Report on characterisation of communal grassland in Menz, Ethiopia

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Report on characterisation of communal grassland in Menz, Ethiopia

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Executive summary

In the highlands of Ethiopia, community grazing land management can contribute to sustainable use of grazing lands and alleviation of feed shortage problems.

In the project of the CGIAR Research Program on Livestock (Livestock CRP) Environment Flagship), International Livestock Research Institute (ILRI's) work focuses on community-based natural resource management particularly on communal grassland management. In one of the study areas, Menz, characterisation was done on 11 communal grasslands to know the general gaps of knowledge around planned grazing, access, and other management strategies in communal grasslands and where this can further determine opportunities for restoration/planned grazing to support livelihoods and incomes in the area.

The communal grasslands have many important uses (e.g. grazing, stone extraction and water sources) but they face challenges such as lack of rest, lack of certification of ownership for some grasslands, expansion of cultivation at the expense of communal grasslands, and lack of use and management plans.

Though the resources were accessed by all members of the community (men, women and youth), we found there was no established governance/management body and rules/law at almost all communal grasslands assessed. There are few traditional associations that have tried to manage the communal grasslands, for example to protect them from not privatization and cultivation of communal grasslands.

Both crop and livestock are strategy for livelihood of the community around all communal grasslands, but there are communities around some communal grasslands that prioritize livestock first as their main livelihood strategy. This was in areas where people perceived livestock as more important, especially sheep that are used as 'cash' because they can be sold to meet urgent monetary needs. Around some communal grasslands, the youth who have no private land can use breed sheep as their main livelihood strategy. Though these all use communal grasslands, there is no management or use plan which may hinder their improvement.

Though these grasslands are important resources for farmers livelihoods, they face challenges related to their improvement/management and governance, which provides opportunities for their better and sustainable utilization.

Introduction

The grasslands of Ethiopia, which are mostly found in Afro-monotone and Afro-alpine grasslands regions cover about 490,000 km^2 of the country (Mengistu and Mengistu 2015). Communal grassland is one of the different types grasslands that serve as livestock grazing areas in the highlands of Ethiopia (Zewdu 2005; Haileselassie et al. 2012) and it is integral to the maintenance of the environment. But these resources are one of the most threatened ecosystems, due to heavy grazing, competition, conversion of land to other land uses, such as cropland and tree plantations, and lack of responsibilities for improvement of communal grasslands by the community (Yadessa 2015).

In the mixed crop-livestock production system, farmers practicing both livestock production and crop cultivation in the highlands of Ethiopia where this both production system predominates, need efficient utilization of grasslands is critical. Understanding how existing communal grassland can be managed and governed with evolving opportunities in land management is therefore important. Research shows that the communal grasslands contribute important livestock feed resources in highlands of Ethiopia (Haileselassie et al. 2012). Issues in communal grasslands are loosely associated with feed quality, temporal and spatial dynamics and most often do not recognize livestock as system elements but rather convert the land to other uses (Mekoya et al. 2009). In the presence of communal action, institutional and organizational development is more likely to have a positive impact on communal resources. However, devolving rights to local communities to manage resources, establish use rules and regulations and enforce the rules is a necessary condition for successful community resource management in these grasslands. This study aimed to characterize the communal grasslands resources management/governance, importance, and access across grasslands in Menz, Ethiopia.

Methods

Study area description

The study was conducted in North Shewa Zone of Menz area of Amhara region. The area is in the Central Highlands (1,669–3,563 metres above sea level) where agriculture is characterized mainly by mixed crop-livestock production systems (Gebre 2009). The mean temperature ranges from 6.7–17°C and mean annual rainfall is 896mm. In the higher altitude zones, despite enduring efforts, intensive crop production is constrained by frost, poor soil fertility and unreliable rainfall (Gebre 2009). This, in fact, has shaped the degree of dependency on livestock and crop enterprises. In the study area, farmers are limited to barley production and sheep farming. Sheep is the major component of livestock herd composition in the Menz Gera and Menz Mama regions. The research unit was 'communal grassland'[1] and users.[2] There were 11 communal grasslands selected namely, communal grassland in 07 kebele (CG-07), communal grassland in 021 kebele (CG-021), communal grassland in 021 kebele village Gerar Gebriel (CG-021g), communal grassland in 08k kebele (CG-08k), communal grassland in 08g kebele (CG-08g), communal grassland in 05 kebele (CG-05), communal grassland in 016 kebele (CG-016), communal grassland in 02 kebele (CG-02), communal grassland in 011w kebele (CG-011w),

Communal grassland in 011t kebele (CG-011t) and communal grassland in 04 kebele (CG-04) (see Table 1). Data was collected through Focus group discussion, key informant interview and observation around each communal grassland.

Table 1: Communal grassland units sampled in Menz

Communal grassland unit sampled	Kebele/village where communal grassland found	Woreda
Communal grassland in 011t kebele (CG-011t)	011 kebele village Teteramba	Menz Gera
Communal grassland in 021 kebele (CG-021)	021 kebele Girar Meda village	Menz Gera
Communal grassland in 021 kebele village Gerar Gebriel (CG-021g)	021 kebele Gerar Gebriel village	Menz Gera
Communal grassland in 02 kebele (CG-02),	02 kebele	Menz Gera
Communal grassland in 08k kebele (CG-08k)	08 kebele Kuri village	Menz Gera
Communal grassland in 05 kebele (CG-05)	05 kebele	Menz Gera
Communal grassland in 016 kebele (CG-016)	016 kebele	Menz Gera
Communal grassland in 07 kebele (CG-07)	07 kebele	Menz Gera
Communal grassland in 011w kebele (CG-011w)	011 kebele Worase village	Menz Gera
Communal grassland in 08g kebele (CG-08g)	08 kebele Gowel village	Menz Gera
Communal grassland in 04 kebele (CG-04)	04 kebele	Menz Mama

1. It is the unit of the study where data collection was based, and one/two communal grasslands were selected from one kebele based on availability.
2. The community used each communal grassland from one village to four in the kebele level.

Results

General information of the communal grasslands

The resources in the communal grassland are herbaceous and woody species, stone, dung and spices plants. The grassland is grazed by all livestock species (cattle, sheep, goat and equines) throughout the year without any rest, but the intensity of grazing differs throughout the year. The communal grassland was used for 12 months, but frequency of grazing was from June to October. This is because of during rainy season the productivity of communal grassland increases, and other land uses, like crop and private grazing land are prevented from interfering with livestock-related uses in the grasslands. Around all communal grasslands the important livestock and crop production as livelihood strategies was assessed. But the number of respondents ranking the livelihood strategy of crop and livestock varied across the communal grasslands (Table 2). Livestock species found around communal grassland were cattle, sheep, goats and equines. Except in one communal grassland, sheep was the dominant livestock species in terms of number around the most communal grasslands. About eight focus group respondents ranked sheep first in terms of importance among livestock species, whereas three focus group respondents ranked cattle first in terms of importance among livestock species. This is because of sheep can be used for immediate income when there are unseen problems through selling, they consume less feed, are reared in smaller spaces and have rapid reproduction, whereas cattle can be used for ploughing, threshing, to produce milk and meat, and to produce dung for fuel and compost for fertilizers.

Table 2: Number of respondents ranked crop and livestock as livelihood strategy at each communal grassland

Kebele/village where communal grassland found	Number of respondents ranked Livestock as 1st livelihood strategy	Number of respondents ranked crop as 1st livelihood strategy
011 kebele village Teteramba	0	11
021 kebele Girar Meda village	0	9
021 kebele Gerar Gebriel village	5	4
02 kebele	5	6
08 kebele Kuri village	11	0
05 kebele	0	8
016 kebele	11	0
07 kebele	0	11
011 kebele Worase village	0	11
08 kebele Gowel village	8	3
04 kebele	3	6

There was credit access for the community across the communal grasslands, but not specifically for communal grassland improvement. The community used the credit services for inputs, like fertilizer and seed, and for buying livestock such as cows, sheep and poultry. These livestock are grazed in the communal grasslands. There were almost no extension services particularly for communal grassland improvement, but in one communal grassland there was specific extension services such as advice to not graze the communal grassland at all times. This advice was given through the agriculture office during their general meetings with livestock keepers.

Table 3: Estimated average number of livestock species per household, area of each communal grassland and users that use each communal grassland by respondents

Kebele/village where communal grassland found	Average livestock numbers/HH				Estimated communal grassland (ha)	Households uses the communal grassland (n)	Number of villages used communal grassland	Certification ownership (yes/no)
	Cattle	Sheep	Goats	Equines				
011 kebele village Teteramba	3	14	0	2	4	41	1	No
021 kebele	5	10	3	2	3	15	1	No
Girar Meda village								
021 kebele Gerar Gebreriel village	4	5	15	4	6	42	2	Yes*
02 kebele	3	15	0	3	4	10	1	No
08 kebele Kuri village	6	42	2	4	200	600	At kebele level	No
05 kebele	4	15	5	3	150	800	At kebele level	No
016 kebele	4	45	5	3	25	100	Many villages	No
07 kebele	4	15	1	1	2	18	1	No
011 kebele Worase village	3	15	1	2	4	21	1	No
08 kebele Gowel village	7	45	2	6	75	400	Many villages	No
04 kebele	3	15	0	2	2.5	17	One village	Yes**
Average	4.2	21.5	3.1	2.9	43.2	187.6		

*Certificate given from kebele level of Menz Gera Woreda, and **from Menz Mama Woreda.

The estimated communal grassland ranges from 2–200 ha, and households that use them are between 15 and 800 (see Table 3). The numbers of users of the grassland has increased over time in tandem with the increasing number of users. The communal grassland contributes to feed sources on average around 13% (ranges 10–20%) (see Table 4). About 40% of feed resources is from crop residues whereas hay and private grazing contribute about 38%. This may indicate that the communal grazing land is decreasing in terms of productivity or/and size.

Table 4: Estimated feed contribution of communal grassland in relation to other feed sources by respondents

Kebele/village where communal grassland found	Main feed sources for livestock around communal grassland (%)							
	Crop resides	Hay	Private grazing	Communal grazing	Improved forages	Stubble grazing	Concentrates	By-product of houses made
011 kebele village Teteramba	30	30	25	11	2	2	0	0
021 kebele Girar Meda village	40	20	20	10	0	0	10	0
021 kebele Gerar Gebriel village	50	20	10	15	0	0	5	0
02 kebele	40	10	20	10	5	10	5	0
08 kebele Kuri village	40	20	10	20	5	0	5	0
05 kebele	55	10	10	20	5	0	0	0
016 kebele	30	20	20	10	10	0	7.5	2.5
07 kebele	40	20	20	10	10	0	0	0
011 kebele Worase village	30	25	30	10	0	2.5	2.5	0
08 kebele Gowel village	40	20	10	20	5	5	0	0
04 kebele	50	20	10	10	5	0	2.5	2.5
Average	40.5	19.5	16.8	13.3	4.3	1.8	3.4	0.5

Characterisation of communal grasslands

Access, uses and users responsibilities in communal grasslands

Most of communal grassland was used for grazing, stone extraction, collection of dung and, in few communal grasslands, wood collection for fuel, water sources, spices plants. The communal grassland also provides important local livelihood resources such as stones for house construction and clay soil for making pottery. A few communal grasslands, had salt licks and were sources of grasses for thatching and making household equipment. All community members including women and youth used these resources. In areas where the communal grasslands were large and used by people in many villages, their resources were shared with neighbours who were not members of the community. But where the area of communal grassland was small and used by a single village, there was no sharing of grazing resources with neighbours outside the immediate village community. In one communal grassland that was assessed, there was sharing of fuel wood, stone extraction and clay soil with neighbouring communities.

Most of the communities who used their respective communal grassland have no responsibility apart from using it for grazing and collection of dung for fuel and selling it to the market. All interested members of the community can collect and sell the dung. Quarrying of stones and collection of dung were done by individuals at the household level. Where available, clay soil was used for making pottery for sale by women. There were no difference on the usage and access of communal grassland resources among the user groups and there were no special benefits for women and youth in using most communal grasslands resources. Also there was no difference in terms of gender and age in participation in the management of communal grasslands, where it existed.

However, in some communal grasslands, some land was given to youth for cultivation of crops, and some youth who had no land at all were using the communal grasslands for livestock breeding and fattening. Areas in communal grassland that have minerals/stones were given to youth who benefited from them. In some communal grasslands, especially the small ones, the users have the responsibility of protecting them from outsiders especially to make sure outsiders do not graze their animals on them when the pasture is in good conditions. The situation was, however, different during dry seasons when access was not restricted. Most of the time, when the land was covered by crops and the private grazing land was protected from livestock interference, the livestock keepers used their respective communal grasslands to support their livestock. In few communal grasslands, the users are responsible for protecting the areas by ensuring trees are not planted, preventing privatization, expansion of cultivation and settlement. In other cases, users prevent outsiders soil and stone harvesting in communal grasslands. One woreda expert said that ‘near one communal grassland, there was a communal grassland developed for watershed. In this watershed, trees like eucalyptus were planted that through time suppress the herbaceous vegetation.’ Such a case, however, calls into question how the feed base is considered when planting browses trees as a way of improving communal grasslands. The average distance from communal grasslands to the users’ villages ranged from five minutes to 45 minutes on foot in nearly all the communal grasslands that were assessed.

Market and disease related to communal grasslands

According to the respondents, the distance to woreda markets was between 10 km and 50 km from most of the communal grasslands assessed (see Table 5). Of the communal grasslands that were assessed, only five have kebele market access. Users of the communal grasslands accessed had at least one market either at kebele woreda level. The limitation for market access was especially felt in kebeles where most respondents said they walked long distances to markets.

Table 5: Availability of market and estimated distances from communal grassland to the marketplace

Kebele/village where communal grassland found	Distance taken to woreda market (km)	distance taken to kebele market (km)	Regional/zone market (km)	Remark (beyond their kebele or woreda)
011 kebele village Teteramba	20	5	No	Two extra market= 10km
021 kebele Girar Meda village	50	No	No	Two extra market= 30km
021 kebele Gerar Gebriel village	40	No	No	1 kebele = 20km, 35km for woreda
02 kebele	10	No	No	1 woreda = 40km
08 kebele Kuri village	30	5	No	1 woreda=30km
05 kebele	No	3	No	1 woreda =30km
016 kebele	30	2.5	No	1 kebele=30km
07 kebele	No	15	No	2 kebele= 20km, one woreda= 40km
011 kebele Worase village	20	5	No	1 kebele= 10km
08 kebele Gowel village	30	2.5	No	1 woreda = 30km
04 kebele	10	No	No	2 woreda= 40km, 2 kebele =30km

No= not access to market

Though respondents said access to market information had increased, the noted that market linkages with livestock and their products were moderate around all the communal grasslands. This was because of price fluctuations, brokers interference in the market between the farmers and traders, long distances to the marketplaces and fluctuating demand. Especially livestock products such as skins and hides have no demand and market; if markets exist , prices are very low. The traders also were not working fairly with farmers according to some respondents. Near one communal grassland, the respondents indicated that the government did not regularly monitor the market status and did not regulate prices for products.

There was no disease related to communal grassland, but from August to October there were been disease outbreaks at the woreda level. Some respondents in one communal grassland said ‘ambo soil,’ which looks like the usual salt lick, caused sheep to become sick. Users of the communal grassland, said that as a result, they kept their animals away from these areas. In general, there were no areas in the communal grasslands where grazing was avoided due to diseases.

Important and harmful pasture species in the communal grasslands

As shown in Table 6 the important plant species across the communal grasslands are similar, especially the grass ‘gayo’. In about six communal grasslands, ‘gudigni’ and ‘setlib’ were the harmful plant species mentioned by respondents.

Table 6. Important and harmful plant species across the communal grasslands (x=presence)

Local name: Amharic	Scientific name	Kebele/village where communal grassland were found																					
		011 kebele village Teteramba		021 kebele Girar Meda village		021 kebele Gerar Gebriel village		02 kebele		08 kebele Kuri village		05 kebele		016 kebele		07 kebele		011 kebele Worase village		08 kebele Gowel village		04 kebele	
		I	H	I	H	I	H	I	H	I	H	I	H	I	H	I	H	I	H	I	H	I	H
Gayo****	Andropogon dactylon	x		x		x		x		x		x		x		x		x		x		x	
Getin	Haplocarpha schimperi	x														x							
Akirma	Unidentified			x												x							
Tosign**	Thymus serrulatus					x		x				x								x			
Sendedo	Unidentified									x										x			
Gita	Unidentified									x													
Yemideri Koso	Parochatus communis											x		x									
Mush	Unidentified																	x					
Maget	Trifolium pratense																	x					
Gudigni***	Unidentified										x		x		x						x		
Setlib*	Unidentified																x		x				

I= important, H= harmful

*Setlib is used for grazing because it grows fast as soon as rain falls, but when dry it attacks the lungs of sheep though forming dust. **Tosign is a type of spices species used for tea and also browsed by sheep. ***Gudigni is found in wet areas and attacks sheep; ****Gayo grass is resistant to heavy grazing according to respondents in the study.

Management of communal grasslands

Institution/organization responsible for communal grassland management

According to respondents, there was no established management/governance body that was responsible for managing access and uses of the communal grassland resources that were assessed. No one gave or refuse permission to use the communal grassland by users.

In one communal grassland, there was an established management of communal grassland through a traditional association known as 'edir' at the village level. Though this established body helped members in different social events (e.g. death and weddings) the community also used the edir for communal grassland management. The community selected two persons from the members of the edir who were charged with protecting the communal grassland from destruction and privatization. The two people have priority in representing the community in managing the communal grassland though this responsibility is shared by all users and most of the decisions on communal grassland are made through users groups. This communal grassland management was not formally established at woreda but known by users group within 'edir' and the respondents indicated that the framework of rules registered at kebele level was done through the edir . There was penalty when somebody attempted privatize the communal grassland. The violators were first refereed to the edir and if the problem was not solved then they were referred to the kebele administration. The penalty at the edir level can be providing some food and drink for the community, but in severe cases, the violator may be banned from using the communal grassland resources.

In all the assessed communal grasslands, there was no controlling individual or entity and permission to use and access of all resources among users, was by mutual agreement that involved all users, such as when government needed land for other uses (e.g. giving land to the youth).

There was no management planning for communal grassland resources to ensure sustainable use of the resources in all areas, but there were efforts to improve the communal grasslands through tree planting and starting watershed management programs. Especially in Menz Mama woreda, where one communal grassland was assessed, most of the communal grasslands were under watershed management programs and their users had planted trees. In Menz Mama, the community had a certificate of ownership for the communal grassland that given by the woreda administration. However, in Menz Gera, 90% of the communal grasslands assessed had no certificate for communal grasslands.

In one communal grassland in Menz Gera Woreda, the community had a certificate from the kebele administration with names of two representatives of 42 users of the grazing land. But in case somebody married among the users, they retained the right to use this communal grassland. The process of getting a certificate was through discussions among the users followed by discussions with kebele administration. The respondents indicated that once the community

received a certificate, users gained a sense of ownership and could start improvement programs for the grasslands because they gained confidence that the land would not be put to other uses (e.g. crop cultivation).

Most of the communal grasslands were owned commonly within the user groups at the village level, but the security was poor because of they have no certificate to show the ownership that the kebele leader claimed they had.

All the respondents indicated that the communal grassland can be improved if the government gives support by introducing improved management, controlling unwanted weed plants, creating proper use plans and management plan. So far, no interventions have been done to improve the productivity and quality of the pasture in the assessed communal grasslands.

Rules/by-laws for communal grassland management

The respondents stated that there was no rules/law established to enforce the management of communal grassland among users. There was only mutual understanding among users that the communal grassland be kept safe and not convert to cultivated land for private ownership, but government can use it for any purpose, including giving part of the land to youth for cultivation of crops as employment creation. Anyone among the user groups can graze their animals in the grassland at any time and no payment is made to use all of its resources. The users are not allowed to cultivate the communal grassland and violators are referred to the kebele land administration and are ordered to leave any cultivated land. The communal grasslands where violations were common lacked any rules to guide the use of the communal grasslands at the users' level.

The communal grassland ownership can be village(s) based among users' group, but most of them have no certificate of ownership of the communal grasslands. In such situation's users have not started the process of getting a certificate because of the many steps and many people involved in the process of acquiring a certificate. In all assessed community grasslands, there was no conflict between community members on access and use among users of the grassland resources.

Biophysical vegetation and soil status of communal grasslands

In all the communal grassland assessed, the area was predefined, but the size of most communal grasslands has decreased over time due to land pressure and the youth being some of the land for cultivation and tree planting. In very few cases has the size of grasslands remained the same over the last 10 years. The respondents indicated that the vegetation regeneration ability, availability and quality on communal grassland has decreased significantly in the last 10 years. This is because of an increase in the livestock population, overgrazing, lack of monitoring and proper management and improvement of the grassland, and stone excavation. Due to these, the respondents said the communal grasslands were of poor quality. The condition of erosion was placed at moderate, but they said there was high biophysical degradation.

Livestock productivity status around communal grasslands

The respondents indicated that the livestock productivity, such as milk yield had decreased, but the condition of livestock, especially for sheep had improved because of improved livestock management practices, such as fattening practices. Generally, the livestock population has increased in the area, with sheep numbers rising the most around all communal grasslands. The respondents indicated that around all communal grasslands, the current livestock number was not balanced with the available communal grassland for grazing throughout the year. This could indicate that the proper management is needed for the sustainable management of these resources.

Challenges of communal grasslands

The challenges vary across the grasslands. The most cited challenges of communal grasslands were high degradation of grazing land, no rest of grassland, lack of rapid-regeneration vegetation, lack of full ownership, no rules/laws, lack of water around grazing land, reduction in grassland size, less fertility because of degradation, lack of use plan, lack of management plan, Illegal use of the resources, crop production expansion at expense of grasslands, planting trees on communal grassland and poor land security. In all the grasslands assessed; respondents did not propose solutions for these problems.

Conclusion

For many years, communal grassland have been one of the most important feed sources for livestock in Ethiopia but they now faces many challenges that have resulted in their degradation. The communal grasslands resources in Menz are herbaceous and woody species, stone, dung, and spices plants. These grasslands are grazed throughout the year by all livestock species without rest. The livelihood strategy around all communal grasslands is both livestock and crop, but their priority differs across communal grasslands. Sheep is the most prioritized livestock species by livestock keepers in the communal grasslands, because sheep can be easily sold to meet for immediate needs because they provide 'cash in the pocket' and have fast reproduction.

Most of the resources of communal grasslands are accessed by all members (men, women and youth) of the community who can use it. The users of the communal grassland have no responsibility beyond using it. In some cases attempts have been made to protect the communal grasslands from privatization and exploitation by outsiders. Through the agreement of the users, some part of the communal grasslands have been set aside for cultivation by the youth to provide employment.

Around the assessed communal grasslands, there is good market access at woreda-level but it is limited at the kebele level. The market status for livestock and livestock products around the communal grasslands assessed can classified as moderate. This is fluctuating demand for these products in the market. There is no disease related to use of the communal grasslands and no area of communal grasslands is avoided for grazing due to diseases.

Important grasses in these grasslands include Andropogon dactylon, and harmful plants there include 'Gudigni' and 'setlib'. There is no established management/governance body that is responsible for managing access and use of most communal grasslands and their resources. But there are few traditional associations, such as edir that are attempting to fill this grasslands management gap., Certification of ownership does not exist in most of the assessed communal grasslands.

There are no rules/laws established to enforce the management of communal grassland among users. There is only mutual understanding among users that the communal grassland should not be cultivated or privately owned. The respondents also indicted the biophysical vegetation has decreased over last 10 years in most of the communal grasslands. Though milk production has decreased over the past years, fattening of livestock, especially sheep has seen improvement due to adoption of improved practices such as fattening and better feeding in many communal grasslands.

Challenges of communal grasslands include lack of rest for the pasture, lack of governance rules among users, absence of use and management plans, and expansion of crop cultivation in these areas. These finding show the need to improve the management/governance of these important communal resources with available opportunities through engagement and participation of the community and stakeholders.

References

Gebre, K.T. 2009. *Estimates of economic values for important traits of two indigenous sheep breeds of Ethiopia*. Msc Thesis University of Natural Resources and Applied Life Sciences. Vienna, Austria.

Haileselassie, A., Duncan, A. and Blummel, M. 2012. *Feed resources assessment and potential implications for interventions in the Menz sheep breed areas, Ethiopia*. Technical Report.

Mekoya, A., Oosting, S.J., Fernandez-Rivera, S., Tamminga, S., Tegegne, A. and Van der Zijpp A.J. 2009. Effect of supplementation of Sesbania sesban on reproductive performance of sheep. *Livestock Science* 121(1): 117–125.

Mengistu, S. and Mengistu. A. 2015. *Major forage genetic resources of Ethiopia: Their distribution and the need for conservation*. Pasture and Range Research Development in Ethiopia, Proceedings. 79–87.

Tessema, Z. 2005. Identification of indigenous pasture and the effects of time of harvesting and nitrogen fertilizer in the Northwestern Ethiopian highlands. *Journal of Tropical Science* 45: 28–32.

Yadessa, E. 2015. *Assessment of feed resources and determination of mineral status of livestock feed in Meta Robi district, west Shewa zone, Oromia regional state, Ethiopia.* A MSc thesis Submitted to School of Graduate Studies, College of Agriculture and Veterinary Sciences.

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