

Enclosing the commons: Coping strategy to socio-ecological challenges by Ethiopian pastoralists

SAMUEL Tefera Alemu¹

ABSTRACT

In response to climate and policy induced causes, the Kereyu and the Hamer pastoralist societies in Ethiopia have opted for continued engagement in enclosure practice in different forms. Communally and individually managed enclosures exist. Usually among the Kereyu crops are cultivated along with grasses in individual enclosures. Whereas in Hamer enclosures managed by two or three individuals exist that combine grass and crop cultivation with more emphasis to the later. However, in both areas communally managed enclosures are exclusively for grazing purposes.

This paper focuses on the positive implications of enclosures. Through enclosures both societies were able to rehabilitate the commons, generated income from the sale of grass and hay, fed weak livestock and small ruminants in the long dry seasons and reduced frequent mobility of livestock for grazing. In addition, in both cases grazing enclosures have integrated rain-fed farming that supported the production of crops for at least household consumption.

Recurrent drought and shortage of rain are among the major causative factors that drag the pastoralists into direful land based conflicts. The expansion of towns, state commercial farms and the influx of migrant labors were found to have brought shortage of grazing land. With occasional disputes still existing, progressively commending efforts to better rehabilitate and secure the environment in the commons are on the way.

Key words: Enclosures, Commons, Grazing, Kereyu, Hamer

INTRODUCTION

Pastoralism and Rangeland Management in Ethiopia

Much less theoretical attention is given to the forms of pastoral land ownership in arid Africa (Behnke, 1985). Behnke argues systematic model building to have continued based on typological categories such as open access, communal and private tenure than a close examination of the rules and processes that govern access to land in different cases.

Farming is accorded priority for initiating the structural transformation of Ethiopia's economy (Ministry of Planning and Economic Development, 1993). The liberalization of the economy with a focus on agriculture following the Structural Adjustment Program in 1991 helped grain production to increase with a criticism for ignoring the complex systems in different parts of the country (Bogale, 2002:10).

¹ Kyoto University, Graduate School of Asian and African Area Studies, African Area Studies division, 46 Yoshida Shimoadachi-cho, Sakyo-ku, Kyoto 606-8501, Japan, samuel@jambo.africa.kyoto-u.ac.jp

“The author does not allow the Digital Library of the Commons to add this paper to its archives for IASC conferences. However, the use of the abstract is possible.”

Pastoralist production systems are the sole means of production in the harsh dry land environments which are characterized by low and erratic rainfall. However, even if the value of pastoralism is increasingly recognized, policies continue to undermine the system. Although improvements in infrastructural development are ongoing, still pastoral and agro-pastoral areas in Ethiopia are characterized by inefficiencies of public service access and delivery.

Pastoralist communities in Ethiopia were stuffed with inappropriate policies that mismatch their felt needs. Poor communication, health and educational infrastructure, service delivery and conflicts deteriorated their livelihoods and left them vulnerable to frequent asset shocks. However, there are commending institutional efforts to help voice of pastoral people heard nationally. One of such an initiative was taken when the Pastoral Affairs Standing Committee was established in 2002. According to Morton (2005:13) the Committee possesses much greater powers of formal parliamentary oversight, but is much less independent on the government with limited members chosen by the parliament from non-pastoral and pastoral constituencies.

Since mid-1960s, Ethiopia has established large rangeland and livestock development projects. In collaboration with Ethiopian Ministry of Agriculture and the USAID, livestock market center and water resources development project was put on in Borena. The creation of the Ethiopian Livestock Meat Board as a specialized agency involved pastoral areas through the provision of veterinary services that was vital in the facilitation of another USAID project, the Arero Range Pilot Project (1965-1975). This project aimed at improving the living standards of pastoral communities in Yabellow and Abernossa along with increasing livestock off take from an area 2,332 km² for commercial market purposes (Desta, 1999:13). The Second Livestock Development Project (1973-1981) and the Third Livestock Development Project (1975-1984) proceeded by a fund from The World Bank and African Development Bank respectively. Although the war between Ethiopia and Somalia in 1977-8 destroyed stock route facilities and market places established by the former, it aimed at developing an integrated market and stock route system in the Southern rangelands through the provision of water points, improved livestock off take and better market opportunities.

In 1962, Awash Valley Authority was setup as an autonomous public organ to coordinate and administer natural resource development in the Upper and Middle Awash that granted land to concessionaires on the basis of the Constitutional provision making pastoralist land the property of the state. Large scale irrigation based state farms were established along the Awash River where construction of dykes reduced grazing availability in the plains and prevented annual fertilization of the land through the deposition of silt (Samuel and Flintan, 2007:50). Unlike the previously described livestock and range development projects the large scale state irrigation projects did not comply with the desires of the Afar and Kereyu pastoral communities.

It can be noted that irrigation based state farms during the Socialist government and leasing land for private investors by the current regime is attributing to scarcity of grazing land despite the significance attached to the projects in bringing direct foreign investment to Ethiopia.

RESEARCH METHOD AND PURPOSE OF THE PAPER

This paper presents the result of the author's experience as academic ethnographic researcher and development oriented action researcher in two pastoral communities in East

and South Ethiopia. It focuses on the positive implications of land enclosures in pastoral and agro-pastoral areas in Ethiopia. It is aimed to highlight how through land enclosures the Kereyu and Hamer societies were able to rehabilitate the commons, generate income from the sale of grass and hay, feed weak livestock and small ruminants in the long dry seasons and reduce conflict-inherent frequent mobility of livestock to distant grazing lands.

In addition, in both cases grazing land enclosures have integrated rain-fed farming that supported the production of crops for at least household level consumption. With occasional disputes still in existence with neighboring pastoral groups as well as large scale irrigation based farm projects, progressively commending efforts to better rehabilitate and secure the environment in the commons are on the way.

DESCRIPTION OF THE COMMUNITIES

1. The Kereyu Pastoral Community in East Ethiopia

The Study was conducted in Fentale district, East Showa Zone of Oromia National Regional State, Ethiopia. The district covers about 150,000 hectares (Beyene and Gudina, 2009) falling within the Great Ethiopian Rift Valley system. Meteorological records over the past 20 years showed that Metehara, the district capital, experiences three seasons with average monthly rainfall for the months March through May is 45mm with the maximum rainfall amount 116.6mm recorded for the month of July. The mean annual temperature of the area is 24.75⁰c with June being the hottest (40⁰c). The daily temperature ranges from 37-40⁰c. Except for few elevated points like mount Fentale, 2007 m a.s.l., the majority of the landmass lies at an elevation of 1000 m.a.s.l (Gudina Tumsa Foundation, 2007). The particular study area, Elalla, is located at a close distance from Metehara along the Ethiopia-Djibouti railway line.

The Amhara and Afar National Regional States are neighbors to the Kereyu pastoral communities. Somali and Ittu Oromo are migrants to the area. The Kereyu are Muslim agro-pastoralists of the same language group who migrated to Fentale district to avoid conflict with the Issa clan of the Somali and in search for less populated land for farming and grazing (Beyene and Gudina, 2009).

The Kereyu over the Decades: Time Line of Events in Fentale District

Resource use pattern particularly of grazing differs from season to season due to a variety of factors where climate is one but not the only to mention. Following the establishment of a railway people from nearby districts came resulting in an increased population pressure and high demand for cultivable land. The Ittu Oromo and the Somali tribes are among the settlers. Such activities coupled with the establishment of state commercial farms in 1960s, designation of forest lands as a park and intensive urbanization has worsen the competition for scarce resources. Table 1 is a trend analysis of the changes and events occurred within the past fifty years.

Table 1. Time line of activities among the Kereyu

Time of the event	Event activity
Before 1960	Kereyu utilized three major traditional grazing zones including part of the Boset district (Beyene and Gudina, 2009)
1969	Sugar cane farm established; Conflict between the farm and the local

	community(community against clearing the forest for the sugarcane plantation)
1971	Drought incidence
1973	Severe drought
1974 onwards	Population increment; Influx of migrants from other parts of the country; loss of some indigenous tree species; Construction of education centers
1991 onwards	Disputes among the Kereyu over resource use; Population increment
1998	Afforestation activities
2002	In the years before, there used to be long rainy seasons (starting from June to September), October and November with residual moistures. But, severe drought caused significance loss of livestock (see also Beyene and Gudina, 2009:59). The Kereyu highlighted the importance of grazing enclosures (<i>kalo</i>) as emergency reserves.
2005	Severe drought afflicted livestock death; Spread of deadly ruminant diseases (sheep) like bleeding noses, swelling of throat and diarrhea. Infestation of camel and cattle diseases

According to Table 1, a number of factors can be cited for the expansion of grazing enclosures in Fentale district. However, it can be regarded as the Kereyu community's initiative towards a range of environmental, institutional and demographic challenges. The arrival of immigrant communities like the Somali and the Ittu, the nature of their livelihood, the recurrence of severe droughts and the establishment of the Sugar cane plantation in the district seem to have pressed the Kereyu community for a sustainable alternative to the increasingly shrinking grazing zones and population pressure. Case studies conducted by the author of this paper in the years from 2006/2007 indicated the presence of a growing interest in enclosing land for grazing and storing grasses to prepare hay for the dry seasons. Some households surveyed had generated income from the sale of hay and reported the reduction of grazing based conflicts among neighboring pastoral and agro-pastoral communities.

2. The Hamer Pastoral Community in South Ethiopia

The Hamer people live in Southern Nations, Nationalities and People's Region, South Omo Zone, Hamer district. They are Omotic language speaking pastoral society. In a particular Hamer household, the nuclear and extended families live together. The Hamer are polygamous, patriarchal, and patrilocal societies (Samuel, 2013). The Federal Democratic Republic of Ethiopia population Census Commission 2008 report indicates that they are numbered 59,160 from a total population of 577,673 in South Omo Zone. Hamer district is bordered by Ari, Benna-Tsemay, Mursi, Dassenetch and Nyangatom ethnic groups. Along the Hamer, in the district are Erboze, Beshada and Kara people.

According to elders, the Hamer territory falls between Keskie and Balah rivers. Because of their belief that a cattle leaping has to be performed inside the Hamer territory they always cross the rivers to perform this rite. The Hamer district pastoral development office reveals that the district owns an arable land size of 8,865 hectare and grazing land occupies 225,434 hectare. Temperature ranges between 29 and 35 degree centigrade depending on the season higher temperatures being in the lowland parts. The Hamer highlands receive relatively better rain compared to the lowlands and are suited for farming. The maximum altitude is at Buska Mountain with an elevation of 2,022 meters above sea level and the minimum being 271 at Kizo plain (PDO, 2005).

WHAT IS AN ENCLOSURE?

Makki and Geisler (2011) amplifying insights from Philip Woodhouse (2003) defined enclosure as ‘a defunct mode of capitalist development and suggest that this needs to be historicized in relation to the shifting cosmographies of power within which they are framed’. They stressed to address the role of states to completely understand the current dynamics of enclosures. Enclosures for them are beyond boundaries of open fields of pastures and woodlands (2011:3). Enclosures signify the processes through which common lands are integrated into market relationships, the hallmark of which is the displacement of people and their gradual conversion into wage laborers.

According to Makki and Geisler, such a refashioning is said to result in disenchantment of nature in moral economies erasing cultural practices and historical memories. Enclosures in Africa were associated with the expansion processes of European overseas missions and its effect in expanding the productive role of capitalism (Makki and Geisler, 2011). Capitalist profit was attributed as a driving logic behind enclosures expansion in Africa that rationalizes ethos of utilitarian calculation. However, the author of this paper is limited to examining enclosures at individual and community level with a focus on land fenced for the purpose of growing grasses, cultivating crops, keeping livestock and rehabilitation purposes. This perspective is chosen to assess enclosures as multi-type and multi-functional possessing elements of cooperation and non-cooperation among different stakeholders at small scale.

Enclosures: Communal blessings or curse?

Land use strategies of pastoralists are influenced by spatial and temporal variability of resources (Tache, 2011:1) thereby the decision to enclose is achieved through consensus resulting in collective responsibility to manage it for a common goal. Although the purpose of this paper is to share positive examples of enclosures in the commons, it equivocally is worth mentioning the opposing view. According to Sead (2007:35-36) enclosures promote sedentary settlement and land use changes through land fragmentation. His cases from the Somali region in Ethiopia showed enclosures to have restricted livestock movement and added huge burden on women requiring them to allot time to take care of small livestock.

Tache (2011:3-4) attributed Borena household’s engagements in land use types that compete directly to pastoralism to the loss of dry season water wells, recurrent drought and large scale bush encroachment. Tache also underscores the emergence of enclosing communal lands for commercial purpose such as renting grazing enclosures to keep livestock passing through Moyale town. This commercialization of hay and grass for individual benefit making caused fragmentation of land and interfered in the affairs of customary rangeland resource management bodies. It blocked livestock paths and brought internal conflicts among people. Discourses of this type were observed in Hamer district too. But, except for some communally managed grazing enclosures, individual and group enclosures are located at a reasonable distance from the village and from one’s publically recognized land holding. Village elder councils were involved in the establishment and fencing processes to avoid disputes because of the enclosure project. In a village called Qaina near Turmi town the communal enclosure was blamed to have narrowed the path for livestock of the nearby Donpo village households and included part of a farm enclosure owned by a household of the same village. Through negotiations by elders of both villages and the management committee of the communal enclosure the argument was peacefully resolved. It was observed in the district that even in group enclosures (which are protected very well than communal and

individual enclosure types) set up for the purpose of cultivating agricultural crops and producing grasses, it is common for people who are not owners of the particular enclosure to hang their bee hives on trees inside the enclosure. Moreover, people can fence a land to establish an enclosure while a tree hanging a bee hive belonging to someone else is to fall under the fence. The owner of the bee hive can anytime enter inside the enclosure to monitor or harvest honey from his bee hive. In cases where the owner of the bee hive is not considering to enclose the land and someone else does, there are ways of reciprocating the favor.

Enclosures: Multiple Forms and Multiple Functions

Enclosures are found to possess different forms and each serving various functions to the community and the ecosystem. Apart from containing grass within their boundary, grazing enclosures in Hamer and Fentale districts are spaces for cereal crop production. The fences may be dead twigs or branches or live spiny bushes.

There is a growing trend to privatize lands by increasing individual holdings among the Hamer. Admasu et al (2010) revealed that 30% of their Hamer respondents showed preference to own land on private basis. Individual orientations in rangeland management are also growing in the district regardless of support from PCDP or NGO intervention. The concept of individual grazing reserves, *derr*, is playing a positive role in retaining weak and small ruminants, milking cows and calves around the homesteads providing the ability to get milk during the dry season when livestock move to camp herds scattered across the wide grazing plains.

Apart from their beneficial modification to the degraded grazing areas and provision of grass for livestock, enclosures have also brought conflicts among people. Encroachments were cases in fenced rehabilitation sites. It was in response to such problems that the idea of ideal boundary practice appeared motivated by some NGOs. Like its name it indeed is ideal as it only works against the concept of constructing physical barriers to avoid encroachment of livestock into rehabilitation sites. However, it encouraged dialogues among people on the benefits in the aftermath and convince them to refrain from doing so. According to the author's discussion with an NGO practitioner, the district pastoral development office has provided two hectares of land for rehabilitation purposes in Benna area in support of the initiative.

The objective of enclosing communal lands is to improve sustainable natural resource management, ensure access to dry season grazing, and reduce competition for resources and encroachment of conservation areas. This is achieved through the enclosures ability in supporting the regeneration of grasses through controlled livestock access into the land. Communal land is enclosed and rehabilitated through community, government and non-governmental organization efforts at different localities in Hamer district. It can be taken as a manifestation of the growing individualization of communal lands for private livestock feed production and free grazing purposes. When the author visited Eryia Qaisa in August 2011, among five communally enclosed sites, two of them had individual houses inside and all of them had free grazing cattle, sheep and goats.

According to the author's observation communally managed enclosures were not better protected as compared to individual and group enclosures. Customary institutes do not exist among the Hamer that is specifically in charge of rangeland issues. But, the emergence of communal enclosures management committees may bring such an office through time.

However, among the Borena (Tache, 2011) communal pasture reserves existed as customary enclosures and are recognized by local customary rangeland resource governance bodies.

For the privatization of land tenure in Eastern Africa to be an opportunity to enhance the rights of all people, it will require changes in the knowledge, attitudes and practice of all actors concerned (Daley and Englert, 2008). However, recent fieldwork from Inner Mongolia was reported to contradict the optimism that promoted household enclosures as the best solution to maximize pastoral productivity and control desert expansion in grasslands. The same paper (referring to a participant-observation) showed that enclosures, as implemented through village level social context, actually compound grazing problems for most residents and the wider ecosystem (Williams, 1996:307-312). Accordingly, it was noted that expanding household enclosures function to intensify hyper-critical stocking ratios on highly vulnerable rangeland, exacerbating wind and soil erosion processes across vast territories only to protect small isolated fields dedicated to poorly financed fodder cultivation.

Taylor (2006:374-386) added to the argument that such policy measures on common grazing lands are increasing social inequalities and contributing to the decline of the natural resource-base. He further reveals concerns that the move towards household enclosures incorporates the neoliberal influenced discourse on conventional grassland science incorporating carrying capacity and succession theories. His concern of downplaying cultural knowledge base of pastoral communities by state machines in developing pastoral environments is a shared challenge among Ethiopian herding societies but not only peculiar to Mongolia.

Most of farm and grazing enclosures in Hamer district are located along-side rivers, water points and in the bush. Those established near water points often have dual functions. Households with such enclosures use the space inside alternatively for grass and crop production. Since the number of households fencing the communal land is on the rise, it is difficult to find more space to enclose and practice shifting agriculture. Therefore, there is a growing trend in the district to manage farm enclosures together in groups of two and sometimes more that often involves leaving portion of the farm for grass production. In addition, each household separately fences land as grazing enclosure and participate in the establishment of communal enclosures together with households of nearby villages. According to the author's observations, group enclosures were better protected and managed compared to individual and communal enclosures. Still differences existed in the degree of encroachment and management among the tree forms based on who took the initiative to enclose the land and the proximity of the enclosure to villages.

Communal enclosures were found to be encroached easily than other forms. Distinction can be made between communal enclosures whose establishment is motivated by a request from households in a certain village or that proposed and supported by development partners of government or non-government origin. The case presented in the later part of this paper in the Qaina village is living evidence to this. This enclosure has management committee elected by the beneficiary households. The land was enclosed based on a request made by forty-one households living in the village. The villagers took land enclosure supported by the Pastoral Community Development Project in a different village as a model work and proposed their idea to the local agricultural development agent. The enclosure is well protected with soil and water conservation works. The households plan to buy farm implements and to cover medical expenses through money obtained from the sale of grass.

Enclosure as Risk Management and Livelihood Diversification Option

Range improvement alone cannot sufficiently lead to the improvement of livelihood of the community unless livelihood diversification options get particular attention. The introduction of state farms have induced the local community to grow agricultural crops like maize, onion, tomato and opened market outlets that to some extent helped to cover needs and household consumptions. Kereyu pastoral communities grow cereals like teff (*Eragrostis tef*), sesame and sorghum. Recent shifts from enclosing land to grow grasses only into mixing cereal cash crops with grasses are indicators of the community's effort to address feed and food security at a time. Moreover, through the sale of hay and agricultural crops the society is integrating alternative income generating options to improve its economic resilience against recurrent asset shocks. The community is engaged in activities mainly in small-scale irrigation agriculture, grazing, charcoal production and water rehabilitation to supplement its livelihood. Inefficiency to market out livestock resulting in economic chaos is a prominent problem communicated.

However, with efforts from the local government and non-governmental organizations operating in the district the Kereyu has started establishing livestock marketing groups to benefit from the business. At the same time, pastoral development programs funded by government lines offices and non-governmental organizations are calling for the participation of the pastoralist community in Ethiopia to organize under livestock marketing cooperatives aimed at accessing fair trade outlets and help accumulate wealth in monetary terms. In December 2012 the author attended inaugural workshop in Addis Ababa. The pastoralist Areas resilience Improvement through Market Expansion (PRIME), as it is called, is said to develop the disaster resilience capacity of pastoral areas through the expansion of market services to communities in Afar, Somali and Oromia regional states. Table 2 summarizes the project beneficiaries' in those three regional states and expected midterm results.

Table 2: Mid-term results and beneficiary households in the three regions

Mid-term results	Total project beneficiaries	Northern Somali cluster	Oromia and southern Somali cluster	Afar cluster
Increase productivity and competitiveness of livestock and livestock products	50,000	17,840	30,110	2,500
Increase climate change resilience and adaptation capacity of pastoralist communities	140,000	49,952	84,308	6,190
Strengthen alternative livelihood forms	50,000	30,750	15,250	4,450
Current and priority issues	10,000	3,568	6,022	860
Total	250,000	102,000	135,000	14,000

Source: (Adopted and modified from a document distributed for workshop participants, December 2012)

PRIME is a 52 million USD Project that took Ethiopian Growth and Transformation Plan into consideration. It is expected to work with federal and regional level government bodies, the private sector and research institutes. It can be inferred from the components listed under Table 2 that market network expansion and enhancing pastoralist livelihoods are given due emphasis. The prevalence of poor and uneven development infrastructures in pastoral areas in Ethiopia particularly in South Omo are less likely to attract information and road-access based livestock market. With the ongoing improvement of road infrastructure and establishment of market centers, what the future brings is uncertain.

Positive Reflections among the Kereyu

There are different reasons for enclosures development in Fentale district. The development and expansion of State farms and the ever growing size of Lake Basaka together with influx of other neighboring communities reduced the size of traditional grazing zones. This coupled with frequent drought reduced average household livestock holdings bringing in the idea of setting aside land for grass reserves (Beyene and Gudina, 2009). Such an initiative won support from governmental and non-governmental actors intervening in the district. While working for Gender and Pastoralism Action Research project the author shared Kereyu household's experience and stories concerning *kalo*. The following two cases are constructed from the discussions the author had with the members of Kereyu communities in Elala village in Fentale district.

AAH, 30, has 4 sons and 4 daughters. She has 5 children from her first husband three from her current husband whom she got married in substitution of her late husband. She collects grass to feed her livestock during rain scarce/dry seasons. Collection takes place following *Gena* (wet season) rains. AAH makes pile of hay, which is more than three meters high and collects not less than thirty back loads of donkey from a *Kalo* near her home. Collection is a communal activity where people are served with food and paid wages to do so. It may take a month if high labor is mobilized. However, it may consume even two months if not possible. Rain failures recently have shortened collection time as grass harvest is reduced in quantity. AAH stores the hay via properly piling and letting it dry to be used during the dry season. Care Awash has once provided her with livestock feed, constructed Birkat-water pond to the community and advised them to enclose land. The community received cane top support from the local government office, which helped a lot in reducing the impact of drought. Everybody almost has its own *kalo*. However, they are enclosing lands on communal basis. AAH collects hay by herself most often, as her children are small to help around. There are many *kalo* in Elala and hay mainly comes from enclosures. People started enclosing lands eight years before. But, have been making hay five years. They grow teff and maize during good rainy seasons and use post-harvest residues as hay to feed their livestock. They dry and store the residue on trees (especially maize stalks) and provide it to their livestock on drought periods when feed availability is scarce. Alima encloses, grow, collects and pile the grass from her *kalo* close to her house to make hay. Anybody can enclose any land. However, it is expected to pay twenty Birr² per year as a tax. Moreover, a person is allowed to hold only one private site to establish *kalo*. Tax payment is levied to all regardless of holding or not a *kalo*. The community encloses land, let grass grow, collect, pile and dry it to make hay. AAH does not come across with any other type of hay making activity other than this. A bundle of hay according to her is sold for seventeen Birr.

² Ethiopian Currency.

Plough oxen also need hay to work properly. So, they prefer to make hay than to buy, as it is costly to buy and feed all the livestock one owns. Therefore, Alima stores hay to let her livestock pass severe dry seasons. If her livestock have something to eat, she doesn't provide hay from the piles. She told that wild animals like warthog destroy teff, maize harvest and piles of hay. But, she attended theoretical training supported by practical audio-visual exercises. However, it was before that she started haymaking. AAH wants to receive material support as they are expensive in the local market and hopes the trainings will continue. She believes haymaking is beneficial to both men and women. She commented that selected seed varieties of cereals with high post-harvest hay values needs to be provided to the community to make this labor saving practice more beneficial. Recently, AAH has started buying hay as her piles are diminishing. She has bought three donkey back loads for seventeen Birr each. Once she has bought hay to construct her house, as her piles were devoid due to absence of grass as result of rain failures. AAH does not sell hay at all. She recalled a five-thousand Birr offer once people provided her to sell a pile that she resisted not. AAH told that people having hay piles but no livestock sale a pile for four hundred-five hundred Birr. She does not do so as piles cannot sufficiently feed livestock well if sold. People purchase hay to feed their livestock. Such people are those without *kalo* and some with *kalo* and high livestock herd. According to AAH, follow up trainings were given. She has missed second round training while she was sending her cattle for grazing. AAH told Care Awash makes monitoring and evaluation and observation checkups.

Like AAH, other Kereyu individuals had also benefited from enclosing land to reserve grasses. One of them is a twenty-seven years old young man called KG, a resident in the same village as her. His experience working with enclosures is presented as follows.

KG lives with his son and wife. He has dropped class from one. KG collects grass and cereal residue to feed his livestock and construct house. He usually collects grass once in a year following the rain in September. If rain falls in other seasons collection might be twice in a year. He collects more than twenty donkey back loads of grass, maize stalk and cereal residues depending on the size of *kalo* and the amount of rain. KG also hires casual laborers during collection, which is an individual activity. He himself with the hired casual laborers collects hay. This may take two months. Collection time, according to him, is influenced by size of *kalo*, labor availability and rainfall amount. He stores hay and feed his livestock during feed scarce periods. KG provides hay mainly to weak, plough oxen, milking cows and ruminant animals. KG told to have received cane top and feed support from government bodies, Metehara Sugar Cane Factory and Care Awash that have helped a lot to keep his livestock alive during the severe drought period. Most often hay comes from private sources (Care intervention). But these days, communal *kalo* are being introduced by GTF. He is a member of 85 people organized recently and enclosed communal lands. They have finished fencing and GTF has hired guard for it. KG told the presence of both communal and private *kalo* around. Parallely he indicated that people enclose lands since 2002 onwards following the then severe drought incidence to feed their livestock during feed scarcity and avoid movement for grazing which will incur conflict. Moreover, he believes enclosing saves money and time he spent for car rental while transporting hay/cane top after collection from Metehara Sugar Cane Factory back home. KG added also that enclosing helps access hay close by. In addition, he raised its positive impact in ensuring food self-sufficiency through the production of cereals as well as protecting the pastoral community from being victim

of cereal market price inflation. KG makes hay often at his home and sometimes inside the *kalo*. He selected his *kalo* site because the land is fertile that is close to rainwater reservoir. As the site is far from his home, he faces transportation problems. But, water is available for his livestock. KG makes more than forty donkey back loads of hay depending on size of *kalo* and availability of rain. People started making hay to secure feed for their livestock during dry periods, to avoid mobility in search of grass and associated risks like conflict, falling from mountain tips (especially women are victims as usually they are in charge of collecting grass to feed small ruminants and milking cows as men move far with the remaining herd and engage in other activities on the field). KG told that he didn't kill warthog though it causes damage to piles except taking preventive measures, as it is part of the wild nature. Care Awash has provided KG with seed, training and tools that still he owns them all. He has not experimented on seeds for hay making but once planted and it failed due to rain scarcity. Practical training supported with audio-visual show on how to make hay had been given for the community in his village, which was the basis for the establishment of his *kalo*. He suggested it to continue and raised the role of *kalo* in conflict mitigation. In order to make haymaking more beneficial it is worth great to award model pastoralist households who succeeded in the making of hay or *kalo* establishment remembering that Care Awash has once done this. Provision of additional trainings to build people's skill, ensuring fair distribution of tools to all households in order to avoid complaints and the supply of selected seed varieties that can grow fast he added are likely to make this labor saving practice more beneficial. KG buys hay when his pile/stock is finished. He pays seventeen Birr for each donkey back load and had bought two for thirty four Birr. He, however, did not sell. He just provides it to his livestock. He usually refuses such offers but once has given eight back loads for his neighbor for free. Traders from around the town buy hay to feed their livestock and construct houses. These are people who has no place /space to prepare hay or they only are engaged in farming activities or do not have *kalo* at all. KG responded to have received follow up trainings and monitoring and evaluation checks as well as advices from Care Awash.

The cases above indicate the importance of land enclosures in improving the livelihood of the pastoral Kereyu. The community is aware of the economic and social impact enclosures impart on a household. There was a good deal of cooperation between non-governmental development organizations and the public where the latter sought support to intensify enclosure management and utilization through better knowledge and technical inputs.

Any institutional and climate change impacts on enclosures movement?

The Kereyu pastoralist community lived with the experiences of accommodating a sugar cane facility since 1969 with the establishment of the Metehara sugar cane factory. The creation of protected areas and such commercial farms along the perennial rivers reduced access to grazing lands where an estimated 55% of traditionally accessed grazing land was expropriated to development schemes (Beyene and Gudina, 2009; Abdulahi, 1998).

In Hamer district enclosures movement have a support from the pastoral affairs line offices. According to the early warning rapid response and food security coordinator, there had been 21, 581 safety net program beneficiaries in 35 localities in the district in 2011 (PDO, 2005). The program aimed to cover food gaps by providing cash and grains for three months each alternatively. It also provided pastoralists in the district with cash to help them create a

means to generate income developing business ideas by their own. Moreover, the program engaged the people in grazing land rehabilitation and soil and water conservation activities.

Institutional factors, however, are not uniformly distributed across the commons. Intervention programs particularly designed by non-governmental bodies with the goal of raising the social wellbeing of people in the commons are biased in their selection of sites to operate. The PRIME project mentioned in this paper (Table 2), for example, does not cover pastoral communities in the remote south western part of Ethiopia where the Hamer are a part. Figure 1 below illustrates the cluster of pastoral communities targeted in the project and the number of population benefiting from it.

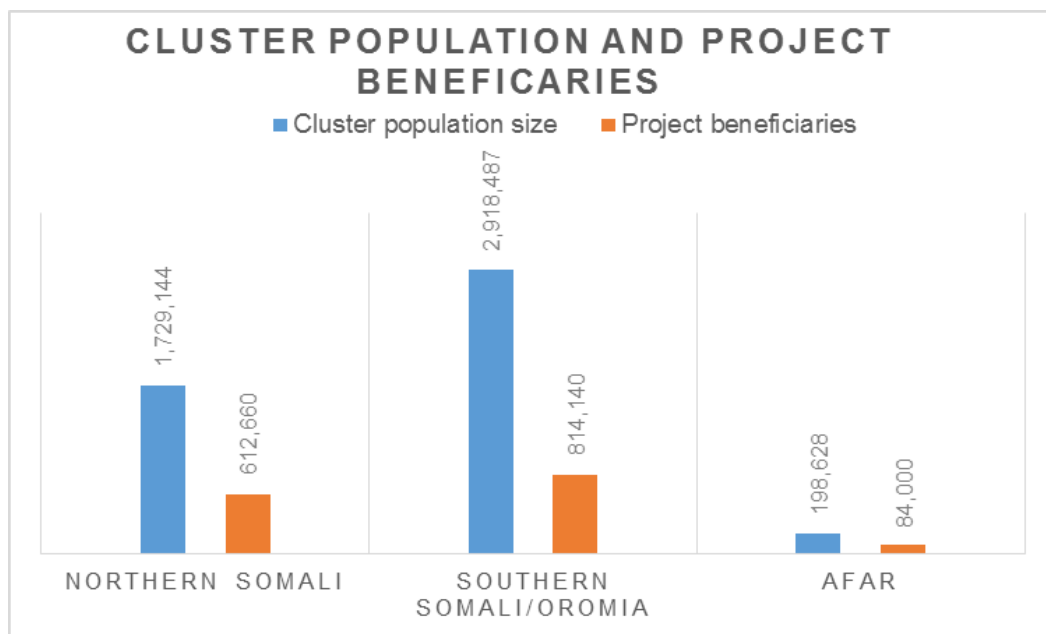


Figure 1: PRIME project cluster and size of beneficiary population

According to Figure 1, the project is designed to provide benefits to 35.68%, 27.9% and 42.29% of northern Somali, southern Somali/Oromia and Afar people respectively. It is believed to open more market outlets and create market linkages among the pastoral communities. It plans to provide alternative livelihood options for people of the commons who are in transition to a different form of life. This is in the domain of the state’s Growth and Transformation plan (GTP) that emphasizes the establishment and strengthening of livestock markets and price information systems and encourages pastoralist people in the commons to take up sedentary life style on voluntary basis (GTP, 2010:24). Apart from non-state owned initiatives to develop the commons, the state in collaboration with The World Bank and the International Fund for Agricultural Development launched the Pastoral Community Development Project (PCDP) which started the second phase of the fifteen years total project life. Unlike PRIME, PCDP operates in both Hamer and Fentale districts with a focus on water and range resources rehabilitation where enclosures development is an integral component.

Recurrent and severe drought can be taken as a primary factor for people in those commons enclose land. However, the impact of governmental and non-governmental interventions through market-oriented and sedentarization-driven forms of intervention should not ignore as a central push factor for the growth and specialization of enclosures in

both areas. Access to main roads connecting the commons to town and city centers and commercialization are also important worth mentioning. The land enclosures in Fentale by the Kereyu are mainly a response to the drought in 2002 and through the support of non-governmental organizations the Kereyu managed to further intensify the system from simple collection of grasses and free grazing inside enclosures to hay preparation and cut and carry feeding during prolonged dry seasons. The proximity of many of the enclosures to the homestead is an advantage to easily mobilize labor, store, and make hay and transport. In comparison to the enclosures in Fentale, the Hamer started lately and the enclosure management system is not intensive. Most the enclosures are located farther from the homesteads mainly along rivers and water points to take advantage of multiple benefits. The establishment of such enclosure near water points enables people to use the sediment carried by the floods for farming and grass growth and to keep an eye on birds and wild animals that destroy crops. Some people who could not daily visit their farms for some pressing reasons make benefit of other's presence in the next enclosure to protect their crops from birds' damage.

The commons in both pastoralist communities are under change. It is interesting that the Hamer and Kereyu seem to pass through similar ways of transforming the management of enclosures. Both use their enclosures to grow grass and cultivate crops. The Kereyu are focused on income generating and seeking alternative life support elements from their enclosures while the Hamer mainly focused on the expansion and management aspect of enclosures development. Conflicts between people due to enclosures are rare with some cases reported. But, everything about enclosures is not rosy. There are people who do not own enclosures for various reasons. There were trespassers who encroached communally managed enclosures and removed the fence and sold it out. But, recent developments showed the development of bylaws to manage communally owned enclosures and there were cases where encroachers were fined accordingly. Another interesting aspect of enclosures development in Hamer district is the unfenced enclosure in the Beshada area which under the management of the local leader provides access right to grazing not only to the people owning the common but also to neighboring friendly and hostile ethnic groups.

It is in this context that enclosures development gradually benefiting the Hamer in many different ways. It should be noted that such a change is occurring without a cost. Enclosures have both success and failure stories. The following case of a communally owned enclosure from Qaina village in Hamer district illustrates those realities.

Enclosing the land was started in 2007 under safety-net program by district office of pastoral development. The participants are beneficiaries of the safety net program that includes forty-of one households consisting of sixteen men and twenty-five women. Women participants are large in number as men marry more than one woman and second and third wives are counted as a household head or they are widowed. Their interest in enclosing land emanated from the experience they got from a village called Lebelä in Qola Qeja area that was initiated by PCDDP.

They started their work by clearing bushes and fencing the cleared land. Two years after, in 2010 they succeeded in regenerating grasses. Soil and water conservation inside the enclosure included construction of biological check dams. In the same year they were able to sell the grass. In 2011 they got 815 Birr by selling grass. Currently the size of the enclosure from inside excluding the area covered by the fence is about 6.5 hectare. The management committee developed a bylaw that strictly follows encroachment cases and punishes offenders.

The author visited another site in Eryia Qaisa area on the 15 August 2011. The visit is illustrated as follows.

OM and the author visited this locality to observe the much said grazing enclosures in the district. Before coming here, the author read success stories about the site. According to district estimate 973 people dwell in Eryia Qaisa. OM and the author of this paper saw about five big enclosed sites for rehabilitation. One of the enclosed sites had a size of five hectares. It was supervised by OM. The people had benefited from the grasses for some time. It was a bare land up until it was enclosed and left to rehabilitate. But, due to lack of rain in 2010 the people gave up hope and start encroaching. According to OM, there prevails a gap in the knowledge of forage development. People let their livestock to free graze inside enclosures and this aggravated the deterioration of the enclosed land through the trampling effect of the herds as they wander freely. And the regeneration of grasses became slow as livestock hooves inflict damage that varies from one herd type to another.

Through the development safety-net program, non-governmental organizations intervention and community motivated initiatives; people in the Hamer district are under continuous engagement of enclosing communal lands for grazing, farming and for a combination of both. Table 3 refers to communal enclosures established as part of the development safety-net project in Hamer district at different sites.

Table 3: Communal enclosures under development safety-net project in Hamer district

Name of the area	Population size ³	Development safety-net project beneficiaries	Size of enclosed area in hectare
Eryia Qaisa	1,220	322	40
Eryia Embule	1,895	248	8.5
Qola Qeja	2,111	970	30
Dimeka	1,465	898	120
Denbyite	1,001	580	34
Beshada	2,733	1,291	35
Sinbele	1,364	636	82
Angude	5,031	1,780	390

Source: Based on data from Hamer district Pastoral Development Office

CONCLUSION

Land enclosures continued to manifest territorial claim of the Hamer and Kereyu pastoralist communities individually, in groups and communally. It is true that the communal land use is subject to fragmentation at individual, group and community level. In Hamer district, the form of land ownership and management is changing progressively. Some few decades ago enclosing land for farm and pursuing shifting cultivation was not cumbersome task. Simple consultations were enough to do so. The land was not fragmented into individual

³ There is discrepancy on population size although the margin of difference is not big.

holdings except for farm enclosures managed on shifting basis. But these days, once enclosures are established, particularly near water points, finding new land to enclose is difficult, so is expanding an existing enclosure. Such a pressure made people to reconsider a land use option that mixes farming and grazing activities in the same enclosure. Households with such an option rotationally use the land for grazing and cropping. However, in Hamer district, the level of social cooperation is not highly affected by terrorization of the communal land. Except for predominantly individually owned enclosures, group and communal enclosures involved partnerships and promoted joint management systems that help to maintain social cooperation. Minor disputes occur rarely. But, punishment procedures exist to fine trespassers through various ways.

Unlike the Borena (Tache, 2011) pastoralist community in Ethiopia who started enclosures primarily for the purpose of producing crops that later evolved to accommodate grasses, reserving grass has been the dominant drive for enclosures establishment among the Hamer and the Kereyu. However, like the Borena and Kereyu the Hamer have farms separately producing crops, mainly sorghum. And it is common these days to combine crops and grasses inside enclosures at different spaces.

Institutional factors and economic interest were found to encourage pastoralist households in Hamer and Fentale districts to enclose land in the commons. Prior to farming and agro-pastoral communities' influx to Fentale district and the introduction of commercial farm facilities, the Kereyu utilized traditionally existing grazing areas rotationally. However, it was after the subsequent droughts that the idea of establishing enclosures for grazing purposes started to surface. Continued pressure from land demanding irrigation based sugar cane projects, population growth and demarcation of conservation areas did not prevent the Kereyu pastoral community from adopting new techniques of managing the grass inside enclosures and diversify benefit making schemes to improve its livelihood. As the cases presented in this paper illustrated, pastoralist households in Fentale acquired the knowledge to better collect, store and prepare hay for livestock feed and for sale.

In Hamer district, the culture of storing and making hay from grasses is immature. People either let livestock to free graze inside enclosures or did some form of controlled grazing. Selling grass from enclosures was reported but still people are more focused on feeding little, weak and milking livestock. However, the author believes that people in Hamer district are terrorizing the commons to secure a space of their own. As the need for grazing land increases, people who used to abandon land and shift to another are no more leaving their farm enclosure unaccounted. With expanding development infrastructures into the remote commons what the future brings is not clear. However, people owning land enclosures are benefiting for now.

REFERENCES

- Abdulahi, M. (1998). Resource deprivation and socio-economic changes among pastoral households: The Case of Karayu and Itu pastoralists in the Middle Awash Valley of Ethiopia. M.Sc. thesis, Agricultural university of Norway
- Admasu, T., Abule, E. and Tessema, Z. 2010. Livestock-rangeland management practices and community perceptions towards rangeland degradation in South Omo zone of Southern Ethiopia. Livestock Research for Rural Development. Volume 22, Article

Bogale, A. (2002). Land Degradation, Impoverishment and Livelihood Strategies of Rural Households in Ethiopia: Farmers' perceptions and Policy Implication. Institutional Change in Agriculture and Natural Resources, Vol.8. Berlin

Behnke, R.H. (1985). Open range management and property rights in pastoral Africa: A case study of spontaneous range enclosures in south Darfur, Sudan. Pastoral Development Network paper, London. Overseas Development Institute

Beyene, S. and Gudina, D. (2009). Reviving a traditional pasture management system in Fentale, East Central Ethiopia. Journal of Ecological Anthropology, Vol.13, No.1

Daley, E. and Englert, B. 2008. Securing women's land rights. In Women's Land Rights & Privatization in Eastern Africa, pp. 158-178. Eastern Africa Series, Fountain Publishers, UK

Desta, S. 1999. Diversification of Livestock Assets for Risk Management in the Borana Pastoral System of Southern Ethiopia. PhD dissertation, Utah State University, Logan, Utah

Federal Democratic Republic of Ethiopia Population Census Commission. 2008. Summary and Statistical Report of the 2007 Population and Housing Census. Population Size by Age and Sex, Addis Ababa, Ethiopia

Makki F. and Geisler C. (2011). Development by disposition: Land grabbing as new enclosures in contemporary Ethiopia. Paper presented at the International Conference on Global Land Grabbing: Organized by the Land Deals Politics Initiative (LDPI) in collaboration with the Journal of peasant studies and hosted by the Future Agricultures Consortium at the Institute of Development Studies, the University of Sussex

Ministry of Finance and Economic Development (2010). Growth and Transformation Plan 2010/11-2014/15 (draft). Addis Ababa, Ethiopia

Ministry of Planning and Economic Development (1993). An Economic Development Strategy for Ethiopia (A Comprehensive Guidance & A Development Strategy for the Future). Addis Ababa

Morton, J. 2005. Legislators and Livestock: A Comparative Analysis of Pastoralist Parliamentary Groups in Ethiopia, Kenya and Uganda. Final report of the NRI/PENHA research project on pastoralist parliamentary groups, pp. 1-26, Natural resource Institute, University of Greenwich

PDO. 2005. Hamer District Pastoral Development Office. *Report Paper*. Dimeka Town, South Omo Zone, SNNPR, Ethiopia

Samuel, T. and Flintan, F. 2007. Dynamics of rangeland and water management in Afar. In Rangeland & Resource Management in Ethiopia. Gender & Pastoralism. Vol.I, 2007, pp. 45-58, SOS Sahel Ethiopia, Addis Ababa, Ethiopia

Samuel, T. (2013). From cattle herding to Sedentary Agriculture: The role of Hamer women in the transition. In (M. Kaneko & M. Shigeta, eds) *African Study Monographs supplementary Issue, No.46:121-133*

Sead Oumer (2007). The 'Privatization' of Somali Region's Rangelands. In Rangeland & Resource Management in Ethiopia. Gender & Pastoralism. Vol.I, 2007, pp. 45-58, SOS Sahel Ethiopia, Addis Ababa, Ethiopia

Tache, B. (2011). Range enclosures in Southern Oromia, Ethiopia: An innovative response or erosion in the common property resource tenure? Paper presented at the International Conference on the Future of Pastoralism; Organized by the Future Agricultures Consortium at the Institute of Development Studies, University of Sussex and Feinstein International Center of Tufts University. 21-23 March 2011, Addis Ababa, Ethiopia

Taylor, J. 2006. Negotiating the grassland: The policy of pasture enclosures and contested resource use in Inner Mongolia. *Human Organization: Volume 65, Number 4: 374-386*

Williams, Dee Mack. 1996. Grassland enclosures: Catalyst of land degradation in Inner Mongolia. *Human Organization: Volume 55, Number 3: 307-312*

