

Conflict among User Groups as Cause for Communal Grazing Land Degradation: The Case of Tahtay Maychew Woreda, Tigray

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Abstract

Livestock contributes a significant role in the livelihood of those people who depend on mixed agriculture and as a main stay of life for pastoralists. In Ethiopia in most cases people largely depend on crop residues, oily and cereal crop products to feed their livestock. Communal grazing lands also play a visible role in providing livestock feed in the country. Despite their contribution communal grazing lands are exposed to degradation. Considering such problem this study was undertaken to show how conflict over natural resources is becoming as cause of communal resource degradation which found in between Adihutsa and Hawosta kebeles of the Tahtay Machew Wereda in Tigray. Purposive method was employed to take the sample kebeles from the woreda and both purposive and simple random sampling were employed to take sample for the study participants. Qualitative methodologies were employed to analyze the data. A total of 40 individuals have been participated in the study process. Key interview, focus group discussions and direct personal observation were the three tools applied to gather data. The finding demonstrates that, conflict among the user group, watershed erosion, and introduction of invasive weed species were identified as the root causes for degradation. The researcher also recommends that; a remedy should be taken by concerned bodies to negotiate the user groups who are conflicting before any action about management on the grazing lands takes place.

Key words: Communal grazing land; Degradation; conflict; Adihutsa and Hawosta; Tigray.

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1. Introduction

This research was conducted on assessing how conflict among user groups causes degradation of communal grazing lands. In the study was carried on the communal grazing lands which found in *Aduhutsa* and *Hawosta kebeles* of *Tigray* region of the country. 77.04% of the local inhabitants are dependent on agriculture for their livelihood. Livestock production is also an integral part of Ethiopia's agriculture in the highlands and the main stay of life in the pastoral and agro-pastoral productions systems [4,7,16]. [15, 27] also pointed out that the livestock management in Ethiopia is mainly based on extensive grazing of communal grazing and arable lands. Beyond this, communal grazing lands have also environmental benefits like maintenance and well-being of immediate and surrounding soil and water resources, air quality, human and wildlife habitat, and esthetics [2]. Despite their advantages today communal grazing land degradation is a global concern which is manifested by losing their palatable biological native species [27]; and serious in sub-Saharan Africa [28]. The same to this almost all communal grazing lands situated in different parts of Tigray displays different degrees of degradation [22]. Introduction of invasive species [29] conflict over communal resources [24,13, 30, 12, 18, 1, 26, 9] and global climate change are some causes of communal grazing lands from world experience.

1.1. Significance of the Study

Communal grazing lands have contributing more to the livelihood of the rural part of the region. They are sources of palatable grasses to feed for livestock, woodland, place for bee heaves, places where soil and water management are practiced. Despite these advantages communal grazing lands are exposed to degradation. Conflict among the user groups is also the main cause which leads for the mismanagement. Accordingly the researcher believes solving conflict among users is the first step to manage and conserve communal resources. Based on the findings the researcher also forwarded important recommendations for concerned bodies. So this research will contribute at large to the local people, to policy makers especially in the natural resources division.

1.2. Limitation of the Study

This research was conducted in with lack of enough budgets allotted. As a result even though the researcher knows as this should be conducted in many woredas' of Tigray region, due to the low amount of money allotted it was conducted only on one Woreda.

1.3. Methodology

Purposive sampling was conducted to take sample *kebeles* from the *woreda* because of its visible degradation of communal grazing lands. A total of forty (40) informants were selected through both random and purposive sampling from the total households of the two *kebeles* (2,233 in *Adihutsa* and 1802 in *Hawosta*). Fourteen (14) of them were selected for interview through purposive sampling. Such respondents were judges in the earlier times, local elders, and rural development officers. The remaining twenty six (26) informants were selected for focus group discussion by random sampling method from each *kebele*. Name of respondents is also presented by their pseudo name for their confidentiality. Focus group discussion, key interviews, and personal field observation were the employed data gathering techniques. In its nature the collected data was a qualitative and

analyzed qualitatively.

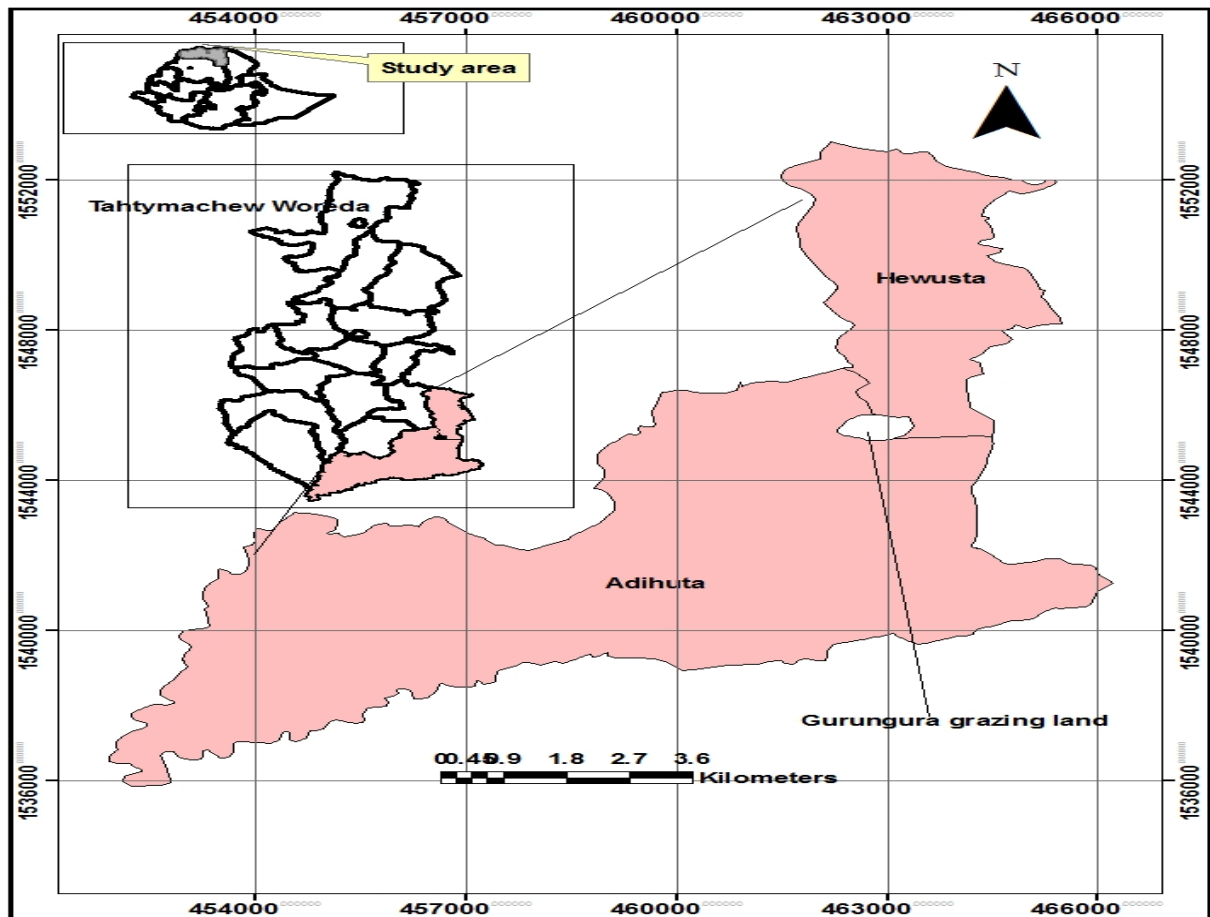


Figure 1: map of the study area

2. Result and Discussion

2.1. Causes of Communal Grazing land Degradation

The major causes of grazing land degradation are much related to overgrazing, cultivation, population pressure and climate change [25]. Reference [27] also found drought, shortage of rain and bush encroachment as a cause of grazing land degradation in Metema district of north Gondar of Ethiopia. Though the causes are little similar, in this study the researcher found conflict among user groups as the fundamental cause for the degradation. It is also argued by [11] people who live in the developing world and who depend directly on natural resources are always exposed to conflict. It is also severe problem in almost all parts of Ethiopia [24, 30]. Interviewees pointed out the main ways for the effectiveness and for the proper management of communal resources are the coordination and agreements between the user groups for different actions. But here in these communal grazing land users are not agreeing, they always compete and conflict to own the grazing land which becomes a challenge to take a coordinated action on management and conservation practices. In addition to this the head of Adihutsa kebele also revealed as follow when he explains the cause of communal grazing land degradation;

Flood which erode the soils of the grazing lands and the weeds which invade large part of the grazing lands are

the result of lack of management practices as a result of lack of coordination among the users which caused by conflict. Members of the user groups are from two kebeles called Adihutsa and Hawosta kebeles'. Starting long time ago local elders and representatives of these kebeles were always in applying for the court of law to own the grazing land. Though there were trials, but a permanent solution is not achieved still now.

Reference [13] Argues people who are always in conflict don't coordinate for best measures, but for violence, competition and aggression. Similarly user groups in these communal grazing lands are always run to take the grazing land for one of them; but they don't agree and to coordinate in management and conservation practices because of their doubt in the next (it may belong to one of them at the end). As a result there is no collaborative action taken on management and conservation of communal grazing lands compared to other kebeles found in their neighbor. As data gathered from the woreda indicates collaborative actions are taken place in management and conservation of communal grazing lands in the rest fourteen kebeles of the woreda. Watershed management practices, soil and water conservation practices and other environmental protection mechanisms are taking place. Identifying conflict as a basic cause for the degradation of the grazing land the researcher also tries to explore the underlying root causes for the conflict to occur. It is because as [24] argues the first stage of resolving natural resource conflicts has to be the identification and analysis of the root causes of the conflict.

2.2. Causes of Conflict in the Study Area

Most of the time conflict over communal natural resources is not avoidable, and arises because interests and needs of peoples are incompatible [13]. In most cases shortages and scarcity of natural resources are the main causes for conflict to occur through creating competition over members of user groups [24]. Mix of tenure insecurity, unclear boundaries and insufficient natural resources management policy has caused also conflicts within many villages and communities [20]. As to the general information obtained from the respondents' of the study area shows the root causes for the frequent conflict in the study area are problems with tenure policy especially in the past regimes and unclear demarcation of communal grazing land. Such information was mainly obtained from key interview informants.

2.3. Unclear Tenure as a Cause of Conflict

The customary tenure systems in Ethiopia left problems with transferring land resources to the current regime [6]. As Ayalneh *et al* further argues the unclear tenure practices in the past regimes become the current challenges for the peaceful specification of owner of natural resources. Lack of clear tenure over communal natural resources has become a source of conflicts and confusions over member users [14]. Similarly past unclear tenure is also identified as a cause for the frequent conflict among the users in the study area. As it is indicated by the informants, past confusions about the owner of the grazing land is the basic causes for the present conflicts. One of the interviewed participants who were judge and elder in the past times responds as follow about how such conflict occurs.

Here the main causes for such conflict is the unspecified owner of the grazing land in the past and changing the administrative sites of Lailay Adihutsa and Sgomo villages which were the sole beneficiaries. Such unclear

tenure creates a problem with transferring these grazing lands resource among groups of users. When those villages which were the users of such commons separated to different kebeles conflict also arises because there were no specified owner and there were also no clear boundary of the resources. In addition unclear boundary demarcation in the study area is also identified as another cause of degradation.

“Currently large number of villages and groups are included under Adihutsa and Hawosta kebeles. But they had passed through different administrative situation in different regimes. Some villages which were under Hawosta kebele administration during imperial and Derg regime are currently included in Adihutsa kebele administration and the same is also true in Adihutsa. Similarly villages which were in one kebele administration are now separated and administered in different kebeles. The problem here is about the resources which were commonly used in the past. These resources belong to both of the two kebeles or villages, but it is difficult to administer such resource in common (for two kebeles). Currently conflicts and disagreements arise on forest areas, grazing lands, rivers which were commons for those kebeles’ or villages of these kebeles’. During the imperial and Derg periods these villages were administered in one kebele. Now these villages are administered under different kebeles’. This is not the only problem, but also in the past when Lailay Adihutsa and Sgomo use it there were no specified owner. Though this grazing land is found within the two villages, there were also other neighboring kebeles which use from the grazing land. What I want to say here is there was no clear owner starting from the long period. This is the cause for the frequently existing conflict on these grazing lands”.

2.4. Unclear Boundary Demarcation as a Cause of Conflict in the Study Area

Unclear demarcation on communal resources is really the indicator of poor management over resources [20] and confusion over resources owner and dispute between villages and communities are the consequences of unclear demarcation of communal natural resources. It is also acknowledged that without clear demarcation of the boundaries it is not possible for the village governors and even for other concerned bodies to enforce the many laws that exist to protect the natural resources.

Tenure insecurity and the unclear boundary demarcation are the two interwoven causes of conflict in the study area. In the past regimes there was no defined owner (whether these grazing land is communal resource for two of them or it belongs to one of them) this is the reason why there is no clearly defined boundary which shows the exact user of the grazing land at the current times. It also left a problem with transferring communal grazing lands when the two villages (Sgomo and Lailay Adihutsa) which were the sole users in the past separated in to the two different kebeles (Adihutsa and Hawosta). Abera [4] discusses that communal grazing lands on the Gamo Gofa highlands are clearly demarcated and there is no confusion on the owner of these resources. As a result members of the user groups easily set rules and regulation and ratify sanctions on how to manage and protect their resources; but in the Gojjam part of Amhara regional state communal grazing lands were not demarcated clearly (there was no specified owner) as a result members of the user groups were always in conflict [32]. The unclear boundary demarcation of the communal resources which found between these two kebeles creates confusion on the users of the resources and it also sources of conflict. In addition to the above idea of the respondent a woman who was judge and elder also stated out about the cause of conflict in the grazing land as follow;

“Currently there are resources between Adihutsa and Hawosta kebeles in which it were not specified either it belonged to Adihutsa or Hawosta kebele. During the imperial and Derg regimes communal grazing lands were used by Sgomo and Lailay Adihutsa villages which were administered under one kebele. But the users were some individuals who have high position and recognition. I can tell you most of the time a man whose name was Kidane from Lailay Adihutsa and Mulaw from the Sgomo were the users. During the time when Sgomo and Lailay Adihutsa villages separated it becomes difficult to whom should it belong but these two kebeles were separated and administered under the two different kebeles. During that time this grazing land and other similar resources were not restricted and not demarcated. This is the reason why these two kebeles conflict frequently on such resources’

2.5. Other Causes of Conflict in Communal Grazing Lands

Causes of conflict over natural resources are not simply materialistic (Adams et al, 2006); beyond their material cause’s natural resources conflict are also depend on the perception and moral attention of the protagonists. The researcher discussed unclear tenure and unclear demarcation of resources as the basic cause for the conflict. Beyond this the researcher also found moral initiations emotions as another cause for the initiation of conflict between the two groups. Information about such idea was mainly obtained from key interview. As one woman informant point out during interview, when Sgemo (it is a village currently administered under Hawosta kebele) and Lailay Adihutsa (a village currently under Adihutsa kebele administration) were separated to different kebeles there was no much attention to whom does these grazing lands belongs too. People who gather grasses earlier take the advantage over others and in the next time the same thing may occur (the group who gather first take the grasses). At that time conflict was not aggravated as it is currently happens. As she says conflict among the user groups arises and aggravated as follow;

‘Once up on a time people were assembled in Haregeweyni church (found in Lailay Adihutsa) for public holiday celebration. Clan elders locally called riese abat and other ordinary people were the guests on that celebration. At that time a women from Adihutsa kebele bawl as follow by calling name of some famous people from kebele Adihutsa’;

“There is one thing which menaces our name;

Is there any hero from enda Trintr?

Is there any brave from enda Weradeqal?

Is there any heroic from enda Melakizgi?

Is there any courageous from enda Harida?

Do you think that Haregeweyni deserves to Sgemo?”

This is a poem in Tigrigna language which translated in to English by the researcher. This is to initiate and motivate for those people who are courageous in Adihutsa kebele. Haregeweyni church is found in Adihutsa then what she wants to say here is these grazing lands belongs to Adihutsa, but the sgeomos' currently found in Hawosta) are using our resource, so why do we see our opponents silently. This data shows; since that time the riese abats of the two groups starts to compete over the grazing lands. When the competition aggravates and conflict among the local people also starts elders and some other individuals nominated to apply to the court of law beside the local people. Such trials also continue still now because only tentative solution is decided on how to use the grazing land resource by neighboring kebeles' elders and by the wereda administration.

2.6. *Consequences of Conflict*

Rising tensions and disputes undermine formal and informal institutions and rules that govern resource use, resulting in environmental degradation and economic decline [13]. The merging of resource conflicts into wider, destructive social conflicts results in collapsed production systems, uprooted communities and chronic insecurity. Here in case of these communal grazing lands the researcher aimed at assessing the consequences of the conflict on the grazing lands and the livelihood of the local people. Conflict between the user groups is also identified as a challenge for the proper management practices in communal grazing lands in the study area. Degradation of the grazing land had been also identified as it has both direct and indirect impacts on the livelihoods of the local people. As data gathered from field observation shows the palatable grass species of grazing land are dominated by weed, in addition grazing lands are also eroded by flowing water from surrounding watersheds. As discussions in the above paragraphs shows it becomes difficult for concerned bodies of the two kebeles to impose management and conservation mechanisms in these commons. It is because the first thing needed here is agreement of the local inhabitants which assures ownership of these commons. As a result gathered data also shows degradation of some communal grazing lands has negative impact on livelihood of the local inhabitants. One interviewee from the study participants also supports this data as follow on the consequences of the degradation of the grazing land on the livelihoods of the local people;

“The frequently occurred conflict between the users becomes a challenge to take management and conservation practices for the grazing land and even for the other surrounding farm lands and other commons. Since there is no agreement and coordination between the user groups to manage the grazing land it is also difficult to enforce them to conserve their resources. The main problem here is because there is no clear demarcation on this grazing land and we cannot know whether this grazing land belongs to Adihutsa or to Hawosta. The problem is not only in taking management practices in this grazing land. In addition the flood which flows through the grazing land also erodes the surrounding farm lands and the forest areas”

Consolidating this idea the rural development officer from Hawosta kebele also informs as follow;

“There are other communal resources within our kebele and these resources are productive. For example I can tell you there is one protected grazing land in our kebele called Dembeba. Local people coordinate to mange it and they also use for bee production in addition to its contribution for livestock feed source. Currently there are 45 bee hives which are more productive and become model in our district. What I want to say here is without

the agreement and coordination of the local people it is also difficult for us to do anything. So the big problem as a result of conflict is lack of coordination among the users and degradation of the grazing land. In addition the local people also lose the advantage that they can get if there were good coordination to manage their grazing land.”

As this data indicates communal grazing lands which found in between the two kebeles are exposed to degradation than those with far distant from their center. Data from respondents also shows there is no any practice on bee keeping, grazing land, and grass for their livestock. As a result local inhabitants are losing advantages of commons. There are no enough management practices in these communal grazing lands. It is also indicated by different participants that the floods which erodes the grazing land and the invasion of weeds are the result of poor management practices. Gully developed by erosion have been observed in the grazing lands. Standing from the observation the researcher tries to obtain information about the time when it is created and its impact on the grazing land. Data obtained from a focus group discussion pointed out; four years ago such gully was not created. The streams were flown through the grazing land. At that time the grazing lands was affected by sheet erosion and the flood also damps and covers some parts of the grazing land with sandy soils.

Strengthening this idea another focus group discussant also add some other information as follows; “this gully was no created in the very recent years. As you see now its size is expanded with in short period of time and within this time large amount of land is eroded by such flood. If such degradation continues like this and if any action is not taken to stop such degradation this part of the grazing land s will loss and changed in to barren land after a few years”.

Observations also show there is no any watershed management taken on the surrounding watersheds. As a result grazing lands are highly exposed to gully erosion on the commons.



Figure 2: part of the grazing land eroded by floods

Introduction of invasive species is identified as the other cause which contributes for degradation of which is also another indicator of poor management of the communal grazing lands. Information about the existence of weeds on the grazing land is mainly obtained from the focus group discussion and direct personal observation of

the researcher. [10] argues that in most cases weeds are the most invasive species which threaten the productivity, stability and ecological functioning of many grazing lands. Weeds can affect native species of a grazing land either by competing directly with the native species for food and/or space or indirectly by changing the food web or physical environment; because invasive species have always a high capacity to grow, compete, and consume more nutrients than that of the native species.

The researcher obtains some information about the current status of the native species and the time when such species are introduced from the informants. Knowing the time in which the invasive species is needed to know the rate in which such species are growing. As information obtained from focus group discussion shows weeds species are introduced in the last three or four years; as one member from the focus group informs as follow;

“Of course it is difficult to know the time when these weeds are introduced because it is difficult to identify when their abundance is much little. But in the last three or four years we have seen variety of weeds. Currently we can easily identify in their flowering season by their flower”.

Consolidating this idea another participant says; “I have another work in addition to agriculture and I sometimes go to other areas for some works. When I turn back there is a surprising change that I observe in this grazing land. In terms of invasion of weed species, in the last four five years I hadn’t observe any visible weed but currently especially in this year a large part of the grazing land is invaded by such species. As you observe now the grazing land is highly invaded by these species which grow and thrive in group we called them tingta in our language. There are also other weed types in which I am not familiar with their names.”

Another rural development officer also reveals the following information.

“I am a new comer to this area but I have information about the past and current status of the grazing land. As my friends told me the grazing land is impacted by flood. In addition the weed species are also other treats to the grazing land. As you see it invades a large portion of the grazing land within a short time. If situations will continue like this, native species will loss.”

In addition it is also discussed that if grazing lands are invaded by brush or weeds, site productivity decreases or may shift from one plant or other species community type to another. It is because weed species are less exposed to environmental threats and other pests. Similarly as information obtained from the study participants shows, the rate in which the weeds invaded to the grazing land is too fast. It covers a large portion of the grazing land within a short period of time. So if such invasion continues keeping the current speed and if any measure is not taking for such invasion the grazing land will cover by the invasive weeds within a limited time.

Information was also taken from study participants to know management practices in communal grazing land found in far distant from the center / middle of the two kebeles and was reacted as follow.

[19] Argues peoples who have high social cohesion have the confidence to take collective actions in communal resources. But here in these grazing lands local people are conflicting and they are not also sure that whether this grazing land belongs for one of them (Adihutsa or Hawosta kebele) or it is a sustainable communal resource

for two of them.



Figure 3: part of the grazing land with its palatable grass species



Figure 4: part of the grazing land shows the invasive weed species

“The management practices that should be done are clear. It is because we are observing that the grazing lands are eroded by flood, it is also invaded by weeds. So management practices are either protecting from such degradation if possible or taking measure at now. We have other communal grazing lands within our kebeles in those grazing lands we the people make management practices collectively and if further help is needed from other bodies we also ask and apply for the help. There is no difficulty because member groups agree for every action to be done. The problem here is the user groups do not have confidence to invest on it. It is because we are in conflict with others to own the grazing land. We are also in doubt of Hawostas may take this after a time. So our trial right now is either to own this land or to know as this grazing land is our persistent communal resources for two of us. If we have this land or we assure it as our common we know that it is our responsibility to take any management and conservation practices. We will care it as we are doing in our private commons.”

Study participants from Hawosta kebele also respond for such question as follow;

“It is our trust that similar to the other commons any management and conservation action should be taken by the local community. Though it was not successful, in the last two years we make trials to manage the grazing land. We made check dames, we plant trees in the gully created within the grazing land but the flood which consolidated in the upper part of the hill area wear away what we have done. But when we ask the local peoples

of Adihutsa to take actions in the watershed area they are not willing. In general what we are saying is our agreement is the decisive way for the proper management of the grazing lands. We are willing for any action to be done and to participate on such action.”

Another elder person from Hawosta kebele also consolidates their idea as follow;

“If the user groups agree to take any action, there is no any means that these grazing lands can’t rehabilitate or benefit us. Nothing is done with in commons without agreement and trust among the users. I know too many trials were done to negotiate the user groups by different neighboring local elders but solutions were tentative; this is the reason why conflict arises frequently. Here when I think user groups can use it in a peaceful way if permanent solution is offered by any concerned body; it may be from government officials of local elders.”

[4,19] argues that it easy and possible to take collective actions and set permanent rules and regulations which guide people on how to use and manage their commons if there is a trust among the users. Abera further explains there are a permanent rules, sanctions and regulations on how to use and manage communal grazing lands in the Gamo Gofa grazing lands because such resources are with identified holders and there is no confusion on the owner of the grazing lands. Unlike to the Abera’s case in these grazing lands the owner is not specified and the two kebles are those of groups who compete and there were disagreements on ownership of the grazing land. It is for this reason that only tentative solutions is laid down by the neighboring kebeles’ local elders and wereda administrators. It is for this reason that the local people lack a confidence to invest on their commons. It is because there are doubts that these grazing lands may belong to one of them in the future.

3. Conclusion

In the study area natural resources are owned both privately and collectively. Forests, grazing lands, watersheds and other reserve areas are some of the commonly owned resources. Such communal resources are managed and protected by the collective action of user groups. The findings also shows that, collective action is more effective in those of resources commonly owned at the village and sub- village levels. It is because there is high social cohesion in these villages than at kebele level. So taking part in the management and protection of these natural resources is also one indicator of their high cohesion. Unlike to the communal resources at the village and sub-village level these resources which are commons for kebeles are always subject to degradation. Conflict among the user groups is identified as the cause for such degradation. Conflict in between the kebeles is because of unclear tenure on natural resources in the past regimes, unclear boundary demarcation, perception and moral attention of the protagonists are also the causes for the groups to conflict over the commons. It becomes a challenge to apply the collective decision and action that are needed.

4. Recommendations

It is acknowledged in this research that the main cause for communal grazing land degradation is conflict among the user groups (Adihutsa and Hawosta kebeles). On the basis of many literature reviewed and the experience that the researcher have in the study area during the field work the following recommendations are suggested;

- ✓ Grazing lands are not clearly demarcated; as a result owners are not specified. There are judges at each kebele who concerned on land issues only, so attempts should be taken to demarcate and specify the owner of the grazing land and to give permanent decisions with the collaboration of the local judges, elders and other concerned bodies from the wereda, because it is an issue which taken between kebeles.
- ✓ Natural resources conflicts are common in almost all communal resources around Adihutsa and Hawosta. But local and neighboring kebles elders are responsible in negotiating and peace building among the users. Therefore, such action should be also made in between the users of communal grazing lands.
- ✓ Watershed management and soil and water conservation practices are regular in all most all communal resources of Adihutsa and Hawosta kebeles. But in case of communal grazing land found in between them such action is not applied. So concerned bodies at the wereda level should take a responsibility by following the application of such activities in all commons.

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