production is not feasible, pastoralists establish highly productive livestock management systems through the adaptation of their social and herding systems to the variability of productive inputs, i.e. pasture and water. Thirty years ago, the Borana pastoral system in southern Ethiopia was described as outstandingly efficient in terms of animal protein and food energy production per hectare, outranking the efficiency of commercial ranches in Australia (Cossins 1985).

The involvement of all family members is crucial for pastoral livestock management; and, for the most part, livestock-related activities are strongly gender-segregated. In principle this applies to the Borana of southern Ethiopia as well (Dahl 1987). Much of the information available on the gendered division of labour in pastoral systems exists in the form of lists and brief descriptions. The relevance of the specific activities, however – the particular working

steps they comprise, their characteristic features and, very importantly, women's own evaluations of their work – are often not investigated.

In present times, the functioning of the Borana pastoral system is challenged due to demographic growth, expansion of crop cultivation in rangeland, increased integration into markets, unfavourable policies on settlements and land use as well as increased frequency of droughts (Hurst et al. 2012, Desta and Coppock 2002, Tache 2000). These changes affect the livestock-related labour in the pastoral production system: as pastoralists maintain their production systems through both routine and problem solving activities (Kaufmann 2011), changes in the production environments will lead to an adaptation of these activities in order to maintain the productivity of the system. Hence, these profound multi-level changes raise the question of whether and to what extent the labour needs and division, and consequently the roles of Borana women, have been affected.

The aim of this study is to understand gender roles in livestock management and their changes from the perspective of Borana women. A base line study on literature addressing the gendered division of labour and recent changes in African pastoral systems presents the state of knowledge. For the empirical part, three main objectives are set. First, Borana women's current roles and responsibilities in livestock management are explored and, in the framework of this paper, illustrated on the basis of fodder collection as a core women's activity. Second, women's perceptions of their role in livestock management are assessed. Third, changes in the gendered division of labour and their causes are investigated from an internal perspective, incorporating structural modifications in the Borana livestock management system as perceived by the local actors, insofar as these provoke changes in the division of labour between Borana women and men.

LITERATURE REVIEW

'The Borana are essentially cattle husbandmen', Cossins and Upton (1987) summarise, pointing to the importance of cow's milk as a staple food in the Borana diet and the main share of income derived from cattle sale in the overall household earnings at that time (approximately ninety per cent). They describe the Boran cattle as a dual-purpose zebu breed, large in frame, usually white or grey in colour and comparatively high in milk yield. For management reasons, livestock are divided in *forra* and *warra* herds. The latter are composed of lactating cattle, calves and small stock and kept near the settlement, whereas dry cows and immature cattle are kept in satellite herds which can reach far distance pasture (*forra*). The

basic unit of livestock ownership and management is the nuclear family, although work is often done co-operatively with several families, for instance through joint herding at *forra*. Men, women and children are actively involved in livestock management; the viability of the household is crucial for the functioning of the system (Dahl 1979). Thus, the Borana way of managing livestock is to be understood as a family-based production system.

In the recent past, the Borana pastoral system has undergone transformation associated with both internal and external drivers. Human population growth, coupled with reduced access to important grazing land, has resulted in significant reduction of strategic herd mobility. Consequently, the Borana pastoralists are not able to exploit the rangeland spatial-temporal variability to their advantage, unlike in the past when they relied on mobility as an adaptive strategy for managing variability. Concentration of livestock in the remaining parts of rangeland, and official banning of the traditional range management practice using fire, have triggered impacts on rangeland health with negative implications for livestock productivity. According to Desta and Coppock (2002) and Gemtessa et al. (2005), bush encroachment and surface soil erosion have emerged as the biggest problems resulting from change in use of fire due to official policies. The observed changes are in line with the perceptions of Borana elders stating that both rangeland quantity and quality have diminished (Hurst et al. 2012). Moreover, multi year droughts in 1983-85, 1991-93, 1998-99 and 2005-08 each entailed the death of about half of all livestock, and a persistent drought over the year 2011 again caused large dieoffs (Hurst et al. 2012, Coppock et al. 2011). Interviews with Borana pastoralists reveal that increased probability of below average rainfall or total failure has become noticeable in Borana since around forty years ago (Hurst et al. 2012). Overall, the pressure on the Borana pastoral system has limited its productivity and resilience. The Borana system once viewed as the 'epitome of sustainable pastoralism' is currently facing a trend towards increased vulnerability (Desta and Coppock 2004). These changes may also affect traditional roles played by different family members in Borana pastoral production.

In numerous pastoral societies, labour is divided along gender lines. Yet, for the investigation of gendered roles in livestock management, it is important to note that 'women' and 'men' are not homogeneous groups, and factors other than gender – such as age and place in the life cycle, social status or level of education – likewise exert influence on people's roles in pastoral production (Daley 2011, Hodgson 2001, 2000). A *gender role*, as defined by FAO (2012), comprises behaviour, tasks and responsibilities that are considered appropriate for men or women within the framework of a society.

Very generally speaking, women's role in livestock management in numerous pastoral systems comprises work concentrated around the homestead. In addition to domestic chores, the care of small livestock and young or sick animals often falls within women's remit, including fodder and water provision and close-range herding. Milking, milk processing and milk marketing activities likewise are predominantly carried out by women (Flintan 2008, Wangui 2008, Hodgson 2001, de Bruijn 1997, Gritli 1997, Curry 1996, Talle 1988, Dahl 1987, 1979). Men's responsibilities include overall herd management, the moving, grazing and watering of livestock, as well as castration, vaccination and slaughter. Other tasks mostly carried out by men are the construction of livestock enclosures and well digging. Also, men often are in charge of the satellite herds grazing far from the base camp or settlement (Flintan 2008, Niamir-Fuller 1994, Talle 1988, Dahl 1979). This basic role allocation scheme is of course subject to regional variations. In addition, over time as well as in periods of stress, considerable flexibility has been observed (IFAD 2012, Hodgson 2001, Tangka et al. 2000, Talle 1988, Waters-Bayer 1985, Dahl 1979).

Although gendered dynamics in pastoralist communities have been documented in detail (see for instance Hodgson 2001, Talle 1988), recent peer reviewed articles and NGO reports on gender issues in pastoralism tend to address the status quo of women's role in livestock management with a static approach, disregarding the flexibility of gendered labour divisions both over time and between different members of the actual society. Most publications provide lists of activities carried out by women, setting a frame for pastoral women's work. However, regarding numerous pastoral societies and the Borana in particular, the body of literature reviewed lacks a thorough analysis of women's livestock work in detail, encompassing the specific working steps the tasks involve and acknowledging changes in the division of labour between women and men. The stereotype of the 'oppressed pastoral woman' is rehashed in several publications, especially in semi-scientific reports and reviews commissioned by development organisations. Women's own appraisal of their activities, however – the tasks they themselves consider hard and the work they carry out with pleasure as well as their overall level of satisfaction – are for the most part neglected.

In this paper, fodder collection – a challenging activity carried out by all female respondents – is described in detail. The respondents' perceptions of their work and the flexibility in the division of labour regarding mutual assistance of women and men are taken into account, and special emphasis is put on the variability of gender roles over time due to external and internal incentives for change.

METHODOLOGY

The study was conducted in the regions of Malbe, Golbo and Dirre, which correspond to three of the four different ecological zones in Borana, southern Ethiopia, as identified by Cossins and Upton (1987). Dirre is located in the direct vicinity of Road No. 6, the only tarmac road in the area, connecting Addis Ababa with neighbouring Kenya, whereas the regions of Golbo and Malbe are more remote.

The entire study is based on a set of 112 qualitative interviews, of which 82 were semi-structured and thirty were narrative, conducted between December 2012 and March 2013. As not all interviews contained information on the specific topic of this paper, we selected 67 interviews to analyse (see Table 1). For the interview design, we relied on the methodology suggested by Schütze (1983) and Bauer (1996) for narrative interviews, and followed Bryman (2004) for the semi-structured interview guide. All interviews were conducted with the help of Borana-English translators. Initially we aimed to work with a female translator; however, in the course of data collection, sound knowledge about the Borana livestock management system appeared to be more important than gender. As no woman both fluent in English and knowledgeable with regard to livestock management was available, we employed a male livestock keeper after two weeks and worked with him until the end of the data collection. All interviews were voice recorded and fully or partially transcribed.

The results of the activity interviews were assessed, distinguishing the following categories: (1) women's regular activity; (2) taken over if men are not around; (3) done together with men; (4) other; and (5) not done at all. By means of a theme-centred assessment, both quantitative and qualitative information from the semi-structured interviews was dovetailed with descriptions from the narrative interviews – giving due consideration to the completeness of contents, embracing both common opinions and opposing views.

In the change interview analysis we distinguished changes regarding livestock management in general and changes that specifically concern gender issues in livestock management. Relevant passages were transcribed or paraphrased and analysed as demonstrated above.

RESULTS

'I love livestock' – women's perceptions of their role in livestock management

Borana women's role in livestock management includes milking, milk processing, sewing and smoking of milk containers, milk storage and sale. Women collect fodder and fetch water for

young livestock, feed calves and kids and clean their enclosures. Borana women and men carry out a number of tasks jointly. The spectrum of shared tasks is considerable, comprising, for instance, cattle dung removal, livestock medication, releasing and returning livestock in the morning and evening and watering livestock at the deep wells. Men's tasks include fencing of livestock enclosures, work at the satellite camp, livestock sale and slaughter. Children and adolescents assist their parents in domestic and livestock activities; both boys and girls take over shepherding duties. This labour division, however, is flexible for the most part, and mutual taking-over of tasks is practised (see below).

Fodder collection – a hardship?

'If there is no fodder for the young calves, we have to go and collect' (L26) – fodder collection is a seasonal task that has to be carried out daily when the pastures near the village are depleted in dry periods of the year (L4), and all fifty activity interview respondents indicated that fodder collection was their work. Some women noted they also collected fodder in the rainy season, although it was emphasised that good grass could be found in the vicinity of the village during the rains but had to be looked for further away in the dry season (L15). Then, women access fodder in areas that cannot be reached by the animals, if necessary in rough terrain such as in dense thorn forests or on steep slopes:

When there is no grass in the area we climb this mountain and then we collect fodder from under the trees, passing from under the trees, from this tree to another ... If we start going for the collection of fodder in the morning we come back in the evening. (L29)

The fodder is being collected from a very far place in the bush ... We normally go to the bush and enter where there are bushy trees. That is where the nice grass always grows. We enter inside and collect the fodder for the young ones. We are normally pierced by the thorns and then we remove them from our hands. Even if the thorns pinch me, I don't fear, I am not afraid, because it is my activity and it is the food of my young calves. (L18)

The women use two tools for fodder collection. With the *cinaacha*, a sharp cattle costal arch, the grass is cut, and bundled by means of a hand-woven rope. If necessary, the *cinaacha* can be replaced by an edged piece of wood. The women carry the fodder tied on their back like a rucksack to the young stock kept in the village:

I took water, I took the *cinaacha* for cutting grass, I took the rope ... So I go to where there is good grass, I collect it. First of all, I have to collect the fodder at one place. When it is enough I have to put a rope down and then I put the fodder on top to tie it properly. When I tied it properly I call someone to help me to put it on my back. (L22)

There is a rope. We use for collecting the fodder. If we don't have this *cinaacha* we always split the branch of a tree into two and we use it for the collection of the fodder. ... It is very sharp, like a knife, it can cut for me! That is how I collect fodder when I don't have a rib. (L26)

The women collect different types of grass in a specific order:

We know all these grasses are different ... First of all, I have to collect *alalloo* [*Chrysopogon aucheri*]. I collect *matagudeessaa* [*Cenchrus ciliaris*] also. From there, I collect *iddoo* [*Digitaria milanjiana*]. At the end, I have to put *gaguroo* [*Themeda triandra*], on top, because it prevents even my sweat from passing to these grasses. (L22)

Fodder collection was considered one of the hardest tasks, listed by fourteen respondents; only fetching water by jerry can was considered more arduous (sixteen indications). 'From the morning to the evening' she has to go and search for grass in order to feed her young stock, a respondent explains (A12). According to a forty-year-old woman, 'going long distance for collection of fodder' is what makes the activity a hardship: 'We came from very long distance, very heavy grasses, sweaty, tired. There is no grass! We go and search, and search, and search. We might get [enough grass] when we are already tired and thirsty.' (A44) Another respondent clarifies: 'If we go to collect fodder we cannot take rest unless this grass is enough for the animals.' (A45) Carrying home the bundle of fodder is the most strenuous part of the task, a respondent explains in a narrative interview: 'When it is time for me to go, I call some other people to put it on my back and then I go. I take it on my back and start walking. By that time I am already tired and it is so hot, I have to remove my sweat.' (L22) The activity has to be carried out daily: 'You cannot say: "I have collected yesterday, I have collected today" – we go every day until it starts raining. Like that, during the dry season.' (L29)

Fodder collection – a favourite activity?

Despite the hardships experienced in several activities forming part of livestock keeping, the respondents expressed great overall contentment with their work. Examples of enthusiastic

answers given to the question 'Are you, in general, happy with your role¹ in livestock management?' include 'too much happy' (A48), 'so very happy' (A21) or 'very much' (A44). In the activity interviews, 48 of fifty respondents indicated they were happy with their role in livestock management. In the remaining two interviews, the question was skipped, but as both respondents stated they liked all activities relating to livestock it is highly probable they were likewise satisfied with their spectrum of tasks.

The explanations following the simple question 'Why?' did not, as expected, point out the labour division between men and women but referred very consistently and exclusively to their affection for and the valuing of livestock in general. 'Hoorii fedhaa!', a respondent states, 'I love livestock!' (A23) Likewise, a woman expresses: 'This is what I have. Animals are good. I don't get milk, meat without animals.' (A42) Another respondent confirms: 'If I slaughter I get a lot of fat. When I milk I get good butter from this milk. So I give it to my guests or relatives, I feed it to my children. Those who have got no milk, they even take it from me, I help those poor people.' (A44) A woman elaborates:

The reason why I feel happy is: I don't beg. I just herd² my animals and when they come back in the evening I just milk. If my family is hungry I can slaughter for them. During the rainy season when there is good milk I process to get butter from them. That is why I don't even feel the hardness of these jobs. (A45)

Another respondent emphasises: 'It is my work, that's why I am happy, whether I am tired or not.' (A35) Referring to the livestock, a woman states: 'All of them are mine, so I do all the activities for them.' (A38) And another female respondent likewise remarks that 'It is my property, my livestock!' (A40) – therefore, she does not have to work 'for any other person'.

Similarly, the question 'Which of your livestock activities do you like?', did not yield a list of particular tasks in the first place – instead, most respondents indicated that they liked all of their activities. Female respondents' opinions include: 'I like all, it is all my work which is good for cattle' (A33), 'I like all because it is my livestock' (A51), and 'there is no activity I

As there is no direct translation for the term 'role' in Borana, we carefully selected the word *ujii* with the help of a person fluent in both languages and knowledgeable about the Borana livestock management system. *Ujii* may refer to both a single activity or a person's work in general; thus the specific meaning was clarified in the course of the interview.

² The Borana term for herding, *tika*, includes a dimension of caring: looking after the well-being of the livestock, taking them to the water pan, making sure no animal gets lost, etc.

dislike, every livestock activity belongs to me' (A19). Referring to her tasks, a 35-year-old respondent explains: 'All [activities] belong to us as we live from livestock.' (A21) Another woman shares her opinion: 'Why I like [livestock work] is because when I slaughter the meat is sweet. When I milk the milk is sweet. When I sell they buy for me good clothes. I get a lot of milk from these animals.' (A44) Likewise, numerous women pointed to the fact that they depended on livestock, considering this reason enough to think well of the work that secured their living. For instance, a respondent explains that she likes all her livestock activities 'because my life just depends on the animals, I don't get any other income from any other side' (A38). 'This is all my work, it is mine, nobody is forcing me to do it', a fifty-year-old woman sums up her prime argument for liking all of her livestock-related tasks (A35).

The overall happiness of Borana women with their role in livestock management is illustrated by the wishes the women expressed for the future of their daughters. Thirty-one respondents out of 43 with whom the question was discussed wanted their daughters to live the same life they currently did. 'I like them to live the way I live' explains a respondent (A31), and another woman underlines she wants her daughters to 'do all activities undertaken by me' (A17). A wealthy husband, lots of cattle and plenty of milk were common wishes for the girls' future. Twelve women, of whom six were from Dirre, wanted their daughters to get educated and abandon livestock keeping. Notably, in Golbo, where most activity interviews were conducted, only two respondents wished their daughters would seek employment instead of living by pastoralism.

The only activity that more than two women indicated they disliked was fetching water by jerry cans (five indications) because of the vast distances needing to be covered in dry season. According to a young wife, Borana women's responsibilities are an integral part of their lives, essential to fulfilling their societal role (A1). She opines: 'It is not a matter of liking'. All in all, the women appeared to answer the question about their favourite activities with no thought of self; the explanations given largely referred to the well-being of the livestock instead of describing how easy or pleasant it was to carry out a task. Some women, having already pointed out they liked all activities, did list tasks they preferred over others. Collecting fodder (seven indications), herding (seven indications), and drawing water from the deep wells (five indications) were most favoured. Asked why fodder collection was her favourite activity, a forty-year-old respondent explains that she likes fodder collection because 'I just want to feed [the calves] by myself only. Other people might not bring the right fodder' (A31). Another woman says: 'If I let my calves graze they will die because of the sun. That is why I want to

feed them under the shade.' (A44) A thirty-year old respondent states: 'They feed on it, I want to feed them from my hands.' (A25)

The way the women talked about taking care of calves suggests that being responsible for young stock exceeds the mere provision of regular nourishment. Some women told about massages they gave to calves during milking: 'I let them suckle and I massage their back and on the side of the ribs.' (L26) The respondents showed a pronounced sense of responsibility and great affection for their young livestock; several women emphasised they regarded themselves as the 'mother of the livestock' (e.g. A45). Referring to a young calf, a respondent says: 'It is just like a child of a human, we take care of it.' (L23)

Flexibility of labour division and recent changes

We divide these activities: fetching water is for the ladies, collecting fodder is for the ladies. Construction of the calf shed is the work of the ladies. Fencing enclosures for the [adult] animals is for the men ... Taking the livestock to the satellite camp is the work of the men. We divide our work in such a way. But when our wife gives birth or they are not able to do, we can even do all these activities. We can construct the calf shed. Even the ladies can construct the [adult] animals' enclosures if the men are not around! ... In case there is not any problem, we have already divided our work. In case of a problem, we can do everything. (C10m)

This statement of an elderly male respondent represents the basic pattern of the gendered division of labour in Borana: role allocations are set out clearly but prove flexible in everyday practice. This flexibility is crucial whenever labour is short – and it is becoming even more important with respect to recent changes occurring in the region. In almost every change interview, environmental degradation was addressed by both women and men. A male respondent illustrates:

In the countryside it has changed completely: shortage of rainfalls, and there is no grass at all. I started herding when I was twelve years, and there was a lot of grass. Since three *gadaa* [24 years] [... there is a] shortage of rainfall, a lot of trees have grown on the ground. Even the rain we get: we don't see the grass growing, only trees are growing. (C12m)

Lack of fodder considerably affects livestock productivity, curtailing both milk yield and livestock fertility. In such a situation, the best choice would be to move to another area – this

production strategy, however, can today only be pursued to a very limited extent. A male respondent explains:

When there was no grass within the area, before, we normally loaded our camels or donkeys to migrate with our animals to different places. Nowadays, there is not any migration, we just stay in one place ... This is the government plan: ... when the people are together, they can do something for the development of this area, that is why the government organised the people not to migrate from place to place. They have planned for the activities only! They have not planned for the animals to graze nicely ... It is good for human beings to stay together, to do everything together, but it is not good for the animals. (C10m)

In several villages, these activities demand considerable labour input, taking place on up to

five or six days a week. A male respondent explains: 'If I go to this work, my wife goes for herding. If she goes, I go for herding. We do it just in turn like that. But according to the government policy, nobody stays at home!' (C12m) He further expounds that people who do not play an active part in the government activities regularly do not benefit from government aid: 'They will not get any help from there. People get some money and some rations. And those who don't go, they don't get.' Moreover, missing the government activities may involve an imposition of fines. However, there seems to be some room to negotiate with the field officer in charge. 'We just tell them: "Please! This person has gone for herding! Don't accuse him!" If he agrees, it is okay. But if he doesn't agree, there is no any other way to go ... You have to pay something in turn. You are fined then, if that person doesn't agree.' (C17m) Nevertheless, a vast majority consider governmental and NGO aid positive in principle. Respondents appreciate the development of water infrastructure, the distribution of food rations, money and livestock and the introduction of novel practices like fencing of grazing reserves and hay storage. On the other hand, however, the labour shortage in livestock management inflicted by the communal labour programme is criticised. 'The government came to the community and told us to do so many things', a female respondent explains (C6f). Both men and women participated in the government activities 'every day! We normally take rest only during the market day, that is on Monday'. She points out that since the government work had been implemented, 'the children herd [adult] cattle. The men only go for watering livestock, and all the [remaining] activities are for the children ... Before, the adults herded. But nowadays, we just let only the children herd the cattle. This is a problem. That is why even yesterday they have got lost. So there is a problem also, on the side of cattle.' Another respondent similarly reports that since the government launched the activities in the area,

'herding is a problem. Watering is a problem. Collection of fodder is a problem' (C14f). Asked about who collects fodder during the days of government activities, she replies: 'Nobody, we are just giving them what we have stored.' She had collected the fodder when the government activities were interrupted for a longer period of time and tries to restock during her days off: 'We collect when it stops. We also collect during our resting days, because within one week, we have two days for resting. We collect fodder those two days.' Normally, however, she would not start using her stored fodder yet but 'collect more instead of [feeding] what is stored'.

Additionally, with the environmental change briefly sketched out above, livestock work becomes more challenging. A female respondent opines that women are more affected by prolonged dry seasons than men, because 'we, the ladies, we fetch water ... If we load donkeys for fetching water it is a must that we carry another jerry can. When we come from fetching water, we don't sit down, we collect fodder. So when I come from collection of fodder I go for collection of firewood. As the sun sets, tomorrow morning we do the same thing' (C22f). She appreciates the help she gets from male community members in such situations: 'Men can also fetch water by donkeys. Sometimes we collect fodder together. Even men are not taking rest. ... We both take this *cinaacha* and cut grass. Sometimes also the men can carry [the fodder]. They tie it together and carry it with their stick ... on their shoulder, they carry.' Especially when drought becomes severe, 'each and everybody goes for the collection of fodder'. According to her, this was not necessary in earlier times: 'Previously, there was enough grass within the area, and the grass didn't get finished like nowadays' – thus, men did not have to collect fodder, 'it was only ladies' (C22f).

Overall, there was a broad consensus among both male and female respondents that nowadays more activities were carried out together, and especially men helped women more than before – not only when drought is severe. Carrying out an activity 'together', however, does not necessarily imply that men and women perform the same working steps. For example, as households become more sedentary, the traditional calf shed constructed by women out of twigs and grass is more and more replaced by a durable, sturdy type of calf shed built of wood and clay. Its construction requires heavy poles that are cut, carried and erected by men. Women, in contrast, bring smaller branches with which they build the walls between the poles. In the end, the roof is covered with a layer of clay: 'It is the men to dig [the soil] but the women to bring it closer to the shed. Sometimes even the ladies can [dig] ... The men put the soil on top. We use a spade to do it and the ladies are not able.' (C17m) This gender-segregation of shared tasks likewise can apply to novel activities: when bush is cleared inside

the new grazing reserve, for instance, 'the man is to cut and the lady is to remove the bark in order for the trees to dry.'

Other examples of former women's activities in which men assist today include cleaning the sheep's, goats' and young stock's enclosures, as well as feeding and herding calves:

Removal of dung for shoats, for calves, and kids mostly was the activity of the women before, but nowadays, the men are doing [it, too]. Previously, herding of calves was for women, but nowadays the men are the ones who are doing it. At *galchuma* time [when the animals return from grazing], it was a must, the lady was supposed to be present at the gate, before, but nowadays it is not like that. They say: 'You have been doing so many activities, you are tired, you can take rest.' This is the gender change. (C21f)

The inducement for these changes was mostly ascribed to the policy of the new government. A woman explains: 'Nowadays, they help in everything. Since this government has been ruling, there is more help from the men ... They have been advised to do every activity together. For example, if the woman goes to fetch water or goes to water livestock, let the husband go and collect fodder. [... Before,] they didn't help each other like this.' (C21f) Although some respondents remarked there were cases of non-cooperation still, an overall tendency to increased sharing was emphasised. Both men and women appreciated the advance of mutual assistance: 'It is good. It is the way of helping each other.' (C7f)

DISCUSSION

Labour division in Borana livestock management

Borana women's work in livestock management comprises milking, milk processing and milk sale, as well as nourishing of kids and calves, including fodder and water supply. This is in agreement with recent and earlier observations in Borana (Flintan and Ridgewell 2007, Dahl 1979), corresponds to findings from other pastoral groups such as the Maasai community (Wangui 2008, 2003, Hodgson 2001, Talle 1988) and applies likewise to agropastoralist Zarma women of Niger and Jallube women of Mali (de Bruijn 1997, Turner 1999). As with Kenyan Maasai (Kimani and Ngethe 2007, Tangka et al. 2000), the Borana women interviewed take care of the cows that are expected to calve shortly and assist at birth. Moreover, Borana women regularly remove the dung of young stock and shoats. Notably, the respondents in this study considered the cleaning of enclosures very important; particularly for young calves, sheds are cleaned once or twice a day. In the literature reviewed, however, dung removal received little attention.

Borana women both share tasks with men and, if necessary, carry out activities that belong to the realm of men's or children's work. Tasks taken over for other family members include herding, watering livestock in the deep wells, and repairing of fences. Dahl (1979) consistently emphasised Borana women's involvement in herding and watering when men sought for alternative income sources in towns. Similar results were obtained from Kenyan Maasai: women assumed men's livestock responsibilities, particularly when their husbands had left for trading, and men helped their wives in milking when necessary (Bekure et al. 1991). Regular sharing of work, however, appears to be a more recent phenomenon. Wangui (2008, 2003) in her investigation of gender roles in Maasai livestock production did not encounter a single activity exclusively carried out by men or women, without the involvement of the opposite sex (activities like milk processing or slaughtering, however, were not investigated). In the dry season, Maasai women's share in watering animals amounted nearly to the same level as men's. This suggests that, despite the prevalence of a gendered division of labour in the Maasai community, the actual task allocation is handled in a flexible manner. The Borana women interviewed for this study carry out a number of livestock activities together with men on a regular basis. Such tasks include releasing livestock in the morning and returning them to the enclosures at night, searching for lost animals, feeding salt, cleaning the cattle kraal, and livestock medication. For cattle dung removal the distinction between 'shared task' and 'task taken over for men' is difficult to make: it was stated several times that cleaning the kraal was men's work, but actually women indicated they were involved regularly in cooperation with male family members; thus, the activity was finally considered 'shared'. Moreover, the involvement of women in typical men's tasks may vary greatly between different women: nearly half of the respondents indicated they were regularly involved in watering animals at the deep well, whereas the other half did not usually participate. This shows that, despite the prevalence of a gendered division of labour and broad congruence of women's work, Borana women cannot be referred to as a homogeneous group. Factors influencing the different levels of involvement of married women in men's, children's and shared activities may include the number and age of children participating in livestock management, women's age and physical capacity, as well as the level of involvement of family members in other activities such as schooling or government labour. Further research would be necessary to identify the determinants influencing women's participation in the above tasks. All in all, the number of shared activities is remarkable, and mutual assistance of women and men with each other's work points to a great flexibility in the gendered division of labour whenever the necessity arises. Hurst et al. (2012) hold the view that gender roles in Borana are not as rigid as might be supposed at first glance. The findings of this study support this claim.

Male domains are the construction of livestock enclosures, livestock sale and slaughtering. This corresponds to earlier findings from Borana (Gemtessa et al. 2005, Dahl 1979), to other ethnic groups of southern Ethiopia and northern Kenya (Little et al. 2001) and to Karamojong and Jallube agro-pastoralists (de Bruijn 1997, Stites et al. 2007). Sale and slaughter appear to be conducted by Borana men only in most cases. This is in agreement with findings from other pastoralist communities, although there are exceptions: Maasai women, for instance, were found to slaughter from time to time, especially in connection with ceremonies (Talle 1988). In contrast, milk processing, sewing of milk containers and carrying items on the back seem inappropriate for Borana men. Given the great flexibility as regards other livestock-related tasks, the exclusiveness of these activities is noteworthy. An investigation of the cultural values and other determinants of the involvement of men in women's work and vice versa would help to gain understanding of the flexibility in the Borana division of labour and its limitations.

Women's perceptions of their role in livestock management

The female respondents show great contentment with their livestock-related work. A majority of the women interviewed like all activities they do; fodder collection, herding and watering livestock at the deep wells are the most preferred tasks. This is remarkable, given that herding and watering livestock are not typical women's activities and fodder collection is considered one of the most arduous duties. Yet, all three activities directly secure the physical well-being of the animals, and statements like 'It is all my work which is good for cattle' (A33) lead to the assumption that the respondents' attitudes towards liking of activities are guided predominantly by the prosperity of the livestock and merely very marginally, if at all, by the ease or convenience of a task. Numerous women express their great affection to the animals they rear, for instance: 'I think when you see the livestock, you normally love them – I also feel like that.' (L19) Moreover, the respondents underline the importance of livestock for their livelihood, as illustrated by assertions like 'There is no life without cattle' (L25).

The only activity disliked by more than two respondents is fetching of water by jerry can due to the vast distances to be covered; not all respondents have pack animals at their disposal. Fetching water, both by jerry can and by camels or donkeys, was also considered the most strenuous activity, followed by fodder collection and watering livestock at the deep wells. However, and regardless of whether the translator was male or female, the women did not in any way complain about their livestock work, but reported hardships in a placid manner.

Overall, the female respondents interviewed are very satisfied with their role in livestock management, and a majority wish their daughters to live in the framework of pastoralism.

Numerous women refer to themselves as the mother of livestock and perceive the animals as their property: 'it is my livestock' and 'all the animals are mine' are examples of statements made by married women. This attitude of co-ownership sharply contrasts with the popular opinion that 'all household property is under the husband's control' (Flintan et al. 2007, p. 20). In an earlier publication, livestock ownership consistently was ascribed predominantly to Borana men, with only a few formal stock rights for women (Dahl 1979). Although the respondents stated that mostly men sell and slaughter animals, several women pointed out that sale and slaugher of livestock is discussed between them and their husbands beforehand. Thus, it may be presumed that livestock ownership and decision-making processes are of greater complexity than apparent at first glance. Oboler (1996) underlines that, for the Nandi community of Kenya, livestock property is 'highly ambiguous, contextual, and complex' and believes that 'although both sexes [have] rights in cattle as property, neither [has] rights of ownership as understood in European law'. Similarly, Talle (1988) concludes from her Maasai ethnography that 'several people may hold rights to the same animal simultaneously, thus rendering Maasai property rights rather diversified and complex' (p. 76). In this study, livestock ownership and decision-making patterns were not investigated in detail; however, the subsidiary results already call into question the stereotype of pastoral women who are 'particularly disadvantaged by the limitations they face within their own societies, for example in owning property or participating in decision-making processes' (IFAD 2012). The insights gained from respondents' statements will be used to inform the design of further specific research.

Changes in the division of labour between women and men

The driving forces of change as perceived by the respondents include both interference on the part of the Ethiopian government and environmental changes, such as lack of rainfall, bush encroachment and shortage of grass. This agrees with numerous studies and reports (e.g. Coppock et al. 2011, Gemtessa et al. 2005, Hurst et al. 2012) ascribing the rising pressure on the system to climate change and recurrent droughts, increased human and livestock population and sedentarisation of pastoral households and reduced mobility of their herds. Government and NGO programmes targeted at 'developing' pastoralism have had complex and not always positive repercussions. In Tanzania, for example, unforeseen side effects of development interventions in the Maasai community included severe pasture degradation as a

result of water provision in a dry-season grazing area, and entailed the death of several thousand cattle in the mid-1980s after the end of a dipping scheme (Hodgson 2001). With respect to gender, unintended consequences were Maasai women's loss of rights in livestock and an expansion of men's political and economic power over women due to a constant exclusion of women in development planning and project implementation over several decades. In Borana in Ethiopia, government-organised labour for both men and women at up to five days a week leads to a severe labour deficit in livestock management. At the same time, the labour requirements in pastoral production are rising due to environmental factors. In response, sharing of labour is practised (see above) and especially men increasingly assist in former women's tasks, as activities like fodder collection demand a disproportionally higher labour input. Flintan and Ridgewell (2007) likewise report that Borana men have recently begun to assist their wives in water and firewood provision. Governmental gender equality training reinforces this trend, providing solutions to a problem partly caused and severely aggravated by external interference in the Borana production system.

Recent reports on Borana livestock management consider fodder collection a core women's activity still (Flintan 2008, Flintan and Ridgewell 2007). In fact, although men's activities were not directly assessed in the framework of this study, the respondents' assertions lead to the assumption that former women's activities continue to be female-dominated. In this light, statements like 'we are doing everything equally' are not to be interpreted in an absolute sense. Just as the declaration 'there is no grass at all' is meant to point to a serious shortage of forage, a striking verbalisation like the above may serve as an indicator for an issue of particular relevance: namely, for a gender change that is currently taking place and that has begun to blur the boundaries between the working spheres of Borana women and men.

CONCLUSIONS

Women's own perspectives and the livelihood contexts in which they perform their work are crucial for understanding Borana women's role in livestock management. We used qualitative data collection methods which yielded detailed descriptions of women's livestock activities and, in addition, revealed women's own evaluation of these tasks. Our results suggest that external judgements, such as interpreting arduous tasks as a burden, must be critically examined. Borana women classify among their most preferred activities the two arduous tasks of fodder collection and livestock watering, explaining their preference by emotional expressions such as: 'I want to feed them from my hands'. This illustrates that *caring for livestock* is seen as a satisfactory and meaningful task although it is arduous at the same time.

Beyond the call of duty, the respondents show great affection for their animals, referring to themselves as 'the mother of livestock'. Apart from indicating a notion of Borana women's co-ownership of the productive assets and a pronounced sense of responsibility for the herds, this also shows that they do not necessarily equate 'arduous' with 'displeasing' and vice versa. This must be taken into account when reflecting on sharing of tasks and workloads between genders and when devising strategies to reduce or adjust the workload of women in pastoral production systems. Further, against the backdrop of the debate on achieving MDG1 target 1b – 'Achieve full and productive employment and decent work for all, including women and young people' – the findings of this study hint at the necessity to critically consider the criteria for defining working conditions as 'decent' when comparing work situations across sectors and cultures.

We observed flexibility in the sharing or distribution of tasks performed by men and women in the Borana pastoral production system to meet the extra labour demand resulting from the obligation to partake in compulsory communal labour and from the recent changes in the production environment. Both male and female respondents expressed an increased tendency to share activities between women and men, although specific working steps of newly 'shared' activities may be carried out separately. The interviews, covering a wide variety of women of different ages and living under different conditions, however, also revealed that different households vary in the extent of joining in and sharing of livestock related tasks.

When investigating change in the Borana pastoral production system, specifically with regard to the activity 'fodder collection', it becomes apparent that 'time/labour availability' is a critical issue. Reduction in herd mobility increases the need for, and the extent of, fodder collection for calves kept near the homesteads in two ways: on the one hand, nearby pastures are depleted earlier so that fodder needs to be collected from areas more difficult to access. On the other hand, milk production and hence availability to the calves decreases, so that the calves' fodder requirements rise. Thus, the time needed for fodder collection increases considerably. In addition, the obligation to partake in communal work, as well as sending children to school, impacts on households' labour availability. As a consequence, higher time and labour demand coincide with reduced time and labour availability in the pastoral families. As labour is the main input in pastoral production, this situation is likely to obstruct effective livestock management and thus put further pressure on the Borana pastoral production system. The results from this study indicate that men and women are currently dealing with this situation by increased flexibility in sharing tasks and mutual assistance; this however raises questions about the limits of such compensation measures.

Table 1. Number of interviews

Type of interview	No. of interviews
Of which were with women aged 30 to 45	7
And with women aged 70 to 80	2
Semi-structured interviews	58
Of which were activity interviews	50
And change interviews, of which 5 with women and 3 with men	8

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