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College of Social Sciences and Humanities (No 5)

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Foreword

As you all know, Research and Technology Transfer are two of the three major mandates of Universities. Hawassa University has rich research experiences which resulted in the generation of some technologies and the production of numerous scientific publications. At present, over 300 different research activities are being undertaken by the staff of the University with funds obtained from the government and collaborative projects.

We are encouraged to see that the number of staff involved in research is increasing from year to year. Almost all schools and departments in the university engage in research, although not at an equal pace. The number of collaborative research projects undertaken with partners from international and national organizations is also increasing a result of the staff’s efforts in developing new proposals. Currently, Hawassa University has over forty different collaborative research and development projects activities. For instance, this year the HU has won six Norwegian supported NORHED projects in different disciplines, that include Agriculture, Health, Natural sciences, Social Sciences and Governance. These projects provide not only research fund to staff and graduate students, but also contribute to manpower development of the university.

The Office of Vice President for Research and Technology Transfer attempts to integrate research with its Technology Transfer programs. For this reason, most of our researches are conducted in our target Technology Villages, on problems identified by the communities. The office of Technology Transfer and Community Services are taking up the technologies generated from research for evaluation and demonstration. Promising technologies are recommended for pre-scaling and scaling up after validation. These processes are participatory in which the communities and relevant stakeholders involve in all stages of technology development and evaluation.

In these research proceedings, numerous completed research papers composed of different disciplines are presented. We do hope that some of the research results will be translated into action and contribute towards livelihood improvement in our country.

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ABSTRACT

This study is aimed at investigating if actors in the rural development sector pay proper attention to practices of communicating and documenting innovative insights in scope of rural development to promote extension practices. It also attempts to identify the factors that cause inefficient communication and documentation practices in the sector. The study was conducted in Dalle and Hawassa Zuria woredas in Sidama zone in 2013/14. The main objective of this study is to explore and describe communication and documentation practices of some undertakings in the scope of rural development interventions to promote effectiveness of interventions through effective communication process and documentation facility. To achieve its objectives the study employed two research tools. Firstly, reactions of development practitioners to some points pertaining to the investigation were surveyed with a help of research questionnaire. Secondly, supervisors of these practitioners and an expert from a nongovernmental actor were interviewed to compile further information and to crosscheck the data generated from development actors directly involved in field activities. The summary of the data obtained through both angles mentioned above primarily indicated that the level of attention paid to practices of communication and documentation in the rural development sector in the two woredas is low.

Keywords: Communication, Documentation, Innovative Insights, Innovative practices, Rural Development

Introduction

Background

Ethiopia is a large, land-locked country in Eastern Africa with a population of over 90 million (based on 2007 national census projection) and 49.5% are women. Above 80% of its population lives in countryside and makes their living through poor traditional agricultural practices. The Ethiopian economy is highly dependent on agriculture which accounts for approximately 42% of its GDP. Moreover, the continued high rural-urban migration due to poor livelihood security in rural area is aggravating the already high urban unemployment situation, particularly for the youth.

Most MDG milestones including the goal of eradicating extreme poverty and hunger, achieving universal primary education, improved gender parity, maternal health as well as reduced HIV/AIDS infection and child mortality by 2015 is part of the overall national priority. Addressing these is deemed indispensible to fight poverty and improve the living conditions for the most vulnerable population. In particular, an exacerbated reality regarding poverty in the country seems worth scrutinizing with a focus on specific socio economic sector such as those which involve rural development undertakings. In this respect, farmers in many parts of the country have long been challenged by food security problems and sever poverty. In addition to this in the last few decades, the situation has been getting worse mainly because of human and naturally induced environmental
problems (soil erosion and degradation) as well as rapid increase in population. However, in the practical sense, the interventions by the government and others are rarely seen helping to serve their ultimate goal of making the rural destitution less severe, and the poor less poor.

There can be different factors for a clear mismatch to exist between the amount of money allotted for rural development projects and the impact this input has yielded in practical terms. In this regard one can plausibly mull over the worth of having a continuous and effective system of communication and documentation in association with rural livelihood improvement interventions and innovations. This is because an absence of effective communication inevitably leads to lack of coordination, duplication of effort, and wastage of development resources. A rural development intervention for considerable degree aspires to do good for indirect beneficiary through information dissemination and extending innovative practices and best lessons grasped from ongoing interventions. In the light of this, many rural development projects claim in their objectives that they give prominence for skill transfer, documenting lesson, and scaling up selected experience to the indirect beneficiary living in adjacent locations.

However, a great number of rural communities do not seem adequately conversant with a role of a development project in their vicinity, and this derives one to question a trend in relation to use and management of development information in rural setting. This is because, scaling up of selected practices, disseminating rewarding lessons grasped, and promoting farmers’ local innovations all require comprehensive documentation and careful communication. Nonetheless, this is an area not adequately researched in Ethiopian context. In the current age of humanity, information has received very great attention in every aspect of human endeavor. Correspondingly, efforts related to rural development can never be exceptional for this tenet. The concept information in a sense embraces a flow and exchange of information among various actors, as well as practices of recording and documenting it.

C. Pitaich (2005:4) states when properly communicated, practical achievements associated to a rural development intervention in certain locality seem to be more stimulating to influence the life of the rural community nearer to that particular location. The writer further suggests successful lessons recorded where a local community have had a stake in the process are like a garden for demonstration in order to encourage and convince a nearby community. However, the same literature illustrates due to the nature of extension education, transferring lessons mechanically should not be confused with meaningfully sharing a common understanding. The World Bank Group (2011) underlines a significance of integrating strategic communication in order to reinforce success of development projects. In this regard the document states emphatically states that strategic communication is a powerful tool that can improve the chances of success of development projects. This document makes a distinction between strategic communication and mere practice of information transfer by underscoring a feature that strategic communication strives for behavior change.

Effective communication is capable of leading to a behavior change. Complementarily, therefore, meaningful development communication is not simply about disseminating development information, but it is about getting information out to particular audiences, listening to their feedback, and responding appropriately. This is because, whether discussing a development project or broader economic reforms the idea is to build consensus through raising public understanding and generating well-informed dialogue among stakeholders.
Finally, this document concludes by stating that properly devised communication strategies and programs can make the difference between a success and failure of development projects. This remark, in fact appears more of concomitant to the very definition of ‘communication’ used by Leagans as “it is a process by which two or more people exchange ideas, facts, feelings, and impressions in such a way that each gains a common understanding of the message.” Pitaich (2005:8). In summary, therefore, a quick glance of the above discussion may also help one to understand that strategic information use and management is vital for the success of development projects. Accordingly, enhancing information and documentation practices and advancing trends of communication can help to complement a consistently declining success attribute of the rural development projects in Ethiopian context.

In addition to this, the researcher had practical experience of working as a training program coordinator of a rural livelihood improvement projects and managing some basic education programs in rural settings, and this has been persistently triggering the researcher’s curiosity that there are many issues worth researching in these scopes. Little attention was observed being given if vital pieces of development information as well as some indigenous innovative life practices of the local communities are well documented, disseminated/ communicated. Therefore, this research intends to fill the gap in this regard, so to say to contribute to the effectiveness and continuity of rural development interventions.

**Statement of the problem**

Destitution and environmental degradation are unfortunate but pervasive realities in rural Ethiopia. As such these have been getting massive attention of development actors, researchers and donor agencies. Specifically, government and non government actors have been operating various practical livelihood improvement and capacity building interventions for a number of years. They have been spending vast financial resource and trying to make it reach the poor with a purpose to mitigate absolute poverty and contribute to sustainable development among the rural community in Ethiopia. Nonetheless, people are still living in poverty.

Particularly, the financial resource and time spent on rural development interventions under such domains as Food security, Public Health and HIV/AIDS is plausibly huge and exceedingly disproportionate with the output and impacts these interventions have ultimately generated in terms of improving the living conditions of target beneficiaries(Desalegn in Taye 2000:16). This tends to show most of rural development interventions in Ethiopia have presumably been proved unrewarding; as they are not capable of making the poor at least less poor. However, irrespective of invisibility of significant impacts and dwindling outputs of efforts in practical senses, vast amount of donations from international financial sources still keeps on flowing on similar rural development and livelihood improvement projects. Efforts in terms of similar further interventions seem analogous to pouring more to raise level of the water in a leaky bucket. Based on a grave level of destitution discussed above, a rampant failure of massive intervention on such a pressing need to improve destitution of the target group appears perplexing and worth researching. In this regard, availability and applicability of relevant information of rural development and an extension of such information presumably seem among the crucial factors that can make a given intervention effective and sustainable. This study, therefore, aims to explore and describe communication and documentation practices in relation to rural development interventions.
Research Purpose

**General objectives**

The general objective of this study is to explore and describe communication and documentation practices of selected programs in the scope of rural development interventions to promote effectiveness of interventions through effective communication process and documentation facility.

**Specific objectives:**

Under the general objectives described above, this study has the following specific objectives namely:

1. Assessing communication practices between development actors and its beneficiary
2. Reviewing communication practices among development actors implementing similar rural development projects
3. Investigating trends of documenting impacts of development interventions
4. Examining an extent of integrating local innovations and indigenous skills of farmers

**Research questions**

Based on the above background information and problem statement, this research tries to answer the following research questions.

**General question**

How do and to what extent development actors manage communication practices and the documentation of rural development information?

**Specific questions**

1. How often and well development actors communicate their project (its objectives, activities, approach) with the beneficiary?
2. How often/well development actors communicate with other actors in overlapping geographical areas and domain of interventions to avoid duplication of effort and resources?
3. Do rural development projects persistently record new experiences grasped and best lessons learnt, and let others find these?
4. Do rural development actors adopt & document farmers’ innovations?
5. Does government office liaise and facilitate information exchange among rural project stakeholders?
6. Is there any well established system to manage rural development information documentation to facilitate communication among stakeholders?

**METHODS OF THE STUDY**

**Description of the study area**

The study area planned to be included were three woredas drawn from Sidama zonal administration, i.e. Dalle, Borecha and Hawassa Zuria woredas. However, Borich woreda was excluded from the study due to financial limitations. Eventually, therefore, the study included only the rest two woredas mentioned.

**Subject of the study**

This study involved in development agents working in full-time basis under the offices of agriculture and rural development in Dalle and Hawasa Zuria woredas of Sidama Zone. Besides, views of supervisors of these development agents leading woreda offices of agriculture and rural development were also incorporated. Moreover, expert of an NGO that operates in both woredas in scope of rural livelihood improvement projects was interviewed, and his views have been incorporated in the analysis.
Study design
The status of communication and documentation related to rural development intervention information can be evaluated by using both quantitative and qualitative (i.e. mixed) methods. Quantitative method can help more to describe the trends of documenting lessons learnt in the course of implementations by development projects, and innovative ideas observed with local farmers. Qualitative method was also used to note the degree of openness regarding information exchange or communicating rural development information between various stakeholders.

Sampling
In terms of sampling, Dalle Woreda has thirty-six rural kebele administrations, where there are three development agents in each peasant association. Here, twenty rural kebeles were included, and that accounts for 56% of the farmers’ association coverage of the woreda. The number of development practitioners working under the office of agriculture and rural development in this woreda is one hundred and eight. From among these, forty development agents selected from twenty kebeles (2 development agents per keble) have been included in the study. In terms of percentage development practitioners included in the case of Dalle woreda constitutes 37% of the development agents in the woreda. On the other hand, Hawassa Zuria woreda has twenty three rural kebele administrations and in each kebele there are three development practitioners on duty. Proportionally, thirteen kebeles from this woreda have been selected (which accounts for 56% of administrative coverage of the woreda), and two development agents from each kebele finally included in the study. Hence the total number of development agents intended to be included were twenty six. Accordingly, development agents included in the study in this woreda roughly accounts for 29% of the practitioners on duty in the woreda.

Hence the total number of respondents ultimately included in this study was sixty. The total development practitioners’ number in the two woredas is 177 (69 in Hawassa zuria, and 108 in Dalle). Hence the number of development practitioners included in the study constitutes about 39% of development practitioners in the two woredas.

RESULTS AND DISCUSSION

Responses to items in the questionnaire
As it is indicated under the research methodology section, copies of the questionnaire were filled in by sixty development agents and other practitioners working in woreda office of agriculture in two woredas selected from the Sidama zone. Regarding the content of the questionnaire, one may note that it has three general sections. The first of these is an introductory section, which deals with the purpose of the questionnaire and the way each item should be seen by the respondent. The second section, on the other hand, is incorporated to attach some personal information whereas the third section deals with the main body of questionnaire. The number of development practitioners whom the study involved is sixty. The total number of development practitioners in the woredas is 180. The first question was forwarded to the respondents to assess their feelings concerning ways that they think largely helped them to obtain the knowledge and skills which they are currently applying on their duty as development agents. In that case twenty-five out of the sixty respondents (41.7%) indicated a chief source for their knowledge and skills a formal education. On the other hand, twenty-two respondents (36.7%) indicated they have received a good deal of knowledge and skills that help them to function at their current career through various short term trainings. Then thirteen of the respondents (21.6%) said that aspects of knowledge and skills they are dominantly making use of currently on their career is what they grasped through real life experiences.

A single more appreciated source of knowledge and skills is formal education. Nonetheless, it is clearly revealed that the other two modes of learning in combination namely; short term trainings
and informal life experience tended to constitute more than 58% as source of the professional insights to development practitioners. In the light of this the knowledge and skills acquired outside formally structured educational opportunities appear considerably significant in terms of their volume, and due to this they call for proper management. The second item in the questionnaire was included to explore an individual development practitioner’s experience in terms of attending (on-job) short term trainings. In this respect fifty seven out of the sixty respondents, which is 95% of the total, indicated that they attended at least one short term training program. The rest three respondents did not indicate whether or not they attended trainings. Based on the response to the second item above, the respondents further asked to specify areas of short term training(s) they attended. In this regard, most of the respondents have expressed that they had more than a single opportunity of attend short term trainings. Specifically, the respondents were offered with a list of few training titles to check if each of the respondents had an opportunity of attended that particular training course (title). The following table summarizes their responses to this item.

<table>
<thead>
<tr>
<th>Table 1: Types of short term training courses along with number of attendants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Short term training title (course)</strong></td>
</tr>
<tr>
<td>Soil conservation issues</td>
</tr>
<tr>
<td>Watersheds management courses</td>
</tr>
<tr>
<td>Land use planning related topics</td>
</tr>
<tr>
<td>Livestock management</td>
</tr>
<tr>
<td>Agro forestry and grain production issues</td>
</tr>
<tr>
<td>Other topics (not mentioned)</td>
</tr>
</tbody>
</table>

One can easily understand a level of attention given to short term training attendances. It at least implies that short term trainings are seen as learning opportunities. However, it is equally important to further investigate if participations in short term trainings are seen as ultimate goal by themselves. Accordingly, the fourth item tried to explore if innovative inputs such as improved insights grasped through short term training sessions have been managed and in some ways brought about certain Impacts.

The following table details task dimensions offered to development practitioners and their rate of applicability to individual practitioner in response to a training attended with an intention to see impacts of trainings attended.

<table>
<thead>
<tr>
<th>Table 2: Effects of some training as reported by participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reported general effect of the training</strong></td>
</tr>
<tr>
<td>It provided me with a new topic or idea</td>
</tr>
<tr>
<td>It helped me to remember something forgotten</td>
</tr>
<tr>
<td>The training helped me to get reference materials</td>
</tr>
<tr>
<td>It provided nothing new but boosted my motivation</td>
</tr>
<tr>
<td>Other point (not mentioned)</td>
</tr>
</tbody>
</table>

From the above table, one can see that all the training opportunities provided were perceived relevant by those attended. However, the participants were not seen listing down a range of productive practices which as a result of training they have involved themselves in and successfully managed. For instance, the last open-ended option was not discussed by any respondent, and it was entirely left blank. In order to assess and evaluate pieces of information summarized under Table 2 above, another query was included in the questionnaire. To this effect, the respondents were asked about the value (worth) of their being involved in rural development training and experience sharing occasions when measured in certain commonly anticipated term of references. In this regard, table 3...
presents certain commonly anticipated points included to measure impacts of trainings and experience sharing occasions along with responses given by respondents.

Table 3: Some training impacts reported by the participants

<table>
<thead>
<tr>
<th>Task executed after attending a training</th>
<th>Number of Respondents</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Giving briefing or explanation to supervisor on the content of training attended</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Giving explanation to colleagues who did not get the chance to attend the training on the content of training</td>
<td>21</td>
<td>35</td>
</tr>
<tr>
<td>Sharing the training manuals and document to those who did not take part in the training</td>
<td>1</td>
<td>1.7</td>
</tr>
<tr>
<td>Giving a training to the community on the same content</td>
<td>29</td>
<td>48.3</td>
</tr>
<tr>
<td>Implementing other task unspecified</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>60</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Among the most valuable physical outputs of training are training manuals. This is because training manuals and notes taken by trainee during workshops and experience sharing occasions are referred by participants when the trainee return back after trainings. Besides, a trainee is often nominated to take a sit in training, representing the position he or she is serving in a given organization. Hence, it is expected that a nominating office shall equally benefit from such forums of induction. To check if this is indeed a case, a question is forwarded to the respondents as to where they often keep training manuals and related relevant document which they collected during training when they return back after the training and experience sharing occasions. Correspondingly, thirty-nine of the sixty respondents (65%) showed that they take it to their respective places and keep it in their home as any personal document. It is also seen that only eighteen of the sixty respondents (30%) indicated they either submits it to a documentation section of the nominating office or to their immediate supervisors.

On the other hand, it is expressed that there is an institutional limitation in terms of making a space available to keep or preserve relevant references for development practices such as policy document and training manual. In this regard more than half the respondents, i.e. 32 out of the 60 development practitioners explained that they have no officially established reliable center to keep official documents. In absence of such an establishment, therefore, development practitioners can hardly have any other option than taking materials to home as their personal belongings. Respondents were asked if their predecessors have had a trend of properly handing over such document when they leave their position. In response, almost half the respondents (twenty-eight out of sixty) expressed this is not a trend. These respondents expressed that they did not have proper discussion, briefing and handing over tasks and materials when they start functioning on this position with someone who was leaving the position.

Twenty-two out of sixty expressed they document training manuals. It is seen that thirteen out of the sixty respondents expressed they record indigenous innovative farmers skills, and the rest nineteen expressed they record some good practices observed during field activities. Those respondents who expressed their experience of recording and documenting some impressive ingenious farmers’ field experiences were asked what they eventually do the information they captured. In this regard, eight development practitioners expressed that after observing the practice, they arranged a gathering and made the farmers explain their achievement to the community. On the other hand, fourteen development practitioners expressed that after observing certain impressive lessons with some farmers, they reported these lessons to their supervisors.

The above query was presented to respondents in order to investigate if development practitioners...
make attempts to facilitate communicating relevant farmer practices. On the other hand, it was implied in their responses that development practitioners hold discussions with their beneficiary at various stages of the initiatives. Besides, development practitioners in offices of rural development under the study woredas showed that they also have had experience of exchanging information with non-government projects in the area. In this respect, fifty-five out of the sixty respondents affirmed the question saying they have had experience of exchanging information both with NGO projects and government stakeholders.

Another question was forwarded to investigate if they noticed efforts in that government offices liaise and facilitate information exchange within their sectors, as well as NGO rural project and the community. In response, twenty three out of the sixty respondents felt that they noticed it. However, thirty seven respondents (which accounts for more than 61%) expressed they did not notice their office making this sort of efforts. One may note that this is presumably considerable proportion of the responses to the item in question. Moreover, an associated question was presented in order to substantiate the responses given to the above item. In this regard, those who responded expressing their office have been making efforts in terms of liaising and facilitating information exchange among stakeholders were further asked to mention such a specific experience that they ever remember. Finally, respondents to questions in the questionnaire were asked if they have observed rural development projects in their work area record new experiences grasped and best lessons learnt so that other actors can adopt these. Correspondingly, twenty seven out of sixty (45%) affirmed the question. However, fifteen respondent (25%) expressed they did not seen efforts in terms of recording lessons grasped on the field. On the other hand, thirteen respondents did not express their observations in either way.

Summary of the Interviews

In addition to pieces of information gathered through copies of the questioner distributed among sixty development practitioners in two woredas, interview sessions were hold with a few other informants. The interviewee comprised a delegate of head of agriculture and rural development office in Dalle woreda and a representative of SOS Sahel Ethiopia’s Hawassa Zuria rural livelihood project. In the light of this, one of the officers was asked to reflect on his observation regarding how often and well development actors communicate about the project (its objectives, activities, approach) with the beneficiary. Specifically, he was asked if he had observed development actors hold discussions regarding interventions in advance and explain their case to beneficiaries. Accordingly, he expressed that he could see good interaction and communication between different development actors and their beneficiaries. He highlighted that the community is often encouraged to express its feelings over all development initiatives at all levels as government directives administratively. In effect, this has therefore automatically maximized mass participations in various development issues.

The second officer who is representative of SOS Sahel’s Hawassa Zuria rural livelihood improvement project. In this respect, he endorsed the point of view summarized by the first officer. He stated that his project has an experience of jointly planning development initiatives. He added that rural development projects of his organization has a unique approach of working through the existing government structure, and this makes it imperative to function every initiative in close contact and consultation with the structure and the community as a whole. Both the interviewee were also asked to comment on the frequency as to how often and on the extent how well development actors communicate with other actors in overlapping geographical areas and domain of interventions to avoid duplication of effort and resources. Specifically, each of the interviewee requires to comment whether or not projects within the same domain and related goal openly exchange their logic of intervention. Besides, they were also asked whether or not different NGO projects which have similar (in)direct beneficiary openly share their logic of intervention. However, SOS Sahel’s rural development undertaking was found the only project in the study woredas. As a
result, each interviewee found it difficult to comment on this item.

The third question presented to each interviewee was to check if rural development projects persistently record new experiences grasped and best lessons learnt, and let others find these. In this regard, responses from each of the interviewee tended divergent. Plainly stating, an interviewee representing government office tended to show reservations to affirm. However, the interviewee representing the NGO project in question tended to response otherwise. A trend of response connotation appeared similar to another interview item questing if rural development actors adopt and document insights and innovations of farmers. On the other hand, each of the interviewee was asked if government office liaise and facilitate information exchange among rural project stakeholders. This question was included to assess the issues treated by development actors on the field from different perspectives. In this case too responses from each informant tended inconsistent. The informant from the government offices affirmed the point but the non-government representative expresses to show reservations.

CONCLUSION
Development actors underline that they have had rampant exposure to improved or up-to-date ideas and innovative insights in the scope of rural development. Specifically, every respondent showed that s/he took part in some number of on-the-job short term training through which they grasped viable ideas and collected valuable resources such as training manuals. Nonetheless, it is seen from the data that most of the times the insights grasped and resources acquired remain in the hands of individuals. Nothing or little was observed in terms of trends of sharing insights as well as resources among the development agents, and this might have negatively contributed to effectiveness of rural development extensions. It appears encouraging to see that development agent fairly value farmers’ inventiveness. Some development actors expressed that they have attempted to keep a record of lessons they grasped during their field work from farmers. Some development actors expressed that they started to promote these through individual efforts. Closely observing the data presumably lead to a conclusion that documenting innovative insights and records of such insights highly challenged due to poor attention given to infrastructures and/or documentation facilities. This in turn is also seen to deter trends and the process of communication as in some respects.

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Analysis of Factors Affecting the Adoption of Sustainable Management of Municipal Solid Waste in Hawassa City, Southern Ethiopia

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ABSTRACT
This study was conducted on Hawassa city, southern Ethiopia from 01 September 2013 to August 2014. The general objective of this study was to investigate factors affecting the adoption of sustainable management of municipal solid waste in Hawassa. For this study three kebeles were selected using simple random sampling technique and 234 sample households were chosen. Both primary and secondary data sources were used. Questionnaires, interviews, field measurement and observations were employed to collect primary data. Both qualitative and quantitative techniques were used for data analysis. The study showed that there are nine solid waste categories in Hawassa. These solid waste types were food, plastic and rubber, paper and cardboard, textiles and leather, ash and dust, metals, glass wastes, yard waste and miscellaneous. The major components of the household solid waste were food wastes, with average weight of 103.1 kg and volume 315.97 liters. The average amount of house hold solid waste generated in Hawassa town is about 0.2 kg/day per capita. The results of the sample survey suggested that the amounts of solid waste generated by the higher, medium, and lower income households of Hawassa are 0.85kg, 1.9kg and 4.3kg per capita per day respectively. The study indicated that the number of solid waste containers in the city is inadequate. Containers are not distributed in the city in such a way that the beneficiary’s optimum travel distance is secured. The provision and distribution of containers in the city was not considered the number of population per sub city and sub cities area/size. Organizing the informal sector and promoting microenterprises are an effective way of extending affordable services for the successful adoption of MSWM. The increase of the service demands combined with the shortage of resource for the municipality of Hawassa is putting tension on the existing MSWM systems.

Key Words: Barriers, Municipal Solid Waste Management, Success factors

INTRODUCTION

Background of the Study
The state of solid waste management in cities of most developing countries is fast assuming the scale of a major social and environmental challenge (Daskalopolous, 1998a). In Sub-Saharan Africa in particular, the combined influence of poverty, population growth and rapid urbanization has tended to worsen the situation (Walling, 2004). The gravity of this problem is perhaps best reflected in the level of attention given to it in the UN Millennium Declaration of September, 2007(UN Organization, 2007). One of the eight Millennium Development Goals (MDGs) outlined in the declaration have waste or resource efficiency implications is to ensure environmental sustainability by integrating the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources. In response to the waste challenge many developed countries have embarked upon ambitious environmental reforms, recording remarkable advances in best practices and sustainable management of their Municipal Solid Waste (MSW). However many developing countries including Ethiopia have fared less well in this regard as a result of several barriers militating against sustainable municipal solid waste management (Ezeah, 2009a). To
illustrate this point, a four country study by the African Development Bank (AfDB, 2002) on Solid Waste Management Options for Africa, revealed the following findings:

No country in Africa has detailed solid waste management legislation yet.

Solid waste management in most African countries is characterized by inefficient collection methods, insufficient coverage of the collection area and improper disposal of waste.

Waste characterization data specific to cities in these countries are generally not available.

There is a general lack of regulatory initiatives to manage and minimize waste.

Problem Statement

Since becoming the capital of SNNPR, Hawassa has experienced a rapid population increase and significant spatial expansion. These have created serious problems in delivering infrastructure and basic services, in particular sanitation and solid waste management. Although the municipality attempted to provide door-to-door services, it was only able to collect and dispose some of the solid waste generated by households and businesses in the town. While some private operators provided door-to-door services, their capacity was limited and their work was not well integrated with the municipality. Containers for storing solid wastes in homes include old buckets, baskets, plastic containers, boxes, sacks, and even polythene bags, which in most cases have no covers. Hence, the wastes are even spread around before they get to the sanitary sites. Solid wastes generated in Hawassa are most often disposed of in open dumps, gutters, and at the back of houses due to the inadequate solid waste management equipment or the long distances to the sanitary sites. The municipal authorities are coping with the aforementioned problems. However, MSW management in Hawasa is still in its infancy. City specific data on waste which is necessary for planning is not readily available, and improper location of solid waste disposal is negatively affecting the city sanitation.

Objectives of the Study

The general objective of this study was to investigate barriers and success factors affecting the adoption of sustainable management of municipal solid waste in Hawassa city. The specific objectives are to:

- Analyse municipal solid waste arising in the city;
- Examine barriers affecting the adoption of sustainable management of municipal solid waste;
- Assess success factors for sustainable management of municipal solid waste, and
- Suggest appropriate legislative and economic drivers to stimulate the uptake of critical performance in managing solid wastes.
MATERIALS AND METHODS

The Study Area

Hawassa city is 275 km far to the South from Addis Ababa. Hawassa City is bounded by Lake Hawassa in the West, Oromiya Region in the North, Wondogenet and Malga Woredas in the East and Shebedino and Gorche Woredas in the South.

Figure 1: Study Area Map

Sample Size and Sampling technique

The research was conducted on 3 kebeles. These 3 kebeles were selected using simple random sampling technique. Then from each selected kebele the sample households were selected proportionally using the sampling frame. Therefore, from the total of 4934 households 234 sample households were. This 234 sample size was decided by using scientific statistical method from (Cochran, 1977). The formula that was used for determining sample size was the following.

\[ n = \frac{NZ^2PQ}{d^2(N - 1) + Z^2PQ} \]

Where \( n \) = total sample size

\( N \) = Total number of households (sample frame i.e. 4934)

\( Z \) = standard normal deviation at the required confidence level that corresponds to 95% confidence interval equal to 1.96

\( d \) = the level of statistical significance (Allowable error) (0.05)

\( P \) = the proportion in the targeted population estimated to have characteristics being measured (from previous studies or studies in other comparable countries)
Q = Non-residential houses (offices, schools, hospitals…) = 1 - p i.e. 1 - 0.8 = 0.2

\[ n = \frac{NZ^2PQ}{d^2(N-1)+Z^2PQ} = \frac{4934(1.96^2)(0.8)(0.2)}{(0.05)^2(4933-1) + (1.96^2)(0.8)(0.2)} = \frac{3032.713}{12.947} = 234.23 \approx 234 \]

Therefore, \( n = 234 \) was the minimum sample size of households for reliable results. Finally, by using proportional allocation method the researcher was decided to take sample households from selected kebeles. Therefore, Fura(83), wukero(121) and Andinet(30) households.

**Study Methodology**

The researchers used field observation and measurement as a major data sources for this study. Field observation was employed for assessing spatial distribution of MSWM infrastructures, households’ solid waste handling practices, illegal dumping, solid waste collection and transportation systems and disposal site facilities of the city. Field measurement was carried out for investigating households’ solid waste generation rate and physical composition. GPS was also used for mapping spatial distribution of solid waste facilities. Secondary data were extracted from books, journals and municipality.

**Method of Data Analysis and Management**

The composite waste samples from each types of plastic bags were spread and have been sorted into different types of waste components on clean plastic sheet stretched on the floor. Then the volume of each component of the waste stream was measured with appropriately sized container. The weight of each component of the waste was measured with weighting balance. Average of the total waste collected from consistent individual households and total waste collected per day for low, medium and high income groups were calculated. The per capita solid waste generation rate for each income group was also calculated and the results were compared. The individual components of the household solid waste stream and their relative distribution based on percentage composition were presented using tables. The relationship between number of population, solid waste containers provision and solid waste generation rate and household income levels was described with correlation. The point data which was collected with GPS was mapped. Then inter containers distance were measured using GIS software and presented using maps. Qualitative data were analyzed by description and verbal statements.

**DATA ANALYSIS AND INTERPRETATION**

**Physical Compositions of Household Solid Waste**

There are nine solid waste categories in Hawassa. They include food, plastic and rubber, paper and cardboard, textiles and leather, ash and dust, metals, glass wastes, yard waste and miscellaneous (Table 1). The major components of the household solid waste were food wastes, with average weight of 103.1 kg and volume 315.97 liters. These accounted for 56.1% and 58.3% by weight and volume respectively. This finding is in line with some previous studies. According to (Tchobanoglous, 1993) large portion of solid wastes of developing countries is food waste. Similarly, wastes from urban areas in developing countries have a much higher percentage of food waste in their overall garbage mix (Cointreau, 1982). Food waste also accounted the largest
proportion with 59.17% by weight of the total wastes in Arada Sub-City, Addis Ababa (Yitayal, 2005).

Ash and dust waste rated second with 29.33% by weight, as 94.5% of the studied households use biomass energy that contributes to high ash production. Yitayal (2005) reported that in Addis Ababa, Arada sub city, ash and dust accounted for 10.13% by weight of solid wastes. Studies in Jimma town showed the ash accounted for 21.5% by weight ranking second among solid waste components (Melaku, 2008). Yard waste ranked third place with 6% by weight (8.4% by volume). In Addis Ababa, Arada sub city yard waste accounted for 12.2% by weight (Yitayal, 2005). Whereas Adama town had yard waste 12.1% by weight (Lemma, 2007). This waste becomes high, because the households had trees for wind break, shading, fruits and flowers. Additionally, people of the town like to use ornamental grass for decoration of the floor, during ‘coffee ceremony’. Paper and cardboard found fourth position with 2.49% by weight (6.68% by volume). According to (Horton, 1995), wastes from low and middle-income countries contain less paper and non-food items. Plastic and rubber waste ranked fifth with 2.3% by weight and 5.4% of the volume. Due to its non-decomposability and easy mobility due to wind, plastic wastes were found everywhere. Textile and leather, metals and glass were low in terms of weight, which accounted 1.09%, 0.46%, and 0.43% by weight respectively. Metal waste was also very small, 0.46% by weight. This is because metals are reused at household level and sold to other informal recycling sources.

<table>
<thead>
<tr>
<th>S.No</th>
<th>Solid Waste type</th>
<th>Weight(Kg)</th>
<th>Volume(L)</th>
<th>Weight (%)</th>
<th>Volume (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Food</td>
<td>103.1</td>
<td>315.97</td>
<td>56.1</td>
<td>58.3</td>
</tr>
<tr>
<td>2</td>
<td>Plastics and rubber</td>
<td>4.28</td>
<td>29.31</td>
<td>2.3</td>
<td>5.4</td>
</tr>
<tr>
<td>3</td>
<td>Paper and cardboard</td>
<td>4.57</td>
<td>36.15</td>
<td>2.49</td>
<td>6.68</td>
</tr>
<tr>
<td>4</td>
<td>Textile and leather</td>
<td>2.00</td>
<td>10.01</td>
<td>1.09</td>
<td>1.85</td>
</tr>
<tr>
<td>5</td>
<td>Ash and dust</td>
<td>53.9</td>
<td>91.78</td>
<td>29.33</td>
<td>16.93</td>
</tr>
<tr>
<td>6</td>
<td>Metals</td>
<td>0.85</td>
<td>0.87</td>
<td>0.46</td>
<td>0.16</td>
</tr>
<tr>
<td>7</td>
<td>Glass</td>
<td>0.80</td>
<td>1.51</td>
<td>0.43</td>
<td>0.28</td>
</tr>
<tr>
<td>8</td>
<td>Yard</td>
<td>1.10</td>
<td>45.65</td>
<td>6</td>
<td>8.4</td>
</tr>
<tr>
<td>9</td>
<td>Miscellaneous</td>
<td>3.31</td>
<td>10.72</td>
<td>1.8</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>183.81</td>
<td>541.97</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Solid waste generation rates for various income groups

Low, middle and high income households with average family sizes of 6.2, 5.1 and 4.6 respectively occupied 60.25%, 34.23% and 5.52% of the total surveyed households (Table 2). The daily solid waste generation rate per household by weight for the low income group was 0.85 kg/day, those for middle and high income groups 1.9 kg/day and 4.3 kg/day respectively. Similarly, the per capita waste generation rates were 0.15 kg/day, 0.37 kg/day and 0.98 kg/day for low, middle and high income groups respectively. The daily household waste generation rate by volume for low, middle and high income was 2.64, 4.6, and 4.5/day respectively.

Thus, waste generation rate has direct relationship with income level (Well, 1996). ANOVA was calculated for mean solid waste generation rate by weight and volume for the three income groups. There was a significant difference between three different income groups regarding the mean daily solid waste generation rate.
Table 2: Household Solid Waste Generation Rate of Hawassa city

<table>
<thead>
<tr>
<th>Description</th>
<th>Low Income</th>
<th>Middle Income</th>
<th>High Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Income</td>
<td>&lt;500</td>
<td>500-1000</td>
<td>&gt;1000</td>
</tr>
<tr>
<td>Number of Households</td>
<td>141</td>
<td>80</td>
<td>13</td>
</tr>
<tr>
<td>Percentage (%) of Households</td>
<td>60.25</td>
<td>34.23</td>
<td>5.52</td>
</tr>
<tr>
<td>Average Family Size</td>
<td>6.2</td>
<td>5.1</td>
<td>4.6</td>
</tr>
<tr>
<td>Solid Waste Kg/Household/Day</td>
<td>0.85</td>
<td>1.9</td>
<td>4.3</td>
</tr>
<tr>
<td>Solid Waste L/Household/Day</td>
<td>2.64</td>
<td>4.6</td>
<td>4.5</td>
</tr>
<tr>
<td>Solid Waste Kg/per Capita/Day</td>
<td>0.15</td>
<td>0.37</td>
<td>0.98</td>
</tr>
<tr>
<td>Solid Waste L/per Capita/Day</td>
<td>0.44</td>
<td>0.89</td>
<td>1.52</td>
</tr>
</tbody>
</table>

Barriers affecting sustainable MSW management

Waste workers poorly paid & trained

The study showed that each solid waste worker is paid gross salary of 460.00 Eth birr monthly. Almost all, about 96% of the sample workers, believe that their payment is very low as compared to the vastness and hardness of the job. The workers have believed that the working-moral and devotion of the workers has been eroded by so many problems such as inadequate payment, most workers being contractual, the incompatibility of the number of workers and the magnitude of the job; and the community’s being not cooperative.

Facilities (equipment) of solid waste management

Equipment play a significant role, whether they are highly mechanized or not, in the activities of solid waste management. We have seen that among the crucial equipment in any solid waste management, storage containers and collection vehicles are currently used in Hawassa. But the problem of solid waste management in the city is relatively associated with the inadequacy and inappropriateness of the equipment and the improper operation system of the equipment.

Storage Containers

The responsible solid waste manager of a particularly urban area, in order to provide a satisfactory solid waste management service to the respective area, has to give due attention to the number, type, size, distribution, location/sitting (placement) of the containers in relation to the public health and aesthetic conditions of the city. However, when we see the case of Hawassa, most of the management issues of the on-site storage containers have not been thoroughly considered. Seriously, constraints were clearly observed in the quantities, distribution, sitting/locating and types of the containers. There are a total of 66 containers currently giving service of solid waste management. Among these 41 are 1m$^{3}$ and the remaining 25 containers are 8m$^{3}$. Therefore, the number of containers distributed in the city is so few to accommodate the solid waste generated in the city. On the other hand, due to shortage, containers are serving wider areas. As a result, beneficiaries are forced to travel longer distances to reach the containers to empty their receptacles. But beneficiaries may travel to get a container service only if it is a tolerable distance. When the distance to the site of containers increase, the community may exhaust its tolerance to travel and reach such distant containers. Then as travel distance of the users to the container sites increases unreasonably, the community’s improper handling and managing of its solid wastes will be inevitable; wastes will be dumped somewhere within the city illicitly.
The question is how long is the so-called optimum travel-distance of the users to solid waste containers. Of course, experts and scholars have tried to limit the optimum-travel-distance somewhere between 100 and 150 meters. The Nor Consultant recommended 150 meters as an optimum travel distance of beneficiary. Whereas the United Nations Center for Human Settlement (UNCHS) has indicated that the inter-containers distance has not to exceed 200 meters. Therefore, I have tried to evaluate the case of Hawassa in terms of the distance indicated by UNCHS. Starting from the outer most containers, each container is connected to the next nearest container by a straight line. And each straight-line distance, between containers, is measured assuming that the containers are sited at somehow in a linear pattern. The delimitation of the inter-container distance depicted in Map (figure: 2) shows that there were no containers located within 200 meters radius. Moreover, there were wider areas lying outside of the 200 meter radius from each container.

![Map showing inter-container distances](image.png)

**Figure 2: Inter containers Distance**

About 51.3% of the respondents agreed that the distance between their premises and the nearest container in general have a problem, where 71.9% of them said that the containers are too far to use. About 49.3% of the sample householders estimated the distance as measuring over 200 meters. And in many cases it goes beyond half a kilometer. Undoubtedly, the travel distance of beneficiary is a function of many variables such as the quantity and the pattern of distribution of containers and the availability of adequate open-places for sitting of the containers. When there is adequate number of containers as well as plenty of suitable spots to site them, the problem of travel-distance of beneficiaries can be greatly reduced.

As shown in table 3 sub-cities are presented according to their population size and the number of facilities (containers) assigned to them. Then a rank (Spearmans’) correlation coefficient is computed as 0.08 at less than 10% significance level. Therefore, this implies that there is no meaningful relationship between population distribution and facility allocation among the sub-cities. The facilities are distributed among sub-cities irrespective of their population size and thus their domestic solid waste generation rate.
Table 3: Total Population of sub-cities and containers allocation

<table>
<thead>
<tr>
<th>Sub-City</th>
<th>Total Population</th>
<th>Number of 1 m³ containers</th>
<th>No. of 8 m³ containers</th>
<th>Total No of containers/sub city</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tabor</td>
<td>59786</td>
<td>7</td>
<td>5</td>
<td>12</td>
</tr>
<tr>
<td>Menaheria</td>
<td>40104</td>
<td>12</td>
<td>7</td>
<td>19</td>
</tr>
<tr>
<td>Misrak</td>
<td>26920</td>
<td>5</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Bahil Adarash</td>
<td>13928</td>
<td>6</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Mehal Ketema</td>
<td>24166</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Hayk Dar</td>
<td>24740</td>
<td>6</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Addis Ketema</td>
<td>24460</td>
<td>3</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Hawela Tula</td>
<td>127555</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hawassa City</td>
<td>341659</td>
<td>41</td>
<td>25</td>
<td>66</td>
</tr>
</tbody>
</table>

Another problem of distribution of containers is the disparity between the inner and outer part of the city. As in the Map (figure 3) the inner part of the city are relatively more favored than the outer part with respect to the number of containers they have. Most of the containers are found within a relatively small area that may be considered as the inner part of the city. As the one moves far from the center of the city, the container-service becomes increasingly scarce. Indeed, the Sanitation Section Head has admitted that his office has given more emphasis to the inner than to the outer parts of the city where the problem of solid waste management occurs relatively more severely. However, the office has not considered the travel-distance of the residents dwelling far away from the center. About 94% of the respondents believe that the inner part of the city is favored. Thus, figure 3 clearly indicates the disparity between the inner and outer part of the city in container service where the inner part gets relatively better service at least with respect to securing optimum travel distances of the beneficiaries.

Figure 3: Containers Distribution

Table 4 indicates that there is no proportion among area/size of sub cities, percentage of population and supply of containers. Accordingly, Tabor sub city with 17.5% population is provided with only 12 containers while Menaharia cub city with 11.7% is provided with 19 containers. Hawella Tula with largest percentage of population (37.4%) was not provided with any container. Even though...
the Hawella Tula sub city is mainly contains rural kebeles at least kebele 01, which is an urban kebeles, had been provided with some containers. Therefore, from table 4 it is possible to conclude that the provision of containers in the city was not considered the number of population per sub city and sub cities area/size.

Table 4: Population, size of the sub-cities and number of containers

<table>
<thead>
<tr>
<th>Sub-City</th>
<th>Area of the sub city (km²)</th>
<th>Population Percentage (%)</th>
<th>Total No of containers per sub-city</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tabor</td>
<td>15</td>
<td>17.5</td>
<td>12</td>
</tr>
<tr>
<td>Menaheria</td>
<td>6</td>
<td>11.7</td>
<td>19</td>
</tr>
<tr>
<td>Misrak</td>
<td>3</td>
<td>7.9</td>
<td>10</td>
</tr>
<tr>
<td>Bahil Adarash</td>
<td>1</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Mehal Ketema</td>
<td>1</td>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>Hayk Dar</td>
<td>3</td>
<td>7.3</td>
<td>8</td>
</tr>
<tr>
<td>Addis Ketema</td>
<td>9</td>
<td>7.2</td>
<td>5</td>
</tr>
<tr>
<td>Hawella Tula</td>
<td>122</td>
<td>37.4</td>
<td>0</td>
</tr>
<tr>
<td>Hawassa City</td>
<td>160</td>
<td>100</td>
<td>66</td>
</tr>
</tbody>
</table>

The Sitting (or placement) of Containers

The sitting of containers in Hawassa is among the very sensitive issues of solid waste management. The communities dwelling nearby the containers are strongly complaining and appealing to the responsible body persistently. The Head of the sanitation section of Hawassa city has claimed that his office has entertained so many public requests related with shifting of container sites-to take away from their premises. Accordingly, he noted, his office has shifted the sites of many containers so many times, but still the requests are coming. Sometimes the unsanitary condition of the containers and their sites in general and the bad odor that comes out of the waste in the containers has aggravated the sitting problem of the containers. The sanitation condition of the container sites in general has been spoiled due to various reasons, such as the community’s mishandling of its solid waste at home and misuse of the containers.

The Collection and Transportation Facilities

Operation system

Operational constraints are the bane of MSW management in Hawassa. The operational system of the collection and transportation of solid wastes has also contributed to the poor solid waste management service in the city in many ways. Firstly, the collection vehicles have no well-defined working programmes (schedule). Though, theoretically, they have a programme that describes the day and the respective sub-city during which it is assumed to be served, the route of collection and collection-points have been determined by the good-will of the drivers. Moreover, there have no regular mechanisms of supervision.

Secondly, some containers are stay for a number of days before collection, until they become full. Another shortcoming of the operational systems of the skip-loaders is the way information is acquired about the condition of the containers. Therefore, it needs specifically assigned informants
at each site. Thirdly, the sitting locations of containers are temporary. The shifting of containers’ locations was taking place without informing the users. Therefore, if the users travel longer distances to the former sites of containers location and could not get it, they give up and throw-out the wastes on the surface.

The Disposal Site and Techniques

The two most important issues of solid waste management regarding disposal of solid waste are the selection of site and the disposal technique. A disposal site has to be selected so that it has no social and environmental consequences. According to my personal observation, the criterion such as the natural condition, land use, public acceptability and safety (as proposed by Rushbrook, 1999) has been satisfactorily fulfilled.

The Socio Cultural Factor

The materials used by the community as receptacles are of varied types such as sacks, small plastic bags, plastic and metal bucket, and other materials, whose sizes are not standardized. However, the problem is not only the size of the materials it is also the fact that almost all of these receptacles are extremely damaged.

Figure 4: Hawassa City dumping site

Figure 5: Types of primary solid waste storage materials of households

The nature of the receptacles used by the residents, such that they are predominately used and old materials, which have been out of use for a long time due to various defects. It is uncommon to come across receptacles that are either new or are originally produced for this propose. It is only
after they have been exhaustively used for some other purposes that almost all the materials are converted to receptacles.

Natural Barriers

Waste from tropical environments tends to be denser and higher in moisture content than samples from temperate regions of the world (Hagerty, 1973). This presents serious operational difficulties as globally available waste management solutions are often not designed with such parameters in mind (Ezeah et al., 2009a). Equally, the easy availability of dumping grounds in some parts of the city is an incentive for fly sloping and a barrier against sustainable disposal alternatives. The open-areas, that are usually relatively far from residential houses and areas for which there has no concern personally are prone to being of unlawful dumping sites.

Success Factors Affecting Sustainable MSW Management

The success of any waste management and recycling policy depends on changes in the behavior of producers, consumers and waste processors. The factors fall into four main categories: Character of the waste stream is suitable for composting, active informal sector engagement in MSW management, recent emergence of small and medium scale enterprises and low cost of labor.

Character of waste stream is suitable for composting

The waste stream is high in organic content (60%). Moisture content is high as well. As a result of the basic character of waste in the City certain management options such as burning are less favored. It is however the opinion of the FGD that MSW samples from the City were suitable for compost/manure production. The FGD therefore advocated the mainstreaming the informal sector in this direction by encouraging small scale, low technology compost production for urban farming.

The Informal Sector is already active in MSW recycling

The FGD stated that the waste stream in Hawassa is composed of recyclable components. As a consequence, materials re-use and recycling activities throughout the City are limited to household re-use and scavenging activities of the informal sector. Informal sector recycling is in two forms: (i) wandering pickers, who go from house to house picking useful items from bins (this group consists mostly of unemployed young men). The number of people engaged in this form of scavenging is not known as they operate on individual basis without any formal structure or association. (ii) The second group consists of scavengers that operate solely at the dump site, picking recyclable materials as they are dumped from disposal vehicles.

Emergence of Small and Micro Enterprises in Hawassa

Aside from a large and rapidly growing population, the City of Hawassa has witnessed an enormous growth in numbers of Small and Medium sized Enterprises (SMEs) in the recent past. Mainly these enterprises are engaged in construction, food processing, waste management services and a range of manufacturing activities. According to the information obtained from Hawassa Municipality urban Sanitation and beautification head, there are 911 individuals currently engaged in Solid waste management. Firstly, they were organized in unions and then divided into cooperatives. The existence of these solid waste management unions and cooperatives with municipalities close supervision play critical role in success of solid waste management in Hawassa.
Low cost of Labour

Over the past period record numbers of people have migrated to Hawassa from various parts of the country. Net positive immigration has created a labor surplus especially amongst the youths in the city. Youth unemployment has generally tended to drive down cost of labor in the City. This trend is beneficial for labor intensive industries such as MSW management. Ultimately, low labor costs drives down production costs of recycled product thereby increasing market competitiveness.

Conclusion and Recommendation

Conclusion

The average amount of household solid waste generated in Hawassa city is about 0.2 kg/day per capita. The food waste contain large amount of moisture because of the high usage of fresh fruit and vegetables in Hawassa.

The amounts of solid waste generated by the higher, medium, and lower income households of Hawassa are 0.85kg, 1.9kg and 4.3kg per capita per day respectively.

The manpower size of the solid waste management service of Hawassa has been low. It does not match with the vastness of the job

The number of containers in the city is inadequate. The distribution of containers over space is also not even, there is a tendency of concentration on a very small area.

With regards to the sitting of containers many containers have not been sited at adequate open spaces. Some of them have been placed very near to dwelling houses and a large pedestrian traffic.

Organizing the informal sector and promoting microenterprises are an effective way of extending affordable services for the successful adoption of MSWM.

The increase of the service demands combined with the shortage of resource for the municipality of Hawassa is putting tension on the existing MSWM systems.

Recommendations

The provision of solid waste management service requires adequate number and appropriate type and number of facilities. It has to have adequate and appropriate types of collection vehicles, with special emphasis to door-to-door collections service.

Adequate attention has to be given to the distribution and placement of containers. Containers have to be distributed in such a way that it matches with the distribution of population in number as well as in space.

For most of the constituents of the domestic solid wastes are organic, it would be advisable to device mechanisms to convert them into compost and provide to peasants.

An improved waste storage and collection system is required. Each household should use waste bins that are placed outside for ease of collection.
The capacity of the private sector to provide effective waste collection services and of the municipal authority to supervise them should be strengthened.

Dump site should be properly fenced to protect foraging animals from eating plastics and other hazardous substances.

More effective involvement of the private sector and greater integration of the formal sector are recommended.

Additional studies should be conducted in different seasons to compare the results of household solid waste management composition and generation rate with this study to establish the arrangements and inconsistency of solid waste characterization data collected by sorting wastes.

REFERENCES
Assessment of Factors Affecting Promotion of Gender Equality in Education in Schools of Technology Villages of Hawassa University

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ABSTRACT
This study aimed at investigating factors affecting gender equality in education by looking into feeling of stakeholders towards gender equality in education, factors affecting gender equality in education, measures taken so far by stakeholders and future action that needs to be taken to promote gender equality in education. To achieve the objectives of the study, qualitative approach has been employed and data has been collected from 30 students, 20 teachers, 6 Unit leaders and 6 principals of three primary and three secondary schools located in Boricha, Wondogenet and Hegereselam woredas; Gender Unit of SNNPR Education Bureau (REB), and gender offices of the selected woredas. Interviews, focus group discussion and observation have been employed to collect data from the participants and the research sites. The results indicated that participants have a general feeling that females perform less than their male counterparts; home related factors, teacher interactions and culture and school environment are factors affecting female students’ participation in education. It was found that there were attempts made at school level to mitigate problems lowering participation of female students in education through tutorials and other affirmative actions though these seem to be less significant in solving the challenges girls are facing in those particular schools. It was suggested that the school management and education offices should work in collaboration with gender units of the woredas as home and culture related factors need coordinated efforts to minimize their effect as they need working with families and the larger society. Moreover, schools and education offices should give training to teachers by involving educators on appropriate interaction strategies for teachers in their classrooms.

Key words: Females Participation, Gender Equality, Home Related Factors, School Environment, Teacher Interactions

INTRODUCTION
Background of the study
Years ago, UNESCO has declared that every child has the right to education with the intent that education helps the child to learn and grow, developing their potential and gifts. It should be note that primary education is recognized as a right because it has positive impact on people’s lives and on society. According to UNESCO (2007), Todaro (1985) and Ayalew (2002), primary education gives people tools to understand the world and participate in society; gives opportunities for girls to marry later and take greater care of the health of their children; gives individuals the chance to earn more and be more productive, and enables people to have a voice in politics and in society. Yet the role of girls/women in development efforts is proved to be crucial. The stress that poverty places on the lives of girls and mothers is manifold. Recognizing the persistent and increasing burden of poverty on women, nations are giving emphasis to curricula that are gender sensitive so as make them become literate and skilled enough to be productive and confident citizens. This is believed to help countries to achieve literacy goals set for the year 2015.

It should be noted that there is strong recursive relationship between economic growth and education. The level of education in any country is determined by the level of economic growth, increases productivity of individual worker, contributes to the minimization of inequalities in
Economic growth without improvement in human resource is unthinkable. In Ethiopia, women constitute 50% of the population and contribute more than 50% to subsistence production. However, studies indicate that the Ethiopian women are subject to gender discrimination in every aspect of their life in economic, social, cultural and legal aspects. For years, they had less access to education and employment. They are subject to traditional practices such as female genital mutilation, early marriage, etc, which leave them to lifelong suffering. They travel long distance to fetch water and fuel wood; they cook in poorly ventilated houses which expose them to other problems; lack of grinding mills in rural areas make the rural women grind grain for the family consumption, etc. The health service is also less accessible for women while their need is high as compared to their male counterparts. Women need more health care at the time of pregnancy, delivery and child upbringing. Studies also indicate that Ethiopian women are also subject to gender violence: rape, domestic violence, political violence, sexual and emotional harassment (CSA, 1994; CSA, 1996).

UN (1991) also stated that gender discrimination affects not only women but also the overall growth of the economy. It makes half segment of the population not to perform to their full potential in social, economic and political life. This gender discrimination may arise as a result of policy gaps and earning gaps. If official positions of the government concerning the major macro indicators and sectors are largely occupied by men, then development will be in question. Widespread education is a necessary condition for economic growth and sustainable development. It increases household income and well-being by increasing productivity or widening income earning opportunities. This indicates that if women get equal chance for participation in education, this will increase the economic development of the country. Helping girls to enjoy a life free from unreasonably heavy workloads, limited control over assets and unequal distribution of household income in the future will depend on the amount and type of education they get at primary and secondary levels. Today’s education will help them to earn income that they are employed.

Moreover, education of girls will be a means of ensuring progress towards their right to the enjoyment of the minimum attainable standard of physical and mental well-being throughout their life, and they will become informed regarding how to manage health related issues such as solid and liquid wastes, personal hygiene, HIV/AIDS, reproductive health and family planning. However, as UNESCO (2007) report indicated what it has declared is not the case for millions of children. It has recently been calculated by the organization that there are 77 million children who do not go to school at all, or attending schools in poor conditions being affected by many affecting factors.

UNESCO (2007) states that the challenges of getting all girls into education are wide-ranging. The challenges include the following:

i. Changing attitudes among the male population so that women and girls have the same rights and respect as men and boys; awareness of rights among women also needs to rise because they have often accepted the dominant view and do not know how to challenge it;

ii. Rising the status of the social roles of women in society at large showing that women can do and achieve the same levels of status, employment and power as men;

iii. Educating mothers as a way of sustaining the education of girls in the long-run;

iv. Expanding early childhood education, particularly for girls, thus ensuring the more will enter and benefit from primary schools;

v. Girl-friendly schooling as a matter of getting girls into school and about making sure that schools are good places for girls’ to be secure, healthy, affirming and encouraging

The challenges which are stated above seem to be relevant to the Ethiopian context in general and the Southern Region in particular. However, the degree, extent and availability of the challenges
should be systematically investigated so that appropriate measures can be taken by concerned bodies such as educational officers, gender offices and non-governmental organizations working on gender.

**Statement of the problem**

Ethiopia is a large country with a population of above 80 million where women constitute about 50 percent. Ethiopian Government has recognized that education contributes to the development of the country and trying to make education accessible to many of its citizens. However, studies indicate that those who are illiterate in rural parts of Ethiopia are mainly women and girls (UNDP, 1997). In rural parts of Ethiopia where agriculture is the main stay of the people, women work more hours than their male counterparts and are responsible for 50-60 percent of subsistence agricultural production while suffering from standards of living, poor health conditions and with limited access to basic education (Almaz, 1991). The limited participation of girls in education in Ethiopia is linked to the historical development of education in the country. Educational in its traditional has long history in Ethiopia. Originally, the education system of the country was predominantly religion oriented to serve the manpower needs of the church, the mosque and the state (Punkrust, 1968). Since women were not allowed to assume responsibilities in both institutions (state and religious), the exclusion of the women from the teaching-learning activities was the main feature of these institutions (Alemtsehay, 1985).

Though expansion of education was taking place, the participation rate of girls was low in the country. Since the implementation of the 1994 Education and Training Policy, many efforts have been made to increase female’s participation through implementation of Education Sector Development Program I-IV and general education quality improvement program. It has been explained earlier that education of girls has many advantages. However, there are various factors that might affect the rate of girl’s education. Ethiopian Government has taken various measures to reduce those factors that might decrease the gender gap in education. It should be noted that in spite of government’s efforts, there may be various problems to be faced while sending girls to schools. Though various measures have been taken by the government to increase girls’ participation in primary and secondary education, there are still gaps that might slower government’s efforts.

My experience, as a researcher in Technology Villages of Hawassa University, informed me that there are almost equal number of boys and girls at primary level, and the gap increases as the grade level increases. This shows that more boys are promoted than girls to the next level of education. When I was in the schools of Yirba and Wondogenet, I observed more girls coming late to school than boys. This might be due to family influence or other relevant factors. The possible explanation might be that girls are not equally participating in education as that of boys. In those areas, studies should be conducted to and intervention actions should be taken. Therefore, this study investigates factors affecting girls’ education in Technology Villages of Hawassa University with the intention to answer the following questions:

1. How do stakeholders feel towards participation of female students in primary and secondary education?
2. What are those factors affecting the participation of girls in primary and secondary education?
3. What are measures taken so far by the different actors in the schooling process so as to reduce the effects of the problems?
4. What further measures (intervention actions) need to be taken to minimize the effects of those factors?
Objectives of the study
The major intent of the study was to assess factors affecting girls education in selected schools in Technology Villages of Hawassa University and to suggest possible actions for intervention. The study specifically tries to:

1. Explore stakeholders’ feeling towards participation of female students in primary and secondary education
2. Identify those factors affecting the participation of girls in primary and secondary education;
3. Explore measures taken so far by stakeholders, and
4. Describe actions for future intervention.

METHODOLGY
Subjects
Data of this study was collected from 30 students, 20 teachers, 6 Unit leaders and 6 principals of three primary and three secondary schools located in Boricha, Wondogenet and Hegereselam woredas; Gender Unit of SNNPR Education Bureau (REB), and gender offices of the selected woredas.

Study approach and sampling
Qualitative approach was used to conduct the study. Qualitative approach has lent itself to the use of purposive sampling for selecting the sample of the study. Purposive sampling will be used to select schools from the selected villages, participants of the study. The aim was to select information rich cases for in-depth understanding of the topic under study. Thus, the samples for the study were selected purposefully in order to obtain substantial information about the research questions.

Data collection tools
The study involved the use of three types of instruments: interview, focus group discussion and observation.

Interview
Interview is important primary source of data in qualitative research. It helps the researcher to find out what people think about events. So, I used it as a means of studying participants’ perspectives clearly. As Best and Kahn (1990) described, interview is used to gather information regarding individual’s experiences, opinions, beliefs, feelings and demographic data, I conducted in-depth interviews with teachers, parents, unit leaders, principals and officials. The interviews were both formal and informal. Having a clear purpose, I developed interview guide and used it during data collection. All the interviews were conducted in Amharic and sometimes in Sidamigna at times when participants do not understand or speak in Amharic.

Focus group discussion (FGD)
This was held with selected teachers (on the basis of experience) and female students (on the basis of grade) in the schools. FGD was used as it leads to a wide range of responses during a single discussion, and participants were able to build on one another’s view making me understand the factors affecting participation of female students in education and concerning actions to be taken so far to mitigate the problems.

Observation
Observation was used as a means of systematically investigating, watching and recording issues related to activities of students and teachers in the schools with focus on gender differences. This also involved observation of what takes place in the classroom with intent of identifying how female students are acting and whether there is a favorable condition or not for female and male students to participate equally in classroom activities. This was helpful to easily describe what is
going on in relation to education of girls in the school environment, and to triangulate data obtained through interview, questionnaire and FGD.

Methods of Data Analysis
Data collection and analysis were simultaneous activities in this study especially during data collection using interviews, FGDs and observations. It was an ongoing process that started from the beginning of field work. For the qualitative data the process was inductive and it helped me to get guiding information on what to do next. Final data analysis included organization, description and interpretation. The categorical division/classification was based on research questions.

Results and Discussion
This section presents and interprets the data obtained on the basis of the research questions. Thus, categories are produced considering the research questions as follows.

<table>
<thead>
<tr>
<th>Category No.</th>
<th>Categories</th>
<th>Data collected through</th>
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<tbody>
<tr>
<td>1</td>
<td>Stakeholders’ feeling towards participation of female students in education</td>
<td>interview, FGDs, Observation</td>
</tr>
<tr>
<td>2</td>
<td>Factors affecting participation of girls in education</td>
<td>Observation, interview, and FGD</td>
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<tr>
<td>3</td>
<td>Measures taken so far by stakeholders</td>
<td>interview, FGDs</td>
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<tr>
<td>4</td>
<td>Suggestions for future intervention</td>
<td>interview, FGDs</td>
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Stakeholders feeling towards participation of female students
What stakeholders feel about participation of female students in education is important to determine the extent of gender equality in education. The explanation given below shows what the feeling of stakeholders look like towards the participation of female students in education and how gender equality in education is perceived by them.

One of the principals during face to face interview explained:

I don’t think that girls and boys are at equal level of participation. Most of the time I see large number of girls coming late to school compared to number of male students who come late. It is a problem we always think but couldn’t solve as its causes are diverse.

This is what I observed during my visits to the schools. A number of girls and boys come to school late with the former’s number exceeding the latter’s. Even I witness that it was common to find girls coming around the end of first period. This indicates that there is something that is making girls lag behind.

Similar view of less participation was reflected by one of the focus group participant teachers who commented:

It is common to observe differences between male and female students. In a given class most of the time girls do not complete their assignments or homework. We see them trying to copy from their male counterparts or the few female students who have completed earlier.

It seems convincing that male students are performing better than female students for certain causes. It is not because they hate the homework or assignment that many female students are coming to classes without completing their assignments or doing their homework. The words of one of the female students, stated below, clearly tell us what is affecting what they want to do.
Who is to be blamed here needs to be clear. It is not because of carelessness that the female student is not doing what is expected from her in the school. The responsibility given to her is a pushing factor affecting her performance and it needs to be resolved.

The above views make me question the strong statement by Ministry of Education which reads:

“Gender equality was already a major priority area and a cross-cutting issue in ESDP III. As a consequence of concerted affirmative action (entry requirements, and financial support such as a pilot scholarship program and tutorial support programs) and overall expansion, the gender parity index (GPI) has considerably improved in favor of females. At first and second cycle primary, for GER, it increased respectively from 0.87 and 0.69 in 2004/05 to 0.93 and 0.92 in 2008/09. Girls’ completion rate at grades 5 and 8 also improved in which it has increased from 49.5% in 2004/05 to 78.4%” MoE (2010: 69).

It is undeniable fact that attempts have been made to increase access to education for female students. However, there are issues that demand working beyond increasing access. Though financial support and tutorials for female students are important, there are a range of factors affecting participation female students which may not be related to financial problems or tutorials on certain subjects.

Factors affecting gender equality in education

The descriptions above indicated that there are differences regarding participation level of males and females in education. What teachers, principals and students forwarded shows that they have a feeling of low participation in education by female students. This sub-section presents those factors that affected gender equality in education.

Home Related Factors

One of the factors identified as home related and affecting gender equality in education is the family expectation that girls should perform household activities.

My mother always expects me to carry out activities that wait me at home. I have no option except performing them even without taking rest or sometimes without having lunch (Interview with female student 1, April, 2012).

If there is always expectation from the family for the female student to carry out household activities, there will be no spare time to study or carry out home works or assignments given by their teachers. Schooling is not about going and coming back from schools. Another female student was bitterly complaining the way she has been treated by her family/brothers when she claimed:

My brothers are free to play or study. They come together with their friends and I am always responsible to boil coffee as they study….The use turns to study in each others’ home. We, as females, are expected to prepare something to eat or coffee to drink… If I am away from home when they study, they will become angry at me.

Under such circumstances, how do schools expect the same level of/comparable performance from boys and girls? Girls go to schools late because they have to prepare breakfast for the family before they leave home. As opposed, males are free to get prepared to have breakfast and leave home. The sad expression by one female student goes on:
I am the one to wake up early and to prepare breakfast. There are a lot of challenges with preparation...It is not easy to explain. After preparing breakfast sometimes I do not get time to eat. I have to prepare myself and run to school...yet I become late.

The Effect of Teachers’ Interaction
The way teachers interact with students has been observed as one of the factors affecting female students’ participation. Research findings have also been fairly consistent in showing that teachers’ interactions with students tend to reflect gender stereotypes. In general, teacher-student interaction tends to facilitate male-centeredness in classrooms, and this is manifested in both quantitative and qualitative terms. As I observed in the class rooms, boys get more attention from the teacher both in student-initiated and teacher-initiated interactions. The other issue which impressed me is that girls' misbehaviors are often perceived differently from boys' bad behaviors by teachers. Teachers thought that my observation was about other things than gender equal to as it is not usual to observe gender equality issues in classrooms like classroom management or active learning methods. During my range of observations, girls who do not conform to conventional gender behaviors often invite harsh criticism from the teachers, whereas aggression and violence among boys was seen as more ‘natural’.

There is also expectation among teachers that boys are more intelligent than girls and they have greater potential for academic achievement than girls in general, and in mathematics and science in particular. One of the teachers during FGD confirmed:

“We do not usually expect the performance of girls to be equal with boys. (Another teacher takes turn and says)...This is usually true in maths and science subjects. Girls are weak in calculations.

It is easy to imagine how these views influence the interaction of teachers in the above subjects. It is this biased conviction that guides their classroom. Another important dimension that appeared in the study as affecting students and teachers interaction is the family background of the students.

During the interviews, one of the female students reflected:

Teachers are in favor of students who come from better families (those who are rich those from towns or those who have salaries). They discuss many things with them. We are not their favorites. I am always afraid of because they do not want to talk to us.

If this is a feeling by the majority of the girls who are from poor families added with household burden, it definitely affects their participation in education.

Culture and School Environment
What I observed frequently though not always in the schools was that girls were sitting with girls, and boys were sitting with boys to study or to chat. Among other negative consequences, barriers are established that prevent boys and girls from learning about and from each other. Thus, rather than opening opportunities for students, gender segregation and differential treatment based on students' gender (due to influence of culture or societal expectation) helped reinforce gender-related problems. As explained by Mac an Ghaill culture is dynamic rather than fixed. Schools reflect the dominant gender ideology of the society around them, but they do not merely mirror these in a passive manner. Rather, they actively produce and reproduce gender and heterosexual divisions (Mac an Ghaill, 1994).

During focused group discussion more of female students' parents affirmed that they give first chance of education for their sons' than daughters. They want their daughters’ labor more than their education. This demonstrates clearly that discrimination in access to schoolings is sharply
concentrated on girls. Most of the students’ parents are poor and they want their children’s labor, especially that of girls for household activities. This implies that poverty is one factor, which negatively affects girls’ access to and participation in education.

**Measures taken so far by stakeholders**
The schools in which this study conducted were strongly claiming that they have taken different measures to promote gender equality in education.

One of the principals claimed:

*Our school has various forums to discuss issues of females’ education with selected parents and kebele education and training board members. Sometimes we tried to solve problems girls face with their families.*

The attempt made to discuss with selected parents and the kebele education and training board is to be appreciated with reservation. The question should be how do these discussions get disseminated to each household from which female students are coming. If school and some parents discuss, this might facilitate designing of action strategies for the school but my observations do not show that significant changes are brought to mitigate problems of female students which is resulting in gender equality in education.

It was reflected in all the cases that the schools have tutorial schedules for female students. This is first step to be appreciated though quality of the tutorials is area that needs careful consideration.

One superficial support given to female students was reflected by one of the unit leaders who explained “*Even if we could not give much support to female students we were allowing them to attend classes when they are late. But it became difficult to separate boys from girls*”.

This might help a little but it cannot be a means to achieve gender equality in education. The root cause of the problem is related to the burden girls are expected to shoulder at home. In addition, it does not seem ethical to give the opportunity for females to enter class while not allowing boys to enter classes.

**Suggestions for future intervention**
As explained above, there are factors affecting promotion of gender equality in education. I have collected information on what should be done further. The following are suggestions made by myself and participants of the study.

i. It was uniformly reflected especially gender units and education officers that there is a need to work in collaboration with all concerned stakeholders. Mitigating problems related to overburdening household activities of female students and concerns related to culture need the school management and education offices to work with the gender units and respective families. The problem is not easy for schools to resolve. They need to be assisted by all stakeholders.

ii. The need to train teachers on classroom interactions has become clear. Unless training is given to them on appropriate interaction behaviors its negative impact will be long lasting. This needs working with educators and giving the necessary training to teachers.

**CONCLUSION**
This study aimed at investigating factors affecting gender equality in education by looking into feeling of stakeholders towards gender equality in education, factors affecting gender equality in education, measures taken so far by stakeholders and future action that needs to be taken to promote gender equality in education.
The results led to a conclusion that:

i. participants have a general feeling that females perform less than their male counterparts;

ii. home related factors, teacher interactions and culture and school environment are factors affecting female students’ participation in education.

iii. there were attempts made at school level to mitigate problems lowering participation of female students in education through tutorials and other affirmative actions though these seem to be less significant in solving the challenges girls are facing in those particular schools.

iv. the school management and education offices should work in collaboration with gender units of the woredas as home and culture related factors need coordinated efforts to minimize their effect as they need working with families and the larger society. Moreover, schools and education offices should give training to teachers by involving educators on appropriate interaction strategies for teachers in their classrooms.

As UNESCO (2002) argues, the links between rights to education, rights within education and rights through education are not linear. Rights to education do not guarantee rights within education, and neither do rights within education secure rights through education. Yet, we need indicators for all three dimensions to help track progress at different levels of policy monitoring.

By focusing on equality of treatment and opportunity through a gender lens, we need to emphasize equally the importance of paying attention to the kinds of behaviors and attitudes that impose gendered expectations on males within the school in particular and in the society at large.

References


An Assessment on Factors Affect Saving Culture: The Case of Dale District in Sidama Zone, SNNPRS in Ethiopia

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ABSTRACT
This study assesses overall socio-economic and cultural factors that affect saving culture of cash crops producer households in Dale Woreda. It focused on the coffee producers. Primary data was collected through household survey, focus group discussion and in-depth interview with key informants. Secondary data was collected from written documents. The total annual income of households and other related data were collected from 144 informants through survey method and additional qualitative data were collected from 30 informants. Descriptive statistics and qualitative description were used to present and discuss the findings. The results of this study show that the average income of the households who were included in survey was 16,562.5 Ethiopia birr. Total saved money during the crop harvesting season is too low; only 2.48% money was saved but it shows that people have experience of saving. Major factors that down saving culture are increase of cost of consumption, social and production like fertilizer and seed, inflation, climate change causes low produce, absences of prioritizing experience and resource management problem, international coffee price volatility, increase of debt habit and expectation of availability of money in cash crops harvesting season.

Keywords: Saving culture, Household, Cash crop.

INTRODUCTION

Background of the study
The world is currently in a big economic crisis, even though few studies can give a reasonable explanation on this issue (Stieglitz, 2009). Recent studies, Wan (2011), argue that the current crisis has relation with the experiences of the consumption of the past. It is explained that different socio-economic or demographic factors are accelerating rate of consumptions of resources and putting pressure on the economy and sustainability of development. Saving culture has effect on the sustainable development. Smith (1776) tells a story related to saving and investment. He argues that saving creates potential capital for new investment which promotes economic productivity. Profits from investment further raise the labor division, economic productivity, capital and further increase of saving. Therefore saving plays important role to insure socio-economic sustainability. Marx (1867) classifies society into two groups, the capitalist and the worker. The capitalists own the whole capital and monopolies the whole surplus of the firm, and then make a big saving to enlarge the industry scale. By contrast, the worker only obtains the subsistence wage then save almost nothing, and cannot make any wealth accumulation. This kind of economic system causes the rich becomes richer while the poor is always poor. It also create wider income gaps which leads to unfair resource distribution thereby making society unstable due to the increase of income inequality. On the other hand, the rich cannot consume the product because the output of the factory is more than the demand of the rich, while the poor worker has no money or purchase power to buy anything further though he or she wants to consume the entire product from the industry. This induces an economic crisis caused by the inefficient domestic demand which is caused by the economic inequality. At national level, our country is working to transfer its socio-economy into an advanced stagy of development. To attain this transformation goal, government is working in different socio-economic areas. In order to improve investment capacity of the people, saving is one of the government’s areas of emphases. Resources management and developing saving culture are very significant to encourage the local investments. Different studies suggest that the amount of income directly influences the amount of savings, and good income increases the tendency to save. Increase of the size of the income will be accompanied by higher increase of saving. Saving encourage the growth of capital and the potential of the investment of the households. Increase of
capital of households will lead to an increase of the investment potential of the country. Saving is also considered as one of the indicators of secured living in the future (Sajio 2008).

**Statement of the Problem**

Wise use of resources is part of cultural trait that distinguishes man from animals. It is obvious that people do not finish all assets on one day. They consume some and put aside the rest for future. Saving is an important tool to conquer uncertainty and to secure life in the future. Here it is possible to raise a question that why we worry about future. The appropriate answer is that necessary human lifespan does not end in few days but it is extended for a certain period of time. Future is full of uncertainty; wise management of the current consumption is important because today’s consumption of properties or saving culture determines the future of life. Kimball (1996) showed that in the presence of uncertainty, households place more attention to money management than when in a certain future. Other writers like David (2000) and Wendy (1997) also indicated that uncertainty forces people to reduce buying luxury goods; uncertainty has powerful impact on consumer spending. Good saving culture is important instrument to resist unexpected challenges in the coming time (Mark 1998). Saved money is right hand during the unexpected problem Some traditional societies prefer to consume resource immediately rather than store if sharing is more appropriate than saving (Opinion Polling, 2008). Traditional societies who have permanent settlement pattern have opportunity to restore or save from their consumption in kind or cash. For agriculturalists, for example, storing is possible and very important because grain could be stored and they have sedentary pattern of life. The length of the time that properties stored depended on the nature of properties. Grains can be stored for years. Roots, vegetables and milk are not stored for long time. Live animals can live for a long time, but they need to be cared for right along.

Before the coming of the modern saving institutions, there was no organized ways to save money in cash but restoring was more common to keep resources for future. However, today thanks to technological development, people have good opportunity to save their money in cash. It is possible to save in cash because there are different modern saving institutions like banks and other indigenous social institutions which promote saving. Saving culture of our society is poor as compared to China, Bangladesh and South Africa which have a better saving rate in the world. Ethiopia is characterized by poor saving cultures which result in very small domestic savings available for investment. Even though there are better saving means, saving culture is not good in areas where there is high income seasons especially in cash crop areas like coffee producing areas in Sidama Zone like Bensa, Aleta Wondo, Dale and Chuko. In these areas people will be “rich for only three months and poor for the rest seasons” in the year.

**Objective of the study**

The general objective of this study is to assess overall socio-economic and cultural factors that affect saving culture in cash crop areas of Dale District in Sidama Zone.

**Specific objectives**

This study has the following specific objectives:

- Identify indigenous saving cultural traits in cash crop areas particularly in Dale district.
- Find out causes for high costs or factors discouraging saving culture in the study areas /find out causes of high consumption and low saving culture.
- Find out potential opportunities to promote saving in the study area.
- Describe amount of saving in the study areas.
- Find out ways to develop indigenous institutions into modern saving intuitions.
REVIEW OF LITERATURE

Concept of savings
The business dictionary, (www.businessdictionary.com), defines savings as the portion of disposable income not spent on the consumption of consumer goods, but accumulated or invested – directly in capital equipment, by paying off a home mortgage or indirectly through the purchase of securities. It is putting money aside by saving it in a bank or financial service providers, investing in a pension plan or in other forms of income – generating investments. In this paper, the concept of saving is used to refer to putting some money in cash in formal institutions or preserve assets in kind in informal institutions like keeping livestock, crop products, housing materials, equipment, and other forms which can lead to much greater potential financial rewards.

Saving Motives of Individuals
Saving, a decision not to consume all of the current income, is associate with the plan of the future and uncertainty. As Adam Smith (1993) speculate “...the principle which stimate us to save, is the desire of bettering our condition, a desire which, though generally calm and dispassionate, comes with us from the womb, and never leaves us till we go into the grave”. Saving is not uniform throughout all culture. The research result of Rui Yao (2008) in comparing saving culture China with America find out that saving practice vary among households between the countries. This difference in savings rates between the two countries may be the result of differences in saving motives. Research has shown that households saving motives vary from country to country implying that culture as well as the economic environment influences household saving motives.

Keynes (1958) identified several motives for saving, both economic and psychological. More recently, neoclassical economists have emphasized the following motives for saving (Sturm 1983, Atkinson 1971, Beverly July 1997and Wolf 1981): Saving for retirement: saving for the days when a person to become physical weak or it is related with life cycle motives that income is not smooth across time. Precautionary saving: it is associated with the uncertainty and possible emergencies such as unemployment, sickness or death; the desire to hold assets in the form of cash as a precaution against unforeseen circumstances. Saving for bequest: it refers to leave personal or other property to somebody after death by means of a will or it is the build-up of assets to bequeath to subsequent generation. Target saving: to purchase “big ticket” items such as consumer durables, education, or a vacation. People might save with the motives to carry out a future purchase. E.g. house. The first three are expected to influence long-term saving, and the fourth to affect short- to medium-term saving and dis-saving patterns.

Factors that Determine Saving Culture
Saving capability of the person may be affected by a number of factors like family size, average age of the entry into the job market, amount of the income and costs, inflation which increase income uncertainty; if the households are at risk averse, this will lead to an increased demand for precautionary assets and thereby a permanently higher saving ratio (Sturm 1983 Juster and Wachtel 1972). The commonly known factors which determine or affect saving culture of the people are (Sondra, 1997 and Sturm, 1983): Interest rate: higher interest rates will encourage people to save more. Availability of appropriate saving schemes: with more options to save money people will be attracted to save. Development of banking: the development of banking and other financial institutions is of utmost importance in mobilizing savings. In absence of proper and adequate saving facilities, people may recklessly waste on superfluous consumption. Banks not only ensure safety to peoples’ money but also pay interest.

Education
Since education is strongly associated with income (Acs & Danziger, 1993; Becker, 1992; Murphy & Welch, 1989), alleged income-related differences in saving may be explained in part by
differences in education, especially for those with low permanent income. Studies (e.g. Bernheim & Garrett, 1996; Solmon, 1975) indicate that saving rates increase with education, even after considering a variety of control variables. Researches shows that those who have higher education more likely to have a higher income than those who have less education. Solomon (1975) found that less-educated individuals were more likely to report providing for emergencies as their primary savings goal, while those with more education cited the desire to provide for children’s education and to help them set up households. Since educated individuals appear to have longer time horizons, he suggests that education may alter individual preferences.


**Theories of Saving**

This section briefly summarizes the key assumptions and propositions of existing theories of saving and asset accumulation. *Neoclassical economic theories* have a common assumption on the individual’s motives for saving. They hypothesized that individuals are viewed as rational beings who seek to maximize pleasure and minimize pain, and individual utility is assumed to be a function of consumption. Individuals must make choices between present and future consumption. These choices are generally believed to be the product of stable, autonomous individual “preferences” and the individual’s opportunity set. An individual’s saving behavior is expected to reflect his/her preferences for present versus deferred consumption and his/her income and wealth. The two most well-known neoclassical theories of saving are the *life cycle hypothesis* (Ando & Modigliani, 1963; Modigliani & Ando, 1957; Modigliani & Brumberg, 1954), and the *permanent income hypothesis* (Friedman, 1957). Both of these theories assume that individuals and households are concerned about long-term consumption opportunities, and therefore explain saving and consumption in terms of expected future income. They viewed saving as a way to smooth out consumption in the face of income fluctuations.

*Psychological and sociological theories* of saving consider that saving and asset accumulation are determined by personality characteristics, motives, aspirations, expectations, and peer and family influences. Psychologists have examined the effects of thrift, conscientiousness, emotional stability, autonomy, extraversion, agreeableness, inflexibility, and tough mindedness on saving (Webley 2001; Wärneryd 1996). Those scholars who emphasized social norms, suggested that the norm of “conspicuous consumption” leads people to over-spend (and thus to under-save). Some researchers consider the effects of families and peers. For example, Stack (1974) suggests that demands from social network members for money or other material assistance can sabotage efforts to save. And, the literature on financial socialization (Chiteji and Stafford 1999; Cohen 1994) suggests that social network members can strongly influence an individual’s consumption patterns, saving-related beliefs, and aspirations and expectations for saving. On the other hand, *the behavioral theory of saving* attempts to explain how people actually behave with regard to financial matters. The pro-behavioral theory writers do not assume that people are rational and all knowing. As Thaler (2000) suggests, a number of common human characteristics that shape financial behavior, including lack of self-control; limited cognitive abilities; inertia; the tendency to interpret default options as advice; and the tendency to use mental accounting techniques. These tendencies lead individuals to behave in ways that are inconsistent with their own priorities or inconsistent with maximizing long-term consumption. If people are aware of these tendencies, they may try to compensate for them. In fact, behavioral theorists have begun to propose some programmatic reforms and innovations such as simplified investment options and automatic enrollment in plans.
Background of the Study Area
The study area of this paper is Dale Woreda in Sidama Zone, which is located in the SNNPR. Sidama zone has 19 districts and two administrate cities. Dale is one of the nineteen woredas of Sidama zonal administration. The main city of Dale is Yirga-Alem which is 320km from Addis Ababa along main highway to Moyale, 5km to the left after traveling 40km from Hawasa. (Markos 2003). According to Dale woreda Agriculture baseline survey which is based on 2008 Central national census, the population of the woreda was estimated to be 261,384 , of which women account for 129,286 (49.46%) and men account 132,098 (50.54%) of the population. The total population growth rate was 2.8%. The ethnic and religious composition indicates that Sidama shares the largest percentage of the distribution of ethno national groups in the Dale woreda. It comprises more than 91% of the total population of the ethnic groups. The rest groups are Amhara, Guraghe, Oromo and the others (SNNPR, FEDB, 2006). The majority are Protestants, with 79.98% of the population, 8.04% Ethiopian Orthodox Christian, 4.69% are Muslim, 3.46% were Catholic, and 1.3% observed traditional religions (Ibid). As far as topography is concerned, the altitude of the woreda varies from 1161 to3167m above sea level, which has three agro climatic zones like wet dega/Semi-Dega (Dale Agriculture and Rural Development office). Coffee is produced in all 36 farmer association and the total land that covered by coffee is 15,838.88 hectare. The total coffee yield of the 2013/14 is 1,498,010.14 tones. The farmers dominantly practice garden coffee farming systems that include intercropping of various crops (enset or false banana), maize, and haricot bean), vegetables, spices, sweet potato and fruits including chat as commodity crops. Livestock also play an important role in the farming systems of the woreda. The major animal species kept in the study areas are cattle, goats, sheep, donkeys, chickens and beehives.

Research Methodology
The Study Design
This study was conducted from September 2012 to January 2014 to investigate the root causes of poor household saving culture in cash crop areas particularly in Dale. It was undertaken on three Kebeles out of the 36 kebeles of Dale district. The research methodology followed both descriptive and exploratory research. Descriptive method of research was applied to discover facts and accurate findings. The study selected to use descriptive type of research considering the desire to acquire first hand data from the respondents so as to formulate rational and sound conclusions and recommendations for the study. As a result, it has employed a combination of different methods of data collection techniques to obtain both qualitative and quantitative data. Primary data were collected through household survey, interview with key informants and focus group discussion. The rationale behind using a combination of different data collection techniques is to overcome the limitation of one method by another. Secondary data were used to supplement primary data and collected from written documents.

Sampling techniques and sample size
For the purpose of assessing saving culture and identification of factors influencing the saving culture, Dale woreda is purposefully selected because it is one of the cash crops or coffee producing areas in Sidama zone. Coffee producers or cash crop producers are core of this study because coffee is major cash crop in the area. Then three farmer associations were randomly selected from 36 kebeles. The sampling technique was random because all of the farmer associations/kebeles/ that grow coffee are cash crop areas. Due to homogeneity of the kebeles in producing cash crops it was considered that generalizing about the population from sample households did not affect the outcomes of the study. The three farmers associations that are included in the research sample are Awada, Wenenata, and Masincho.
The sampling technique used in this regard was simple random sampling and the farmers list of each kebele was applied as sampling frame. 50 farmers were selected from each of the three kebeles for questioners, but six questioner papers never returned leaving the total response at 144. From my preliminary observation I learned that there is good income in cash crop areas during the crops harvesting seasons; on the other hand, there was low saving; therefore, farmers were considered as a good information source for the study. Again, 30 individuals were selected for interview and focus group discussion. Aged informants who know local culture were purposively included in the sample as they are considered good information source for indigenous culture. Those who have good and low annual income have also been purposively included.

Data collection techniques and sources

To collect the necessary information, the study used both the primary and the secondary data source. The primary data was derived from answers that respondents were given in the self-administered questionnaires, interview, focus group discussion and observation. The secondary data on the other hand, was derived from the findings stated in published and unpublished documents and literatures related to the research problem such as written documents like reports from the local administrative and development agencies, Dale woreda rural development office, and previous existing research materials.

Data analysis

The process of data analysis was carried out using descriptive statistics and qualitative description. Data from close-ended questions of questionnaire was described in tabulation of variables with percentage values in descriptive statistics. Qualitative data from open-ended questions, key informants and focus group discussion has been discussed in qualitative description.

DATA PRESENTATION AND ANALYSIS

Background of the Informants

<table>
<thead>
<tr>
<th>Age range</th>
<th>25-30</th>
<th>31-35</th>
<th>36-40</th>
<th>41-45</th>
<th>46-50</th>
<th>51-55</th>
<th>56&lt;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of households</td>
<td>11</td>
<td>31</td>
<td>29</td>
<td>23</td>
<td>21</td>
<td>9</td>
<td>20</td>
<td>144</td>
</tr>
<tr>
<td>%</td>
<td>7.64</td>
<td>21.53</td>
<td>20.14</td>
<td>15.97</td>
<td>14.58</td>
<td>6.25</td>
<td>13.89</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: survey

All informants being above 25 year old, the highest number, 21.53%, of the respondents are found in the age range of 31-35; while 6.25% of the respondents are in the age range of 51-55.

Household size

<table>
<thead>
<tr>
<th>Age range</th>
<th>25-30</th>
<th>31-35</th>
<th>36-40</th>
<th>41-45</th>
<th>46-50</th>
<th>51-55</th>
<th>56&lt;</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of the respondents</td>
<td>45</td>
<td>131</td>
<td>170</td>
<td>150</td>
<td>127</td>
<td>105</td>
<td>158</td>
<td>886</td>
</tr>
<tr>
<td>Households’ size</td>
<td>4.1</td>
<td>4.2</td>
<td>5.9</td>
<td>6.5</td>
<td>6.1</td>
<td>11.7</td>
<td>7.9</td>
<td>6.2</td>
</tr>
</tbody>
</table>

Source: survey
The above data indicates that the average size of household members of the respondents is 6.2. However, in the range of the age 41-45, 51-55 and 56 - the size of the household is larger than the average of household. In the age range between 51-55 average sizes of the household is 11.7 but in the age range 25-40 the size of household is less than an average.

<table>
<thead>
<tr>
<th>Religion of the informants</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protestants</td>
<td>121</td>
<td>84.03</td>
</tr>
<tr>
<td>Orthodox</td>
<td>4</td>
<td>2.78</td>
</tr>
<tr>
<td>Indigenous</td>
<td>14</td>
<td>9.72</td>
</tr>
<tr>
<td>Muslim</td>
<td>5</td>
<td>3.47</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>144</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: survey

Majority, 84.03% of the informants, are Protestants. However, as can be seen, there are few Orthodox, Muslim and indigenous religious followers. Indigenous religion followers share only 9.72% of the total informants.

<table>
<thead>
<tr>
<th>Educational background of the informants</th>
<th>frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not attended education</td>
<td>9</td>
<td>6.25</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
<td>3.47</td>
</tr>
<tr>
<td>2</td>
<td>27</td>
<td>18.75</td>
</tr>
<tr>
<td>3</td>
<td>18</td>
<td>12.5</td>
</tr>
<tr>
<td>4</td>
<td>18</td>
<td>12.5</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>3.47</td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>3.47</td>
</tr>
<tr>
<td>7</td>
<td>5</td>
<td>3.47</td>
</tr>
<tr>
<td>8</td>
<td>10</td>
<td>6.94</td>
</tr>
<tr>
<td>9</td>
<td>18</td>
<td>12.5</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
<td>3.47</td>
</tr>
<tr>
<td>10+1</td>
<td>5</td>
<td>3.47</td>
</tr>
<tr>
<td>10+3</td>
<td>5</td>
<td>3.47</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>144</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: survey

The highest grade level of the informants was 10+3 which share the total informants 3.47%, while as 6.25% of the informants not attended school throughout their life. From the informants 63.19% of the farmers attended schools from grade one up to grade five. The total percentage of the informants who accomplished 10+1 and 10+3 is 6.94%.
Plants grown on the respondents’ farm

<table>
<thead>
<tr>
<th>No</th>
<th>Plant items</th>
<th>Frequency</th>
<th>%</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ananias</td>
<td>12</td>
<td>8.3</td>
<td>132</td>
<td>91.7</td>
</tr>
<tr>
<td>2</td>
<td>Avocado</td>
<td>106</td>
<td>73.95</td>
<td>38</td>
<td>26.05</td>
</tr>
<tr>
<td>3</td>
<td>Banana</td>
<td>111</td>
<td>77.08</td>
<td>33</td>
<td>22.9</td>
</tr>
<tr>
<td>4</td>
<td>Cabbage</td>
<td>30</td>
<td>20.83</td>
<td>114</td>
<td>79.17</td>
</tr>
<tr>
<td>5</td>
<td>Carrot</td>
<td>19</td>
<td>13.19</td>
<td>125</td>
<td>86.81</td>
</tr>
<tr>
<td>6</td>
<td>Chat</td>
<td>12</td>
<td>8.3</td>
<td>132</td>
<td>91.67</td>
</tr>
<tr>
<td>7</td>
<td>Coffee</td>
<td>144</td>
<td>100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8</td>
<td>Enset</td>
<td>144</td>
<td>100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9</td>
<td>Eucalyptus</td>
<td>121</td>
<td>84</td>
<td>23</td>
<td>16</td>
</tr>
<tr>
<td>10</td>
<td>Gesho</td>
<td>23</td>
<td>16</td>
<td>121</td>
<td>84</td>
</tr>
<tr>
<td>11</td>
<td>Maize</td>
<td>77</td>
<td>50</td>
<td>77</td>
<td>50</td>
</tr>
<tr>
<td>12</td>
<td>Mango</td>
<td>47</td>
<td>32.64</td>
<td>97</td>
<td>67.46</td>
</tr>
<tr>
<td>13</td>
<td>Sorghum</td>
<td>2</td>
<td>1.38</td>
<td>142</td>
<td>98.62</td>
</tr>
<tr>
<td>14</td>
<td>Papaya</td>
<td>14</td>
<td>9.72</td>
<td>130</td>
<td>90.28</td>
</tr>
<tr>
<td>15</td>
<td>Sugar Potato</td>
<td>27</td>
<td>18.75</td>
<td>117</td>
<td>81.25</td>
</tr>
<tr>
<td>16</td>
<td>Sugar cane</td>
<td>23</td>
<td>16</td>
<td>121</td>
<td>84</td>
</tr>
<tr>
<td>17</td>
<td>Teff</td>
<td>17</td>
<td>11.81</td>
<td>127</td>
<td>88.19</td>
</tr>
<tr>
<td>18</td>
<td>Tomato</td>
<td>28</td>
<td>19.44</td>
<td>126</td>
<td>80.56</td>
</tr>
<tr>
<td>19</td>
<td>Zayton</td>
<td>12</td>
<td>8.33</td>
<td>132</td>
<td>91.67</td>
</tr>
</tbody>
</table>

**Total**

Source: survey

From the respondents it is learned that all farmers have Enset and coffee on their farm land because Enset is common for all farmers and it is stable food for Sidama people in Dale and other *woredas* but regarding to coffee it might be common because coffee grown site is purposely selected and coffee producers are the targeted groups of this research. The other crops which are common among the many farmers are avocado, banana, cabbage, Eucalyptus, Gesho, Sweet Potato, Teff and so on. Most of these crops are provided to the market and they are sources to get money in cash. Enset, is grown for food consumption. It doesn’t mean that no one sells the produce of enset, but it is usually grown for home consumption. There are some trees like avocado, banana and mango in the farm. They are grown around the other crops; mango and avocado serve as shadow for other crops.

**Saving Culture in the Study Area**

**Local definition of saving**

Sidama people define saving as *cibbi’ra/suuqira* which means to accumulate for oneself, put aside something for oneself or keep the provision for the future. It is also known as *ga’ara tima wodha* which means put bread for tomorrow or put resources for the bad day. It doesn’t mean that simple accumulation or collection of assets from the current consumption but, it is a wisely use of the resources which are at hand. This definition shows that saving has association with future time and people save not only money in cash but also in kind. Sidama people save properties in kind or in cash; particularly before the coming of the modern saving institutions saving in kind was more dominated than in cash because cash flow was very limited and there were formal saving institutions. The exchange of market mainly dominated by barter form; even though people exchange barter system for long period of time, Sidama people were known for using money for exchange as early as the 14thc. The money was known as *meesanete Womaasha* which means money which is made from bronze. Nowadays, it is still possessed by some old aged Sidama persons. (Markos, 2003:59).
Ways of saving in the study area

The ways to put aside assets for future may differ based on the nature of the properties. Some properties are dry and directly stored in the stores but some others are wet and need some technical methods to stay for years. In the research site, the known ways to put aside properties are described in the coming paragraphs. Butter is kept for long time after it is filtered. Women filter butter and put it in clay pots. Then after it is kept in the house and use when necessary. Women keep “waasa,” the product of Enset/ underground and it stay for more than one year. It is also possible to keep “waasa” after drying and making in the form of “bixee” which is dried Enset produce which made like half circle shape. Mainly keeping butter and “waasa” is the role of women but men also keep seeds of cereals for the coming year by storing in the house or hanging on the balcony or in dry places. Local people not only store their properties in or around their house, they also keep them in the field. Plants are consumed selectively, if the crops are not seasonal. Those Enset plants which has potential to grow and will become very large should be left in the field and those which reached for harvest are cut and consumed but if they are very weak, they are transferred to other place. If crops are available in season, they are harvested on time and stored in the store.

According to my informants, in the previous generation people did not rush to take their products to market. During the harvest season, the major factors which helped people to store their produce was that there was no serious shortage of food; therefore, people prefer to store their produce. People keep cattle for years. The local culture does not promote selling animals; keeping animals increase the size of the cattle which add the social status of owners because in Sidama the size of cattle and Enset determine the socio-economic status of the person. For reproduction purpose, female animals are not rushed to market unless there is some especial case on the animals or in the family. The major factors which causes for female animals for be sold are if the animals were unable to give birth or if there are pressing expenses in the family like bride prices. Even if there is especial case in the household, female animals are kept as the most important. In case of male animals, especially oxen, their sale is not encouraged because they are needed as a sacrifices for the father’s spirit in cases where male house heads are not alive. Other male animals, such as that of sheep and goats are allowed to be sold or slaughtered for meat. One of the important reasons which helped to keep cattle for years was that in Sidama culture people do not give high value for meat. On the major festivals like Fichee/Sidama New Year/ cattle are not slaughtered. The major food which is provided in the festivals is Buurisame/food made from Enset product and butter/. Eating meat on Fichee day is often considered as a bad lack for animals. According to elders Sidama people, it is not advisable to rush their properties to market. Old aged informants say that in the early time it was not likely to have market around the village because it was believed that it may bring “baashe or onfolima” (destroy bless). If there is market around village children and women may take everything to market and bring “baashe”. Not only the market around the village that is disliked, but long distance trade route roads which cross the village are also despised.

In addition to this, people put money for payment of Idir, equb, or in order to give gifts on some occasions such as weeding, funeral, and so on. Here, one may raise a question on how gift giving can be considered as saving? It is obvious that people have a tradition of inviting people for different social occasion. When a person is invited he/she is expected to pay some amount of money. For example, a person who is invited on the wedding ceremony should pay some amount of money for the bride-groom. Later on, the person who has taken the gift on the wedding is expected to return the money when the other conducts wedding in his turn. The same thing may happen on the funeral and other social events. Even the return is not exact money that he/she had taken but additional money is expected based on the economic potential of the persons. This ways help people to be confident or to have a sort of investment for future social costs. Economy of local persons in the study site is based on subsistent agriculture of growing plants and animals rearing i.e. mixed agriculture. Since the basis of the economy is mixed agriculture, land has high value among the people. The land ownership system is divided into two: Danawa (communally owned land) and utuwa (private land). The utuwa land is owned by individuals and passed to children and grand
children through inheritance. Sidama culture gives emphasis to the sustainability of life. According to cultural believe, sustainable life ensured if and only there is land; therefore, no one is encouraged to sell utuwa land. Culture promotes the land to be transferred to the right person in inheritance.

The danawa land is common for all people who live around the areas. It has wide fields and include the land which is covered by forest. The right of the consumption of the danawa land falls on the local community. All of the local people use the Danawa land for grazing; bees production, and for collection of fire wood. It serves also as reserve land that if there is shortage of land for the individuals in the community, the local elders give the plot of the land from the Danawa land to the needy or sometime local community divide among themselves if there is shortage of land. Large trees in the forest are not to be cut without consultation of the local elders, except dry trees that is needed for fire wood. This helped in the environment protection and wild life conservation efforts.

Sidama culture not only reserves the forest from the Danawa land, but it also promotes a planting of trees on the Utuwa land, especially on the dry lands and in front of the living house for their shadows and beauty. Even today in the living compound elder people have tall trees. The beautfulness and protection of the surrounding easily indicates that the house belongs to an elder person. Today the growth of population has created pressure on the Danawa land and forests; the increase of the population led to the expansion of farming. However, local culture's heritage of wild life conservation can be witnessed from the old aged indigenous trees around burial areas and in areas where religious or other social events are conducted, like Beera in Dale woreda and other areas in Sidama zone such as Wonsho in Wonsho woreda, Telamo in Shebedino, Bunamo in Gorche woreda, Shisho Dara and Burte in Bensa. (Markos 2003). After the evolvement of the use of cash money, saving in cash was developed in the local areas; instead of keeping/storing properties in kind, people began to save some amount of money, and keep it in house under the bed or in hashuchu giddo/mattress/ which made by dried enset leaves/, box, in the pot, with relatives or friends etc. With the coming of modern money saving institutions, the ways of saving culture was changed from traditional ways of saving into more formal ways. People started to save their money in banks and micro finance institutions.

**Reasons for saving**

Households saving include accumulation of real assets or financial assets. Large part of saving accumulation in the study sites is in the form of real assets. These include livestock, permanent properties, or food stocks. The major aims for saving which are observed in the research site are for weeding, house construction, to buy cloth, daashote/sacrifice offering/, for funerals and memory of the dead, for new comer guests, gumaataho/to provide gifts for happy events/. All of the major purpose of household saving may fall into the following purposes. Thus, households saving aimed at preserving fund for old age, and in order not to inherit poverty to children; to finance unexpected losses of assets; to transfer seeds for the next years; and to smooth the availability of financial resources over times to maintain a more stable consumption profile.

**Annual income of the informants and saving Culture**

Always agricultural products are not good in all years because different factors determine them. An uncontrolled factors like climate change have great effects on the yield of the year. Good climatic condition may have positive correlation with the agriculture production. Excessive dry or rain reduces the annual yield of the farmers. Other factors like fertility of the land, size of the farm land and inputs of agriculture determine the size of the yield of agriculture productions. According to informants coffee yield is not consistence in the study areas. If it is good in this year, it will decline in the coming year. These factors cause variation of farmers’ income in different years and also annual income of each farmer vary from one to another. The following table shows the income of respondent farmers during the coffee harvesting season and the saved money during and after the coffee harvesting season of2012/13.
Proceedings of Annual Research Review Workshop, College of Social Sciences and Humanities 2015

The above data shows that 30.56% of the total informants have annual income between 25,000-30,000 birr and followed by 27.08% that have 1,000-5,000 birr. The least, 2.76%, informants have more than 80,000 birr. From the survey it can be understood that no informant had annual income between 30,000-80,000 birr in the study areas. The average income of the informants was 16,562.5 birr. The saved money during the crop harvesting season was too low; only 2.48% money was saved but it shows that people have experience of savings. Although there was too low saving, most informants not saved their money at the end of the year. According to this survey, this was because of the high cost of the household consumptions. The annual income of the respondent farmers of the Dale is less than the annual income of the respondent farmers of Bensa. In the preliminary observation I understood that six farmers have an average 43,416 birr during cash crop harvesting season in Bensa, but in Dale the average annual income of the 144 respondents is 16,562.5 birr. In order to see the annual income of farmers of Bensa I distributed 50 questionnaires for the coffee producer farmers and collected 47 responses. It was based on the 2012/13 harvesting season and analyzed as follows.

<table>
<thead>
<tr>
<th>No.</th>
<th>Income range</th>
<th>Total</th>
<th>Freq.</th>
<th>% of saved</th>
<th>Total</th>
<th>freq.</th>
<th>% of saved</th>
<th>Saved at the year end</th>
<th>Cause for low saving</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1,000-5,000</td>
<td>6,000</td>
<td>2</td>
<td>4.26</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>high cost</td>
</tr>
<tr>
<td>2</td>
<td>5,000-10,000</td>
<td>25,000</td>
<td>3</td>
<td>6.38</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>high cost</td>
</tr>
<tr>
<td>3</td>
<td>10,000-15,000</td>
<td>56,000</td>
<td>4</td>
<td>8.51</td>
<td>8,400</td>
<td>3</td>
<td>15</td>
<td>0</td>
<td>high cost</td>
</tr>
<tr>
<td>4</td>
<td>15,000-20,000</td>
<td>166,500</td>
<td>9</td>
<td>19.15</td>
<td>8,500</td>
<td>4</td>
<td>5.11</td>
<td>0</td>
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</tr>
<tr>
<td>5</td>
<td>20,000-25,000</td>
<td>211,230</td>
<td>9</td>
<td>19.15</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>high cost</td>
</tr>
<tr>
<td>6</td>
<td>25,000-30,000</td>
<td>89,800</td>
<td>3</td>
<td>6.38</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>high cost</td>
</tr>
<tr>
<td>7</td>
<td>30,000-35,000</td>
<td>232,750</td>
<td>7</td>
<td>14.9</td>
<td>14,000</td>
<td>7</td>
<td>6.02</td>
<td>0</td>
<td>high cost</td>
</tr>
<tr>
<td>8</td>
<td>35,000-40,000</td>
<td>115,800</td>
<td>3</td>
<td>6.38</td>
<td>34,500</td>
<td>3</td>
<td>29.8</td>
<td>0</td>
<td>high cost</td>
</tr>
<tr>
<td>9</td>
<td>40,000-45,000</td>
<td>128,400</td>
<td>3</td>
<td>6.38</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>high cost</td>
</tr>
<tr>
<td>10</td>
<td>45,000-50,000</td>
<td>94,000</td>
<td>2</td>
<td>4.26</td>
<td>31,100</td>
<td>2</td>
<td>33.09</td>
<td>27,000</td>
<td>high cost</td>
</tr>
<tr>
<td>11</td>
<td>50,000-55,000</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>high cost</td>
</tr>
<tr>
<td>12</td>
<td>55,000-60,000</td>
<td>59,000</td>
<td>1</td>
<td>2.13</td>
<td>37,000</td>
<td>1</td>
<td>62.71</td>
<td>0</td>
<td>high cost</td>
</tr>
</tbody>
</table>

Source: survey
The above data shows that respondents collected an average 27,012.34 birr during coffee harvesting season in Bensa. It is greater than the average income of the respondents of Dale. The reasons behind the variation of the income of the farmers between Dale and Bensa need further examination. In Bensa, 85.11% of the respondents collected between 10,000 to 45,000 Ethiopian birr in the 2012/13 harvesting year. From total 1,269,580 birr only 12.25% saved at the harvesting season, but at the end of the year, only 27,000 was saved. Among 47 informants only 44.68% have had saving experience.

**Ways of Saving in the Study Areas**

<table>
<thead>
<tr>
<th>No.</th>
<th>Ways of saving</th>
<th>Yes Frequency</th>
<th>Yes %</th>
<th>No Frequency</th>
<th>No %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Iqub</td>
<td>77</td>
<td>53.47</td>
<td>67</td>
<td>46.53</td>
</tr>
<tr>
<td>2</td>
<td>Idir</td>
<td>144</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Aksyon</td>
<td>7</td>
<td>4.86</td>
<td>137</td>
<td>95.14</td>
</tr>
<tr>
<td>4</td>
<td>cattle fatting</td>
<td>19</td>
<td>13.19</td>
<td>125</td>
<td>86.81</td>
</tr>
<tr>
<td>5</td>
<td>Small corporation</td>
<td>14</td>
<td>9.72</td>
<td>130</td>
<td>90.28</td>
</tr>
<tr>
<td>6</td>
<td>Box in home</td>
<td>11</td>
<td>7.63</td>
<td>133</td>
<td>92.37</td>
</tr>
<tr>
<td>7</td>
<td>family meeting</td>
<td>19</td>
<td>13.19</td>
<td>125</td>
<td>86.81</td>
</tr>
<tr>
<td>8</td>
<td>Loans</td>
<td>5</td>
<td>3.47</td>
<td>139</td>
<td>96.53</td>
</tr>
<tr>
<td>9</td>
<td>Bank</td>
<td>50</td>
<td>34.72</td>
<td>94</td>
<td>65.28</td>
</tr>
</tbody>
</table>

**Source:** survey

The above data show that all respondents have idir and 53.47% have equb. Cattle fatting share 13.19% and also family meeting share 13.19%. Saving in modern institution like banking was 34.72%. Even if there was poor saving culture, it indicates that there were informants who develop habit of visiting modern saving intuitions.

**Effects of expansion of cash crop on economy**

Producing coffee has significantly increased the amount of cash available to the cash crop areas; it has led to the removal of some land from subsistence herding and food production. Instead of the widely growing Enset, people gave attention coffee. It is making local people dependent on cash for consumption instead of widely growing crops which are sources for stable food. During the harvesting season, it seems people have cash and they tend to enjoy recklessly in urban areas. Here it is important to raise a question that asks whether spending of the cash was the signs of small scale capital investment, and whether visiting urban areas mean that productivity was increasing and the standard of living also improving?

**Factors that increase costs**

Nowadays many factors test the economy of the farmers. The size of the farming land is declining with increase in the household members. The size of plot of farming land before 30 years ago was different when we compare with the current farming land. Before 30 or 35 years, few households rely on the yield from the plot of the land but today the size of the household increased and the same farming land is shared among the parents and the siblings. Data from this research survey, as well as information from the woreda agricultural office indicate that the average family member is 6.3, but in some families there were up to 12 household members. Parents send their children to town and cities for education. They have monthly costs for house rent, food and other materials.
Farmers have no permanent monthly income but most of their income is seasonal though their current cost are monthly. The current expenditure of the farmers is not equal with their income; this is worrying more in current market inflation which is eroding the economic power of the local farmers. Respondents listed the following major factors which cause local people to have low saving culture. These costs related with the costs of food, cloth/materials, house or students graduation, weeding, bride price, student tuition, drink, health, fertilizer and tax. In addition these climate change causes low produce and declined annual income of the farmers. Another major cause of the shortage of money is absences of prioritizing experience.

**Bride price**

In Sidama language bride wealth is known as *Miine*. It is an amount of money or property which is paid by the bride-groom or his family to the parents of a woman upon the marriage of their daughter to the groom. The type of the *miine* could be in cash or in kind and the amount of depends on the capacity of the groom’s or agreement between the two families. The origin of *miine* is debated. According to local elders and Betana (1983 E.C) in Sidama culture girls are expected to circumsised before two or more months of the the wedding. If the husbands’ family is rich, they send *ameessa* (a cow which is giving milk). It was sent to feed the circumcised girl. However, the cow was send back to husband’s family after the marriage. Some families if they are poor, they send few money to the bride’s parents in order to avoid discomfort as they are unable to send *ameessa*. This tradition continued from one generation to the next and recently changed into bride-price.

**Amounts of Bride price and its effects on the saving culture**

The type of the bride price could be in kind or in cash. Its amount varies from family to family or from time to time. Before the import of the foreign culture the amount of bride price was very small or one small female lamb for the mother of the daughter and a thick cotton garment (used as blanket) for father and “gonfa” (men’s suit made of cotton) for uncle. This tradition, bride price in kind, was replaced by money. About before 30 years ago the amount of bride price was not more than 100 birr. Nowadays in the research site the amount of the bride price was between 8,000 to 15,000 birr, however, in the rest part of the Sidama zone like Bensa, Arbegona, and Chuko it reached to 15,000.00 to 25,000.00 birr. Larger ratio of the bride price go to the father and the rest to the mother; Uncle of the daughter, mother brothers, also share some amount of it (Ambassador Markos 2003 E.C and Informants). Marriage cost doesn’t end by payment of bride price. Wedding and family introduction (*kiifato*) programs also follow. During the wedding large number of the relatives and friends are called by the both families. Each from the bride-groom and pride families prepare ceremonies in their house and call their relatives and friends. It is prepared expecting their customers may share the cost. From the informants it is understood that people calculate cost-profit based on the cash that they paid for the events and what is paid by their guests. The small costs were not properly recorded and included in the total cost. At the end of the ceremony the households is in debt and mostly forced again to sell permanent properties.

The bride-groom will bring cloth for mother-in-law, father-in-law, and close relatives. The parents and close relatives are expected to give gifts for the bride-groom. It is too costly for the daughter’s parents. For example, father of daughter is expecting to give 10,000 cost gifts, mother, brothers and sisters also are also expected to give additional gifts. Even if each of them gave various gifts, it comes from the same household. Most incomes come from the father until the children become independent. The dissatisfaction of the gift may cause social crises between the two families and marriage life. For instances some bride-grooms not take gifts or expel their wives if the gift which is given from parents-in-law is not satisfied them. There was a case in the research site that the father of the daughter gave 1000 price matrices as a gift and not voluntary to add other materials or birr. After they return back to home, the bride-groom cut the matrices and expelled his wife from the home. During crop harvesting season the number of the wedding ceremonies will highly increase. There will be more than five wedding ceremonies per a weekend in a village. Many individuals,
old person as well as young, receive many weeding call from their friends and relatives. Each attendant was expected to pay for each wedding. In the survey from the 144 informants 59.72% worried that wedding ceremony payment making their pocket to empty. Informants argue that weeding is becoming as a means for a business sources.

Absence of prioritizing Experience
In the research site one of the common problems that affecting saving culture was lack of planning for future expenses. During the cash crop harvesting season people prefer to buy too expensive materials like phone, leather jacket and shoes, and other ornaments. Purchase of these materials were not planned ahead and they are not compulsory but people buy them without plan. In group discussion respondents identified that materials like electronics or cloths are the major factors for to low saving culture. It doesn’t mean that people buy different clothes in each year but it was common that people buy clothes during the crop harvesting season and sell it back immediately after the end of the season. When they buy clothes, friends or neighbors are taken as a reference to common that people buy cloths during the crop harvesting season and sell it back immediately after low saving culture. It doesn't mean that people buy different clothes in each year but it was common that people buy clothes during the crop harvesting season and sell it back immediately after the end of the season. When they buy clothes, friends or neighbors are taken as a reference to choose the type of materials. At the interview section informants said that “...”, (how much did my neighbor spent on cloth or mobile is the motive to buy; just to compete). This makes people to purchase new clothes or materials every coming years. When they sell the materials it is with high depreciation. For example, mobile phones bought for 2000 Birr during harvest season ends up being sold for 400 to 600 birr in non-harvesting seasons.

Other Social costs
The function of house is not only for private security; it serves as a means for respect and for the famousness. In Sidama particularly in Dega areas cultural house is made by bamboo trees but in low land, qola, it is made by other trees and grass. Individuals construct house by their own cost and only receive some supports from their friends, village organization and relatives. In the old days, house construction was less costly to the villagers. At the time of construction the owner only prepared necessary construction materials. The local village organization, seera, contributed labor forces. Neighboring women also helped preparing food to those helping to build the house. those who helped in the construction of house are called for maaso (house blessing ceremony). Attendants of maaso were not expected to pay money; therefore, house construction and maaso never exposed people to extra costs. Nowadays the indigenous culture is almost eroded and replaced by another foreign culture. In the research site, individuals construct house and call people for maaso. In questionnaires, 51.38% respondents indicated that their income was affected by maaso. Maaso celebration is not only affecting the people who are invited to attend the Maaso but the persons who call for maaso also may not benefit because most of time people calculate only the cost of food and may not realize the rest costs like payment for labor force, material damage during the ceremony, fire wood and other related costs are never calculated. Attending maaso is becoming compulsory because absenteeism is causing breakup in social networks. For instance informants say that “...”, (how much did my neighbor spent on cloth or mobile is the motive to buy; just to compete). Another serious problem which has negative effect on the saving culture is graduation ceremony when students accomplish their diploma, degree or Master studies. Added to this is the culture of mourning in the study areas, the intensity of mourning for a deceased. Gatherings during mourning costs a lot. Local idir may take the responsibilities by providing supplies at the time of mourning. Nowadays, beautification of tombs is becoming a fashion. It has negative effect on the saving culture. Another problem is Increase of cost of consumption and production inputs. In the study local area informants identified some of the factors that caused higher household costs. The majors are food, students cost, health, fertilizers, and tax. The price of the consumption goods are also increasing from time to time. The increment of price of goods is not proportional to the monthly/annual income. In two focus group discussions, informants surfaced their concern about the climate changes which causes low produce and thereby forced people to depend on market goods.
Volatility in international coffee price

Although other agricultural products are currently being introduced on the international market, coffee has remained to be the main export of Ethiopia. According to Villanger (2006), the major export products from Ethiopia in 2004/05 were coffee (41%), oil seeds (13%), khat (12%), leather and leather products (8%), gold (6%) and pulses (4%). The price of coffee is not stable in the international market. The global oversupply of coffee resulted in a sharp decline in coffee prices beginning from 2001. The recent plunge in the international coffee prices contributed to further deterioration of the incomes of the Sidama coffee producers usually merchants and farmers. Coffee producers’ income in the research site is affected by international coffee market. One of the serious problems was that farmers have already borrowed money expecting price would be the same with the past and the variation of the coffee price put them in recession as they were then forced to pay the debt from other resources. Other factors for decline in saving according to informants and discussion with subjects include: Resource Management problem; Money Borrow Style and its Effect on Saving Culture; Expectation of people; Attitude of the youth toward work; and Trust of the people for future. Here it is important to study the trust of people if they will be face challenges in the future. One of the question which was forwarded to informants is on whom you trust during the crises time in the future? The responses are analyzed as follows.

<table>
<thead>
<tr>
<th>On whom you trust in the future</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>God + work /my property</td>
<td>90</td>
<td>54</td>
</tr>
<tr>
<td>God</td>
<td>73</td>
<td>71</td>
</tr>
<tr>
<td>relatives, friends or neighbors</td>
<td>11</td>
<td>133</td>
</tr>
<tr>
<td>Children</td>
<td>51</td>
<td>93</td>
</tr>
<tr>
<td>money/property</td>
<td>80</td>
<td>64</td>
</tr>
</tbody>
</table>

Source: survey

In the focus group discussion informants agree that the trust of parents on their children is not as it was in the previous generation. It has grown weaker and weaker. Individualism grew and life has become too expensive for each person and forced person abandon sharing habits. Children attend education from their early age. After the completion of first degree or diploma they come back to home and continue to be independent up on their parents. Out of the 144 respondents, only 35.42% consider their children as future trustee. From the above table it is possible learn that people who trust on the God and their money or properties share the larger proportion. Persons who trust in God and on their money or properties are 62.5%. Persons who trust on their properties or money are 55.56%. It is the second largest proportion of the taken sample. Persons who expect help from relatives, friends or neighbors in the future when they will be an old or at socio-economic problem time is 7.64%. Based on this it is possible to say that traditional social bond between the local communities has been awakened. It is a sign of growing individualism.

Accessibility or Opportunities for the saving

The research site has some of the formal saving institutions. There are four banks and two debts and saving financial institutions that facilitate money transfer, give loans and initial capital for development as well as give modern saving services in the main city, Yirga Alem. These are listed in the following table.
All of these institutions are playing the roles of initiating and promoting saving culture in the local areas.

Transfer of traditional saving institutions into modern
Tradition is a long-established pattern of behavior in a community or group of people, often one that has been handed down from generation to generation. As it is mentioned in the above the commonly known traditional saving institutions are *ekub* and *idir*; saving in box at home is also common. Despite its advantages the traditional saving institutions' security is not reliable. Saving in modern institutions is more reliable than traditional ones. The expected ways to transfer traditional saving institutions to modern one is analyzed as follows. In the interview session I learned that people fear saving in banks because there is fear that they will miss their money on the sudden burning of building and some time by corruption; and also there is believe that the money saved in the bank is not accessible on the time of need. In order to cancel this belief improvement of the banking services is very crucial. Security and easy access of saved money make people reliable on the institutions. Services like on line service, ATM, and mobile banking technologies are crucial to attract customers of saving.

As *equb* promote to collect daily remnants of money from consumption and people are advised to put money in the bank at the end of the week. To promote this type of saving Sidama microfinance is working by providing small box for individuals. The institution put locked small box in the individual home and advice each person to put the remnants of money in it. At the end of week days or month the institution manager or workers open the box and transferred to their saving accounts. Ethiopia commercial bank is working to promote saving by providing the especial saving interest for children and women. This strategy helps children to develop saving culture and money management skill from their early age. At the same time it helps children to experience modern saving institutions. People in the study site have experiences of saving money converted to kind; like fattening cattle instead of saving in banks because fatting cattle is helps to get good profit. Interest rate should be attractive because high interest rate motivates people to save. Nowadays the value of the money is not same at all time. If there is good interest with in certain period, the number of people who will motivate to save in banks increase.

CONCLUSION
Sidama people defined saving as *cibbi’ra/suuqira* which means to accumulate asset for oneself, put aside something for oneself or keep the provision for the future. It is also known as *ga’ara tima wodha* which means put bread for tomorrow or put resources for the bad day. This definition tells us that saving is associated with future and people save in cash and in kind. Therefore, in this paper saving refers to not only putting money in bank, but also reserving assets for future. People in the study site put money for future in different ways like *Idir, equb*, giving gifts or storing. Rushing to take properties to market for sell is not promoted by the culture because it is believed that rushing to sell cattle or crops accelerate evaporation of blessing. Saving is aimed for different objectives but the major factors which are observed in the research site are for weeding, house construction, to buy cloth, sacrifice offering, death ceremonies, for guests and *gumaataho* to provide gifts for happy
events/. All of the major purpose of household saving may fall into the following purposes. Household saving aimed: to fund old age and to protect poverty inheritance for children; to finance unexpected losses of assets; to transfer seeds for the next years; and to smooth the availability of financial resources over times to sustain a more stable consumption profile.

From this perspective, low-income individuals may have lower saving rates because they are less able to defer consumption even if they have willingness to save. Individuals or households with incomes below minimum level of consumption cannot afford to save because their survival needs have not been yet fulfilled even if they have strong motives for saving. Low-income households face formidable obstacles to saving and asset accumulation. In 2013/13 harvesting season farmers had different income in the research site. From 144 informants, the highest (30.56%) gained 25,000 to 30,000 Ethiopia birr. There were no respondents that gained between 30,000 to 80,000 birr but 2.76% respondents gained above 80,000 birr. The average income of the respondents was 16,562.5 birr. The money saved during the harvest season is too low; only 2.48% money was saved but there was still experience of savings. Except a few respondents, 2.76%, most of them have not saved their money in the end of the year. According to them, it was because of the high cost of the household consumptions. The major costs were related to food, cloth/materials, house/students graduation, weeding, bride price, student tuition, drink, health, fertilizer and tax. In addition climate change caused low produce and declined annual income. Another major cause was absence of prioritizing experience. People buy too expensive materials without considering the urgencies of the need and sell in cheap price after months. Needs of people was often influenced by neighbors and friends.

When its price of coffee drops it becomes one of the serious problems as farmers borrow money in advance expecting the good market in the coming year. However, when the price of the coffee becomes too low, the total income that they gain from sell of coffee will not cover debt forcing them to sell other properties. People borrow money from lenders before the harvesting season expecting good produces. The amount of the money paid in return increased from 70% to 100% interest. Two months i advance to the harvest season it wouldn't be more than 50% interest, but as harvesting season get closer it becomes double. For example, a person borrowing 1,000 birr had to sign to return 2,000. People developed the culture of “renting land.” Individuals sign agreement that he “sold” his plot of land but it is not publicized or kept in secret. These new styles of selling land causing people to have money for short time. Local farmers have no experiences of saving; therefore, they will finish money within the short time. It is causing farmers lose their farm.

Higher optimism about future income raises current consumption, so current saving declines. The increase of demand increase costs and makes saving impossible. In the research site people expect high income in the harvesting season. This good hope and trust on the cash crop causing people not to worry about the future and saving. They prefer to enjoy today and focus on the current consumption than saving for the future. There are four banks and two debts and saving financial institutions that facilitate money transfer, give debt and initial capital for development as well as modern saving services in the main city, Yirga Alem. They are considered as a good opportunity to expand and facilitate saving in the research site.

RECOMMENDATIONS

While putting part of income in a saving box is a good start, it is only the first step. Finding ways to earn additional money is an important effort that grow saving and that helps people meet their personal and financial goals. Saving money is always easier when individuals have a goal. It is
important to identify the need and how long it takes to get there. Items should be listed, then their cost should be analyzed and finally way of achieving them should be detected. Parents are the primary agent of socialization of children and individual saving and spending habits are modeled after family habits. Teaching children about proper care of clothing, equipment, repairs, and maintenance or consumption may lay bases to promote culture of saving. Focus on children to develop saving culture is important because the discipline of saving starts with a mindset change. It helps children to be effective in money management in later age and improves saving to be successful in long run particularly in the coming generation.

Key institutional variables should be considered: like access, financial information and education, incentives and facilitation because they are good factors which promote saving of the individuals or households. Saving needs sustainable income sources, therefore, improvement on the production and improves income of the low income households and helps to promote saving culture of the farmers. Raising awareness on money management skill is mandatory. People need training on how to spend less than what they are earning. It helps to develop culture of “pay yourself first”; the rule that encourage saving as duty of person. In addition, the government should stabilize inflation, implement forced saving, modernize saving institution and make them accessible. It should also improve the income level of the society by reviewing the saving interest rate. Education and other institutions should work to improve work habit of the youth.

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www.businessdictionary.com

Implementation of the School Improvement Program in Selected Schools of Technology
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(School of Education and Training)

ABSTRACT
The major objective of this study was to explore the implementation of the School Improvement Program (SIP) in primary schools of Boricha, Wondogenet and Dale woredas. The study investigated the process of SIP implementation, challenges faced while implementing it, benefits accrued and actions to be taken to advance SIP implementation. The study employed qualitative approach and made use of purposeful sampling. Thus, from six primary schools 4 principals, 24 teachers, 60 students, 4PTA members, and 3 supervisors, and 3 education office heads and 2 REB officials were participants of the study. To obtain the data interviews, focus group discussion and observation were employed. The data indicated that SIP implementation is in progress through preparation of plans, employing active learning methods, making the school environment conducive, implementing continuous assessment, involving parents and organizing different clubs. However, these attempts have been mitigated by lack of positive attitude on the part of some teachers, lack of incentives and recognition strategies, low-level of parental involvement and low suitability of environments of some schools. Hence, increasing parents participation, introducing proper incentive and recognition mechanisms for outstanding teachers, giving training on continuous assessment and active learning and creating collaborative environment are suggested as solutions. Finally the study implied that education officers, school management, teachers, parents and students should work in collaboration as there is much to be done to achieve SIP targets.

Keywords: School improvement, School environment, Leadership, Continuous assessment

INTRODUCTION
Background
It is believed that quality of education is an important component of any education system. Derebssa (2008), Leu (2005) and Solomon (2008) stated that quality is the heart of any educational system, and it influences what students learn, how well they learn and what benefits they draw from their education. However, Amare, et al (2006) argued that education quality is a multifaceted concept, defined differently depending on a country’s policy objectives and underlying philosophies. Although Ethiopia has a long history of education, a major progress was not observed in the access and quality of education. Realizing that education is one of the most important determinants of the development of the country, Ethiopia has worked very hard to increase access to education for its citizens. Hence, MoE believed that Education Sector Development Programme (ESDP) is the best approach as it covers all areas of education (MoE, 2002; MoE, 2004). Then, the Ministry has launched ESDP I, ESDP II and ESDP III. During ESDPI and ESDPII, it was possible to increase access to education and the number of students enrolled increased highly at all levels. During the start of ESDPIII (launched in 2005) primary enrolment reached around 13.5 million in 2005/06. At the same time, it has been difficult to maintain and improve the quality of general education.

MoE (2005) noted that ESDP III has some specific features that distinguished it from the previous ones in that it will be focusing not only on access but also on quality. The Ministry of Education further claimed that the implementation of ESDP III will help decentralize education down to school level, hence empowering the stakeholders. It also entails a purpose where the MoE will be transparent, efficient, cost effective and accountable to the public realizing full participation of
The school improvement program (SIP) which is one of the components of GEQIP is meant to improve student achievement by aiming at:

1. improving the capacity of schools to prioritize needs and develop a school improvement plan;
2. enhancing school & community participation in resource utilization decisions and resource generation;
3. improving the Government’s capacity to deliver specified amounts of schools grants at the woreda level, and
4. improving the learning environment by providing sufficient resources to schools

The intent of this study was to investigate SIP implementation at the school level.

Statement of the Problem

The GEQIP document stated that the expansion of the education system has come at a high cost to investments in quality related inputs with the result that fewer than half of the children in Grades 4 and 8 give evidence of having mastered the grade level curriculum. In Short, the program aims to improve the quality of schooling (of general education). Although there are six pillars as indicated above, all of the other five pillars are there to strengthen SIP as they are inputs for SIP which is the core for improvement of students’ achievement. SIP was established in 2006 and it has objective of improving student learning achievement, improving school management and administration, and establishing objective standards and procedures for ensuring accountability and authority at Woreda level.

AS GEQIP is a new program, there is a need to investigate how the implementation of the different pillars of GEQIP is taking place in the country, benefits coming from their implementation, and challenges/problems faced by implementers. Thus SIP implementation will be investigated in light of this theme. It should be noted that in spite of government efforts, there may be various challenges to be faced while implementing the program. And I often heard certain school community members complaining certain difficulties they have encountered in their attempt to implement the program. When I was conducting two studies on MAP and TDP components of GEQIP, I often heard certain teachers talking about some inconveniences during implementation of the programs and others talking about benefits coming from their implementation. These entailed that there must be a systematic investigation regarding implementation of SIP as well as other components of GEQIP. Therefore, this study answered the following questions.

i. How is the process of implementation of SIP going on in the selected schools?
ii. What are the benefits accrued from implementation of SIP?
iii. What are the major challenges faced while implementing SIP, and
iv. What measures need to be taken to promote SIP implementation?

Objectives of the Study
The general objective of this study was to explore the implementation of SIP in the selected schools. The study specifically tried to:

i. explore the process of SIP implementation in the selected schools;
ii. explore the major challenges faced while implementing SIP, and
iii. assess the benefits accrued from implementation of SIP;
iv. find out possible solutions for the challenges faced.

Overview Improvement Planning
All schools want their students to succeed. But schools can only make a lasting difference when they focus on specific goals and strategies for change. School improvement planning is a process through which schools set goals for improvement, and make decisions about how and when these goals will be achieved. The ultimate objective of the process is to improve student achievement levels by enhancing the way curriculum is delivered, by creating a positive environment for learning, and by increasing the degree to which parents are involved in their children’s learning at school and in the home. A school improvement plan is a road map that sets out the changes a school needs to make to improve the level of student achievement, and shows how and when these changes will be made. School improvement plans are selective: they help principals, teachers, and school councils answer the questions “What will we focus now?” and “What will we leave until later?” They encourage staff and parents to monitor student achievement levels and other factors, such as the school environment, that are known to influence student success. With up-to-date and reliable information about how well students are performing, schools are better able to respond to the needs of students, teachers and parents (Barth, 1990).

A school improvement planning is also a mechanism through which the public can hold accountable for student success and through which it can measure improvement. Improvement planning is a continuous and cyclical process of analysis, planning and implementation designed to enhance student achievement measurably over time. The steps include:

Step-1: Ownership
Planning seeks the engagement of all education partners. According to Epstein, et al (1997) It is necessary to ensure representation from all parts of the system and community including teachers, school councils, parents, and other community members working together to gather and analyze information about the students and the school. An exemplary plan will involve all education partners by

- Ensuring that involving a variety of partners is a priority;
- Including elementary and secondary schools
- Clarifying how all participants (stakeholders, educators and parents) are involved and what their role is in all five steps of the plan.

Step-2: Understanding and Focusing
School improvement planning requires gathering, evaluating and interpreting the data from school results, reports, different profiles and surveys, and feedback from staff, teachers, principals, councils, parents and students.

This analysis helps to understand many factors that influence student learning, some of which are beyond the school’s control. Students’ achievement is influenced for example, by students’ linguistic background and community socio-economic factors. Significant influences like these
must not only be identified and measured but addressed through educational programs designed to maximize or mitigate their influence.

To understand the distinctive character of a school, it is necessary to understand the its unique features and characteristics of the community it serves. The analysis of multiple components is necessary to assess the education in context and determine the policies and programs needed to improve student learning.

**Step-3: Accountability**
Effective communication with parents and other members of the community is a critical component of school improvement planning, and a demonstration of school and board accountability. The goal of external communication should be to communicate appropriately and clearly how students are performing, and how student achievement relates to school improvement planning.

**Step-4: Planning for Improvement**
This is about creating and updating the school improvement plan. To be effective, improvement plans should incorporate key components such as a review of previous improvement plans, strategies, indicators of success, timeline and milestones for status updates, resources required, roles and responsibilities, and performance targets (level of achievement expected following implementation).

**Step-5: Ongoing Impact**
This requires monitoring the implementation of the plan by gathering evidence from a variety of sources on how well the plan is working, recognizing and celebrating improvements and focusing and refining strategies throughout the year and from year to year. Thus, it is critical that, following plan development, as MoE (2007) and MoE (2005) state a monitoring process be put in place to ensure that implementation is proceeding according to plan and that the strategies being implemented are having an impact on student achievement. This needs considering the following:

- Are teachers implementing new methods of teaching, learning and assessment as planned?
- Are new resources or learning materials being used?
- Does ongoing assessment indicate that students are progressing?
- Have professional development and follow-up been made?

**METHODOLOGY**

**Study Area and Subjects**
Data of this study were collected from students, teachers and principals of three primary and three secondary schools (two schools from three Hawassa University’s Technology Villages, namely Boricha, Wondogenet and Yirgalem; experts of SNNPR Education Bureau (REB) SIP Office, and officials of wereda education departments. To investigate how the implementation of SIP is going on in the selected areas, 4 principals, 24 teachers, 60 students, 4 PTA members of the schools, 4 supervisors, 4 wereda education department officials (one from each), and 2 REB experts were purposefully selected.

**Study Approach and Sampling**
The study was conducted using the qualitative approach. Unlike the quantitative approach (survey) which uses random sampling techniques, qualitative researchers use purposive sampling for selecting their research samples. Therefore, purposeful sampling was used to select schools from
the selected villages, and participants of the study. Purposeful sampling, here, is not meant to achieve population validity. The intent was to achieve an in-depth understanding of selected individuals, not to select that would represent accurately. As Patton (1990 in Denzin and Lincoln, 2003) stated the logic and power behind purposeful selection of informants as the sample should be information rich. Thus, the samples were selected purposefully in order to obtain substantial information about implementation of the program.

**Instruments**

1. **Interview** – Most of the information from the participants was collected by using interview. Interview is important primary source of data in qualitative research. It helps the researcher to find out what is in someone else’s mind. So, I used it as a means of collecting data, as it allows seeing participants’ perspectives clearly. As Best and Kahn (1999) described, interview is used to gather information regarding individual’s experiences, opinions, beliefs, feelings and demographic data. In qualitative case-study research, interviews are undertaken in the form of person to person interaction using unstructured (open-ended) and semi-structured questions.

2. **Focus–Group Discussion (FGD)** – This was held with selected teachers (on the basis of experience) and students (on the basis of grade) in the schools. FGD was used as it leads to a wide range of responses during one meeting, and participants were able to ask each other and argue on some issues which gave me clear meaning of certain aspects of SIP implementation.

3. **Observation**: I used observation as a means of systematically selecting, watching and recording issues related to implementation of SIP. This was helpful to easily describe what is going on in relation to implementation of the program, and to triangulate data obtained through interview and FGD.

**DATA PRESENTATION AND ANALYSIS**

The data collected through interviews, observation and focus group discussion is presented and analyzed below.

**Process of SIP Implementation**

The data obtained from different participants show that implementation of SIP is taking place in various ways at various levels. The statements from one of the principals in the schools are stated as:

> Now we don’t have option. The only thing that we can do is we have to help the young to realize its potential. In our school there are notable attempts at implementing school improvement program. We have formed a committee of six members from parents and teachers to follow-up implementation of the program.

These statements show the commitment and wish of the school to achieve the goal of the program. It is also important that parents are involved in the committee. However, from my observation during this study, I realized that parental involvement is mainly through PTAs which do not represent many of the parents. Though the above statements claim that the schools are implementing the program and there is a follow-up mechanism, during this study I couldn’t observe any proper monitoring mechanism. Without monitoring it may be difficult to make adjustments.

In a similar way, one of the participants reflected:

> We have strong weekly and yearly plans that help us to implement our strategic and school improvement plans. Even if we faced problems related to implementation of active learning and continuous assessment at the beginning, now there are signs that
they are properly implemented...Teachers are also motivated to carry out activities required by the school improvement program.

What I observed in all the schools involved in this study and the reflected views agree with the above statements. There are plans in the schools but I haven’t seen any significant difference between their strategic and school improvement plans. There is no point in duplicating the plan by giving different names without considering objectives and contents. The reflection also shows that there are challenges while implementing active learning and continuous assessment.

One of the teachers leading school compound-beautification committee forwarded:

_We have made our best to make the school compound attractive and interesting for students as they spend much of their time in the school. We have also used all our efforts to produce/construct reading sites, recreation sites and sites for sport events. Moreover, we have posted pictures and quotations on the walls and trees of the school compound to let students get on the spot educative lessons._

The above quote shows that making the school environment attractive is one of the requirements to help students spend much of their time in the school. As school environment is one area of the improvement program, the attempt mentioned above seems encouraging if the schools make it sustainable.

During the focus group discussion, the students in one of the schools reflected:

_We have seen a lot of changes in our school. Previously, our focus was only on subject matters (classroom lessons), but now there are many clubs and students can learn a lot from each other regarding health, corruption and environmental protection._

These few extracted statements show that extra-curricular activities are taking place in the schools. They are important to help students to learn about various issues in addition to what they learn in the curriculum delivered at classes.

The improvement seen in one of the schools is expressed by one of the participants as:

_now our school has a fence which was a serious problem even two years before, and we have also constructed separate toilets for males and females. Our school is planting more and more trees since implementation of SIP. Students can make use of the shadows for recreating, studying and taking rest at the same time enjoying the writings posted on the walls and trees._

The words above show that there are some good conditions that make the school environment comfortable for students to learn. However, in some of the schools the case is not the same. I observed that there are schools in which there are common toilets for males and females, and there are schools which do not have shadows or trees at all.

**Challenges Faced during Implementation of SIP**

In the sections so far we have seen that SIP implementation is in progress. However, the progress is affected by some challenges.

_Though we have interesting achievements in SIP implementation, we critical problems related to shortage of facilities for students with special needs (we do not have good support mechanism), unbalanced student-classroom ratio and shortage of competent teachers on certain areas._

During the focus discussion with the teachers, I realized that there is shortage of textbooks which directly affects the teaching-learning process.
One of the management members also reflected the challenge they faced as:

We have some good teachers and some careless teachers. Due to the carelessness of some teachers, implementing continuous assessment as it was intended in the policy documents was a challenge...they were simply giving pass grades to all students without looking at their activities.

This shows that there were good intentions in the policy documents but they are facing problems at the grassroots level. The idea of continuous assessment is not simply to give pass grades, but helping students to get prompt feedback so that they can learn from their assessed work. In some cases, the challenges faced go beyond what is to be done by the school community and needed involvement of others.

There were residents in the school compound and that has created a lot of problems to implementation of the school improvement program. This needed involvement of the city administration and it was not easy for the school management to handle. It was really a challenge to let the residents leave the compound, and make it a silent learning place for students.

This shows that the day to day activities of the school are disturbed by residents in the compound of the school. I also observed that there were people keeping cattle while they are grazing in the school nearby classrooms.

The FGD held with the teachers informed the following challenges:

We feel that we have to perform better than we used to. But things are not taking place the way we think. Sometimes we make some preparations for reporting purpose and we forget them. Other times we do not do the same. As we do more we need incentives that can make us struggle more.

If things are done to meet certain formalities, not the targets set, as the above case shows, it seems that implementation plans of SIP will not achieve their target. It also sounds good if there are some mechanisms of recognizing teachers who perform better as incentives play their own role. The above idea is confirmed by one of the principals though it is not stated directly:

I personally feel that some teachers are not motivated for their own reasons. There are times when they forget their responsibility and accountability. Some even do not use their time properly...Sometimes I confront individuals who have negative attitude towards the activities carried out.

The explanation implies that if there is no motivation or lack of positive attitude on the part of teachers for whatsoever reasons, the end result will be lowering level of student achievement. On the other hand, late coming, absenteeism and dropout for different reasons are problems which are becoming persistent and affecting the SIP activities in the schools.

We have challenges as we have students who come late, dropout and miss classes...This is because some students earn their living and they have to work for that...others see education as less important part of their life and engage in business activities. Some parents also see the school as only the concern of the government; even they don’t want to participate in meetings and during parents’ days.

It is true that if there are economic challenges as mentioned above the extent of late-coming, absenteeism and drop-out will be higher. Reducing these problems might help the achievement of SIP targets.

Similarly, one of the students expresses less concern of parents as:
My parents do not know what I do in the school even whether I go to it or not. They
do not know what I learn...Even I beg them when I need a pen or other stationery
items.

These words indicate that some parents do not have awareness about importance of education of
their children. This might be due to lack of knowledge about the role they can play in the schooling
process. One of the teachers also added:

Some parents come to school when their children are to bring them...but when I ask
them the grade level, they say grade 3 or 4. From this you can imagine the level of
concern they have for their children’s education.

The above ideas show that some of the parents do not even know the grade level their children are
attending. Under such circumstances where parental involvement is very low, it may be impossible
to fully achieve what is set in the SIP plans of the schools.

Benefits Accrued from SIP Implementation
Even if the study indicated that there are challenges while implementing SIP, there are also some
benefits accrued from the program. Some of the benefits are described below.

1. Increased Pass Rate
During the discussions I made, almost all the participants reflected that around 99% of the students
pass from one grade to the other. The FGD with teachers of one of the schools indicated:

In our school those students who complete the academic year are getting pass grades.
Because we assess our students on continuous basis the repetition rate is very low. Only few
students may repeat the same grade may be due to incomplete cases.

The reflection shows that almost all students are passing probably because of the implemented
continuous assessment. This will help to minimize educational wastage. My observation of the
diagrams posted in the offices of the principals indicates that there is a trend of increased pass rate
from year to year in the schools. However, these should not be the case where students pass without
acquiring the required skills.

2. Attractive Learning Environment
I observed that some of the schools have carried out activities to make the school compound
attractive so that students can spend more time in the schools. In some of the schools, I have seen
students studying under the shades of trees, and some of the writings(as indicated in the descriptions
so far) have also made the schools attractive. Though it is not the case in some of the schools,
improvements in the school environment are contributing for better learning.

3. Support for Low-achievers
Schools involved in this study have designed strategies to let students support each other as part of
their SIP implementation. Regarding this, reflection from those students who participated in FGD
indicated:

In our school, there are arrangements to help students who achieve lower marks. We are
engaged in one to five arrangements. Top students work together with medium and below
average students. We discuss with each other. We do not always wait for our teachers to
tackle difficulties we face while studying.

This data shows that students are helping each other, and this helps to minimize most of the subject
specific difficulties. As teachers cannot solve problems of large number of students they teach
successfully, the above trend seems appropriate solution.
CONCLUSION AND RECOMMENDATIONS
The objective of this study was to explore the implementation of SIP in primary schools of Boricha, Wondogenet and Dale woredas. The study investigated the process of SIP implementation, challenges faced while implementing it, benefits accrued and actions to be taken to advance SIP implementation. The study employed qualitative approach and made use of purposeful sampling. Thus, from six primary schools 4 principals, 24 teachers, 60 students, 4PTA members, and 3 supervisors, and 3 education office heads and 2 REB officials were participants of the study. To obtain the data interviews, focus group discussion and observation were employed.

Data presented shows that SIP implementation is in progress in the schools. There were attempts at producing plans, making the school environment conducive, implementing continuous assessment and active learning strategies, involving parents through PTAs, and establishing different clubs. The benefits accrued after SIP implementation included high pass rate, attractive learning environment and introducing a support mechanism for low-achievers. However, these attempts have been mitigated by challenges such as lack of positive attitude and motivation on the part of some teachers, lack of incentives, low level of parental involvement and unsuitability of environments of some schools. Hence, increasing parents participation, introducing proper incentive and recognition mechanisms for outstanding teachers, giving training on continuous assessment and active learning and creating collaborative environment are suggested as solutions. There should also be training for teachers on SIP and issues related to continuous assessment and parents should be trained concerning what they can do to their children’s education. The study also indicated that there is also a need to help needy students by searching for financial sources to support them so that they can continue their study. This can be by generating income from the society and other governmental and non-governmental organizations.

Some schools are better and some are not achieving the SIP targets. Finally, the study implied that education officers, school management, teachers, parents and students should work in collaboration as there is much to be done to achieve SIP targets.

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ABSTRACT

The growing need for institutional effectiveness and efficiency in meeting institutionally set objectives cannot be seen independent of information management and strategic communication. As a result, information management and strategic communication practices have become quite relevant to improve the effectiveness and efficiency of institutions. To find out the information management and strategic communication situation in the region, data was collected from primary and secondary sources and relevant literature was reviewed. Then, the data was classified using sex, age, qualification and experience, and also analyzed using frequency, percentage, mean value, standard deviation, T-test and correlation analysis. Based on the analysis, it is found out that the information management and strategic communication practice is less effective due to its intuitional placement where the section is mostly ignored. Besides, it is found out that most of the challenges and problems related to BPR implementation for institutional change, though it has been better performed in Hadiya than the rest two zones, it is are quite related to the marginalization of information management and communication practices along with the inadequacy of finance and office equipments, and poor office situations like in the case of Gedeo zone. There is a strong correlation among the zones in information exchange level and challenges of BPR implementation. There is, indeed, more than 65% success story in reducing process time, and more than 50% in reducing cost and about 50% success in proper use of resources and creating accountability in Hadiya zone though much more is expected. Sidama and Gedeo zones seem to have by far low successes in BPR implementation.

INTRODUCTION

The activities of information management and communication today have no parallel significance in our information era. Information is a major means to understand about the social, cultural, economic and political establishments. Information is the way people sustain their social relations and secure power. If information is a means to secure power, then power is on those who possess information. Actually power is all about politics and politics, in turn, defines the power relations among citizens of a nation. Therefore, information, power and politics are highly intertwined and the study of one in some form implicates the other.

In fact, having the information by itself is not sufficient, so there is a need to pass the information to recipient of the information. Communication, especially strategic communication, thus, becomes necessary to effectively pass the pieces of information that entail different issues from source to its destination. The issues that pass from the source to the destination may include developmental, administrative, political, or issues of the different gamut of life. Particularly, however, strategic communication in institutions is concerned; the focus goes to how communication enhances smooth relationships among stakeholders for effective and efficient administration as well as for institutional change or success. Consequently, information management and strategic communication practices have been growing with much importance in our today’s growing business of the private sector and also in the ever widening nature of governmental institutions because of their increasing responsibilities towards meeting the public needs. So the study in this area is quite useful for social, economic, political and business practices.
Background

In order to get better understanding and for the purpose of analysis about institutional information management and strategic communication, it would be appropriate to examine aspects of institutional management and communication, strategic communication, need for civil service reform to foster institutional effectiveness, effective communication management, practices of information and communication at this stage. The concepts of information management and strategic communication are quite related to the principles of management. This is because “An intelligent user of information can demonstrate the ability of decision making, since his manipulative capability is considerably increased, with the information”, Sarras (2013:4).

Institutional management according to Gregory (2001:49), first, can be best seen from systems theory. “Systems theory provides a useful theoretical underpinning for thinking about the role of public information management and communication practices because it stipulates that an institution’s well-being (or otherwise) is dependent on establishing and maintaining relationships both within itself and with its environment. It has to adjust and adapt as both it and its environment change.” This is because institutions are social systems and they are consisted of individuals and groups which we may call them groups, and there is a need to develop or maintain relationships among them for meeting institutional goals or objectives. The smooth relationship marks the positive effect of relationship management and its adverse effect demonstrates mainly the lack of good relationship. This, in turn, implies that institutional management is highly interwoven with communication (Grunig and Hunt, 1984).

Second, the need for effective communication in institutions emanates from the very nature of institutional or organizational management. Usually institutional management better works with proper information management and this is related to the strategic communication system that outlines the objective or goals of the communication, identify stakeholders, define key messages, find out potential communication methods and vehicles for communicating information for a specific purpose, and also state the mechanisms that will be used to obtain feedback on the strategy. Strategic communication may have different uses, that is, providing information; increasing awareness, encouraging action, building consensus, changing behavior, promoting community participation, resolving conflict, and making request for necessary resources. According to Murthy (2001:9-10) “management aims at reaping rich results in economic terms, also implies skill and experience in getting things done through people, it is a process, function or activity done in groups, with a specific system of authority and goal oriented”. Effective communication in one organizations can be opted from the following two major aspects. It is known that effective communication create “a common link for the management processes of planning, organizing, leading, and controlling and manager’s time is spent largely in communication with employees, supervisors, suppliers, or customers. There effective communication skills of managers are very essential to get the work accomplished”. (Ibid).

Third, information management and strategic communication is an essential part of strategic management system that involves decisions and actions which automatically leads to effective strategy as Kazmi (1999). Kazmi quoted the definition given by Glueck as strategic management is “a stream of decisions and actions which leads to the development of an effective strategy” in order to meet ones institutional objectives. It is also taken as crucial element in the institutional change process and opens up the avenue for new strategies, structures and systems to achieve the renewed strategies for the formulation and implementation of policies. Mintzberg (1991) as cited in Heath (2005: 824 ) a strategy is seen as “a means of locating an organization in its environment”. From this perspective, strategy “becomes the mediating force—or ‘match’—between organisation and environment, that is, between the internal and external context (of the organisation)”.
Fourth, civil service reform is a means for change in institutions to get better results by changing their organizational system and culture. The civil service system defines the function and conduct of public institutions and the civil servants as well. Civil Service reforms in institutions are expected to create better work situations by adapting a new set of cultures. Wood (2001:99) in relations discusses corporate culture and defines it by saying “An organisation’s behavior reflects, or is reflected in, its culture”. The change or the reform system in “organizational cultures to improve performance” particularly for economic gains is major part of the civil service. Governments use civil service systems to “reorganize” the their government systems to be “more manageable, efficient, effective, and politically responsive”, and this is the case in the American system, according to Rosenbloom, Kravchuk and Clerkin(2009:209). In connection, the civil service system reform or change becomes much tied up with the activity of organizing, which in turn, cannot go separately from information communication. In Ethiopia in general, and in Southern Ethiopia in particular, Business Process Reengineering (BPR) has been implemented as a mean for institutional change or reform, considered as a ‘core process redesign’, ‘new industrial engineering’ or ‘working smarter’. Business process reengineering is based on the notion that organizations need a sense of direction to gain dramatic benefits, by improving operation and outputs of organizations, (Rock (2003:2); Hammer and Champy (1993); Davenport and Short (1990)). Many organizations have reported dramatic benefits gained from the successful implementation of BPR. Companies like Ford Motor Co., CIGNA, and Wal-Mart are all recognized as having successfully implemented BPR. It is also mentioned that success story has not been told by all organizations, which have implemented BPR. Rock quotes Hammer and Champy (1993) says that “as many as 70 percent did not achieve the dramatic results they desired.”

Fifth, communication and organizational management are quite useful to form corporate identity. Corporate identity is as a result of better strategy, particularly for corporate identity management. Corporate identity management is something closely tied with strategic communication which focuses three aspects: on conducting research to determine senior management and a range of stakeholders’ views on an organisation’s actual and desired image, an audit of all elements of corporate identity to determine if they are congruent with the desired image, and formulating a plan to adjust the corporate identity if necessary. Theaker (2001:121) identifies major aspects of information management as an act of lobbying for effective strategic communication. These include access to decision makers, background research, good timing, communication skills, and knowledge of government procedure, public interest, support of opinion leaders, effective targeting, favorable media coverage and knowledge of government structure.

**Statement of the Problem**

This study is about information management and strategic communication for institutional change in the Southern Nations and Nationalities Peoples Regional State (SNNPRs). As it is known, the growing need for institutional effectiveness and efficiency in meeting institutionally set objectives cannot be seen independent of information management and strategic communication. As a result, information management and strategic communication practices have become quite relevant to improve the effectiveness and efficiency of the institutions. In relation, for example, Kiragu (2002:107) says information flow is at the core of every management system, public or private”. He further added that “poor information is ineffective communication” because information processing and management, and also communicating it is “a priority function in public administration”. In relation, though BPR (Business Process Reengineering) and BSC (Balanced Score Card) are recent civil service reform tools implemented all over the nation, how they have enhanced institutional change with emphasis for information management and communication activities need to be analyzed. Here the study, however, does not primarily focus on how both of them have brought effectiveness and efficiency, rather focuses on the place of information management and strategic communication in BPR implementation in the region. Scholars agree that the success of BPR is
largely dependent on information and communication, which becomes the major
determinant (Ahmad, Francis and Zairi (2007); Natek, and Lesjak (2006); Jackson (2002); Shin and
Jemella (2002); Al-Mashari, and Mohamed. (1999); Weicher, et al (1995)). Connectively, how does
information management and communication departments have enhanced BPR will be analysed in
the study. Therefore, the study based on the above points would attempt to answer the following
questions.

- Does the information management and communication section or department play an
important role in institutional change in the zones?
- Is the public information management and communication wing rightly placed in zonal
departments and played its role in the zones?
- How does information management and strategic communication help to institutional
governance and change?
- What are the successes and challenges of BPR implementation in Southern Ethiopia?

Objectives of the Study

The general objective of the present research is to investigate the current working conditions of the
information management and communication departments or sections of the Southern Ethiopia with
regard to meeting the new organizational set up while implementing BPR.

The specific objectives of the present research are, therefore,

- To indicate to what extent the information and communication department has enabled to
maintain organizational reputation and image, and promote organizational objectives.
- To analyze the functions of the information and communication department in the specific
institutions and their contributions towards implementing BPR
- To find out the problems and challenges faced, and the successes gained by implementing
institutional change or reform through BPR, and suggest solutions

METHODS AND MATERIALS

Description of the study area

The study is conducted in Southern Ethiopian region by taking three major zones in the region,
namely Sidama, Hadiya and Gedeo. According to 2007 Census conducted by the Central Statistical
Agency of Ethiopia (CSA), the SNNPR has an estimated total population of 14,929,548, of whom
7,425,918 were men and 7,503,630 women. 13,433,991 or 89.98% of the population are estimated
to be rural inhabitants, while 1,495,557 or 10.02% are urban; this makes the SNNPR Ethiopia's
most rural region. Sidama has the largest population in the region with 19.38% population in 2007
followed by Woleiyta, 10.59% and Hadiya, 7.98%. Based on 2007 census by CSA, Sidama Zone
has a total population of 2,954,136, of whom 1,491,248 are men and 1,462,888 women; with an
area of 6,538.17 square kilometers, Sidama has a population density of 451.83. Besides, Hadiya
Zone has a total population of 1,231,196, of whom 612,026 are men and 619,170 women; with an
area of 3,593.31 square kilometers, Hadiya has a population density of 342.64. Gedeo zone is also
among the largest population in the region. Gedeo Zone has a total population of 847,434, of whom
424,742 are men and 422,692 women; with an area of 1,210.89 square kilometers, Gedeo has a
population density of 699.84, which is among the largest densely populated zones in Ethiopia.

Study subjects

The study subjects are zonal employees, coordinators, and heads of departments in the selected
zones of the region. The study included a total of 112 respondents and among them 89 are males
whereas 20 of them are females; the rest three of the respondents have not filled there sexes. In
terms of sex, 31(81.58%) in Sidama Zone, 21(67.74%) and 37(86.05%) are males whereas the rest are females. The male- female ratio is relatively better in Gedeo Zone where the male accounts for about 67.7% and the remaining percent is for female. The reason for less representation of females is their under representation in their respective offices. The females mostly take lower positions in the institutions under study. Respondents age profile includes respondents above 42 years of age, who are 16(42.1%), between 34-41 are 13(34.2%), between 26-33 are 6(15.79%), and 18-25 are 2((5.3%) in Sidama zone whereas it is 10 (32.3%), 6(19.35%), 8(25.8%) and 7(22.6%) in Gedeo zone, and 18(39.3%), 9(20.9%), 7(16.3%) and 9(20.9%) in Hadiya zone respectively. The age group demonstrates that the highest number of employees in the three zonal administrative departments belong to the fourth age group, that is, 42 and above years old. The employees' age condition indicates that most of them have experiences, about 65% of the employees are above 34 years old and they are adults. Gedeo Zone has relatively youngest employees than the rest two zonal bureaus. The qualification of the professionals/respondents indicate that 78.9%, 80.6% and 88.37% are degree holders in Sidama, Gedeo and Hadiya zones respectively where as there are only 1(3.2%) and 3(6.98%) masters holders in Gedeo and Hadiya zones., but Sidama zone has no master holders, and it has the higher diploma holders compared to the rest 7(18.4%), Hadiya 5(16.1%) and Gedeo 2(4.65%). Regarding their work experiences 22(57.9%) and 19(44.18%) the highest in Sidama and Hadiya zones respectively as all of them have 12 years and above years of experience. Gedeo has relatively young staff and more than half of the respondents have 1-5 years of experience, that is 8(25.8%) have 1-2 years of experiences and 9 (29%) have 3-5 years of experiences. Those who have 12 years and above experiences are 6(19.35%). In Sidama zone the highest percentage is accounted by respondents who have more than 12 years of experience that is about 58 %. Followed by Hadiya, but Gedeo has its highest rate for employers who have 3-5 years of experience and 1-2 years of experience, 29 and 25.81 percent experience respectively, which both account more than half of the employees included in the study. Since there are less number of respondents who work in the area of information management and communication, respondents were taken from different departments or sections. The respondents who work in information, communication, and journalism field only have the total sum of 26.78571 % cumulatively. However, people who work in other fields make the largest sum of 64.28571 %. The rest are accountants and managers.

**Study Design**

The study used survey method. The method of data collection includes questionnaire and interview, and observation methods. The questionnaire is constructed with the objectives to collect information from different professionals in the selected department in three zones, Sidama, Gedeo and Hadiya. Furthermore, interview method is applied to obtain information from managers and heads of departments. The data is obtained from both primary and secondary sources. The primary sources are professionals, experts and top officials who provided first hand information regarding the information management and communication practices of the selected zonal departments in respect to institutional change and implementing BPR. The secondary sources are books and other documented sources. Observation is a method applied in order to indicated the existing situation in the zones. In the study, random sampling technique was applied to select a certain government institutions. Particularly, nine offices or departments were selected from the zonal departments. These zonal departments include Education, Finance and Economy, Culture, Tourism and Government Communications, Agriculture and Rural Development, Revenue Authority, Civil Service, Labour Affairs, Urban Development, and a Zonal Administration in the SNNPRs.

The sampling procedure includes, first, some of the zonal departments were randomly selected from the different zonal bureaus. After the departments were identified the work processes were sorted out and an individual is taken from each work process where there are about 5- 9 work process based on the nature and scope of the zonal department. In Gedeo zone, for example, the number of the work process is lower than the two zones. Then some mangers, top officials, heads were selected for interview, but professionals were given question to give their replies for the questions.
set in the questionnaire. Thirdly, heads of Zonal bureaus and process owners were asked some questions regarding their organizational structure and the challenges in their respective offices.

The sampling size is determined by taking sample respondents from nine different departments from the three zonal departments in the SNNPR. Totally, 112 questionnaires were distributed to the randomly selected departments of regional bureaus. Moreover, three zonal departmental heads and five work process owners were included for interview. The total number of sample respondents taken from each department include 7, 5, 11,7 and 8 in Sidama Zone Education, Finance and Economy, Culture, Tourism and Government Communications; Agriculture and Rural Development, Revenue Authority respectively, where as 6, 8, 4,5,2,6 in Education, Culture, Tourism and Government Communications, Civil Service, Labour Affairs, Urban Development and Zonal Administration in Gedeo Zone and 13, 10, 10, 6 and 4 in Finance and Economy, Culture, Tourism and Government Communications, Agriculture and Rural Development, Revenue Authority and Urban Development in Hadiya zone.

**Study Methodology**
The methodology of the study entails the method of data collection, classification, description, presentation and analysis. The present research is a comparative study of the information management and communication sections of various organizations in the SNNPRs and the data collection, presentation and analysis are also done in a comparative manner.

**Data Management and Analysis**
The obtained data is managed using the different factors and variables identified, and also described using frequencies and percentages. First, the data is classified based on, sex, age, education, work experience of respondents. Second, the data is classified based on the category of the departments included under the three different zonal governments in the regional state. The data is analyzed using tables, descriptive and inferential statistics.

**RESULTS AND DISCUSSION**
In this study, the analysis of the data comprises the comparisons of the different zonal departments and their practices in regard to information management and strategic communication practices. Particularly, the study focuses on information management and communication practices in the selected departments in the Southern Nations and Nationalities Peoples Regional State by taking the three zonal governments, namely Sidama, Gedeo and Hadiya. Therefore, this part presents the results and discussions of the information exchange level or adequacy, sources of institutional successes and challenges in the zonal departments, BPR implementation and its successes, challenges, problems encountered. The results are presented using frequencies, percentages, mean values, standard deviation, T-Test and correlation analysis.

**Level of Information Exchange in the Zonal Departments**
The information flow and the level of exchange is a key factor in achieving ones institutional objectives and to go in line with the missions and the visions outlined. Based on this fact, when one sees the information exchange level of the different departments in the three zonal departments, the exchange rate is almost near to average for the three zones. In Sidama and Gedeo zone the information exchange level and its sufficiency is almost 50%, but in Hadiya Zone it is below the average. 50% claim that information exchange level is sufficient, whereas almost not less than 50% on the other hand also claim the information exchange is insufficient. What does this communicate is that for fostering institutional transformation, information exchange or information communication is the main variable, but in the case of Sidama Zone, for example, the information exchange level is low. This indicates that information flow is not quite satisfactory, consequently, the implementation of BPR might have been hampered. In the case of Gedeo, the favourable response is about 58% whereas it is 60% in Hadiya zone. One can imagine the degree of
satisfaction where the rest 40 or 50% of the respondents are unsatisfied or weigh almost to the average, as in table above. There is strong rank correlations between the responses of the respondents in the three zones where there is 0.944 and 0.916 very strong correlations between Sidama and Gedeeo and Sidama and Hadiya respectively.

Actually, the degree of information flow is highly related to many factors. One of the factors that may determine or affect the success in information management and communication is the relationship between customers and workers. This is because as Theaker (2001:p.172-173) says “Internal communications is particularly important in times of change”. It is indicated that “communications must be integrated into each stage of the change process, emphasizing both giving facts and listening to concerns and reactions to the change”. As it was stated earlier, information exchange is one of the key issues for institutional reform. It is not possible to think institutional change without information. In information exchange level, the correlation is .933 between Sidama and Gedeeo, and 9.83 between Sidama and Hadiya, which is strongly significant for 5% significance level. This indicates that the responses are quite related. In this part the factors contribute for the successes of BPR are examined. Consequently, respondents replied whether BPR should be based on appropriate information. The level of their agreement is presented with scales where 1 denotes ‘strongly agree’, 2 ‘agree’, 3 ‘neutral’, 4 ‘disagree’ and 5 ‘strongly disagree’. Based on this, the finding demonstrates that most of the respondents agree BPR should be based on appropriate information, that is, 77%, 90.6% and 93.7% in Sidama, Gedeeo and Hadiya Zones respectively.

Table 1: Factors for the success of BPR/Institutional Change

<table>
<thead>
<tr>
<th>In my Organization</th>
<th>Sidama</th>
<th>Gedeeo</th>
<th>Hadiya</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respect for customers</td>
<td>38</td>
<td>100.00</td>
<td>31</td>
</tr>
<tr>
<td>%</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Clear division of work</td>
<td>35</td>
<td>92.11</td>
<td>27</td>
</tr>
<tr>
<td>%</td>
<td>3</td>
<td>7.89</td>
<td>4</td>
</tr>
<tr>
<td>Knowledge of the work</td>
<td>37</td>
<td>97.37</td>
<td>30</td>
</tr>
<tr>
<td>%</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Effective administration</td>
<td>27</td>
<td>71.05</td>
<td>20</td>
</tr>
<tr>
<td>%</td>
<td>8</td>
<td>21.05</td>
<td>8</td>
</tr>
<tr>
<td>Profession assignment</td>
<td>30</td>
<td>78.95</td>
<td>25</td>
</tr>
<tr>
<td>%</td>
<td>6</td>
<td>15.78</td>
<td>6</td>
</tr>
</tbody>
</table>

However, there are also other factors that determine the success of BPR. The issue of customer satisfaction through good relations, issue of professional assignment of employees, effective administrative system, and clear division of work are the indicators of the degree of success in Business Processing Reengineering (BPR). It is known that BPR is a radical redesign of the work, and the extent of these accomplishments indicate how BPR has become practical. In Gedeeo Zone, like in Sidama, the relationship between customers and employees seems to be all positive, where 100% of the respondents agree they respect their customers. In Gedeeo zone, it is agreed that there is 64.5% claim for the existence effective administrative system after the implementation of BPR, but 35.5% didn’t agree and undifferentiated. The implementation of BPR is still under doubt by about 16% where 6.45% are indifferent. In Hadiya zone the relationship between customers and employees is positive, and it is 95.35%. Except administrative effectiveness, more than 90% of the respondents of the zone seem to agree that one of the listed factors contribute for the successes of BPR. The average for the factors ranges above 90% and BPR implementation in this particular zone, Hadiya, seems to be in a better state than the rest two zones. The professional assignment of employees in the zone is quite good, where it is only 2.3% who are suspicious; nevertheless, in Gedeeo zone it is 19.35% and 15.79% in Sidama Zone as in table 1. The idea that workers are placed without their professional knowledge is significant in Gedeeo and Sidama zone where this can adversely affect the success of BPR implementation. Such type of assignment of workers without considering their profession creates mistrust among workers and administration, and also among the
employees themselves. This might be the reason why some respondents in Sidama and Gedeo zones are suspicious about the effectiveness of the administration, 21% and 25.8% respectively.

Sources of Institutional Successes and Challenges in the Zonal Departments

The institutional successes or challenges may be determined by the division of work, the relationships between employees and management, the professional motivation of workers, and the knowledge and skills of officials which all are highly linked with information management and communication practices. When these variables for the success or challenges of the institutions are observed, motivation of workers is taken mainly as one of the area that has helped the institutions to succeed in Sidama zone as in table 2, but that is still low. Clear division of work and good relations between employees and management are believed to be the major determinants for the institutional successes in Hadiya and Sidama Zone with 62.79 in Hadiya zone and 31.57% in Sidama zone for the former, and 62.79% and 26.3% for the latter respectively as table 2. However, workers assignments based on their profession and clear division of work are major determining factors that should be improved in Gedeo zone where they seem relatively lacking in the zone.

Table 2: Sources of Institutional Success

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Organizational successes</th>
<th>Sidama</th>
<th></th>
<th>Gedeo</th>
<th></th>
<th>Hadiya</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
<td>%</td>
<td>Freq</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>Clear division of work</td>
<td>12</td>
<td>31.58</td>
<td>9</td>
<td>29</td>
<td>27</td>
<td>62.79</td>
</tr>
<tr>
<td>2</td>
<td>Good relations between employees and management</td>
<td>10</td>
<td>26.3</td>
<td>4</td>
<td>12.9</td>
<td>27</td>
<td>62.79</td>
</tr>
<tr>
<td>3</td>
<td>Workers are assigned based on their profession</td>
<td>7</td>
<td>18.4</td>
<td>11</td>
<td>35.48</td>
<td>44</td>
<td>55.8</td>
</tr>
<tr>
<td>4</td>
<td>Workers are professionally motivated</td>
<td>8</td>
<td>21.05</td>
<td>5</td>
<td>16.1</td>
<td>23</td>
<td>53.48</td>
</tr>
<tr>
<td>5</td>
<td>Officials are knowledgeable and have good skills</td>
<td>10</td>
<td>26.3</td>
<td>6</td>
<td>19.35</td>
<td>17</td>
<td>39.5</td>
</tr>
</tbody>
</table>

BPR Implementation and its Successes

The proper implementation of Business Process Reengineering (BPR) is not fully agreed by all of the respondents, in fact, 81.58% in Sidama zone agree, but 13.16% claim that it is not implemented. So here one may see there is no common agreement among the employees in regard to BPR implementation in the zone. If it were implemented completely, all could agree about its implementation regardless of its effectiveness or not. However, this can indicate that BPR might not have been effectively implemented as desired. Still, 5% of the respondents are in-between about the implementation. In regard to BPR implementation most of the respondents, 77.4 in Gedeo, and 86% in Hadiya tend to agree that BPR is implemented, however, 6-13% of them disagree and the rest seem to be reluctant. Hence, it is only few percent of them disagree about the real implementation of BPR and its being successful.

When one measures the successes of BPR implementation, the success level of BPR can be seen in terms of decreasing work process time, proper use of resources, proper exchange of information, the degree of accountability and decreasing cost. The following table demonstrates the extent in which BPR has become successful.
Table 3: Successes of BPR

<table>
<thead>
<tr>
<th>BPR Implementation and Successes</th>
<th>Sidama</th>
<th>Gedeo</th>
<th>Hadiya</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Decrease process time</td>
<td>12</td>
<td>11</td>
<td>27</td>
</tr>
<tr>
<td>2 Proper use of resources</td>
<td>11</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>3 Exchange information properly</td>
<td>11</td>
<td>11</td>
<td>19</td>
</tr>
<tr>
<td>4 Accountability is practiced</td>
<td>8</td>
<td>21.05</td>
<td>11</td>
</tr>
<tr>
<td>5 Decrease cost</td>
<td>8</td>
<td>21.05</td>
<td>12</td>
</tr>
<tr>
<td>6 Above Factors altogether</td>
<td>0</td>
<td>0</td>
<td>18</td>
</tr>
</tbody>
</table>

The success story of BPR is largely determined with the attitude of employees. In fact, the attitude of the respondents towards BPR seems positive where 72.5 in Sidama Zone, 80.6 in Gedeo Zone and 65.1 in Hadiya Zone seem to agree that they have good attitude towards BPR as in table 6. However, the number of respondents who do not agree and undecided is not low in actual terms. Statistically, the mean and the standard deviation of the respondents’ reply about their attitudes towards BPR seem to correspond somehow with the mean value of 7.2, 6.2 and 8.2, and with standard deviation of 7.46, 6.61 and 7.91 for Sidama, Gedeo and Hadiya respectively. There is, in fact, some difference among the respondents who agree and disagree, and the standard deviation also demonstrates this fact. This implies that there are similar attitudinal differences among respondents in the zones. It is known that institutional views or attitudes affect the success level of institutions. So much should be done on communication since attitudes can be changed by communication strategies being employed and level of interactions. This is because any system can work better in interaction with its various parts because as Gregory (2001:55) views, a system is “the level and nature of interaction they [institutions] have with their environments”.

Institutional Challenges
Institutional challenges in information management and strategic communication practices can be rooted from the process and condition of interaction during planning, organizing, information management and communication, and other aspects of management. In relation to this there seems to be a serious problem in Sidama and Gedeo when compared with Hadiya, which is in all cases is the highest. As an institutional challenge, poor information management and communication still amounts to the highest. Moreover, poor accountability situation is still the second highest challenge in Sidama and Gedeo and Hadyia zones.

When the successes of BPR is examined in the department of the zones, BPR has brought more than 50% success in Hadiya Zone in regard to the decrease in work process time, 62.8%, of the proper use of resources, 55.81% of practicing accountability, however, the BPR successes in the zone does seem to be less attributed to exchange of information, which only accounts for 44.18 % as in table 2.

Table 4: Institutional Challenges

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Institutional challenges</th>
<th>Sidama</th>
<th>Gedeo</th>
<th>Hadiya</th>
<th>Freq</th>
<th>%</th>
<th>Freq</th>
<th>%</th>
<th>Freq</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Poor planning</td>
<td>2</td>
<td>5.26</td>
<td>7</td>
<td>22.58</td>
<td>4</td>
<td>9.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Poor organization</td>
<td>5</td>
<td>13.16</td>
<td>7</td>
<td>22.58</td>
<td>4</td>
<td>9.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Poor information management and communication</td>
<td>16</td>
<td>42.10</td>
<td>14</td>
<td>45.16</td>
<td>14</td>
<td>32.56</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Poor accountability situation</td>
<td>16</td>
<td>42.10</td>
<td>13</td>
<td>41.94</td>
<td>5</td>
<td>11.6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The major challenge for the departments for BPR implementation, according to the respondents reply in the three zones, is poor information management and communication where it accounts the highest percent in the zones followed by poor accountability situation in the zone (table 4). In Gedeo Zone, the respondents replied regarding the factors for the successes of BPR, all the mentioned factors or variables range between the values of 32% to 38%, which indicates that the success is limited and not satisfying, in Sidama ranges between 21% to 31.6% and in Hadiya all the success level is better than the two zones which ranges between 41.86% to 62.79%. Decreasing work process time is the highest successes with 62.79% in Hadiya and Sidama 31.6% and the second highest in Gedeo with 35% among the highest as in table 3. However, the figure is very low in the mentioned two zones.

The mean calculation of the zones for the four variables affecting institutional challenges indicate the means are 4.4 for poor planning, 5.3 for poor organizing, 14.67 for poor information management, and 11.3 for poor accountability situation with slight variation, where the standard deviations make 2.51, 1.52, and 1.15 respectively as in table 9 below, but there is a significant variation in accountability situation among the zones with 5.68, but the rest are closely related. The differences between the zones indicate that there are differences among the variables of institutional challenges and the T- test results demonstrate that it is statistically significant for poor planning and poor accountability situation with 9.6% and 7.5% with 5% of significance level. On the other hand, the poor organization situation and poor information management communication do not show any significant difference for 5% of significance level with two tailed, which means more or less they are closely related for the three zones.

### Table 5: T Test values for one Sample Test

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td>Poor Planning</td>
<td>2.982</td>
<td>2</td>
<td>.096</td>
<td>4.33333</td>
<td>-1.9183</td>
</tr>
<tr>
<td>Poor Organization</td>
<td>6.047</td>
<td>2</td>
<td>.026</td>
<td>5.33333</td>
<td>1.5388</td>
</tr>
<tr>
<td>Poor Information mgt &amp; Comm</td>
<td>22.00</td>
<td>2</td>
<td>.002</td>
<td>14.66667</td>
<td>11.7982</td>
</tr>
<tr>
<td>Poor Accountability</td>
<td>3.452</td>
<td>2</td>
<td>.075</td>
<td>11.33333</td>
<td>-2.7921</td>
</tr>
</tbody>
</table>

In Sidama zone, the success story of BPR is by far low compared to the rest of the two zones. The values computed for the variables range between the highest 31.6% to the least 21%. These values indicate is that there is less success in the implementation of BPR in the zone.

**Problems Encountered while Implementing BPR**

The problems faced during implementation of the BPR can be multifaceted. Scholars agree that most of the problems are related with identifying who does what and who has to be involved in regard to selecting the right person, the lack commitment from top management and inability of
Table 6: Problems in Implementing BPR in the zonal bureaus

<table>
<thead>
<tr>
<th>S. N.</th>
<th>Problems observed while implementing BPR in you org</th>
<th>Sidama</th>
<th>Gedeo</th>
<th>Hadiya</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Confusion of ideas and negative attitudes</td>
<td>11</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Freq %</td>
<td>28.9</td>
<td>32.3</td>
<td>23.2</td>
</tr>
<tr>
<td>2</td>
<td>Lack of professionals</td>
<td>6</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Freq %</td>
<td>15.8</td>
<td>22.6</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Inadequate office equipment</td>
<td>18</td>
<td>20</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Freq %</td>
<td>47.4</td>
<td>64.5</td>
<td>72.0</td>
</tr>
<tr>
<td>4</td>
<td>Information network has not been properly created</td>
<td>12</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Freq %</td>
<td>31.6</td>
<td>29.03</td>
<td>30.2</td>
</tr>
<tr>
<td>5</td>
<td>No proper or clear chain of command</td>
<td>19</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Freq %</td>
<td>50</td>
<td>48.4</td>
<td>46.5</td>
</tr>
</tbody>
</table>

In relation, Ahmad, Francis and Zairi (2007:452) quoted Peppard and Fitzgerald (1997) and said that the success factors for BPR could be related to “the deployment of a creative team in problem solving, and a process approach and integration of electronic data processing (EDP)” Besides, they underline that the success factors are four based on the discussion of Ascari et al. (1995). The elements leading to successful BPR are culture, processes, structure and technology. Similarly, the problems faced by the three zonal departments of the southern regional state is related to confusion of ideas and negative attitudes developed as a result of poor communication, less education and training, less commitment of officials where they obtained limited trust from their employees as discussed earlier. The confusion of ideas and negative attitudes can be solved with the help of strategic communication, but it seems to lack where 28.95% of the respondents agree that the problem in relation to BPR implementation is related to confusion of ideas and negative attitudes in Sidama Zone, 32.26% in Gedeo zone and 23.2558 in Hadiya zone. In fact, 31.56%, 29 % and 30% of the respondents indicated that the problem encountered in implementing BPR are due to the fact that information network has not been properly created. Furthermore, improper or unclear chain of command is the major impediment. In regard to the appropriateness of information during the implementation of BPR, 93.1 %, 82.5% and 66.5 % of the respondents in Hadiya, Sidama and Gedeo zones do agree that information is useful for the successes of BPR.

Analysis of Qualitative Questions in the Questionnaire and Interviews
Most of the respondents have stressed on the problem of budget and lack of office equipments along with information management and communication problems, which have highly influenced the success level of BPR in the zones. Many of the interviewees, for example, said there is no proper allocation of resource, they suggested that in order to bridge the problem there is a need to work without needing much budget, and work voluntarily. The other most important issues raised regarding addressing institutional problems is to improve information services by increasing users’ services and by increasing service quality. One of the respondents also suggested that there is a need to work on media efficiency in government communication activities. There are no computer accesses as desired and also no network connection to do office activities in an integrated manner. They claim this could have decreased work time and labor cost if these office infrastructure had
been fulfilled. In fact, they also said there are no professionals trained in media and/or Information Communication Technology. As it was observed in some of the zonal bureaus, there is serious shortage of office equipment like computers, and particularly in Gedeo zone there is serious problem of rooms where the rooms are over staffed and with very poor situation (even some of the rooms are not comfortable to sit and work), there are no audiovisual equipments, etc. one of an interviewees also stressed that the other major impediment in implementing BPR is lack of monitoring and evaluation of the activities carried out. So it is mentioned that follow up the effective performance of government policy implementation, improve the means of disseminating valuable news by using accessible media channels to provide information to concerned bodies in the zone and also other woreda level administration.

The issue of raising work commitment; assign committed democratic leader or coordinator; workers’ cooperation to each other, being genuine and loyal for their work are suggestions made by some of the interviewees. This may indicate that there is a long way to go in raising employees work commitment, in assigning committed and democratic leaders and promoting mutual relations between management and employees. Some other respondents also stressed that there must be improved and better services, create democratic working situation. They also focus on the need to work towards taking initiatives to implement BPR by following structural system, by respecting work hour; decreasing public/government cost; providing appropriate information flow. This is also supplemented by another respondent who mentions the need for proper handling of one’s task/job; providing many trainings for employees; provide incentives for workers; improve work culture by working without waiting others and building self confidence; and having moral ability to carry out tasks. Still some other respondents in Sidama and Gedeo zones replied that there is no clear division of work, there is no information and communication wing.

Generally, however, it is believed that information management and strategic communication activities are quite useful for organizational reform in the three zones, and institutions must make everything in the information flow standard towards working on public interest and exposing evils.

CONCLUSION
The practices of information management and strategic communications in the nine departments of the three zonal governments towards institutional change have not yielded the desired effect. One of the major factors that deters the role of information management and communications section or department is its structural placement in the institutions where it is mostly ignored by the zonal institutions under study. It is believed information is the life blood of institutions and managing and communicating it is part of the management practices because as Wood (2001:95) discusses corporate identity is part of the management functions where “managing corporate identity is about identifying the right image for an organisation, and communicating it effectively.” Scholars believe information management and communication is quite useful for institutional change and necessitate the need for better information management and strategic communication. Mainly, effective information management using the existing technology and communicating effectively by using better communication strategies is necessary for the effectiveness of any reform systems. BPR is implemented in the zonal departments; however, they are not as effective as they were desired. The information adequacy level in the three zonal departments is almost to the average and that has also inhibited the success level of BPR. In fact, BPR has enabled mostly to decrease process time by 62.7%, The respondents replied that BPR has enabled for proper use of resources, and enabled to bring accountability by 55.8% each, nevertheless, BPR has less fruits in Sidama and Gedeo zones where they success level is only less than 31.6% and 38.7 respectively.

There is, however, correlations among the zones in the information exchange level. The correlations at 5% significance level for the degree of information exchange across the zones is very strong. This denotes that most of the problems identified in the three zones are quite related. Among factors that hinder the success of BPR in the three zonal departments inadequate level of office equipments
and lack of budget seem to be the major ones. However, the rest of the issues are mainly tied with the inadequacy or unavailability of information management and communication efforts in an organized manner to meet institutional objectives and also work towards institutional change. This is mostly seen where most of BPR implementation problems like confusion of ideas and negative attitudes, lack of information network, and no proper or clear chain of command, are aspects of the inadequacy of information management and communication practices in the selected zones. Moreover, it is found out that Inadequate office equipments and poor information network situation are considered as the two highest problems faced during BPR implementation in Hadiya and Gedeo as in the above table. Besides, lack of clear chain of command is the most serious problem in Sidama zone followed by inadequate office equipment and poor Information network.

Generally, information management and strategic communications practices are given almost no or subsidiary positions in the management system of the nine departments included from the three zones. Strategic communication has objectives or goals of the communication and identifies stakeholders; however, there are no proper setting up of objectives and identifying of stakeholders in the zonal departments. This is because there is no body assigned to execute such activities. This is observable in the three zonal departments’ levels except in the Zonal Culture, Tourism and Government Communication departments, where the attempts here are still very low. Besides, key messages are not identified except temporary acts during pressures come from top government body, and they barely find out potential communication methods and vehicles for communicating information for a specific purpose. Some of the strategic communication functions like providing information, increasing awareness, encouraging action, building consensus, changing behavior, promoting community participation, resolving conflict, and making request for necessary resources are not done in an integrated manner. Consequently, little successes stories have been told in post BPR implementation of the zones. Actually effective information management and strategic communication are the life blood of institutions and, consequently, must have been given due place because as Theaker (2001:161) argues information management and strategic communication in institutions helps to “identify, establish and maintain mutually beneficial relationships” among the institutions, the customers, employees and other stakeholders “on whom its success or failure depends”.

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Modelling Soil Erosion and Lake Evaporation Using Remote Sensing and GIS in Lake Hawassa Catchment

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(Department of Geography and Environmental Studies)

ABSTRACT

This study was carried out to evaluate the risk of soil erosion and evaporation in Lake Hawassa watershed. The research applied the Revised Universal Soil Loss Equation (RUSLE), remote sensing, geographical information system (GIS), and Surface Energy Balance Algorithm for Land (SEBAL) to the mapping of soil erosion risk and Lake Evaporation in the catchment. Soil map and soil survey data were used to develop the soil erodibility factor \( (K) \), and a digital elevation model image was used to generate the topographic factor \( (L) \). The cover-management factor \( (C) \) was developed based on vegetation, shade, and soil fraction images derived from spectral mixture analysis of a Landsat ETM+ image. Meteorological data's like rainfall, temperature, humidity, cloud cover, etc were also applied to estimate the actual rate of evaporation from the lake. The result revealed that a soil erosion risk map with five classes (very low, low, medium, medium-high, and high) was produced based on the simplified RUSLE within the GIS environment, as very severe, severe, moderate, low, and very low, and ranged from 0.49 to 125 t/ha/yr. However, the mean annual soil loss estimated for the study area was put at 5.35 t/ha/yr. Moreover, the sensitivity analysis of the RUSLE model to the input variables revealed that, this model was highly sensitive to slope gradient and cover but less sensitive to slope length, and rainfall erosivity. In addition to the RUSLE parameter, Aerial pattern of actual annual evaporation can be assessed by SEBAL remote sensing techniques using restricted input data like solar radiation. Finally, the SEBAL analysis showed that lake shore has higher evaporation rate than the center of the lake. This is because the area contains silts which are received from the high elevated areas of the catchment through erosional processes.

INTRODUCTION

Background of the Study

The adverse influences of widespread soil erosion and degradation, agricultural production, water quality, hydrological systems, and environments, have long been recognized as severe problems for human sustainability (Lal, 1998; Lu D. et al, 2004). Land degradation by soil erosion is a serious problem in Ethiopia with an estimated annual loss of about 1.5 billion tons from the highlands (SCRP, 1996) and estimated to cost the country $1.9 billion between 1985 and 2009 (EHRS, 1984; cited in Shimelis et al, 2009). However, estimation of soil erosion loss only in monetary value is often difficult due to the complex interplay of many factors, such as climate, land cover, soil, topography, and human activities. In addition to the biophysical parameters, social, economic, and political components also influences soil erosion (Ananda and Herath, 2003). Numerous soil erosion and sediment yield estimation models have been developed in the past two decades and utilizing different scientific methods and modeling approaches. The methods of quantifying soil loss based on erosion plots possess many limitations in terms of cost, representativeness, and reliability of the resulting data. They cannot provide spatial distribution of soil erosion loss due to the constraint of limited samples in complex environments (Zhang Hengming, et al, 2006). So,
mapping soil erosion in large areas is often very difficult using these traditional methods. Thus, accurate and timely estimation of soil erosion loss or evaluation of soil erosion risk has become an urgent task.

The use of remote sensing and geographical information system (GIS) techniques makes soil erosion estimation and its spatial distribution feasible with reasonable costs and better accuracy in larger areas (Millward and Mersey, 1999; Wang et al., 2003). In practice, the Universal Soil Loss Equation (USLE) and later the Revised Universal Soil Loss Equation (RUSLE) has been the most widely used empirical quantitative models throughout the world in predicting the annual soil loss rates on a long-term basis soil erosion loss. The USLE was originally developed for soil erosion estimation in croplands on gently sloping topography (Wischmeier and Smith, 1978). The RUSLE has broadened its application to different situations, including forest, rangeland, and disturbed areas (Renard et al., 1997). However, the above models did not consider the Sediment delivery ratio (SDR) ultimately because estimation of sediment yield needs further analysis about sediment source, texture, nearness to the main stream, channel density, basin area, slope, length, land use/land cover, and rainfall-runoff factors.

In recent years, the issue of water quality and availability is drawing more attention to utilize the water resources of the area in a sustainable manner. Therefore, understanding the temporal and spatial distribution of evaporative depletion is essential for managing river basins and open water systems (Kijne et al., 2003). The lake catchment typically contains rainfed agriculture, woodlands, grass cover, wetlands and include other systems that all transmit water into the atmosphere through Evapo Transpiration (ET). Unlike other hydrological models, remote sensing techniques compute evaporation directly from the energy balance equation without the need to consider complex hydrological process (Beven, 1988; Bastiaanssen M. et al., 2005). The determination of ET is not straightforward due to the natural heterogeneity and complexity of hydrological processes in catchments. The surface energy balance provides through latent heat flux a direct assessment of actual ET. The soil-water balance can then be circumvented for the assessment of ET by applying the surface energy balance.

**Statement of the Problem**

Soil erosion is a serious threat of increasing dimensions and tends to blunt efforts to counter global population growth with increased and sustainable agricultural production. It is a major factor for decreases in soil fertility and land value and this is widely recognized as a threat to farm livelihoods and ecosystem integrity worldwide. The mechanisms involved in soil erosion by water vary over time and space and depend on several factors including ground cover, soil texture, structure, porosity/permeability, and topography (Moore & Burch, 1986 cited in Hickey, R., 2000; Mitasova et al., 1996). In addition, human activities, and especially improper land management and use can influence the dynamics of each of these factors (Wischmeier & Smith, 1978). Especially in the tropics, erosion can be particularly threatening because of intense climatic inputs, low levels of fertilizer use and conservation activities, frequently fragile soils, and strong dependence on soil quality for livelihood (Cohen et al., 2005; Claessens et al., 2007).

Land degradation is also widespread problem menace in the Lake Hawassa watershed which is one of the most important surface water in the Rift Valley System. The land and water resources of Lake Hawassa and its watershed ecosystem are in danger due to the rapid growth of population and the resulting land clearance for agriculture, deforestation, soil erosion, sediment deposition, pollutant transport, and overexploitation of the lake resources (WWSDE, 2001; Tigneh, 2005; Yemane, 2004). Moreover, land degradation and the subsequent soil erosion and sedimentation
plays a significant role in impairing water resources within sub watersheds, watersheds and basins (Todd Breiby, 2006). Water quality is affected significantly by soil erosion. Increased levels of nitrogen and phosphorus, along with higher sediment loads, are the leading contributors to reduced water quality. Nitrogen and phosphorus move from fields to surface water when sediment is transported through runoff and soil erosion. As a result of the nitrogen- and phosphorus-enriched sediments, eutrophication—the growth of algae and other aquatic plants—occurs, decreasing dissolved oxygen levels (Mahdi M.et al, 2003). According to WWDSE, 2001; Tigneh, 2005; water erosion, particularly rill and gully, is widespread in the catchment along the down sloping escarpments especially in Shamena-Hurufa, and Lalima. Sub-catchments 4 to 8 km long and 2-100m wide gullies are common. In addition, the study indicated that due to erosion hazard in 1998, flooding of roads (Bushulo to Shamena 6 km), 105 hectare of farm lands were flooded, severe gully (4-70 meter wide) were formed in the west and eastern parts, 210 households were lost, and 16,000 hectare of land was affected. Therefore, this study is aimed at estimating the annual soil loss of the Lake Hawassa catchment and the evapotranspiration rate of the lake which could lead to a serious of environmental stress in the catchment and to recommend appropriate measures for the prevailing soil loss.

**Objectives of the Study**

This paper generally aims at assessing the annual soil loss and the rate of Evaporation in Lake Hawassa catchment. It also attempts to overview the relationship between sediment deposition and Evapotranspiration from the lake. More specifically, the study attempted to:

- To estimate the annual soil loss in Lake Hawassa catchment using the Revised Universal Soil Loss Equation (RUSLE) Model.
- Analyze the spatial variability of evaporation rate of Lake Hawassa.
- Assess the sensitivity of the lake to the prevailing soil loss in the catchment.
- Forward possible solutions and recommendation to alleviate the problem through first intervention priority mechanisms and policy decisions.

**Research Questions**

The accomplishment of the above mentioned objectives requires solutions/ answers for the relevant questions asked. Thus, the study tried to find solutions to the following questions:

- How much tone per hectare of soil removed from Lake Hawassa catchment annually?
- Which areas of the lake has high evaporation rates throughout the year and why?
- Is there direct relationship between Problem of soil loss and Evaporation rate?
- What are the possible solutions and recommendations to alleviate and/or minimize the problem of soil erosion in Lake Hawassa catchment?

**RESEARCH METHODS**

**Materials Used**

In order to achieve the stated objectives, both primary and secondary data were used. The primary data were collected from Global Positioning System (GPS) survey and field observation. The secondary data’s were collected from Moderate Satellite (MODIS) sensor on board of the Terra (mid-morning overpass) 2011 and Shuttled Radar Terrain Model (SRTM), LandSat ETM+ 2012, Spot (2008) images, and spatial data’s (drainage network, catchment boundary, land use, soil and infrastructural data) obtained from International Livestock Research Institute (ILRI), USGS archive, Ethiopian Mapping Authority and of Ministry of Water and Energy Resources, respectively.
Moreover, different software’s like ERDAS Imagine 10.0 and Arc Map 10 were used for satellite image processing, DEM processing, overlay and multi-criteria analysis, and for meteorological data processing. Besides, MS office packages including Excel 2007 were used for chart making, tabulation and word processing.

Methods or Description of Models

RUSLE Parameter Estimation
The extent of erosion, specific degradation, and sediment load from watersheds are related to a complex interaction between topography, geology, climate, soil, vegetation, land use, and man-made developments (Shen and Julien, 1993). USLE is the method most widely used around the world to predict long-term rates of inter-rill and rill erosion from field or farm size units subject to different management practices. Wischmeier and Smith (1978) developed the USLE based on many years of data from about 10,000 small test plots. Each test plot had about 22m flow lengths and they were all operated in a similar manner, allowing the soil loss measurements to be combined into a predictive tool. RUSLE, the Revised Universal Soil Loss Equation, was developed to incorporate new research since the earlier USLE publication in 1978 (Ibid). The underlying assumption in the RUSLE is that detachment and deposition are controlled by the sediment content of the flow. The erosion material is not source limited, but the erosion is limited by the carrying capacity of the flow. When the sediment load reaches the carrying capacity of the flow, detachment can no longer occur. The basic form of the RUSLE equation has remained the same, but modifications in several of the factors have changed.

\[ A = R \times K \times L \times S \times C \times P \] ...

(R.1.1)

Where:

- **R**, the rainfall Erosivity, equals \( E \), the kinetic energy of rainfall, multiplied by \( I_{30} \) (maximum intensity of rain in 30 minutes expressed in cm per hour). This index corresponds to the potential erosion risk in a given region where sheet erosion appears on a bare plot with a 9% slope.

- **K**, Soil erodibility, depends on the organic matter and texture of the soil, its permeability and profile structure. It varies from 70/100 for the most fragile soil to 1/100 for the most stable soil. It is measured on bare reference plots 22.2 m long on 9% slopes, tilled in the direction of the slope and having received no organic matter for three years.

- **S**, slope steepness and length depends on both the length and gradient of the slope. It varies from 0.1 to 5 in the most frequent farming contexts in West Africa, and may reach 20 in mountainous areas (See table 1 & Fig. 1 below).

- **C**, is the cover and management factor, is a simple relation between erosion on bare soil and erosion observed under a cropping system. The C factor combines plant cover, its production level and the associated cropping techniques. It varies from 1 on bare soil to 1/1000 under forest, 1/100 under grasslands and cover plants, and 1 to 9/10 under root and tuber crops.

- **P**, support practice factor, takes account of specific erosion control practices such as contour tilling or mounding, or contour ridging. It varies from 1 on bare soil with no erosion control to about 1/10 with tied ridging on a gentle slope.
SEBAL estimates the spatial variation of the hydrometeorological parameters using satellite spectral measurements and (limited) ground-based meteorological data (Farah and Bastiaanssen, 2001). These parameters of the Soil–Vegetation–Atmosphere system are used to assess the surface energy balance terms. The latent heat flux $\lambda E$ is computed as the residue of the energy balance equation:

$$\lambda E = R_n - G_0 - H$$  
(Eq. 1.2)

Where $R_n$ (w. m$^{-2}$) is the net radiation over the surface, $G_0$ (w. m$^{-2}$) is the soil heat flux, $H$ (w. m$^2$) is the sensible heat flux and $\lambda E$ (w. m$^{-2}$) is the latent heat flux.

The SEBAL procedure involves the following main requirements and assumptions, viz. (Mohamed et al. 2004):

I. The presence of a dry pixel (zero evaporation) and a wet pixel (zero sensible heat) in the same image for scaling of the sensible heat flux.

II. The wind speed at the blending height (100 m) is assumed constant over the whole area of interest.

III. The temperature difference, $\delta T_a$ is a linear function of the surface temperature $T_s$.

The SEBAL procedure consists of more than m25 steps, which can be re-grouped into seven main steps appropriate for automatic processing, as given in Fig 4-3 (modified after Mohamed et al (2004)). The steps are:

1. Pre-processing of the satellite image
2. Computation of the SVAT parameters (Soil–Vegetation–Atmosphere Transfer Parameters)
3. Computation of net radiation $R_n$ and soil heat flux $G_0$
4. Computation of sensible heat flux, $H$ by iteration procedure to describe buoyancy effects on the aerodynamic resistance of the land surface ($r_{ah}$)
5. Computation of instantaneous latent heat flux, $\lambda E$ and instantaneous evaporative fraction, $\Lambda$
6. Computation of daily ETa from instantaneous evaporative fraction, $\Lambda$ and the daily net radiation

Estimation of monthly evaporation maps from the daily evaporation maps and aggregation of monthly ET to produce annual ET maps.
LITERATURE REVIEW

Soil erosion mechanisms and processes

Soil erosion by water starts when raindrops strike the bare soil surfaces. It involves the detachment and transportation of soil particles (Tripathi and Singh, 1993; Barthes et al., 2001) followed by deposition (Barthes et al., 2001). Therefore, the fundamental erosion processes are detachment by raindrop impact and flow, displacement by raindrop impact, transport and deposition by flow (Foster, 1990). Detachment processes remove soil particles from the soil mass producing sediment while transport processes move sediment from its point of origin.

Impact of Soil Erosion by Water

The problem of soil erosion has been a problem ever since land was first cultivated. The consequence of soil erosion occurs both on-site and off-site. In Ethiopia, the on-site impacts of soil erosion are most frequently studied, typically by estimating the productivity losses as economic cost of soil erosion. Less well known and documented are the off-site costs of soil erosion (Eyasu, 2003). On site effects are those that happens at the site where erosion occurs. Such effect is particularly important on agricultural land where the distribution of soil within a field, the loss of soil from a field, the breakdown of soil structure, the decline in organic matter and nutrient, a reduction of cultivable soil depth and a decline in soil fertility happens. Erosion also reduces available soil moisture, resulting in more drought prone conditions. The net effect is loss of productivity which at first restrict what can be grown and results in increased expenditure on...
fertilizer to maintain yields, but latter threatens food production and leads ultimately to land abandonments (Santra, 2001). In Ethiopia, the EHRS estimated an on-site productivity loss of 60 million Ethiopian Birr in 1986 due to soil erosion (FAO, 1986; Sutcliff, 1993). An off-site effect are those which occurs when runoff and sediments from one field, watershed or waterway enters to another. These downstream effects reduce the capacity of river and drainage ditches, enhance the hazard of flooding, blocking irrigation canals and shorten the design life of reservoirs. Many hydroelectric and irrigation projects have been ruined as a result of erosion (Santra, 2001).

**Soil Erosion Models**

A wide variety of models are available for assessing soil erosion risk. Erosion models can be classified in a number of ways. One may make a subdivision based on the time scale for which a model can be used: some models are designed to predict long-term annual soil losses, while others predict single storm losses (event-based). Field studies for prediction and assessment of soil erosion are expensive, time-consuming and need to be collected over many years. Though providing detailed understanding of the erosion processes, field studies have limitations because of complexity of interactions and the difficulty of generalizing from the results. Soil erosion models can simulate erosion processes in the watershed and may be able to take into account many of the complex interactions that affect rates of erosion. The choice for a particular model largely depends on the purpose for which it is intended and the available data, time and money (Lal, 1998). Erosion models allow users to ascertain temporal trends, examine spatial variations, identify critical processes and explore the possible impacts of remedial measures and the relative effectiveness of implementations strategies for erosion and sedimentation controls (Baigorria and Romero, 2007). Modeling in soil erosion is the process of mathematically describing soil particle detachment, transport and deposition on land surfaces. The objective of soil erosion models is either predictability or explanatory (Petter, 1992). In general, the models fall into three main categories: conceptual, empirical and physically based models.

**Empirical Models**

These are a simplified representation of natural processes based on empirical observations. They are based on observations of the environment and thus, are often of statistical relevance. Empirical models are frequently utilized for modeling complex processes and, in the context of erosion and soil erosion, particularly useful for identifying the sources of sediments (Merritt et al., 2003). Table 1 below lists some common empirical models and their sources.

### Table 1. Empirical Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Musgrave Equation</td>
<td>Musgrave (1947)</td>
</tr>
<tr>
<td>2 Delivery Ratio Method</td>
<td>Dendy and Boltan (1976)</td>
</tr>
<tr>
<td>3 Universal Soil Loss Equation (USLE)</td>
<td>Wischmeier and Smith (1978)</td>
</tr>
<tr>
<td>5 Soil Loss Estimation Model for South Africa (SLEMSA)</td>
<td>Elwell (1978)</td>
</tr>
<tr>
<td>6 Dendy-Boltan Method Flaxman Method</td>
<td>Flaxman (1972)</td>
</tr>
<tr>
<td>7 Pacific Southwest Interagency Committee (PSIAC) Method</td>
<td>Pacific Southwest Interagency Committee (1968)</td>
</tr>
</tbody>
</table>
Physically based models

These represent natural processes by describing each individual physical process of the system and combining them into a complex model. Physical equations hereby describe natural processes, such as stream flow or sediment transport (Merritt et al., 2003). This complex approach requires high resolution spatial and temporal input data. Physically based models are therefore often developed for specific applications, and are typically not intended for universal utilization. Physically based models (Tab. 2) are able to explain the spatial variability of most important land surface characteristics such as topography, slope, aspect, vegetation, soil, as well as climate parameters including precipitation, temperature and evaporation.

<table>
<thead>
<tr>
<th>Models</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Erosion Kinematic Wave Models</td>
<td>Hjelmfelt, Piest and Saxton (1975)</td>
</tr>
<tr>
<td>2 Quasi-Steady State</td>
<td>Foster, Meyer and Onstad (1977)</td>
</tr>
<tr>
<td>3 Areal Non-point Source Watershed Environment Response Simulation (ANSWERS)</td>
<td>Beasley et al. (1980)</td>
</tr>
<tr>
<td>5 Water Erosion Prediction Project (WEPP)</td>
<td>Lafren et al. (1991)</td>
</tr>
<tr>
<td>6 European Soil Erosion Model (EUROSEM)</td>
<td>Morgan (1998)</td>
</tr>
</tbody>
</table>

Conceptual Models

These Models play an intermediary role between empirical and physical based models. Whilst they tend to be aggregated, they still reflect the hypotheses about the process governing system behavior. This is the main feature that distinguishes conceptual model from empirical models (Beck, 1987). According to Renschler (1996), conceptual models tend to include a general description of catchment processes, without including the specific details of process interactions, which would require detailed catchment information. This allows these models to provide an indication of the qualitative and quantitative effects of land use changes, without requiring large amount of spatially and temporally distributed input data (Merritt et al. 2003).

<table>
<thead>
<tr>
<th>Model</th>
<th>Source</th>
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</thead>
<tbody>
<tr>
<td>1 Sediment Concentration Graph</td>
<td></td>
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<tr>
<td>2 Renard-Laursen Model</td>
<td></td>
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<tr>
<td>3 Unit Sediment Graph</td>
<td></td>
</tr>
<tr>
<td>4 Instantaneous Unit Sediment Graph</td>
<td></td>
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<tr>
<td>5 Sediment Routing Model</td>
<td></td>
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<tr>
<td>6 Discrete Dynamic Models</td>
<td></td>
</tr>
<tr>
<td>7 Agricultural Catchment Research Unit (ACRU)</td>
<td></td>
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<tr>
<td>8 Hydrologic Simulation Programme, Fortran</td>
<td></td>
</tr>
</tbody>
</table>

Surface Energy Balance Algorithm for Land (SEBAL)

Different methods have been developed to estimate evapotranspiration process from remote sensing data, among them energy balance method using surface energy balance algorithm for land (SEBAL) were used in Ethiopian rift system and adjacent high lands to estimate actual evapotranspiration that spatial and temporal variation derived from satellite based measurement meanwhile comparison were also made between the results from different method and it was found that an acceptable
deviation (Tenalem, 2003). Following Bastiaanssen et al, 2005, SEBAL model was validated over different environments. One of the most important developments in the field of remote sensing hydrology is the determination of distributed aerial actual evapotranspiration from spectral satellite data, based on the energy balance approach developed with researchers.

Theoretical Background for Evapotranspiration

Atmospheric processes in the lower boundary layer are strongly modulated by energy and mass fluxes from and to the underlying surface. Surplus energy at the surface is absorbed and converted to heat. This energy is used to heat air, heat the ground and evaporate water. Evaporation is the process whereby liquid water is converted to water vapor and removed from the evaporating surface. Water evaporates from a variety of surfaces, such as lakes, rivers, pavements, soils and wet vegetation. Energy is required to change the state of the molecules of water from liquid to vapor. Direct solar radiation and, to a lesser extent, the ambient temperature of the air provide this energy. The driving force to remove water vapor from the evaporating surface is the difference between the water vapor pressure at the evaporating surface and that of the surrounding atmosphere. Transpiration consists of the vaporization of liquid water contained in plant tissues and the vapour removal to the atmosphere. The water, together with some nutrients, is taken up by the roots and transported through the plant. The vaporization occurs within the leaf, namely in the intercellular spaces, and the vapour exchange with the atmosphere is controlled by the stomatal aperture. Nearly all water taken up is lost by transpiration and only a tiny fraction is used within the plant.

The combination of two separate processes whereby water is lost on the one hand from the soil surface by evaporation and on the other hand from the crop by transpiration is referred to as evapotranspiration or ET for short (Allen, 1998). Evaporation and transpiration occur simultaneously and there is no easy way of distinguishing between the two processes. Both soil evaporation and plant transpiration represent evaporative processes; the difference between the two rests in the path by which water moves from the soil to the atmosphere. ET data are usually presented as a depth of water loss over particular time period in a manner similar to precipitation. Common units of ET are inches/day or millimeters/day. The rate of ET for a given environment is a function of four critical factors (Brown, 2000). The first and most critical factor is the soil moisture. Evaporation (ET) simply cannot take place if there is no water in the soil. However, if adequate soil moisture is available, three additional factors, plant type, stage of plant development and weather (solar radiation, wind speed, humidity and temperature), affect ET rate.

Methods of Estimating ET

There are various methods for estimating evapotranspiration in a given drainage basin. They are classified as conventional methods, direct measurements, hydrologic modeling and remote sensing methods.

Conventional methods

Various methods for estimating ET have been proposed, but there is none, which is acceptable under all circumstances. Basically there are three major approaches: theoretical methods, physically based methods and empirical methods. Theoretical and empirical methods are based on either the physics of vapor transfer or of heat energy whereas the physically based methods estimate ET as a residual term of the soil-water balance approach. Only the Penman-Monteith modified equation is used for validation purpose in this study. For estimating potential evapotranspiration Penman-Monteith modified equation is used in the evaluation of ETo rate. In this method only the fourth factor- weather- is allowed to vary in the ETo calculation. One can therefore consider ETo a measure of atmospheric (or meteorological) demand for water. Any difference in ETo between two days is caused by changes in the weather, not changes in the grass reference or changes in soil
moisture. However, to reduce ETo to ETa adjustment factors such as crop coefficient and soil moisture reduction term should be included.

**Direct (in-situ) measurements**

Most field measurements are indirect and based on equations and assumptions. Others like lysimeters and evaporation pans measure ET and evaporation directly without further assumptions. The Bowen ratio (the ratio of sensible heat flux to latent heat flux) and Eddy correlation are the other in-situ measurements of ET.

**Hydrologic modeling**

Hydrological models are advanced tools that are better suited to estimate ET and related hydrological processes at the regional scale. Their advantage is that the impact of transferring water between competing sectors can be simulated and the effects of man-induced scenarios on regional hydrology can be studied.

**Remote sensing techniques**

Remote sensors measure electromagnetic (EM) radiation that has interacted with the Earth’s surface. All remote sensing systems designed to monitor the Earth’s surface rely on energy that is either diffusely reflected by or emitted from surface features (Randall, 2006). Remote sensing observations in the optical wave bands (visible to thermal-IR wavelengths) combined with ancillary weather data have been used in evaluating ET over a range of temporal and spatial scales (James B., and Randolph H., 2011). Remote sensing in the optical regions has been shown to provide information useful in estimating soil-vegetation-atmosphere transfer (SVAT) parameters such as surface temperature, albedo, incident solar radiation and vegetation biomass. Remote sensing is an indirect ET measurement technique; it involves using a set of equations in a strict hierarchical sequence to convert the spectral radiances measured by satellites or airplanes into estimates of actual ET (Ibid).

**RESULT AND DISCUSSION**

**Estimation of RUSLE Parameter**

**Rainfall Erosivity (R) factor:** is the rainfall – runoff erosivity factor which is defined as the mean annual sum of individual storm erosion index values, $E_{I_{30}}$, where $E$ is the total storm kinetic energy and $I_{30}$ is the maximum rainfall intensity in 30 minutes. The average annual rainfall data of the study area for the period of 20 years (1992-2011) was obtained from the Metrological Agency (EMA). The numerical value used for R in RUSLE must quantify the effect of raindrop impact and must also reflect the amount and rate of runoff likely to be associated with the rain.

$$R = E_{I_{30}}$$  

\( \text{(Eq. 3.1)} \)

Where,

- $R$ = Rainfall erosivity factor in metric unit
- $E$ = Rainfall Kinetic Energy in Jm-2
- $I_{30}$ = 30 minutes rainfall intensity, mmhr-1

However, rainfall kinetic energy and intensity data are not available in most cases. Therefore, the erosivity factor $R$ that was adapted by Hurni (1985) for Ethiopian conditions based on the easily available mean annual rainfall $P$ was used in this study.

$$R = -8.12 + 0.562P$$  

\( \text{(Eq. 3.2)} \)

Whereas, Kaltenrieder-supervised by Hurni, (2007) $R = 0.36P + 47.6$  

\( \text{(Eq. 3.3)} \)

Where,

- $R$ = Rainfall Erosivity

$$R = -8.12 + 0.562P$$  

\( \text{(Eq. 3.2)} \)

Whereas, Kaltenrieder-supervised by Hurni, (2007) $R = 0.36P + 47.6$  

\( \text{(Eq. 3.3)} \)
Table 4: Comparison of Hurni (1985) and Kaltenriede (2007) R-factor estimations

<table>
<thead>
<tr>
<th>No</th>
<th>Station</th>
<th>Annual RF</th>
<th>Average annual RF</th>
<th>Hurni R-Factor</th>
<th>Kaltenrieder R-factor</th>
<th>R_Factor Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Hawassa</td>
<td>19370.2</td>
<td>968.51</td>
<td>10839.19</td>
<td>7020.872</td>
<td>3818.32</td>
</tr>
<tr>
<td>2</td>
<td>Shashemene</td>
<td>15201.7</td>
<td>760.1</td>
<td>8504.832</td>
<td>5520.212</td>
<td>2984.62</td>
</tr>
<tr>
<td>3</td>
<td>Wondo Genet</td>
<td>22697.4</td>
<td>1134.87</td>
<td>12702.42</td>
<td>8218.664</td>
<td>4483.76</td>
</tr>
<tr>
<td>4</td>
<td>Yirba Dunacho</td>
<td>21478.74</td>
<td>1073.937</td>
<td>12019.97</td>
<td>7779.946</td>
<td>4240.028</td>
</tr>
<tr>
<td>5</td>
<td>Haisawita</td>
<td>20017.8</td>
<td>1000.89</td>
<td>11201.85</td>
<td>7254.008</td>
<td>3947.84</td>
</tr>
<tr>
<td>6</td>
<td>Leku</td>
<td>10717.1</td>
<td>1071.709</td>
<td>5993.45</td>
<td>3905.752</td>
<td>2087.698</td>
</tr>
<tr>
<td>7</td>
<td>Tula</td>
<td>16620.3</td>
<td>1108.2</td>
<td>9299.248</td>
<td>6030.908</td>
<td>3268.34</td>
</tr>
</tbody>
</table>

The rainfall pattern of the study area is such that rainfall increases southward with the north west parts receiving an average of 442 mm of rainfall annually while the southern parts experience an average of 638 mm annually. These values are inputted into equation 3.1 to derived R factor for the study area (see Table 4).

Soil Erodibility (K) factor:
Soil erodibility (K) represents the susceptibility of soil or surface material to erosion, transportability of the sediment, and the amount and rate of runoff given a particular rainfall input, as measured under a standard condition. The standard condition of bare soil, recently tilled up-and-down with slope with no conservation practices and on a slope of 5° and 22 m length (Morgan, 1994). K-values reflect the rate of soil loss per rainfall-runoff erosivity (R) index. Soil erodibility factors (K) are best obtained from direct measurements on natural runoff plots than rainfall (erosivity) simulation. Most studies widely used and frequently cited relationship is the soil erodibility nomograph. The nomograph comprises five soil and soil profile parameters: percent modified silt; percent modified sand; percent organic matter; classes for structure and permeability. The K value can be calculated with the use of soil nomograph for soils where the silt fraction does not exceed 70%, derived by Wischmeier and Smith (1978), when all the values of K influencing factors are available.

Though in reality, especially at local level, these data are often difficult to find and may not be suitable for extrapolation from one area to another. The erodibility of soils as defined by Hurni
(1985), in the adaptation of RUSLE to Ethiopian considers the soil color to have relation with erodibility even though others consider soil texture and structure so as to determine the value of soil erodibility factor. Therefore, the soil erodibility (K) factor for the study area was estimated as a qualitative index that was adapted to Ethiopia by Hurni (1985) based on the color of the soil. The Spatial data obtained from Ministry of Water and Energy shows that, in Lake Hawassa catchment, four major soil types were identified namely Andosols, Cambisols, Leptisols, and Luvisols. The K-value for the soil types of Lake Hawassa catchment are presented in Table 5.

<table>
<thead>
<tr>
<th>No</th>
<th>Type of the Soil</th>
<th>K-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Andosols</td>
<td>0.2</td>
</tr>
<tr>
<td>2</td>
<td>Cambisols</td>
<td>0.13</td>
</tr>
<tr>
<td>3</td>
<td>Leptisols</td>
<td>0.22</td>
</tr>
<tr>
<td>4</td>
<td>Luvisols</td>
<td>0.11</td>
</tr>
</tbody>
</table>

As indicated in the figure below, the range of values obtained form the result varies from 0 to 0.22. The higher the value indicates more susceptibility while the lower the value indicates less susceptibility to erosion.

![Figure 4: Erodibility Value (K Factor Value) soil Map](image)

**Slope Steepness and Length (LS-Factor)**

The effect of topography on soil erosion is accounted for by the LS factor in RUSLE, which combines the effects of a slope length factor, L, and a slope steepness factor, S. In general, as slope length (L) increases, total soil erosion and soil erosion per unit area increase due to the progressive accumulation of runoff in the down slope direction. The slope steepness (S) is defined as the ratio of soil loss from the field slope gradient to that from a 9% slope under identical conditions. In general, as the slope steepness (S) increases, the velocity and erosivity of runoff increase. The RUSLE slope steepness equation is the following (McCool et al., 1987; McCool et al., 1997; Renard et al., 1997):

\[ S = 16.8 \times \sin \theta - 0.5 \quad \text{for} \ \theta \geq 9\% \ (5 \text{ degree}) \text{ slope angle} \]  
\[ S = 10.8 \times \sin \theta + 0.03 \quad \text{for} \ \theta < 9\% \ (5 \text{ degree}) \text{ slope angle} \]

In this study, the slope gradient (S-Factor) was determined from digital elevation model (DEM) of 30 meter resolution. The slope gradient determined for the study area is used for generating the LS factor as determined by SCRP for Ethiopian condition.
Slope length is defined as the distance from the point of origin of overland flow to the point where either the slope gradient decreases enough that deposition begins or to where the flow connects to a river system (Wischmeier and Smith, 1978). RUSLE is least sensitive to changes in slope length in the study site as compared to steepness (S-factor). Moreover, the result shows that the effect of slope length was modified by slope gradient. The RUSLE algorism for calculating the L factor serves to reference the erosion estimate for the horizontally projected slope length (HPSL) to the experimentally measured erosion for a 22.1m (72.6ft) reference slope length (RSL), to the power of a designed slope length exponent (m) value (Renald, et al, 1997; Van Remortel, et al., 2001; Tigneh, 2009).

L-factor is calculated by the following equations:

\[ L = \left( \frac{\lambda}{22.1\text{m}} \right)^{m} \]  \hspace{1cm} \text{ (Eq.3.5)}

Where, \( \lambda \) = horizontal slope length in meter

\[ m = \frac{\varepsilon}{(1+\varepsilon)} \]  \hspace{1cm} \text{ (Eq.3.6)}

\( \varepsilon \) is calculated for conditions when the soil is moderately susceptible to both rill and inter-rill erosion using the following equation:

\[ \varepsilon = \frac{\sin \theta}{0.86 \times [3 \times (\sin \theta)^{0.8} + 0.56]} \]  \hspace{1cm} \text{ (Eq.3.7)}

Where, \( \theta \) = the slope angle
The output $LS$ factor map for Lake Hawassa catchment (Figure 6) confirms that the hilly areas of the watershed have the highest values. A comparison of the $LS$ factor map with a map displaying slope steepness as percent rise (Figure 7) indicates that the $LS$ factor is sensitive to steep slopes and rises in value accordingly. The highest $LS$ factor value is 135.34, with the mean value for the entire watershed at approximately 9.51 and a standard deviation of 11.57 (Fig. 6).

Cover Management (C-Factor)
The C-factor is used within the RUSLE to reflect the effect of cropping and management practices on erosion rates, and is the factor used most often to compare the relative impacts of management options on conservation plans (USDA-ARS, 2001 cited in Israel, 2011). RUSLE uses a sub factor method to compute soil loss ratios (SLR), which are the ratios of soil loss at any given time in the cover management sequence to soil loss from the standard condition. The sub factors used to compute a soil loss ratio value are prior land use, canopy cover, surface cover, surface roughness, and soil moisture. In order to determine C-factor, Lake Hawassa catchment was classified into six land use classes generated from Landsat ETM+ images of 2012, Path 165 and Row 55 by applying maximum likelihood of supervised classification and information collected from field, SZARDB, as well studies on the catchments were used for the estimation of C-factor. Thus, based on the above information, the estimation process of the appropriate C value of the catchment area was mentioned in detail in the table below and Fig. 6 below.
Table 6. Estimated Cover Management (C-factor) of Lake Hawassa catchment

<table>
<thead>
<tr>
<th>No</th>
<th>Land Cover type</th>
<th>Cover Management Factor (C-Factor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Water and Swamp area</td>
<td>0.00 – 0.001</td>
</tr>
<tr>
<td>1</td>
<td>Forest &amp; Built–up area</td>
<td>0.01</td>
</tr>
<tr>
<td>2</td>
<td>Scrub Land</td>
<td>0.04</td>
</tr>
<tr>
<td>3</td>
<td>Mixed farm and Grass land</td>
<td>0.05</td>
</tr>
<tr>
<td>4</td>
<td>Mechanized Farm/ Conservation Cultivation area with</td>
<td>0.1</td>
</tr>
<tr>
<td>5</td>
<td>Moderately Cultivated land</td>
<td>0.15</td>
</tr>
<tr>
<td>6</td>
<td>Degraded land and intensively cultivated land</td>
<td>0.25</td>
</tr>
</tbody>
</table>

Support Practice (P-factor)

The support practice factor (P) in RUSLE is the ratio of soil loss with a specific support practice to the corresponding loss with upslope and down slope tillage. These practices principally affect erosion by modifying the flow pattern, grade, or direction of surface runoff and by reducing the amount and rate of runoff (Renard and Foster, 1983). This factor is a ratio between erosion occurring in a field treated with conservation measures and another reference plot without treatment. Therefore, erosion control practice factor is based on the soil conservation practices operated in a particular area. The support practices considered in the recent years in Lake Hawassa catchment for cultivated land includes contour plugging, strip cropping, bunds, fanyaju, drainage systems and others. On non-cultivated land support practices considered includes hillside terraces, check dams and other practices that result in storage of moisture and reduction of runoff.

Hurni (1985) gives parameters for different land management practices on cultivated land. Studies conducted by Hurni have found P values for various support practices and land use cover. Hurni used P value range between zero and one. This means the P value indicates reduced erosion potential, with a range between 0 to 1 because of farming practices or soil and water conservation measures. With no erosion control practice, P is equal to one. The farming practices increasing erosion instead of reducing are ploughing in the direction of up and down slope with equivalent P value of one, which is the worst case scenario. The data related to management or support practices situations of the study watershed were collected during the field work through different techniques. The techniques deployed includes interview of the local community, site observation by transect walk and secondary information collected from wereda and local agricultural offices. Therefore, values for this factor were assigned considering local management practices and based on values
Management factors were obtained by assessing the different supporting practices in the study watershed and it was taken the weighted value for similar land use types. The data were analyzed following the interpolation of the values of USLE in Hurni (1985) and Tigneh (2009). The p value assigned for different land use types presented in Table 7 below.

<table>
<thead>
<tr>
<th>No</th>
<th>Land Use Type</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dense intercropping</td>
<td>0.76</td>
</tr>
<tr>
<td>2</td>
<td>Intercropping/strip cropping</td>
<td>0.80</td>
</tr>
<tr>
<td>3</td>
<td>Ploughing on contour</td>
<td>0.90</td>
</tr>
</tbody>
</table>

Table 7. Estimated P- Values and their land use type

Figure 9: Support Practice (P) map of Lake Hawassa watershed

Determination of Potential Annual Soil Loss

The estimated annual soil loss was computed by multiplying the grid layers of the factors described above in the GIS environment using Arc Map 10. The result of the analysis showed that the amount of soil loss in the Lake Hawassa watershed is about 207815 ton per year and it ranges from 0.49 to 125 t/ha/yr with an average value of 5.35 t/ha/yr. Based on the model, the study area was classified into eight erosion classes ranging from 0.49 to 125.0 ton/ha/yr (Fig. 19). The area within erosion rates ranged from 30.6 to 125 ton/ha/yr are considered to be within the very severe range which covers 1.67 percent of the total area of the catchment. The severe eroded areas with erosion rates range between 15.6 and 30.5 ton/ha/yr and covers 6.17 percent of the study area. The areas within the moderate, low and very low class of erosion rates were between 2.0 and 15.5; 0.70 and 1.9 and < 0.69 ton/ha/yr, respectively and covers almost 92.19 percent of the catchment area (see Table 8 below).

Table 8. Area Coverage and Proportion of Soil Erosion Risk Classes

<table>
<thead>
<tr>
<th>No.</th>
<th>Soil Erosion Risk Class</th>
<th>Numerical Range of Soil Loss Potential (ton/ha/yr)</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Very low</td>
<td>0.0 – 0.69</td>
<td>518.93</td>
</tr>
<tr>
<td>2</td>
<td>Low</td>
<td>0.70 – 1.9</td>
<td>113.59</td>
</tr>
<tr>
<td>3</td>
<td>Moderate</td>
<td>2.0 – 15.5</td>
<td>686.4</td>
</tr>
<tr>
<td>4</td>
<td>Severe</td>
<td>15.6 – 30.5</td>
<td>88.15</td>
</tr>
<tr>
<td>5</td>
<td>Very severe</td>
<td>30.6 – 125.0</td>
<td>23.50</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>1430.57</td>
</tr>
</tbody>
</table>

The result indicates that the RUSLE is least sensitive to changes in slope length in the study area as compared to other factors evaluated. Moreover, the effect of slope length was modified by slope gradient. A 20% decrease in slope length resulted in a maximum of 10.56% decrease in soil loss for the study area having slope gradients greater than 5%. The highest reduction in soil loss in response to 20% change in the input variables was due to slope gradient and percent cover.
For the majority of the sites, reducing the slope gradient by 20% reduced soil loss by more than 25%. The sensitivity to slope gradient is more pronounced at higher slope gradients. Moreover, the effect of the changes in surface cover factor also brought about the largest reduction in soil loss in the study area (see fig.19 below).

It is evident from in depth analysis of all factors that soil loss factor seems to have significant effect on the estimated total soil loss in the area. This is because the areas mostly affected by erosion within the study area coincided with the areas where soil loss factor is highest.

**Figure 10: The spatial distribution of Mean annual soil loss in Lake Hawassa Catchment**

**Determination of Lake ET Rate**

An accurate estimation of evapotranspiration is very useful for an appropriate water management. SEBAL model has been designed to calculate the energy partitioning at the regional scale with minimum ground data. Atmospheric variables (air temperature and wind speed) are estimated from remote sensing data by considering the spatial variability induced by hydrological and energetic contrasts. The actual evapotranspiration map was prepared by encompassing the lake boundary in the catchment. This task considering thousands of pixels used, each 1sq. km, to analyze the actual evaporation rate. The result shows that, the annual actual evaporation lies between 1613 and 1661 mm. As one can see the result from the figure below, the pixel values near the shore illustrate the highest evaporation rate, which is in accordance with the shallow depth of the lake body. Besides, relatively low evaporation rate were found at the majority part of the lake where the depth is much higher than the surroundings and intermediate result was observed on limited location at northern, southern, eastern and western corner of the lake body only due to the presence of long grass grown (figure 20) and tectonically controlled by faulting as observed from geological map of Ethiopia in figure 7.

**Figure 11: Annual evaporation map (mm/yr).**
The spatial variability of evaporation over the lake body has a significant implication on the result of soil loses load from land feature. The lake area obtained by digitizing the lake perimeter from the image and that calculated during the spatial matching process for the soil loss map shows, there is a direct interrelationship between sediment deposition and lake evaporation. Both the soil loss and the evapotranspiration map pointed out that the siltation effect of the sediments near the shoreline coincides with high rate of evaporation. The SEBAL result compared to the RUSEL map,(see figure 21) proved that the higher calculated lake evaporation rate implies that there is a problem of siltation in the area. Particularly North West, west and south west part of catchment have contributed much higher siltation on adjacent location of Lake Periphery. While, the eastern part of the lake has minor contribution to soil loss load (value less than 0.49 Ton/ha/yr). This implies that low angle slope topography and the vegetation cover decreases the soil loss problem in the area. Relatively lower evaporation rate (1661 mm) over the lake indicates the higher depth of the lake where to be siltation problem somehow less affected than the outer boundary of the lake.

![Figure 12: The Sensitivity map between the annual soil loss and ET of the lake](image)

As shown in the above figure (fig. 21), the highest soil removed from the catchment is from cultivated fields and gullies found in Hawassa Zuria, Shashemene and North part of Boricha and Shebedino weredas is re-deposited within the lake shore. Here, the influences of soil erosion process on lake sedimentation contribute changes in the rate of evaporation over the lake surface.

CONCLUSION AND RECOMMENDATION

Conclusion

Quantifying soil loss based on erosion plots possesses many limitations in terms of cost, representativeness, and reliability of the resulting data. They cannot provide spatial distribution of soil erosion loss due to the constraint of limited samples in complex GIS environments. Establishing of data bases through conventional methods is time consuming, tedious and difficult to handle. This study attempts to utilize a quantitative assessment of soil loss and sediment yield on grid basis using the well-known RUSLE model with a view to identify the critical erosion prone zone for conservation planning in the study catchment. All the maps of R, K, LS, C and P were integrated to generate erosion and sediment yield risk map to find out spatial distribution of soil loss and sediment yield within GIS environment in the study area.

The potential rate of soil loss from eight classes, as very severe, severe, moderate, low, and very low, and ranged from 0.49 to125 t/ha/yr. However, the mean annual soil loss estimated for the study area was put at 5.35 t/ha/yr. Moreover, the sensitivity analysis of the RUSLE model to the input variables revealed that, this model was highly sensitive to slope gradient and cover but less sensitive to slope length, and rainfall erosivity. In addition to the RUSLE parameter, Aerial pattern of actual annual evaporation can be assessed by SEBAL remote sensing techniques using restricted input data like solar radiation. This model should be geometrically and radiometrically corrected.
imageries because of their sensitivity to most data that are used for evaporation estimation, i.e. to the effect of topography or shadow effect of topography. Possible errors also calibrated using GPS field survey data and through understanding of the lake system at current condition. The Evaporation information over the lake has spatial variability which helps us to conclude the interpretation of soil and water interaction in the catchment. While most studies estimate the lake evaporation from the water body as homogeneous unit without attempting to characterize the spatial variability of the evaporation rate. This situation can lead to estimate higher or lesser value and causes difference with SEBAL output. Finally, the SEBAL analysis showed that lake shore has higher evaporation rate than the center of the lake. This is because the area contains silts which are received from the high elevated areas of the catchment through erosional processes.

RECOMMENDATIONS

On the whole, it was noted that the study area marked by problems that seem have no outright and immediate solution. However, on the basis of the findings and conclusions drawn, the following suggestions may be considered both by the concerned governmental and Non-governmental organizations and the local communities to see the system functioning to the expected.

✓ Adopt the poverty reduction policies/strategies that are conservation-friendly

To reduce the pressures on natural resources and habitats, alternative strategies capable of reducing the exploitation of natural resources around Lake Hawassa watershed should be adopted. Since land shortage in the watershed areas is ascribed to poor farming practices, more equitable and efficient use of the land already under cultivation should be adopted as one of the strategies. The strategy should also involve activities aiming at supporting agricultural sector – e.g. subsidizing inputs, providing credits and access to markets.

✓ Involve local communities in the conservation and management activities and provides them adequate conservation incentives.

For decades, conservation has been pursued against the interests of local people and, therefore, resulted into loss of trust, hostility and local resentment towards conservation of natural resources. Genuine and effective participation should involve empowering local people to take part in designing, planning, decision making, implementation, benefit sharing, monitoring and evaluation. The participatory process is essential in reaching consensus about the appropriate uses of resources without degrading them. Thus, new mechanisms for benefit sharing should be developed by the government to ensure that the benefits are evenly distributed and adequate enough to offset the conservation-induced costs and can outweigh the returns generated by environmentally destructive land uses.

✓ Develop a Legal Framework which is vital for effective conservation activity

Until recently, there has been no specific policy or effort made to protect and manage the water resources between two decentralized regions. More emphasis has been given on water supply in towns and rural areas. There is no comprehensive or detailed law on water resource protection and management between two regions. Therefore, a key step in alleviating such problems it requires careful control and this can be effected through legislation, as the major objective of water law to establish a framework for the protection and control of water resources in the country as a whole and the Lake Hawassa watershed in particular.

✓ Call for integrated and appropriate mechanisms to protect water resources from pollution and depletion so as to maintain sustainable development and utilization.
Effective water resource protection and management activity needs the participation and/or contribution of different stakeholders to maintain its sustainability and use while fulfilling the needs of the present generation and conserving the resources for future generation as well. Thus, there must be a coalition between different sectors who are working directly or indirectly on water resource conservation and management to protect the water resource, in particular, and environment as a whole from pollution and depletion so as to maintain sustainable development and utilization through scientific and technologically recognized ways.

✓ Further studies on the geological, hydrological, environmental and social issues should be made to bring harmonized and wide-ranging solutions for the problems facing the Lake Hawassa watershed.

References


Modal Shift towards Urban Public Transport Bajaj Taxi in Hawassa: Evaluating the Role and Factors that Impede or Facilitate

Asfaw Mohamed
(Department of Geography and Environmental Studies)

ABSTRACT

This study analyzes the role and factors of Bajaj taxi transport in Hawassa city administration. Results were shown Bajaj taxi transport role in terms of drivers and passengers’ side. Bajaj taxi as any other intermediate public transport system is playing an important role by giving door to door short distance journey of majorities of the city inhabitants particularly low income group of the society. It is also improves the life of large number of young people by making use of as employment opportunities. It also helps as a substitute of other type of urban public transport. On the drivers’ side as they satisfy different parameters of the qualities of their life they have some compliant on traffic flow control system and tariff fixing mechanisms, and they are also dissatisfy on their own expense and saving behavior. On the passengers’ side as they have higher satisfaction most of the public transport system measuring parameters, they have also some kind of inconvenience on crime and theft control mechanisms, and safety and security

Keywords: Bajaj taxi, Modal shift, Intermediate Public Transport

INTRODUCTION

The rapid growth of an urban system is one of the important socio-economic characteristics of these days Ethiopia, although the huge gap of the urban basic service supply and demand persists in all aspects of the system. The regional capital Hawassa, one of the fastest growing cities of the country is also experiencing similar problems. Despite a major program of road building, the transport service deficiency and traffic congestion is a serious problem, as vehicles ownership has increased dramatically. The expansion of the city is somehow based on an urban sprawl type of land-use. The urban sprawl is the problem of informal settlement or squatting, in which people tends to live in very densely populated condition but unplanned areas, which are underserved by urban transport systems.

In the case of public transport supply has wide gap with the demand. As a result during the morning peak period large amount all waiting passengers on the towns’ routes are left behind but this is not only caused by the supply side but also the result of improper management of existing services. After the promulgation of the government urban reform strategy of 2003, the Hawassa city and other regional towns alter momentum of their growth. The socio-economic back-up of these towns resulted in a considerable growth in the demand for transport of both persons and goods. As the city continue to expand, people tend to reside outside the city core and the number of commuters and, motorized and non motorized vehicles are in the rise, this create congestion and the problem of journey to work. This condition also contributes large for the impediment of transport service provision.

The transport in the city and other regional towns of Ethiopia was based on hors driven carts, bicycle and motor bikes; besides, Lada Taxis and Mini Buss which were used in some selected heavy loaded corridors of these towns. The current development of very flexible system of vehicles has been witnessed the shift of transport system, which is commonly known as Bajaj taxi transport. Bajaj is a kind of three wheeled motorized vehicle usually colored blue and white. This type of transport recently is becoming a very familiar Phenomenon in many towns of the country even in those which have no asphalt roads. The number of operators, related service provider, and users also
has increased. The Bajaj taxi transport is not looked only as in the context of ensuring decent mobility for urban inhabitants, but also a means of livelihood opportunity. Though, the government striving much addressing urban unemployment by installing several strategies and programs Bajaj Taxi operation is not taken a form of income earning opportunity. So the system has not obtained proper concern and not well guided by city managers and planners. The pattern of Bajaj Taxi flows also is not harmonized with the city land use pattern and its functional characteristics. In its place high demand of the system remains on the route corridors; creating problems in terms comfort, punctuality, accident, crime and, causes for the upbringing of several related problems. Therefore the motive of this research is evaluating the role and factors that impede or facilitate Bajaj taxi transport in Hwassa city.

The general objectives of this study were to:

- Asses the drivers and passengers side socio-economic role of Bajaj Taxi Transport Systems in Hawassa City Administration,
- Examine the towns socio-economic formal structural conditions that facilitate or impede the Bajaj taxi transport system, and
- Suggest possible recommendation for further development of the city further public transport development Planning management.

**RESEARCH METHODOLOGY**

Six centers were selected for the study on the basis recently developed and active Bajaj taxi terminals. These are Piassa, Menahria, HU Main Compass, Mobil, Alamora and Atote. Therefore, the sample respondents were randomly selected from a given 6 cluster. As far as the Bajaj taxi drivers, out of 1183 active Bajaj taxis in the city (SNNPR Transport Bureau, 2003), 118 sample respondents which is about 10% of the population. To proportionate the sample respondents over selected six clusters, the researcher consider the number of Bajaj taxis originated from the selected terminals in their peak hour of the day. Actually it is difficult to determine the sampling frame for passengers/ Bajaj users; hence, I have taken the number of Bajaj taxis originated from the selected terminals in their peak hour of the day. The capacity for a Bajaj on these routes is three passengers per Bajaj and there were 2508 Bajajs in the selected six areas on the average, which puts the entire average number of passengers at 7525 for a particular hour of a day, since the Bajajs must be fully loaded in their travel of which 278 were selected.

<table>
<thead>
<tr>
<th>Sample Areas</th>
<th>No of taxis at its Peak hours</th>
<th>Bajaj its passengers</th>
<th>Passengers of Bajaj Taxis</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piassa</td>
<td>*1300</td>
<td>105</td>
<td>37.8</td>
<td>45</td>
</tr>
<tr>
<td>Menahria</td>
<td>*877</td>
<td>71</td>
<td>25.4</td>
<td>30</td>
</tr>
<tr>
<td>Main Compass</td>
<td>*462</td>
<td>37</td>
<td>13.5</td>
<td>16</td>
</tr>
<tr>
<td>Mobil</td>
<td>*133</td>
<td>11</td>
<td>3.9</td>
<td>5</td>
</tr>
<tr>
<td>Atote</td>
<td>*367</td>
<td>29</td>
<td>10.5</td>
<td>12</td>
</tr>
<tr>
<td>Alamora</td>
<td>*304</td>
<td>25</td>
<td>8.9</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>278</td>
<td>100</td>
<td>118</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source of the star data figures is from Hawassa city Administration traffic volume study 2003

As it is presented in figure 1.1, first, the researcher try to assess urban transport and the urban land use spatial functional characteristics, and variables relationship. On one hand some theoretical basis were reviewed and on the other hand some countries experiences were examined. Second, the
researcher tries to integrate conceptually the variables like population dynamics, land patterns with transport system on one side try to evaluate some empirical evidences on the status of urban public transport services and travel patterns in developing countries. Third the researcher analyzes the connectivity of the city and the socio-economic contribution the Bajaj Taxi transport in terms of the city formal and functional structure. And finally the researcher try to produce maps showing the Bajaj Taxi flow patterns and the socio-economic implication of the transport system by using GIS based data and questionnaire survey.

**Bajaj taxi transport in Hawassa**

Bajaj taxi transport is the recent phenomenon but it is in a fast growth of increment and out bid the existing all other types of transport system. As it is shown on figure 3.2 Bajaj taxi occupy huge percentage share of the total number of Lada Taxi, Mini buses and other types of urban public transport vehicles registered in the city administration transport office.

![Figure 3.2: Percentage Share of Types of Urban Transport by Vehicles type](source: Hawassa City Administration Transport department 2011)

The Bajaj taxi system spontaneously appears to feel the diastema of public transport demand, which was open in response of the socio economic backup and unprecedented expansion of intermediate and emerging urban centers of Ethiopia.

### The Role and major Factors of Bajaj Taxi as a Public transport system in Hawassa

Analysis of the public transport system roles and factors is described in the following subtopics.

#### Bajaj Taxi Drivers’ Side Roles and Major Factors

Analyzing the characteristics and socio-economic background of the drivers helps us to scrutinize the role and the factors that influence the Bajaj Taxi transport system. This sub topic describe the age structure, marital status, educational background, , the length of years they spent on this work, the time what they spent on their work per day and then the drivers income structure and satisfaction level on Bajaj taxi driving also compared with the previous working conditions in terms of different measurement variables.

#### Sex -Age Structure of the Bajaj Drivers

Despite sampled respondents were randomly selected from the given purposefully selected areas all of them are males, that means females were less attracted on such types of works. According to the
data presented in table 4.1 the overwhelming majority of the respondent Bajaj taxi drivers 83.05% are 18-30 years of age. As it is stated in the Ethiopian youth affairs policy, they are grouped under youth part of the society. Majorities of Bajaj taxi drivers are from youth part of societies as it is confirmed in the work of Oluranti (2010) which made in Nigerian urban centers Intermediate public transport.

### Table 3.1: Age Structure of the Bajaj Taxi Drivers

<table>
<thead>
<tr>
<th>Age</th>
<th>Freq.</th>
<th>Percent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-25</td>
<td>33</td>
<td>27.97</td>
<td>27.97</td>
</tr>
<tr>
<td>26-30</td>
<td>65</td>
<td>55.08</td>
<td>83.05</td>
</tr>
<tr>
<td>31-35</td>
<td>10</td>
<td>8.47</td>
<td>91.53</td>
</tr>
<tr>
<td>36-40</td>
<td>7</td>
<td>5.93</td>
<td>97.46</td>
</tr>
<tr>
<td>41-45</td>
<td>2</td>
<td>1.69</td>
<td>99.15</td>
</tr>
<tr>
<td>&gt;45</td>
<td>1</td>
<td>0.85</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>118</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Marital Status of the Bajaj Taxi Drivers

Marital status of the community is somehow dependant on the age. As it is described in the age structure subtopic of above majorities of the Bajaj taxi drivers were at the young age. So they are expected to be single. Similarly as it is as it is confirmed in table 4.2 more than half of the sample respondents (54.24%) were single.

### Table 3.2: Marital Status of the Bajaj Taxi Drivers

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Freq.</th>
<th>Percent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>64</td>
<td>54.24</td>
<td>54.24</td>
</tr>
<tr>
<td>Married</td>
<td>50</td>
<td>42.37</td>
<td>96.61</td>
</tr>
<tr>
<td>Widowed</td>
<td>4</td>
<td>3.39</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>118</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Educational Background of the Bajaj Taxi drivers Respondent

As far as respondents educational background is concerned is concerned, about 78 % of the Bajaj taxi drivers respondents were in primary and secondary level education not few sample respondents (about 18% and 8%) were also in the level of diploma and degree and above. So we can simply deduce that the Bajaj driving business is open to for a person from any level of academic carrier.

### Table 3.3: Educational Background of the Bajaj Taxi drivers

<table>
<thead>
<tr>
<th>Education</th>
<th>Freq.</th>
<th>Percent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>55</td>
<td>46.61</td>
<td>46.61</td>
</tr>
<tr>
<td>Secondary</td>
<td>37</td>
<td>31.36</td>
<td>77.97</td>
</tr>
<tr>
<td>Diploma</td>
<td>18</td>
<td>15.25</td>
<td>93.22</td>
</tr>
<tr>
<td>Degree &amp; Above</td>
<td>8</td>
<td>6.78</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>118</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>
Income Level

Out of 118 sampled Bajaj taxi drivers respondents 43 of them are owner of the Bajaj while 75 of them are employed. An average income of the respondents who drive their own Bajaj taxi is 3034.5 Ethiopian Birr and an average income of the respondent who employed on other owners Bajaj taxis is 1374 Ethiopian Birr. The income distribution of the Bajaj taxi drivers shown in table 4.4 is a bit higher than the minimum standards of the countries socio-economic background. So it is better to take a simple reference to compare the respondents’ income with the fresh university degree holder which is approximately 1500.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>500 &amp; Less</td>
<td>18</td>
<td>15.25</td>
<td>15.25</td>
</tr>
<tr>
<td>500-1000</td>
<td>5</td>
<td>4.24</td>
<td>19.49</td>
</tr>
<tr>
<td>1000-1500</td>
<td>24</td>
<td>20.34</td>
<td>39.83</td>
</tr>
<tr>
<td>1500-2000</td>
<td>16</td>
<td>13.56</td>
<td>53.39</td>
</tr>
<tr>
<td>2000-2500</td>
<td>6</td>
<td>5.08</td>
<td>58.47</td>
</tr>
<tr>
<td>2500-3000</td>
<td>7</td>
<td>5.93</td>
<td>64.41</td>
</tr>
<tr>
<td>3000-3500</td>
<td>31</td>
<td>26.27</td>
<td>90.68</td>
</tr>
<tr>
<td>3500 and above</td>
<td>11</td>
<td>9.32</td>
<td>100</td>
</tr>
</tbody>
</table>

**Table 3.4: Average Monthly Income in Present Working Condition**

If we look at the income change of the respondents caused by changing the work condition scheme, about 13.5% of the respondents remained at the same income level as the previous work. About 63.6% of the respondents have improved in their income; while about 23% of the surveyed Bajaj taxi drivers’ income declined when they came to the present working conditions (see Table 4.5). Hence, lion’s shares of the respondents were improved in their income in the new working conditions.

**Table 3.5: Contingency Table for Average Monthly Income in Present and Previous working conditions**

<table>
<thead>
<tr>
<th>Current Income</th>
<th>500 &amp; Less</th>
<th>500-1000</th>
<th>1000-1500</th>
<th>1500-2000</th>
<th>2000-2500</th>
<th>2500-3000</th>
<th>3000-3500</th>
<th>3500 and above</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 &amp; Less</td>
<td>8</td>
<td>0</td>
<td>7</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>500-1000</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>1000-1500</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>24</td>
</tr>
<tr>
<td>1500-2000</td>
<td>6</td>
<td>0</td>
<td>6</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>16</td>
</tr>
<tr>
<td>2000-2500</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>2500-3000</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>3000-3500</td>
<td>10</td>
<td>3</td>
<td>11</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>2</td>
<td>31</td>
</tr>
<tr>
<td>3500 and above</td>
<td>8</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>12</td>
<td>34</td>
<td>12</td>
<td>4</td>
<td>4</td>
<td>3</td>
<td>4</td>
<td>118</td>
</tr>
</tbody>
</table>
Respondent Bajaj Taxi Drivers Average Working Hours

It is clear that an average hours what the individuals spent on their work pretty clear implication on the individuals’ earnings and the livelihood what they lead. As it is portrayed in table 4.4 lion share (81.4%) of the respondent Bajaj taxi drivers working for 8-12 hours per day which is a bit higher ILO standards of 8 hour per day.

<table>
<thead>
<tr>
<th>Average Hours</th>
<th>Freq.</th>
<th>Percent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 &amp; Less</td>
<td>14</td>
<td>11.86</td>
<td>11.86</td>
</tr>
<tr>
<td>8-12</td>
<td>96</td>
<td>81.36</td>
<td>93.22</td>
</tr>
<tr>
<td>12 &amp; above</td>
<td>8</td>
<td>6.78</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>118</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

Major problems Drivers Faced in Bajaj Taxi Operation

Of the number of hypothetical problem presented to sample respondents they pronounced some of the major problems they have faced yet. Table 4.7 shows that they have huge compliant on traffic flow controlling system and Bajaj taxi tariff fixing mechanisms. As about 65.2% of the respondents were disparaging on traffic flow controlling system, the next higher proportion about 22.9% of the respondents were on tariff fixing mechanism what city transport office used. According to some selected key informants of the sampled Bajaj taxi drivers; there is no transparent system to be clear for operators.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tariff fixing mechanism</td>
<td>27</td>
<td>22.88</td>
<td>22.88</td>
</tr>
<tr>
<td>Traffic flow controlling system</td>
<td>77</td>
<td>65.25</td>
<td>88.14</td>
</tr>
<tr>
<td>Expense of fuel and spare parts</td>
<td>4</td>
<td>3.39</td>
<td>91.53</td>
</tr>
<tr>
<td>Operators associations</td>
<td>10</td>
<td>8.47</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>118</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

Satisfaction Levels of Bajaj Taxi Drivers on Some Selected Variables

In this respect the researcher tries to compare the respondent Bajaj taxi drivers’ satisfaction on the previous and current working conditions with reference to the variables like helping their family, security to work, available leisure time, their own feeding condition, saving, expense and their income. figure 4.1 a and b the symmetry of the graph along the percentage distribution of the satisfaction level of respondent Bajaj taxi drivers clearly shows the difference between previous and current working conditions. In the previous working condition higher proportion of the distribution is covered by uncertain, dissatisfy and highly dissatisfy level of satisfaction, whereas in the current condition the overwhelming portion of the percentage distribution of the graph covered with moderately satisfy and highly satisfied level of respondents satisfaction.
Bajaj Taxi Passengers’ Side Roles and Major Factors

A very objective of Public transport is improving quality of life and realizing public satisfaction. But people quality of life and satisfaction is highly determined by individuals’ socio-economic background. Background of the individuals varies by their own, as it is in the next subtopics sampled Bajaj taxi passenger respondents.

Sex Age Structure of Respondent Passengers

As it is shown in table 4.7 majorities of the sample respondents (about 60%) were female, while the remaining 40% of the respondents were male. This high relative proportion is not only related to urban sex ratio of the country it would rather relate to urban female travel behavior. As it similarly confirmed by some researchers (American Public Transport Associations, 2006; Pendakur, 2005; Rosenbloom, nd), Women are making more trips, more often than male urban inhabitants.

In terms of age group; as it is portrayed in table 4.8 lion share of the respondents (about 79.5%) were in the young age, between 15-30 years of age. This shows as yang people make more trip, and often than male. American Public Transport Association (2006) also identified the same age group at the maximum level of traveling behavior the higher traveling continue up to the age of 52. But in this specific research it is drastically dropdown to few after the age of 35.

<table>
<thead>
<tr>
<th>Age</th>
<th>Freq.</th>
<th>Percent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-20</td>
<td>71</td>
<td>25.54</td>
<td>25.54</td>
</tr>
<tr>
<td>21-25</td>
<td>88</td>
<td>31.65</td>
<td>57.19</td>
</tr>
</tbody>
</table>
Marital Status and Educational Background of the Respondent passengers

Marital status is another important factor to determine the traveling behavior of the group of society. In this case out of 278 sample respondents 113 (about 40.6%) of the respondents were married the remaining majorities of the respondent 165 (about 59.3%) were single. That means single persons make more travel or more often than married person. As far as educational background of the respondent passengers is concerned, table 4.9 shows that passengers traveling behavior is of direct relationship with their academic career. If we take the two extreme academic careers of the sampled respondent passengers, they are also represented in the random sample as they are in their career. The respondents those who are illiterate account only about 2% of the total number of sample respondents, but the proportion of the respondent those who hold university degree and above is about 35.6%.

Table 4.9: Educational Background of the respondent Passengers

<table>
<thead>
<tr>
<th>Educational Status</th>
<th>Freq.</th>
<th>Percent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>6</td>
<td>2.16</td>
<td>2.16</td>
</tr>
<tr>
<td>Primary School</td>
<td>53</td>
<td>19.06</td>
<td>21.22</td>
</tr>
<tr>
<td>Secondary School</td>
<td>58</td>
<td>20.86</td>
<td>42.09</td>
</tr>
<tr>
<td>Diploma</td>
<td>62</td>
<td>22.30</td>
<td>64.39</td>
</tr>
<tr>
<td>Degree &amp; above</td>
<td>99</td>
<td>35.61</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>278</strong></td>
<td><strong>100.00</strong></td>
<td></td>
</tr>
</tbody>
</table>

Income Structure of the Respondent passengers

As it is discussed above Bajaj taxi like an intermediate public Transport spontaneously appears not only to supplement the existing urban public transport system but also a sole opportunity for majorities of the urban low income group. Table 4.10 also reveals the same truth, as about half of the respondents were from the income group who were earning 500 Birr and less, and 73.4% of the respondents were from the income group less than 1500 Birr. But very few (about 4.2%) of them were from the income group earning greater than 3000 Birr.

Table 4.10: Income Stricture of the Respondent passengers

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;500</td>
<td>138</td>
<td>49.64</td>
<td>49.64</td>
</tr>
<tr>
<td>501-1000</td>
<td>46</td>
<td>16.55</td>
<td>66.19</td>
</tr>
<tr>
<td>1000-1500</td>
<td>20</td>
<td>7.19</td>
<td>73.38</td>
</tr>
<tr>
<td>1501-2000</td>
<td>22</td>
<td>7.91</td>
<td>81.29</td>
</tr>
<tr>
<td>2001-2500</td>
<td>23</td>
<td>8.27</td>
<td>89.57</td>
</tr>
<tr>
<td>2501-3000</td>
<td>17</td>
<td>6.12</td>
<td>95.68</td>
</tr>
<tr>
<td>3001-3500</td>
<td>3</td>
<td>1.08</td>
<td>96.76</td>
</tr>
<tr>
<td>&gt; 3500</td>
<td>9</td>
<td>3.24</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Passengers Preference other than Bajaj Taxi and Before Bajaj Taxi Transport System

Passengers preference when there is no Bajaj taxi transportation because of any form of incontinence majorities of the respondents (about 36.3%) were prefer to make their journey on foot. The next higher percentage of the respondents (about 27%) were using own bicycle. This may reveal as they have no any other alternative means of transport. As it is discussed in the above subtopic, it is partially because they are in the low income group of the society.

Table 4.11: Passengers preference Other than Bajaj Taxi Transport

<table>
<thead>
<tr>
<th>Type of transport other than Bajaj</th>
<th>Freq.</th>
<th>Percent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>On foot</td>
<td>101</td>
<td>36.33</td>
<td>36.33</td>
</tr>
<tr>
<td>Own Bicycle</td>
<td>75</td>
<td>26.98</td>
<td>63.31</td>
</tr>
<tr>
<td>Owen Motor Bike</td>
<td>28</td>
<td>10.07</td>
<td>73.38</td>
</tr>
<tr>
<td>Service</td>
<td>30</td>
<td>10.79</td>
<td>84.17</td>
</tr>
<tr>
<td>Other</td>
<td>44</td>
<td>15.83</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>278</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

On the other way round when we look at the sample respondents’ choice of transport system before the Bajaj taxi transport was started, the leading role was in Lada taxi and personal bicycle which accounts 51.8 and 19.4% respectively. This is actually shows the modal shift which were takes place after the installation of Bajaj taxi public transport system by its own market driven rationales.

Table 4.12: Passengers' choice of Transport System before Bajaj Taxi Transport

<table>
<thead>
<tr>
<th>Types of Transport Before Bajaj</th>
<th>Freq.</th>
<th>Percent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>on foot</td>
<td>39</td>
<td>14.03</td>
<td>14.03</td>
</tr>
<tr>
<td>Owen Bicycle</td>
<td>54</td>
<td>19.42</td>
<td>33.45</td>
</tr>
<tr>
<td>Owen Motor Bike</td>
<td>34</td>
<td>12.23</td>
<td>45.68</td>
</tr>
<tr>
<td>Lada Taxi</td>
<td>144</td>
<td>51.80</td>
<td>97.48</td>
</tr>
<tr>
<td>Hours Cart</td>
<td>3</td>
<td>1.08</td>
<td>98.56</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>1.44</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>278</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

Origin and Destination of Respondent Passengers

Concerning to the sampled of Bajaj taxi user passengers, large share about 36.3% of the respondents originated from Tabor sub-city followed by Haik Dar sub-city which accounts about 19.8%. Tabor sub-city is the most populated part of the city; it is therefore most Bajaj taxi travelers were originated from this sub-city. Bahil Adarash and Addis Ketema were an area where lesser proportion of the respondent originated from, which accounts about 2.5% and 2.9% of the total sampled respondent passengers respectively (see table 4.13 “a”).

On the other hand as to the passengers destination table 4.13 “b” shows that significant portion of the sample respondent (about 44.6%)were circulate within the sub-city of their origin. This shows one important illustrative idea for this research. As it is described in the previous parts how Bajaj taxi as an intermediate public transport means are of the essence in urban door to door service provision with some urgent demands for short distance. The next larger share of the respondents destined to Hawella Tulla and Menaheria sub-city which accounts about 17.6 and 16.9% of the
respondent respectively. In the case of Hawella Tulla it is the widest sub-city of Hawassa occupies more than 75% of the total area. Whereas Menaheria sub-city is contained the major business centers of the city like the main bus stations and Piassa market centers. That is why larger proportion of the city travelers destined to these locations.

Table 4.13: Origin and Destination of Respondent Passengers by Sub-City

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Addis Ketema</td>
<td>8</td>
<td>2.88</td>
<td>2.88</td>
<td>Same S.C.</td>
<td>124</td>
<td>44.60</td>
<td>44.60</td>
</tr>
<tr>
<td>Misrak</td>
<td>41</td>
<td>14.75</td>
<td>17.63</td>
<td>Addis Ketema</td>
<td>22</td>
<td>7.91</td>
<td>52.52</td>
</tr>
<tr>
<td>Menaheria</td>
<td>12</td>
<td>4.32</td>
<td>21.94</td>
<td>Misrak</td>
<td>10</td>
<td>3.60</td>
<td>56.12</td>
</tr>
<tr>
<td>Tabor</td>
<td>101</td>
<td>36.33</td>
<td>58.27</td>
<td>Menaheria</td>
<td>47</td>
<td>16.91</td>
<td>73.02</td>
</tr>
<tr>
<td>Haik Dar</td>
<td>55</td>
<td>19.78</td>
<td>78.06</td>
<td>Tabor</td>
<td>12</td>
<td>4.32</td>
<td>77.34</td>
</tr>
<tr>
<td>Mehlat Ketema</td>
<td>18</td>
<td>6.47</td>
<td>84.53</td>
<td>Haik Dar</td>
<td>14</td>
<td>5.04</td>
<td>82.37</td>
</tr>
<tr>
<td>Bahil Adarash</td>
<td>7</td>
<td>2.52</td>
<td>87.05</td>
<td>Tulla Hawella</td>
<td>49</td>
<td>17.63</td>
<td>100.00</td>
</tr>
<tr>
<td>Tulla Hawella</td>
<td>36</td>
<td>12.95</td>
<td>100.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>278</td>
<td>100.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.14: Average Time Spent on Per Trip

<table>
<thead>
<tr>
<th>Average minutes per Trip</th>
<th>Freq.</th>
<th>Percent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>67</td>
<td>24.10</td>
<td>24.10</td>
</tr>
<tr>
<td>6-10</td>
<td>38</td>
<td>13.67</td>
<td>37.77</td>
</tr>
<tr>
<td>11-15</td>
<td>44</td>
<td>15.83</td>
<td>53.60</td>
</tr>
<tr>
<td>16-20</td>
<td>40</td>
<td>14.39</td>
<td>67.99</td>
</tr>
<tr>
<td>21-25</td>
<td>20</td>
<td>7.19</td>
<td>75.18</td>
</tr>
<tr>
<td>26-30</td>
<td>38</td>
<td>13.67</td>
<td>88.85</td>
</tr>
<tr>
<td>31-35</td>
<td>3</td>
<td>1.08</td>
<td>89.93</td>
</tr>
<tr>
<td>&gt;35</td>
<td>28</td>
<td>10.07</td>
<td>100.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>278</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

Passengers Average Time and Cost Spent on Per Trip

Average time and cost what the passengers spent on per trip is one of the important measure of urban public transport quality. As the minutes and money they spent in journey to work getting minimum and minimum the satisfaction becoming higher and higher. According to table 4.14, as about 24% of the respondents were travel 5 and less minutes, more than half of the respondents were arrived their destination after a Bajaj taxi journey of 15 minutes or less.

Table 4.15: Average Cost Spent on per Trip

<table>
<thead>
<tr>
<th>Average cost Per Trip in Birr</th>
<th>Freq.</th>
<th>Percent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>34</td>
<td>12.23</td>
<td>12.23</td>
</tr>
</tbody>
</table>

Regarding the average cost what the sample passenger respondents spent on for Bajaj taxi, as larger proportion about 38.5% of the respondents spent 3-4 Birr per trip, overwhelming majority (about 85%) of the respondents were spent 5 Birr and less per trip (see table 4.15). despite the cost seams small in general terms, it is not easy to a group of city inhabitants majorities of them are from low income level, which may account more than 10% of an average income earner sample respondent.
Out of the total 278 sample respondents who were asked about the presence of on work irregularities caused by transport Problem, 173 (about 62.2%) of them were replied as they have faced the problem because of the transport service dalliances and transport system related incontinence. But as it is shown in table 4.16 majorities of the respondents express as it may occur in some seldom instances. So the Bajaj taxi transport system

<table>
<thead>
<tr>
<th>Terms of a problem created</th>
<th>Freq.</th>
<th>Percent</th>
<th>Cum.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Often</td>
<td>5</td>
<td>1.80</td>
<td>1.80</td>
</tr>
<tr>
<td>Always</td>
<td>25</td>
<td>8.99</td>
<td>10.79</td>
</tr>
<tr>
<td>Sometimes</td>
<td>248</td>
<td>89.21</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>278</td>
<td>100.00</td>
<td></td>
</tr>
</tbody>
</table>

**Passengers Satisfaction Level on Bajaj Taxi Transport on Selected Variables**

As it is portrayed in figure 4.2, percentage of the level of satisfaction is varied within a given variables. In terms of punctuality, travel time, and transport cost sample respondent passengers were highly satisfied, whereas they are relatively satisfied less in crime control and safety and security. As it is seen in the figure the highly dissatisfy dissatisfaction part is becoming higher in control of crime and theft, and safety and satisfaction.
CONCLUSION AND RECOMMENDATION

Conclusion

In the examination of the role and factors of Bajaj taxi transport system there could be some concrete evidences clearly stand out in the analysis part. Bajaj taxi as an intermediate public transport system plays an indispensable role in Hawassa city by making journey of majorities of the inhabitants easy. The system also attracts large number of an urban poor from any level of academic career as a wide open means of income earning opportunity to engage directly in Bajaj taxi operation or indirectly related services provision activities. They also substitute the Mini buses and Lada taxis, which were of leading role some 8 or 10 years before. This is refers the modal shift from some common higher level public transport to intermediate public transport type.

Regarding Bajaj taxi drivers side, majority of them are from youth group of the society. Researches (Oluranti, 2010) which have made in many African countries also confirm this fact. This research also realizes as Bajaj taxi drivers’ income increased when it compared to previous working conditions income. Although they have higher level of satisfaction on most of the measuring parameters their satisfaction getting lesser in their expense and saving characters. Then again, the Bajaj taxi drivers also have a heavy compliant on traffic flow controlling and tariff fixing mechanisms installed by Hawassa city transport office. Since it is not transparent clear of many of the stockholders like Bajaj taxi drivers and Bajaj taxi owners associations, they are also losing their trust on the system.

In passengers’ point of view, Bajaj taxi transport is the most favored transport systems particularly for most of the low income group of the city inhabitants since either it is the only means of transport available in the market or it is the cheapest one. But if we deal somehow more on the cost of the Bajaj taxi fare, it is as such easy to majority of the Bajaj users. It covers more than 10% of their income. Again as it is seen in the origin and destination analysis majorities of the Bajaj taxi passengers working within sub-city of their residential quarter. This may crudely reflect the presumption of distance decay. The satisfaction level analysis of Bajaj taxi passengers on different parameters of urban public transport is also another big issue.

Recommendations

On the weak spot of the drivers’ denunciation of traffic flow control system their dissatisfaction on their own expense and saving behavior and Passengers on work irregularities created by transport system problem and inconvenience of crime and theft, and safety and security the following city administration, planning and managerial impels could be critical:

Generally a complete stoppage of the Bajaj taxi transport has a huge cost of social and economic outcome. So planners or managers endeavor should be on regulating additional entrance of Bajaj taxi in to the system, and on creating other alternative public transport system only through market mechanisms; like facilitating some entrepreneurial abilities, assisting alternative means of transportation. The Bajaj taxi drivers’ critical complaint of traffic flow control system and tariff fixing mechanisms should transparent for operator and their compliant also have to be heard in all levels of city administration. All the public transport strategies and programs should be developed based on rigorous empirical facts and data analysis, should communicate with operators, and should have consent of majorities of the stakeholders.

The Bajaj taxi drivers’ dissatisfaction on their expense and saving behavior is related to the spontaneous nature of the system opening. There were no guidelines for this business like other...
government induced urban economic activities, which were fashioned under the city administration Micro and Small Scale Enterprise Development Office. So Bajaj taxi drivers’ poor organization expense and saving could be resolved by installing best practices of the micro enterprises expense and saving experience in Bajaj taxi operation system as any other income earning enterprises. May be through continuous training and awareness raising programs. As to Bajaj taxi passengers on work irregularities, both the city municipal and transport office have to work on to create alternative routes to arrive some selected business centers at least. They should be pre informed through mass media about the presence of special occasions on the main routes to the major business centers.

The dissatisfaction of passengers on crime and theft control mechanisms both the drivers and passengers should take a responsibility to minimize the problem. Bajaj taxi drivers like by awakening passengers those who are not mindful. It could be by posting some kind of remainder on the wall of the vehicle. The transport office may also lay compulsory mechanisms. On the other hand passengers also should take extra care and consideration to the remainders. Concurrently the city administration also allocates the police posts at least at the major Bajaj terminals in the night time.

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Psycho-Educational Factors That Affect First Year Female Students’ Academic Achievement: The Case of Ethiopian University

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(School of Education and Training, School of Behavioral Sciences)

ABSTRACT

This study focused on determining the psycho-educational factors that affect female students academic achievement in Ethiopian University. Three research questions and three objectives were formulated to guide the study. Three hundred fifty (generic and readmitted) female students for survey study were selected through simple random sampling techniques from all Hawassa university campuses and 20 key informants (staff and students) were selected purposively for interview. Data were collected through interview and questionnaire. Mean and graphs were the statistical tools used for the analysis. The study reveals that two psychological factors are found to be the dominant problem from the investigation. They are lack of self confidence and worry about having to leave the institution due to academic failure. Similarly, three educational factors are found as the major obstacle for female academic success in the university. These are: lack of attention during lecture time, poor previous academic preparation/experience in secondary schools and problem of taking notes during lecture hours. It was recommended that Successful study skills training should be arranged, a learning center as an academic development center should be established to utilise both the academic staff and senior students, Orientation should go beyond showing their dormitory and the provision of good and organized counseling service by the professionals.

BACKGROUND OF THE STUDY

Many aspects of university life in the first year seem confusing for most students. For the first year student who has recently completed secondary school, the transition from school to university or college is highly complex, a situation fraught with changes for which no one is really fully prepared for. Gibbs (1992) looks at this transition in a positive light, commenting that although it is not the open door to a better life, it provides the student with the chance to learn and grow. The first year of study is seen as an essential time for the overall success in his/her academic performance. Mostly first year in higher institution is also considered as a year of fun and excitement, yet also extreme academic, social and peer pressure. It is the year where ideas, lasting attitudes and values are established. It is the start of opportunities for growth as the student faces complex situations without the support and assistance of parents and family (Gibbs, 1992).

The student may find him/herself in a new environment, surrounded by a new responsibilities and new people, expected to make decisions on his/her own without family support. He/she has to face life on his/her own. The new found freedom that he/she suddenly has at his/her disposal can pose problems. Making the adjustment to university or college life is exciting but tough. Gibbs (1992) stresses the student’s responsibility and accountability in the first year that she/he will not be spoon-fed, but rather left to his/her own devices when in the classroom. First year is a year of transition from high school to that of higher education which is teemed with difficulties. It is a time where the student is made to feel welcome, where he/she is supported and eventually assimilated into the institutional community. In addition, first year is a year of adjustments that take place of all fronts, in many ways determining his/her future success. In the first year student arrives with many
expectations at a university. Most student fail to adjust themselves in their first year. Academic staff and students alike speculate as to the causes of attrition and dropout. Some students see themselves as victims of the system whereby they felt that they were not adequately prepared by secondary school for university studies. Some others also view the problem as one of cognitive inadequacy.

This study will try to find out the most crucial psychological and educational factors that are perceived to inhibit maximum performance of the first year female students. The researchers as the experts in psychology and education will try to examine the psychological and educational or academic factors that affect performance. Undoubtedly, there are other factors like socio-economic, cultural, and socio-political factors which impede students’ performance, but due to many reasons they will not be treated here.

Objectives

In light of the background and problem statement stated above, this study aimed to achieve the following specific objectives and research questions.

This research has the following objectives:

1. To identify psychological factors that affect female student’s academic achievement.
2. To identify academic factors that affect female student academic achievement.
3. To suggest areas of intervention for the institution to help female students succeed in their academic achievement.

Research Questions

In attempt to meet the objectives stated above, the following specific questions were addressed:

1. What are the most common psychological factors that are seen to constrain the first year female students’ performance?
2. What are the most common academic factors that are seen to constrain the first year female students’ performance?
3. What are the areas that need improvements in the institution to help female students succeed in their academic achievement?

DATA AND METHODS

Cohen and Manion (2001) argue that all data can be described according to whether it is collected via qualitative or quantitative methods. Therefore, most studies can be classified as either qualitative or quantitative depending on the type of data collected. In this study both quantitative and qualitative research methods will be used as part of triangulation approach. The target population for this study was all first year female students. The population therefore, consisted of all first year female students admitted in 2012/13 and readmitted first year female students. Probability sampling techniques was used to select a representative sample. The method involves selecting at random from a list of the population (a sampling frame) the required number of subjects for the sample. This technique ensures that each student in the population, with certain distinguishing characteristics- male or female, high or low intelligence has an equal chance of being included in the sample (Cohen & Manion, 2001).

Based on the above explanations for this study, from the total female students 3036 (generic and readmitted) students admitted in 2012, 350 female students were selected from four randomly
selected colleges: College of social science and humanities, College of Health sciences, College of Agriculture and College of business and economics of Hawassa University. In addition to these 12
female readmitted students, 5 academic staff and 3 administrative staff working in gender office
were selected purposively for qualitative data (focus group discussion).

Data collection procedures

Permission was sought from the University Research and Development Directorate to carry out the
research. The focus group interview, pilot study and the questionnaire were conducted with selected
respondent.

An important step in the process of data collection is to find the right people, places and to gain
access to and establish rapport with subjects so that they can provide valuable information
(Creswell, 2007). For the current study the focus group interview was conducted with purposively
selected key informants (12 female students and 5 academic staff 3 administrative staff working in
gender office). Three focus group discussions were conducted: one with staff, another with
readmitted students and the third with generic students in three campuses (main campus, Awassa
Agriculture and Wondo Gennet campus). According to Black (1999) the questionnaires for
quantitative research in social sciences as an instrument that is used to measure and quantify how
people feel about things, their attitudes, perceptions, opinion and view. Based on the information
collected through the focus group discussion self-administered survey questionnaire was developed
and used to collect data from randomly selected first year students. Prior to the administration of
questionnaire for the main study, it was pilot tested to see its validity and reliability. Qualitative
data (focus group interviews) were analysed by taking common points raised in each group and
grouping together and recording trends. The major trends will be served as a basis for the
development of questionnaire and recommendation of intervention strategies. Quantitative data
(questionnaire data) were designed to meet the major aim of the study that is to determine those
factors that are seen to constrain the first year female student academic performance. Based on this
assumption the analysis approaches that a researcher could follow include descriptive statistics.

RESULTS AND DISCUSSION

Analysis from focus group discussion

The focus group discussion was conducted with female students, academic staff and administrative
workers working in gender office who are selected purposively. Each group had six participants
and the researchers act as facilitator and rapporteur. The consent form was signed by all
participants and the basic ground rules (like allowing each one a turn to speak, confidentiality and
encouraging participation) was agreed by the participant before the focus group discussion take
place. Similar questions were asked to all the participants in different campus. The findings of
qualitative data were organized thematically as follows:

Psychological factors

The first question raised for the student participants was “what is life in campus like for you as a
student? Some of the responses forwarded by participating female students are:

- It was very frustrating at first. I felt that I did not fit in anywhere and I thought myself as one of
  the victim of Christmas.
- I began life in campus frustrating. In my secondary school I like language most and expect to
join department like journalism, English, etc. but without my interest I was assigned in geography and environment department. This affects my study.

- “Socially, it is excellent for me. I enjoyed a lot, but then I liked my friends and I went off my way to chat to them.”
- “I have still found it difficult to understand what the lecturer presents. English is not the language I used and learned when I was in previous school. That is frustrating me.”
- “I work hard and I play hard. I know when to study and when to play. I am happy with the way things are here in campus.”

The most common problems of female students in first year

The other question motivated to the three groups of participants is in your opinion what are the problems that first year female students face in the university? Even though many problems are mentioned by the participants, very stirring responses are presented as follows:

“Fear of failing is the major problem for many of us. A number of factors attributed to this fear, for example, so much pressure form instructor and senior students, too much expectation from family, neighbours and even from church. I feel my parents have tried their best for me to reach here and I cannot disappoint them”

I am very afraid that I will disappoint my parents if I fail. I can’t afford to fail. I and my friends are working day and night without having time for relaxation. No one advised us on how to manage our time, how to study and how to be successful in the university. When we were with our parents they advised us but here is no one. Really no one!! That leads us to become stressed and unable to cope up without studying properly.

Another participant mentioned the importance of orientation to the campus. Even though the university facilitate the condition on the first day of their arrival, as the participant mentioned that should not be stoped on the first day. One of the participant expresses her concern as follows:

“When I came here, it was all so strange. I did not know where everything was. Especially when you come from a small town or rural area, the town and the campus make you scared. Later when I met one of the senior students, my relative, I felt excited and very happy. I become familiar with places. I learned where to go when I needed. The university or the student council must do more during the registration week.”

On top of these factors one of the student interviewee participant, for example, mentioned the problems she encountered in this way as: most female students were not placed in the department that they really had wanted to study but they were assigned in their fifth or sixth choice. In addition to that some of the students have the problem of language and academic preparedness. As a result, they are not motivated to study anything and work hard rather wander here and there.

Psycho-educational factors

The last question raised for the participants is what other academic, psychological, social or emotional problems that you think affect female students preforming at her best? Some of the responses are presented below as examples.

“when you live in dormitory, the students seem to do what they like. They have full freedom to do what they are pleased with. Due to this, sometimes it is impossible to study in dormitory. There is so much noise.”
I find that most of my lecturers are not concerned about us, their students. Some of them defame us, demoralize us and they are not so passionate about what they are doing. Some times I am unable to understand what the instructor said and explained, in addition to that I fail to attentively follow the lecture and take note at the same time. Some of the lecturers consider all the students as top achievers. As a result during quiz if we score below his/her expectation they get irritated and told us to expect “F” in his/her course. That frustrated us and then we have no way to get support or counsel.

“In my opinion most female students have academic problem. Language is the most challenging aspect. For most us English is a third or a fourth language. There is a problem of understanding what the lecturer is saying. Most of us are afraid to ask question or even for help in classroom.”

I learned that some lecturers are interested in helping us and want to see our success. Others don’t like to talk and have time for us. When we go for consultations, they are not there, even if they are there, they are not willing to hear our issue. They are impatient and some of them treat us like a child.”

These focus group discussion results show that campus life for some female students seems to be problematic. Although they are motivated to work hard, unless others do not appear to respect the need for silence in the dormitory that create problems in their achievement. In addition to that, it seems that there was communication gap/problem between students and lecturers. Another student responded by explaining the problem she faced in living in new environment by saying that “I find living in the campus very difficult and uncomfortable compared to living at home. I can’t adjust my self to the environment.”

The staff working with gender office interviewee participants from different session unanimously agree with the existence of different problems. It is interesting to note that from the entire interview sessions similar problems were identified and categorized under the educational, psychological, social and institutional factors. The summary of factors that are identified by the three groups of participants that are considered as problematic are presented as follows. Difficulty to write and understand in English, frustration during examination, easy disturbance, feeling that others are not interested in what I said, lack of adequate learning materials (such as handouts, reference books and texts), lack of attention during lecture time, academic work over load (assignment, group work, etc.), worry about leaving the institution, do not know how to be successful in higher education, feeling that the department allocation is unfair, worrying about having to leave the institution due to so many problems and having no time to relax, problem to take note and to listen at the same time, lack of self-confidence, feeling disoriented on campus, not knowing where things are or where to go, problem of getting suitable place to study, expecting someone to motivate, reading something many times before it makes sense, reading slowly, worrying about becoming HIV positive, writing slowly, problem of taking notes during the instructor is lecturing, poor previous academic experience in secondary schools, lack of academic staff - student relation, getting little assistance from the institution on study skills, feeling inferior to friends, problem of finishing examination/test on time and problem of understanding what the instructor lectures, feeling sad and depressed most of the time and experiencing frequent illness, lecturers are frustrating when they give lecture.

The summary of overall comparison between academic, psychological, social and institutional problem

The figure below indicates the problem that is considered by female students as more problematic. From the figure it was seen that the psychological related factors higher than the other factors: educational, social and institutional related factors.
On the basis of the focus group data the four broad themes educational, psychological, social and institutional factors were identified. These four themes were used as the basic format for the development of the questionnaire. Under these four themes a total of 40 questions were developed. Rating scale statements were used to identify the intensity of each item. According to Monion & Morrison (2000) a likert-type of scale mostly used to measure attitude, perception or opinion of the respondents. Thus, the aim of the questionnaire was to assess the respondents reaction towards each item. For the purpose each of the statements is accompanied by a 5-point scale ranging from “Strongly Disagree” (=1) to “Strongly agree” (=5). Finally, the developed questionnaires were distributed to sample female student respondents in the four colleges of Hawassa University to identify the extent of the problems. The number of students that completed the questionnaire was 335 of a possible sample of 350. Of which 29 (8.7%) were readmitted students and the remaining 306(91.3%) were generic. The majority of the respondents 85.2% are between the age group of 19 – 21 and the remaining 14.8% were under the age group of 22 – 24.

**Perceived educational problems of all female student respondents**

Since the concern of this study was to identify the psycho-educational factors, the following discussion was mainly focus on the educational and psychological problems. The academic factors are factors that are related to the educational capabilities that are necessary for students to acquire academic competencies in order to meet the demand of tertiary education (McKenzie and Schweitzer, 2001). Some of the major academic factors which are identified by the participants during focus group discussion are: Frustration during examination, difficulty to write and understand in English, lack of attention during lecture time, not enjoying my study, academic work over load (assignment, group work, etc.), feeling unprepared for successful learning, not knowing how to be successful in higher education, problem to take note and to listen at the same time reading something many times before it makes sense, reading slowly, writing slowly, problem of taking notes during the instructor is lecturing, poor previous academic experience in secondary schools, being frighten of failing examination, problem of finishing examination/test on time and problem of understanding what the instructor lectures. Some of the factors listed above are similar to the findings of Mungai (2012) that the school factors had an independent and significant effect on female students achievement.
the graph above shows the extent of specific problem areas of the education related factors. From all the education related factors that appear to be the most problematic and fall within the significant range are: lack of attention during lecture time, poor previous academic preparation/experience in secondary schools and problem of taking notes during lecture hours. Problem of understanding lecture, reading slowly, writing slowly, not finishing exam on a given time and expecting instructor to motivate at some stage impact on the student’s academic life. On the other hand, academic overload found as the least factors that affect female students’ academic achievement.

**Perceived psychological problems of all female student respondents**

A psychological factor refers to a thing that can influence the functions, attitude and characteristics of the human mind. These factors can in turn affect the behaviour and well-being of a person (Brown, Warren and Ryan, 2003). The psychological factors that are included in the questionnaire includes: easy disturbance; worry about leaving the institution, expecting the someone to motivate, being not satisfied with self, feeling that others are not interested in what I said, afraid of trying something new, feeling inferior to friends, lack of self-confidence, lack of knowledge on self-reward for jobs well done, feeling sad and depressed most of the time and experiencing frequent illness.
Figure 3: Psychological factors

Figure 3 above shows the extent of psychological related factors. Even though all the psychological factor indicated in the figure identified as problematic areas, from the questionnaire data it is clear presented that lack of self confidence and worry about having to leave the institution due to academic failure are found the most problematic areas. Similarly, problems related to worrying about becoming HIV positive, not satisfied with self, lack of knowledge to reward self for well done job, becoming sad and depressed most of the time and frequent illness found to have some stage of impact on the student’s academic life. It is also observed from the figure that fear of trying something new and being easily disturbed are considered as least influencing factors (see Brown, Warren and Ryan, 2003; Huppert 2009; Lowe, 2011 for similar finding).

Comparison of academic and psychological factors

As discussed above in the background section, first year is the period of adjustment in which the new students trying to deal with the newly acquired freedom, academic demands, new social interaction, etc. Some of these issues are related to competency, emotional adjustment, social, institutional and psychological. The finding is similar to Mungai’s (2012) finding. These factors force female students to achieve at lower level and have negative effect on their psychological well-being. Psychological well-being is about lives going well. It is the combination of feeling good and functioning effectively. Sustainable well-being does not require individuals to feel good all the time; his/her experience of painful emotions (e.g. disappointment, failure, grief) is a normal part of life, and being able to manage these negative or painful emotions is essential for long-term well-being. Psychological well-being is, however, compromised when negative emotions are extreme or very long lasting and interfere with a person’s ability to function in his or her daily life (Huppert 2009).
According to Huppert (2009) the concept of feeling good incorporates not only the positive emotions of happiness and contentment, but also such emotions as interest, engagement, confidence, and affection. The concept of functioning effectively (in psychological sense) involves the development of one’s potential, having some control over one’s life, having a sense of purpose (e.g. working towards valued goals), and experiencing positive relationships. Evidence from both longitudinal and experimental studies shows, that a positive emotional style has a beneficial effect on physical health. In addition to that, psychological well-being is associated with flexible and creative thinking, pro-social behavior, and good physical health (Brown, Warren and Ryan, 2003). An individual’s level of mental capital and psychological well-being is powerfully influenced by her/his early environment (Huppert, 2009).

CONCLUSION

The research findings indicate that the student’s experience in the institution determines the attrition and retention rate. For instance, if the students adjust themselves smoothly in the first year, it is more likely that he/she can complete the course successfully. Similarly, if there is a mismatch between the student’s preferences, needs and interest and those of the institution, the possibility exists that he/she will not see his/her course through to the end (Ahhmed, Abdullah and Hassene 2011). It was also found that a great number of factors both educational and psychological are perceived to constrain female student performance. Evidences from the literature indicate the problem of appropriate study skills, the way in which the student organises and processes knowledge, the manner in which the student is taught, his/her language problem, the level of reading ability, time and self management all contribute in one way or other to their performance. Two psychological factors are found to be the dominant problem from the investigation. They are lack of self confidence and worry about having to leave the institution due to academic failure. Similarly, three educational factors are found as the major obstacle for female academic success in the university. These are: lack of attention during lecture time, poor previous academic preparation/experience in secondary schools and problem of taking notes during lecture hours.

Although the focus of this study was to investigate the psycho-educational factors that affect first year female student’s academic performance, the other factors are also identified as problematic and cannot be ignored. Thus, it is also important to investigate factors like social and institutional factor in the future study. In addition to this, the following recommendation should be taken into consideration to improve female students’ performance at the University.

1. **Study skills training:**
Successful study skills training should be arranged for first year female students per semester to address such issues as time management, study techniques, note taking skills, test taking skills, self-motivation and to developing good attitude towards learning.

2. **Creating learning center:**
A learning center as an academic development center should be established to utilise both the academic staff and senior students. Through having a learning assistance center, it is possible to provide assistance for female student different intervention mechanisms to improve their reading and writing skills in English language. On top of that through this center female students get chance for peer mentoring and tutoring.

A suitable room should be found near female’s dormitory in all universities and filled with computer and other relevant reading materials. The center facilitator should be language instructor or postgraduate students from language studies department. in order to develop their language competency and writing skills.

3. **Adjustment and orientation**
The literature indicates that the successful integration of the student into new social and academic environment is possible through organized orientation programmes. Even though it is common to orient new student in the first day in every universities, it should not be a one time activity. Orientation should go beyond showing their dormitory to acquainting them with until formal classes begin and it should include introducing them to administrative and university rules and regulations, activities, student service and acquainting them with different places in the university.

4. Establishing counseling office
It is well known that all students of the universities have the knowledge and skills necessary to complete his/her higher education successfully. One way of promoting and improving students success in their educational endeavor is through the provision of good and organized counseling serivce by the professionals. Some of the psychological problems identified in this research can’t be solved without the involvement of skilled counselor. There should be some one who assist the students in need of academic and psychological support. If there were professional counselor, he/she would provide one-on-one help for students on academic skills, for example on note-taking, test-taking, time management and study skills. To the knowledge of the researchers, there has been no counselor in most universities. Therefore, it is recommended that the management of the universities have to organized well organized counseling office with trained counselor.

References
Ahammed, Shaima;Abdullah, Abdullah S;Hassane, Sofoh H 2011. The role of emotional intelligence in the academic success of united Arab Emirates International Education; 41,


INTRODUCTION

Background of the Study
Teaching Speaking skill and its assessment are among the most important issues in language teaching since speaking is dominant in communication and in language teaching (Hartley and Sporing, 1999). Speaking and its assessment have got emphasis due to the advent of Communicative Language Teaching Approach (CLT) which is dominating over the traditional grammar-centered method in many countries. However, this study is concerned more to assessment of speaking skill in government secondary schools. Assessment of speaking needs to be based on theory of assessment. However, Spolsky (1975) as cited in Kim (2003) states that inconsistency between language teaching and testing is the central problem in foreign language teaching.

The other faulty practice in language teaching is using only limited forms of assessment- usually achievement test. Even though there are varieties of assessment methods, using only limited assessment methods is against the language assessment theory (Davies, 1990). Also the theory argues for a test to match with the content of the course of study (Bachman, 1990), teachers should match the course objectives with the test items. This attitude by teachers is crucial in a classroom test because teachers may tend to use test tasks different from the course objectives especially when oral aspects are involved (Ibid). Although the above facts are the most crucial areas that need improvement in Ethiopian context; it is also useless if the assessment method is impractical in the real classroom setting. This involves questions of economy, ease of administration, scoring and interpretation of results (Bachman, 1990). The context for the implementation of a test is a vital consideration because classroom tests should not require costly specialized equipment or highly trained examiners or raters (Weir, 1993). Also there is much pressure on teachers to make tests as short and practical as possible because teachers cannot afford to spend much time in assessing students' communicative ability (Bachman, 1990). In spite of the above facts, there are only few researches carried on speaking assessment from the point of view of the teachers in Ethiopia. In particular, the status of Ethiopian Secondary school English language teachers in conducting speaking assessment remained unexplored though as to Kelly (1980), as cited in Kim (2003), teachers’ performance in the feasibility of communicative assessment in a particular context is crucial in determining the ultimate success or failure of that assessment.

Statement of the Problem
It is believed that there are many difficulties in the practice of speaking in Ethiopian secondary school English classes. As it is explained by Hughes (1989), there is a great incongruity between the dominance of the Communicative Approach and measurement of communication ability in the field of language teaching.

Although many English language teachers are interested in CLT, as Jones, (1977) cited Kim (2003), communicative assessment has received little attention. Nevertheless, it is important to test a person's speaking ability directly if he/she can speak a second language. The problem becomes more serious when there is lack of interdependence between communicative language teaching and assessment on speaking skill. As Bachman (1990) states, speaking assessment carried out in traditional way does not assess students' oral proficiency from the perspective of language use and
communication. He pointed out that rote memorization of text dialogs has been used as a common way of speaking practice and assessment.

In this regard, the status of teaching speaking skill its assessment in secondary schools in SNNPR Sidama zone should be researched. Therefore, this research revolves around finding the major successes and defects of the teaching of speaking skill and its assessment in secondary schools in Sidama zone.

**Objectives of the Study**

**General objective**
The main objective of this study is to investigate the extent to which speaking skill assessment is practiced/implemented in Ethiopian government secondary school English classes and identify challenges related to it.

**Specific objectives**
The specific objectives of the study are:

- to find out Ethiopian secondary school English teachers’ level of awareness of assessment of speaking skill.
- to Identify the major constraints related to assessment of speaking in secondary school English classes
- to suggest possible techniques of alleviating the existing constraints related to speaking assessment.

The research tries to answer the following questions:

- Do Ethiopian secondary School English teachers have awareness of speaking skill assessment?
- What areas of speaking are focused in the assessment and how are these assessed?
- What problems do Ethiopian secondary school English teachers encounter during speaking skill assessment?

**MATERIALS AND METHODS**

**Study subjects:** subjects of this study are English language teachers and students of secondary schools in Sidama zone.

**Study Design**
In this study, purposive sampling is used to select the sample schools. This is preferred because Yirgalem secondary school has both cycles (9-12 grades), is the oldest school as compared to the others and believed that it has better experienced teachers that can be good source of information. Also it represents senior schools. Tula secondary school is among the youngest schools and has only first cycle (9-10 grades), and believed that it represents schools which are less experienced and resourced teachers. Thus, Yirgalem and Tula schools are focus of the study. The study focuses on 9-12 grades. Quota sampling is used to select sample students among the selected schools. A total of thirty students; twenty students from Yirgalem and the remaining ten were selected from Tula Secondary school. The number was limited to this to make the study manageable. Among the thirty sample students, various proportions are given for each school based on their number of students and teachers and grade levels. Therefore, in Yirgalem, five students from each grade level were selected. Then, these five students are subdivided among the number of sections in each grade level. Finally, one sample student was taken from the five drawn sections according to the given quota to each grade level. In Tula secondary school, the ten students are drawn from the two grades, 9 and 10, five from each grade similar procedure to the above.

Eight English language teachers from selected secondary schools were selected as samples. Among these, three English language teachers from Tula school and five teachers from Yirgalem based on
their population; two from each school were interviewed. They are selected in purposive sampling method, to have both better and less experienced teachers. All sample English teachers are made to fill questionnaire.

Study Methodology
In this study, two types of data collection instruments were used: 'questionnaire' and 'interview'. As McDonough and McDonough (1997) state, questionnaires are advantages because the knowledge needed is controlled by the questions, can be used on a small scale and large scale researches because they require little more extra effort, data can be gathered in several different time slots, and information can be gathered from colleagues in other schools and even in other countries. Questionnaires were prepared for both teachers and learners. The teachers’ questionnaire has two parts. The first part is about the school and teacher’s background information. This part has contained six questions. The second part has fourteen questions. All of the questions are closed-ended seeking information on various areas of speaking skill assessment.

Similarly, students’ questionnaire has two parts, questions related to background information and the main area of the study. They are six in number. On the other hand, semi-structured interviews were conducted with the sample teachers because interview is a very good way of accessing peoples’ perceptions and practices in detail. Also it was used to add triangulation of the data to be obtained from the questionnaire responses. The questions are five in number.

Data collection procedure
After the samples from both learners and teachers were specified, their respective questionnaires were distributed among them. The researcher has distributed the questionnaires in person and orientation was given on the purpose of the research and procedures of filling the questionnaires.

Data management and analysis
As data analysis is important to bring interpretation, it requires organization of information and data reduction. Thus, the collected data were organized and only relevant and related information was selected. The completed questionnaires were tallied according to their respective question items and choices. The number of tallies were counted and put in numbers and percentiles. Then, the data of each question item was changed to a table followed by discussion. On the other hand, the interview responses were listened thoroughly and transcribed. Then, content analysis was performed first by listing the range of responses by the participants, and then grouping common themes/contents in the interview questions. These themes were grouped under categories. Then, the repeated responses were put quantitatively. Next, the data obtained through both the questionnaires and interviews were analyzed and conclusions were made inductively. Finally, based on the results of the research, the respective schools were commented based on the theory of assessment in the literature and possible recommendations were given.
DATA ANALYSIS, RESULT & DISCUSSION

Questionnaire for Teachers’

Table 1. Teachers’ Response on frequency of Speaking Assessment

<table>
<thead>
<tr>
<th>Item 1.</th>
<th>Response</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you assess your learners’ speaking skill?</td>
<td>Always</td>
<td>13</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Sometimes</td>
<td>12</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Rarely</td>
<td>2</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Never</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>

According to the respondents, as indicated in table 1, most (75%) say that they assess their’ speaking skill sometimes. And not least, 13% of them confirmed they do this always. Another significant percentage, 13% said that they assess rarely. The figures show that it is encouraging that most of the respondents witnessed that they assess their students’ speaking skill sometimes. However, it is not convincing, every portion of speaking has to be carried out along with assessment. It may not necessarily be for marking.

Table 2. Teachers’ Response on Purpose of Speaking Assessment

<table>
<thead>
<tr>
<th>Item 2.</th>
<th>Response</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Why do you test your learners’ speaking skill?</td>
<td>To take marks for the report card</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>To identify students’ speaking problems</td>
<td>8</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>To see students speaking progress</td>
<td>8</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>To make evaluation comprehensive</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>

This item is used to see whether the teachers are using tests for various purposes or not. It is a closed-ended item type and gives four common purposes of tests. The table shows that half of English language teachers have used tests for assessing their students’ progress in speaking. Similarly, 50% of teachers have shown better performance in speaking problem identification.

Table 3 Teachers’ Response on Modes of Speaking Assessment

<table>
<thead>
<tr>
<th>Item 3</th>
<th>Response</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you use the following in speaking assessment?</td>
<td>Self-assessment</td>
<td>8</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Peer assessment</td>
<td>10</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>Teacher assessment</td>
<td>12</td>
<td>75</td>
</tr>
</tbody>
</table>

This item is used to see the practicability of various modes of assessment in speaking classes. The data in the above table show that the teachers take the lion’s share, as said by 80% of the samples, in giving feedback. Another pedagogically important assessment method, peer evaluation, is not exercised adequately; only 26% have said their teachers use as part of speaking skill assessment. The other least used technique of speaking assessment is self-assessment; only 23.6% of respondents said it is used in their classes. Here, it is evident that the teacher is a person who has the most experience of the learners’ speaking ability. However, they should have made the assessments side by side to the students’ self-assessment.

Also, the learners are not given adequate opportunity to assess their speaking skill by themselves though, as mentioned earlier, Dickinson (1978) recommends self-assessment because it makes the learner take responsibility about his/her learning independently of the teacher. Similarly, Chatter
(1984) says the ultimate aim of assessment should be for self-assessment, as it grants the learners the autonomy where they could form a judgment of their own abilities and attainments. Then the learners can move towards a sense of confidence about their use of language if they participate in the assessment process and gradually free themselves from being dependent on their teacher.

Table 4  Teachers’ Response on Speaking Assessment Task Resources

<table>
<thead>
<tr>
<th>Item 4</th>
<th>Response</th>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you use the following resources to assess your students speaking performance?</td>
<td>Textbook</td>
<td>No.</td>
<td>17</td>
<td>10</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>56</td>
<td>33.3</td>
<td>10</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>21</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>3.3</td>
<td>16</td>
<td>3.3</td>
<td>70</td>
<td>100</td>
</tr>
<tr>
<td>Audio-video materials</td>
<td>No.</td>
<td>1</td>
<td>6</td>
<td>5</td>
<td>19</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>3.3</td>
<td>20</td>
<td>16.6</td>
<td>63.3</td>
<td>100</td>
</tr>
<tr>
<td>Pictures/photographs</td>
<td>No.</td>
<td>7</td>
<td>11</td>
<td>6</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>23.3</td>
<td>36.6</td>
<td>20</td>
<td>20</td>
<td>100</td>
</tr>
</tbody>
</table>

Item 4 is aimed at finding the resources in which the speaking test tasks are selected from. According to the students’ responses, as shown in table 3, most (56%) said that English teachers have used textbook always as primary resource material and the other significant proportion (33.3%) said that the teachers have used it sometimes. Regarding the audio-video materials, almost all (90%) of the respondents witnessed that teachers have never used them. Similarly, visuals like pictures, photographs and posters have never been used according to (63.3%) of the respondents. However, 23.3% and 36.6% of sample students said that teachers have used articles journals and the like always or sometimes respectively.

Table 5  Teachers’ Response on time of Assessing Speaking

<table>
<thead>
<tr>
<th>Item 5</th>
<th>Response</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Only accidentally</td>
<td>4</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Only Advance preparation</td>
<td>8</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Both methods</td>
<td>4</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>

The purpose of this item is to see the usage of pre-informed (prepared) and uninformed (incidental) type of speaking tests. As it is summarized in table 5, (50%) of the teachers tell their students to be prepared for speaking tests in advance. On the other hand, 25% of sample teachers said that they test their students only accidentally. The remaining 25% use both type of techniques.

Table 6. Teachers’ Response on Completion Rate of Speaking Test Tasks

<table>
<thead>
<tr>
<th>Item 6</th>
<th>Response</th>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do your learners complete speaking assessment tasks/activities on/in time?</td>
<td>No.</td>
<td>-</td>
<td>14</td>
<td>2</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>%</td>
<td>-</td>
<td>87</td>
<td>13</td>
<td>-</td>
<td>100</td>
</tr>
</tbody>
</table>

Here, in this item, teachers were asked to respond to the degree at which their speaking assessment tasks are completed in the planned time. Concerning this, table 6 shows that, among the teachers, most of them (87%) of them completed sometimes. And, (13%) of the teachers’ students have never completed the task.
Table 7. Teachers’ Response on Speaking Assessment Task Selection Criteria

<table>
<thead>
<tr>
<th>Item 7</th>
<th>Task Selection Criteria</th>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lesson objectives</td>
<td>No.</td>
<td>%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>25</td>
<td>50</td>
<td>25</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>contents</td>
<td>No.</td>
<td>6</td>
<td>10</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>38</td>
<td>63</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Time</td>
<td>No.</td>
<td>4</td>
<td>10</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>25</td>
<td>63</td>
<td>13</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Resource</td>
<td>No.</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>25</td>
<td>37.5</td>
<td>37.5</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Interest</td>
<td>No.</td>
<td>10</td>
<td>-</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td>63</td>
<td>-</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Classroom organization</td>
<td>%</td>
<td>37.5</td>
<td>50</td>
<td>12.5</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Easiness for marking</td>
<td>%</td>
<td>25</td>
<td>75</td>
<td>-</td>
<td>100</td>
</tr>
</tbody>
</table>

How often do you select the assessment tasks/activities based on the following criteria?

This item is related to item 4 above. After they have decided where to get the assessment task from, here, they explain their basis for deciding which task to bring to class. The table shows that 25% of English teachers select speaking test tasks ‘always’ based on the lesson objectives. Pedagogically, objectives are cornerstones and starting point for both teaching and assessment. In selecting the tasks based on their contents, similarly, all of the sample teachers have shown good awareness.

On the other aspect, majority of the teachers are sensitive to time available in selecting the tasks. 87.5% of them selected their test tasks ‘always’ based on the time available. In addition to this, most of the teachers (62.5%) have considered the amount of available materials (resources) for speaking test task selection. 37.5% of them replied that they ‘rarely’ consider resource availability for task selection. Also it is good to see most of the teachers respect their learners’ interest in task selection. Majority of them (63%) have responded ‘always’ in this regard. Classroom organization is the other criterion which is well considered in both sides. Most of them relate their tasks with their classroom organization. Similarly, suitability for marking is considered by almost all the teachers.

From the above discussion, we can see that teachers have good pedagogical knowledge on speaking assessment task selection. However, they don’t consider availability of resource in task selection, and while designing tasks, they prefer tasks that are easy for correction.

Table 8. Teachers’ response on Pedagogical awareness on Test Administration

<table>
<thead>
<tr>
<th>Item 8</th>
<th>Response</th>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often are the following practiced during speaking assessment in your classroom?</td>
<td>Tell purpose of the test</td>
<td>No. 4</td>
<td>25</td>
<td>50</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td></td>
<td>% 25</td>
<td>25</td>
<td>50</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Give instruction of the tasks</td>
<td>No. 14</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>% 88</td>
<td>12</td>
<td>-</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Gives procedure of assessment</td>
<td>No. 2</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>% 12</td>
<td>25</td>
<td>38</td>
<td>25</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Gives guidance during assessment</td>
<td>No. 6</td>
<td>8</td>
<td>2</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>% 38</td>
<td>50</td>
<td>12</td>
<td>-</td>
<td>100</td>
</tr>
</tbody>
</table>

The objective of this item is to see pedagogical efficiency of the teachers in administering speaking tests. On the first category, purpose of the test, all the teachers are expected to respond in ‘always’ column because always learners should be told why they are doing the tasks. However, as it is indicated in table 8, 25% of the teachers have responded ‘always’ and the other 25% teachers have
responded ‘sometimes’. Pedagogically, objective of any task either for grading achievement or identifying areas of treatment, purpose of the test needs to be introduced.

The result is supportive in giving instruction of the test tasks. 88% of the teachers give instruction always. The other pedagogical aspect, giving detailed information on the procedure of evaluation is surveyed by this item. As it is shown in table 8, only few of them 12% have done it always. In other words, most of (83%) the total teachers have either rarely or never explained the detailed procedure. The last aspect of speaking assessment, in this item is giving guidance for the learners. Here the data show that 38% of them have given ‘always’.

<table>
<thead>
<tr>
<th>Table 9. Teachers’ Response on Speaking Assessment items types</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Item 9</strong></td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>Do you use the following item types to assess speaking skill in your classroom?</td>
</tr>
<tr>
<td>Interview</td>
</tr>
<tr>
<td>Oral Presentation</td>
</tr>
<tr>
<td>Dialogue</td>
</tr>
<tr>
<td>Role play</td>
</tr>
<tr>
<td>Drills</td>
</tr>
</tbody>
</table>

This item is used to identify if the above item types of speaking assessment are used. Table 9 shows that oral presentation is used by most (63%) of the sample teachers. Next, role play is used by 25% of the teachers. However, role play is used by only 25% of the teachers. In the case of dialogue, it is used by 88% of teachers. Interview is used only by 13% of the teachers. The rest drilling is used by very few (13%) of the teachers.

Generally, two of the six item types (presentation and dialogue) are used by most of the teachers whereas the rest three (interview, role play and drill) are less used.

<table>
<thead>
<tr>
<th>Table 10. Teachers’ Response on Weight of Contents in Speaking Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Item 10</strong></td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td>How much weight do you give for the following areas of speaking during assessment?</td>
</tr>
<tr>
<td>Pronunciation</td>
</tr>
<tr>
<td>word</td>
</tr>
<tr>
<td>Appropriateness</td>
</tr>
<tr>
<td>Grammar</td>
</tr>
<tr>
<td>Clarity of idea</td>
</tr>
<tr>
<td>Confidence</td>
</tr>
<tr>
<td>Naturalness</td>
</tr>
<tr>
<td>Eye contact</td>
</tr>
<tr>
<td>Voice projection</td>
</tr>
<tr>
<td>Body language</td>
</tr>
<tr>
<td>Eye contact</td>
</tr>
</tbody>
</table>

Even though teachers can vary the weight of contents depending on the value they give to them or the amount of time they spend during practice, it is logical that they shouldn’t over emphasize or give very little emphasis on one or the other aspects. According to the table above, there is over emphasis on grammar, word appropriateness and clarity of idea by the teachers. 75% of the respondents said that they give high value during assessment. They believed that it is the most essential aspect of speaking. Also half of the respondents said that confidence, naturalness, voice projection and eye contact are highly valuable. On the other hand, pronunciation, organization and
naturalness considered as less important aspects of speaking. Generally, the above data show that teachers have given much emphasis on accuracy than meaning on speaking evaluation scheme.

Table 11. Teachers’ Response on using Speech Scoring techniques

<table>
<thead>
<tr>
<th>Item 11</th>
<th>Response</th>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you use the following tools during scoring speaking performance?</td>
<td>Checklist</td>
<td>No. 4</td>
<td>-</td>
<td>12</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>% 25</td>
<td>-</td>
<td>75</td>
<td>-</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>Scales</td>
<td>No 2</td>
<td>10</td>
<td>4</td>
<td>-</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td>% 12.5</td>
<td>62.5</td>
<td>25</td>
<td>-</td>
<td>100</td>
</tr>
</tbody>
</table>

This item is used to check whether checklist and scales are used or not. According to the teachers’ response, as shown in the above table, content checklist is used always by 25% of the sample teachers. 75% of them have rarely used it. Regarding the scales, only 12.5% of them in both schools have used it always and 62.5% have used it sometimes whereas 25% of the teachers have rarely used it. This shows that the assessment procedure is unplanned and subjective. Clear scheme should have been set for conversion of speech to marks/numbers.

Table 12. Teachers’ Response on Feedback and Correction

<table>
<thead>
<tr>
<th>Item 12</th>
<th>Response</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>When do you give the assessment feedback/correction on your learners’ speaking performance?</td>
<td>In the middle of assessment</td>
<td>10</td>
<td>62.5</td>
</tr>
<tr>
<td></td>
<td>After assessment</td>
<td>6</td>
<td>37.5</td>
</tr>
<tr>
<td></td>
<td>Never give feedback</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

According, to the above data, 62.5% of the teachers said that they give feedback in the middle of presentation, and 37.5% of them give at the end. The students’ response also shows the same. Errors which affect meaning or the entire presentation should be corrected on spot. However, grammatical errors should be tolerated till the end of presentation. Also over correction may discourage student involvement, loss their confidence on themselves or disturb their presentation.

Table 13. Teachers’ Response on challenges Related to Speaking Assessment

<table>
<thead>
<tr>
<th>Item</th>
<th>Response</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which of the following factor(s) challenge speaking assessment in your classroom?</td>
<td>Class size</td>
<td>10</td>
<td>62.5</td>
</tr>
<tr>
<td></td>
<td>Seating arrangement</td>
<td>6</td>
<td>37.5</td>
</tr>
<tr>
<td></td>
<td>Disciplinary problems</td>
<td>8</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Lack of materials</td>
<td>10</td>
<td>67.5</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>4</td>
<td>12.5</td>
</tr>
</tbody>
</table>

Here, teachers are asked to indicate the kind of problems that interfere with speaking assessment in their classrooms. As the table shows, problems reported by teachers are listed as follows from most to list: lack of resources 67.5%, class size 62.5%, disciplinary problems 50%, seating arrangement 37.5%, and others 12.5%. This shows that lack of resources, large class, disciplinary problems, and seating arrangements are the top three reported problems that are affecting speaking assessment. The problems are so serious and can disrupt the entire teaching learning process in not resolved soon. Other problems reported by the teachers are: lack of exposure to English speaking people;
lack of motivation; learners are often reluctant to be assessed in speaking classes and learners do not have speaking skill required at their grade level.

Students’ Questionnaire

Table 14. Students’ Response on frequency of Speaking Assessment

<table>
<thead>
<tr>
<th>Item 1</th>
<th>Response</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often does your English Teacher assess your speaking skill?</td>
<td>Always</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Sometimes</td>
<td>17</td>
<td>56.7</td>
</tr>
<tr>
<td></td>
<td>Rarely</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Never</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

This item is similar to item 1 in teachers questionnaire and its purpose is to see the rate at which speaking is assessed in Ethiopian secondary school English classes. According to the respondents, as indicated in table 1, most 56.7% of students say that their English language teachers assess their' speaking skill sometimes. And not least, 20% of them confirmed they do this always. Another significant percentage, 20% said that their English teachers assess them rarely. The figures show that it is encouraging that most of the respondents, 76.7% witnessed that their teachers assess them either sometimes or always.

Table 15 Students’ Response on Modes of Speaking Assessment

<table>
<thead>
<tr>
<th>Item 2</th>
<th>Response</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your Teacher use the following in speaking assessment?</td>
<td>I evaluate myself</td>
<td>7</td>
<td>23.6</td>
</tr>
<tr>
<td></td>
<td>My friends evaluate me</td>
<td>8</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>My Teacher evaluates me</td>
<td>24</td>
<td>80</td>
</tr>
</tbody>
</table>

This item is used to see the practicability of various modes of assessment in speaking classes. The data in the above table show that the teachers take the lion’s share, as said by 80 % of the samples, in giving feedback. Another pedagogically important assessment method, peer evaluation, is not exercised adequately; only 26 % have said their teachers use as part of speaking skill assessment. The other least used technique of speaking assessment is self-assessment; only 23.6% of respondents said it is used in their classes.

Here, it is evident that the teacher is a person who has the most experience of the learners’ speaking ability. However, they should have made the assessments side by side to the students’ self-assessment. Also, the learners are not given adequate opportunity to assess their speaking skill by themselves though, as mentioned earlier, Dickinson (1978) recommends self-assessment because it makes the learner take responsibility about his/her learning independently of the teacher. Similarly, Chatter (1984) says the ultimate aim of assessment should be for self-assessment, as it grants the learners the autonomy where they could form a judgment of their own abilities and attainments. Then the learners can move towards a sense of confidence about their use of language if they participate in the assessment process and gradually free themselves from being dependent on their teacher.
Table 16. Students’ Response on Speaking Assessment Task Resources

<table>
<thead>
<tr>
<th>Item 3</th>
<th>Response</th>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often does your teacher use the following as resources to assess your speaking performance?</td>
<td>Textbook</td>
<td>No.</td>
<td>17</td>
<td>10</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td><strong>56</strong></td>
<td><strong>33.3</strong></td>
<td><strong>10</strong></td>
<td><strong>0</strong></td>
</tr>
<tr>
<td></td>
<td>Audio-video materials</td>
<td>No.</td>
<td>1</td>
<td>5</td>
<td>3</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td><strong>3.3</strong></td>
<td><strong>16</strong></td>
<td><strong>3.3</strong></td>
<td><strong>70</strong></td>
</tr>
<tr>
<td></td>
<td>Pictures/photographs</td>
<td>No.</td>
<td>1</td>
<td>6</td>
<td>5</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td><strong>3.3</strong></td>
<td><strong>20</strong></td>
<td><strong>16.6</strong></td>
<td><strong>63.3</strong></td>
</tr>
<tr>
<td></td>
<td>Articles</td>
<td>No.</td>
<td>7</td>
<td>11</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>%</td>
<td><strong>23.3</strong></td>
<td><strong>36.6</strong></td>
<td><strong>20</strong></td>
<td><strong>20</strong></td>
</tr>
</tbody>
</table>

Item 4 is aimed at finding the resources in which the speaking test tasks are selected from. According to the students’ responses, as shown in table 3, most (56%) said that English teachers have used text book always as primary resource material and the other significant proportion (33.3%) said that the teachers have used it sometimes. Regarding the audio-video materials, almost all (90%) of the respondents witnessed that teachers have never used them. Similarly, visuals like pictures, photographs and posters have never been used according to (63.3%) of the respondents. However, 23.3% and 36.6% of sample students said that teachers have used articles journals and the like always or sometimes respectively.

Table 17. Students’ Response on When to Assess Speaking

<table>
<thead>
<tr>
<th>Item 4</th>
<th>Response</th>
<th>Tests me without telling me the test time</th>
<th>No.</th>
<th>13</th>
<th>43.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does your English teacher use the following ways to test your speaking?</td>
<td>Tells me to be prepared before the test day</td>
<td>No.</td>
<td>17</td>
<td>%</td>
<td><strong>56.7</strong></td>
</tr>
</tbody>
</table>

As it is summarized in table 2.3, majority of the teachers (56.7%) tell their students to be prepared for speaking tests in advance. On the other hand, 43.3% of students said that the teachers do not test their students incidentally.

Table 18. Students’ Response on Completion Rate of Speaking Test Tasks

<table>
<thead>
<tr>
<th>Item 5</th>
<th>How often do you complete speaking assessment tasks/activities on/in time?</th>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Response</td>
<td>No.</td>
<td>%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td><strong>33.3</strong></td>
<td>18</td>
<td><strong>60</strong></td>
<td>7</td>
</tr>
</tbody>
</table>

Item 4 is designed to see the degree of assessment task completion with in the planned time. According to the respondents, 33.3% of them have always finished the tasks and more than half 60% have sometimes finished. The figures show that assessment tasks were mostly completed, but this, in other words, means that the assessment objectives were not met as there were times tasks were not finished.
Table 19. Students’ response on speaking assessment Administration

<table>
<thead>
<tr>
<th>Item 6</th>
<th>Options</th>
<th>Always</th>
<th>Sometimes</th>
<th>Rarely</th>
<th>Never</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often does your English teacher do the following during speaking test in your classroom?</td>
<td>Tells me the purpose of the test</td>
<td>No. 4 3 9 14 30</td>
<td>% 13.3 10 16.6 46.6 100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Introduces me the topic of the task</td>
<td>No. 12 10 5 2 30</td>
<td>% 40 33.3 16.6 6.6 100</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gives me instruction of the task</td>
<td>No. 10 14 4 2 30</td>
<td>% 33.3 46.6 13.3 6.6 100</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gives me Procedure of the evaluation process</td>
<td>No. 5 7 12 5 30</td>
<td>% 16.6 23.3 40 16.6 100</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gives me guidance during the assessment</td>
<td>No. 6 7 9 7 30</td>
<td>% 20 23.3 30 23.3 100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Also this item is similar to item 8 in the teachers’ questionnaire. It is aimed at identifying the pedagogical quality of test administration. In communicating the objective of the test to the learners, as the above table shows, 46.6% of the respondents said that the teachers never did this and another 30% fall to ‘rarely’ category. This means ‘rarely’ and ‘never’ comprise 76.6% of the sample respondents which means the teachers have failed to communicate the assessment objectives among the learners. On the second pedagogical aspect, introduction of the test task, 40% and 33.3% of the samples replied that English teachers have shown that they were successful on this aspect. In giving clear task instruction, teachers are better in this regard. On the last two pedagogical aspects, giving detailed procedures of marking and guidance, the teachers have shown poor performance. 56.6% and 53.3% of sample students said that they get assessment procedure and guidance rarely or never.

Table 20. Students Response on Speaking Skill Assessment Task Item Types

<table>
<thead>
<tr>
<th>Item 7</th>
<th>Response</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Interview</td>
<td>8</td>
<td>26.6</td>
</tr>
<tr>
<td></td>
<td>Individual oral presentation</td>
<td>13</td>
<td>43.3</td>
</tr>
<tr>
<td></td>
<td>Dialogues</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Role plays</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td>Reading a monologue</td>
<td>8</td>
<td>26.6</td>
</tr>
<tr>
<td></td>
<td>Drilling</td>
<td>12</td>
<td>40</td>
</tr>
</tbody>
</table>

The above table shows that dialogue, oral presentation and drilling are used by most of the sample teachers (50%, 43.3%, 40%). Role play is the least used 3.3% of the teachers. Interview in used only by 26% of the teachers. Though they are important tasks in communicative language teaching, role play and interview are less used by the teachers whereas drill is overemphasized.

Table 21. Students’ Response on Time of Feedback

<table>
<thead>
<tr>
<th>Item 8</th>
<th>Response</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In the middle of assessment</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>After assessment</td>
<td>11</td>
<td>36.6</td>
</tr>
<tr>
<td></td>
<td>Never give feedback</td>
<td>4</td>
<td>13.3</td>
</tr>
</tbody>
</table>

According, to the above data, 50% of the respondents sad that their English teachers give them feedback in the middle of presentation, and 36.6% said that they receive at the end. In fact, corrections are given either in the middle or at the end depending on the gravity of the error. Errors which affect meaning or the entire presentation should be corrected on spot. However, grammatical errors should be tolerated till the end of presentation. The other implication is that over correction
may discourage student involvement in the future course or loss confidence on themselves. In addition, it can make them unstable psychologically and affect organization of their presentation.

Table 22. Students’ Responses on Problems Related to Speaking Assessment

<table>
<thead>
<tr>
<th>Item 9</th>
<th>Response</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Which of the following factors challenge speaking test in your classroom?</td>
<td>Class size</td>
<td>20</td>
<td>66.6</td>
</tr>
<tr>
<td></td>
<td>Seating arrangement</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td></td>
<td>Disciplinary problems</td>
<td>8</td>
<td>26.6</td>
</tr>
<tr>
<td></td>
<td>Lack of materials</td>
<td>20</td>
<td>66.6</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>4</td>
<td>13.3</td>
</tr>
</tbody>
</table>

Based on the figures in table, the top three and more serious problems are class size (66.6%), lack of materials (66.6%), disciplinary problems (26.6%) and seating arrangement (13.3%). The other problems related to testing speaking, reported by the students in the open ended item, were test taking students fear of their classmates and the teacher during speaking; lack of speaking experience before the test; lack of supplementary materials like books, video etc; and lack of guidance from the teachers’ side.

**Teachers Interview**

**Question 1.** The interviewed teachers said that they assess their students speaking skill because it is one of the four skills used for communication. They stressed that they do this to make their evaluation comprehensive. Two of the respondents in these schools said that they assess speaking once a semester and the other said that the rarely do the assessment. The challenges given by the teachers who assessed less frequently responded are: learners are not interested and do not participate during the speaking lessons as opposed to grammar lessons; due to large number of students, it was impossible to allot time to assess speaking as it needs much time to administer; there is no agreement among the teachers to give marks for speaking skill test. They believe that it is waste of energy and time; and finally, EGSLCE and university entrance exams do not incorporate speaking test and their learners too prepare themselves according to these national tests.

**Question 2.** The most important areas of speaking assessment according interviewed English teachers are grammatical correctness, fluency and clarity of idea. The reasons to focus on grammar /accuracy/ are good speaker has to say it correctly, and also the students like and spend a lot of time on it. They emphasized that though the three areas of speaking are important for effective communication, grammar has to be prioritized.

**Question 3.** The kinds of speaking assessments tasks preferred by these teachers are those which are suitable for individual and pair works and less time taking because they have little time for this skill and learners are often less interested to do in groups. Mostly, as they said, use oral presentation and memorized dialogues. The source of the tasks varies between these two teachers. One of them said that he uses the tasks in the textbook whereas the other said that he gives the learners to choose a topic for themselves.

**Question 4.** On the procedure of marking, both teachers from the government schools didn’t give detailed information. They said that they listen to their presentations and give marks depending on their speech quality. There are no fixed and clear procedures of marking their learners’ speaking performance. They said that they give marks based on their learners’ performance on the most essential areas of speaking to them.

**Question 5.** Finally the teachers concluded that testing speaking is a tiresome work and they stressed that their problems are lack of time, large number of students and learners’ lack of interest and unwillingness. They also said that they have lack of audio-video resources in their schools and
as a result, they couldn’t make learners watch model presentations before they appear on test sessions. They concluded that they are working with their school principals and owners to solve the problems.

CONCLUSION AND RECOMMENDATIONS

Conclusions

Speaking skill assessment is given less emphasis in government secondary schools even their primary assessment purpose is to measure achievement rather than using it for learners’ progress and problem identification. Learners speaking skill is assessed dominantly by teachers themselves rather than giving learners responsibility to assess and reflect on their speech. Textbooks are over used as a resource material for assessment task selection. Assessment tasks and activities in government secondary school English classes are selected mostly based on availability of time and seating arrangement rather than to be based on objectives set for the subject. English language teachers have shown little performance in communicating objectives and marking procedures of assessment. Learners are often interrupted while they are in assessment presentations and they are rarely given guidance when they loss their track. There is over use of individual presentation and form focused assessment in in speaking class. English teachers in government secondary schools are less planned in marking procedures and their assessment is highly influenced by lack of resources, large number of students in class and learner disciplinary problems.

Recommendations

- English language teachers in secondary schools should be encouraged to apply both competence and performance based assessment and given professional help by English departments in their schools and language teaching experts at zonal or wereda education offices.

- English Department Heads and English teachers themselves, School principals and other responsible bodies should work cooperatively in inviting professional from Universities and NGOs like The British Council who promotes English language teaching and preparing short term refreshment trainings focused on practicability and advancement of speaking skill assessment in their schools.

- Enter school experience sharing opportunities like discussion forums and workshops should be prepared between secondary schools so that English language teachers discuss on their common problems and work hand in hand in solving their problems in their classrooms.

Bibliography


The Attitudes and Perceptions of School Community towards Mother Tongue Based Classroom Instruction: The Case of Sidama Zone
Mebratu Mulatu Bachore
(School of Languages and Communication Studies)

ABSTRACT
The main objective of the study is to assess the attitudes and perceptions of school community towards mother tongue based classroom instruction. The study was conducted in Sidama zone, particularly in three Woredas which one school was drawn from each. The approach employed to carry out the study was mixed one: quantitative and qualitative approach. The tools which were used to collect data are questionnaires and interview. The questionnaire was administered to the teachers and the students, and the interview was to the school parents in the target area. There were 70 students, 6 parents and 11 teachers who were taken by using cluster and random sampling. The results of the study showed that most parents and almost half of the sample students have negative attitude and perception towards using mother tongue as a medium of instruction. But, the teachers’ attitude and perception can be rated as good. Moreover, the study revealed that there are challenges like shortages of reference materials and text books to be used in Sidama language; students might have problems in their future since the language is being used in their local environment only, and the students are experiencing serious writing problems in the texts they produce in the Sidama language.

INTRODUCTION
Background of the Study
Although language education policies diverged across sub-Saharan Africa during the colonial period, post-colonial developments are showing a remarkable convergence towards one language model. Tanzania, Ethiopia and Eritrea are the only countries with other models (UNESCO, 2006). The former French, Portuguese and Spanish colonies used only the colonial language in education. Post-independence shows increasing movement from zero mother-tongue education to between one and three years of learning in the mother tongue, followed by a transition to French and, in Mozambique, Portuguese. The former French, Portuguese and Spanish colonies used only the colonial language in education. Post-independence shows increasing movement from zero mother-tongue education to between one and three years of learning in the mother tongue, followed by a transition to French and, in Mozambique, Portuguese. In contrast, African languages were transcribed by missionaries in the former British colonies and used as the medium of instruction in education for four to six years. Since independence these countries have tended to whittle away at mother-tongue education (MTE) and either eliminate it or reduce it to a maximum of three years. Today, with a few exceptions, there is a convergence towards similar language education models across sub-Saharan Africa. In most cases, children receive up to three years of MTE, followed by a switch to education in the former colonial language.

Statement of the Problem
While there are many factors involved in delivering quality basic education, language is clearly the key to communication and understanding in the classroom. Many developing countries are characterized by individual as well as societal multilingualism, yet continue to allow a single foreign language to dominate the education sector. Instruction through a language that learners do not speak has been called “submersion” (Skutnabb-Kangas 2000) because it is analogous to holding learners under water without teaching them how to swim. Compounded by chronic difficulties such as low levels of teacher education, poorly designed, inappropriate curricula and lack of adequate school facilities, submersion makes both learning and teaching extremely difficult, particularly...
when the language of instruction is also foreign to the teacher. Mother tongue-based bilingual programs use the learner’s first language, known as the L1, to teach beginning reading and writing skills along with academic content. The second or foreign language, known as the L2, should be taught systematically so that learners can gradually transfer skills from the familiar language to the unfamiliar one. Bilingual models and practices vary as do their results, but what they have in common is their use of the mother tongue at least in the early years so that students can acquire and develop literacy skills in addition to understanding and participating in the classroom.

Though mother tongue based education has such roles, discussions of the role of the MT (mother tongues) are often controversial and polarized, full of misunderstandings and an unhealthy amount of guilt. The banning and the use of the MT have come and gone throughout history. However, Cook points out that ‘most teaching methods since the 1880s have adopted the direct method avoidance of the L1’ (2001: 2) and ‘recent methods do not so much forbid the L1 as ignore its existence altogether. Moreover, the research works conducted so far in the area haven’t assessed the attitude and perception of the society, the learners and the teachers on the role of MT in education.

Objectives of the Study
The main objective of the research is to assess the attitude and perception of the wider school community towards mother tongue based classroom instruction. Very specifically, the research attempts to:

- Identify perception issues of school community related to towards mother tongue based classroom instruction.
- Evaluate the attitude of teachers and learners in imparting and learning classroom knowledge in mother tongue.
- Sort out the opportunities and challenges in category and imply directions for future action.

RESEARCH METHODOLOGY

Research Setting
The present study was undertaken in Sidama Zone primary schools where Sidama Language has been used as medium of instruction.

Research Population and Sampling Techniques
The researcher selected three schools randomly from three Woredas in Sidama Zone. Similarly, three Woredas are selected by clustering the 22 Woredas in the Zone in to three groups. Then, one school was selected randomly from each group. In addition, Hawassa college of Teacher Education was taken as a sample purposively. From the schools’ population, 11, 6 and 70 teachers, parents and students respectively were selected as research samples. The sampling technique employed was clustering and random sampling. Regarding teachers, from grade 1-4, two teachers from each grade level were selected and 4 teachers who were teaching in Hawassa Teacher Education College were selected. From each of the three schools, two parents, 6 in total, were selected as a sample. Finally, 15 students were selected randomly from each primary school and 10 students were selected in the same way from Hawassa College of Teacher Education.

Data Gathering Tools
A questionnaire was used to test students' attitude and perception towards Sidama language as medium of instruction. The questionnaire was slightly adapted from Taylor's Language Attitude Scale, Gardner Attitude/Motivation Scale and other scales. It is a 5-point Likert type which rates the attitude as "strongly agree", "agree", "undecided", "disagree", and "strongly disagree". Similarly, another questionnaire was designed to be administered to the Sidama language teachers.
DATA ANALYSIS AND INTERPRETATION

Introduction
This section deals with the analysis and interpretation of the data collected from different stakeholders (informants) through various tools. Very specifically, the first part presents the data from students. Then, data from teachers follows with its detail analysis. Finally, the parent’s interview data is presented through textual analysis.

Students’ Questionnaire

Table 1: Attitude towards the Role of MT in classroom

<table>
<thead>
<tr>
<th>No.</th>
<th>Statements</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>U</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The scholastic level of school will fall if the mother tongue is used as instructional medium.</td>
<td>11</td>
<td>19</td>
<td>40</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Attempts to avoid Sidama language as medium of instruction can be psychologically damaging to the students of native speaker.</td>
<td>36</td>
<td>26</td>
<td>8</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Continual usage of the mother tongue in the classroom instruction would accomplish nothing worthwhile for the society.</td>
<td>14</td>
<td>16</td>
<td>18</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>The Sidama language could be used as efficient instructional language as other languages.</td>
<td>23</td>
<td>22</td>
<td>12</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>The mother tongue should be discouraged from being used as medium of instruction.</td>
<td>5</td>
<td>8</td>
<td>38</td>
<td>6</td>
<td>13</td>
</tr>
<tr>
<td>6</td>
<td>The Sidama language must be accepted as instructional medium if pride is to develop among students of the native speakers.</td>
<td>22</td>
<td>18</td>
<td>11</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>If users of the Sidama language were encouraged, speakers of the Sidama language would be more motivated to achieve academically.</td>
<td>31</td>
<td>39</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

The above table, table 1, depicts the respondents’ attitude towards the role of mother tongue in classroom. Accordingly, the quantitative average of the respondents disclosed that 39.2 (45.9%) respondents have a positive attitude towards the role since the sum of SA (strongly agree) and A (agree) results the indicated number. However, the addition of the two categories (SD and D) shows that 25 (35.7%) students have a negative attitude towards the classroom role of the mother tongue. Likewise, 5.7 (8.1%) students were unable to decide on the role of mother tongue in classroom.

Table 2: Perceptions towards the standard of MT to meet the Classroom Demands

<table>
<thead>
<tr>
<th>No.</th>
<th>Statements</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>U</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>The Sidama language is clear, thoughtful, and expressive.</td>
<td>26</td>
<td>28</td>
<td>10</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>The Sidama language has a faulty grammar system.</td>
<td>6</td>
<td>8</td>
<td>31</td>
<td>25</td>
<td>-</td>
</tr>
</tbody>
</table>
10 When teachers reject the native language of a student, they do him great harm.

11 Widespread acceptance of the Sidama language as medium of instruction is absolutely necessary.

13 The acceptance of mother tongue instruction will lead to a lowering of standards in school.

14 Mother tongue instruction should be accepted socially.

15 The Sidama language is as effective for communication as are other languages.

Average of the Respondents

<table>
<thead>
<tr>
<th>Statements</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>U</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 One successful method for improving the learning capacity of speaker of the Sidama language would be to replace their language with second and foreign languages.</td>
<td>21</td>
<td>21</td>
<td>18</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>17 I prefer Sidama language to be the medium of instruction at the junior level.</td>
<td>28</td>
<td>24</td>
<td>11</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>19 Given the chance, I would study all my subjects in Sidama language.</td>
<td>19</td>
<td>24</td>
<td>12</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>20 I believe that students' participation would be more effective if the Sidama language were the medium of instruction at junior level.</td>
<td>22</td>
<td>26</td>
<td>10</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>21 I believe the curriculum would serve the learners more efficiently if it was in the Sidama language at junior level.</td>
<td>19</td>
<td>24</td>
<td>12</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>22 I believe that the Sidama language is capable of handling modern science.</td>
<td>17</td>
<td>20</td>
<td>10</td>
<td>10</td>
<td>13</td>
</tr>
</tbody>
</table>

Table 3: Classroom Preference and Learners Involvement

Table two assesses the learners’ perception towards the standard of mother tongue to meet the classroom demands. The data in the table reveals that 50.6 (72.2%) students agreed on the standard of the mother tongue to handle the issues in the classroom. On the contrary, 16.2 (23.1%) learners indicated that the language is not competent enough to meet the demands of the classroom. Also, 3(4.2%) respondents were unable to decide their position on the standard of the language in attaining the classroom needs. This implies that most of the students are convinced on the efficiency of the Sidama language to carry out the classroom activities. But, some students are not convinced in this regard.

<table>
<thead>
<tr>
<th>No.</th>
<th>Statements</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>U</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>One successful method for improving the learning capacity of speaker of the Sidama language would be to replace their language with second and foreign languages.</td>
<td>21</td>
<td>21</td>
<td>18</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>17</td>
<td>I prefer Sidama language to be the medium of instruction at the junior level.</td>
<td>28</td>
<td>24</td>
<td>11</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>19</td>
<td>Given the chance, I would study all my subjects in Sidama language.</td>
<td>19</td>
<td>24</td>
<td>12</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>20</td>
<td>I believe that students' participation would be more effective if the Sidama language were the medium of instruction at junior level.</td>
<td>22</td>
<td>26</td>
<td>10</td>
<td>11</td>
<td>7</td>
</tr>
<tr>
<td>21</td>
<td>I believe the curriculum would serve the learners more efficiently if it was in the Sidama language at junior level.</td>
<td>19</td>
<td>24</td>
<td>12</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>22</td>
<td>I believe that the Sidama language is capable of handling modern science.</td>
<td>17</td>
<td>20</td>
<td>10</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td><strong>Average of the Respondents</strong></td>
<td><strong>29.2</strong></td>
<td><strong>21.4</strong></td>
<td><strong>12.1</strong></td>
<td><strong>4.1</strong></td>
<td><strong>3</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th><strong>SA</strong></th>
<th><strong>A</strong></th>
<th><strong>D</strong></th>
<th><strong>SD</strong></th>
<th><strong>U</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>41.7%</strong></td>
<td><strong>30.5%</strong></td>
<td><strong>17.3%</strong></td>
<td><strong>5.8%</strong></td>
<td><strong>4.2%</strong></td>
</tr>
</tbody>
</table>
The above table represents the quantitative data on the learners’ involvement and classroom preference in the case of mother tongue. Hence, 40.6 (57.9%) students agreed that mother tongue is important to promote learners’ involvement and improvement of results. Hence, they prefer they prefer their classes to be conducted in mother tongue. Nevertheless, 22.1 (31.5%) students reacted against to the use of mother tongue for the stated purposes. On the other hand, 8.4(12%) students were suspicious on the issue.

Table 4: The Role and Status of Mother Tongue in Comparison to Second/ Foreign Languages

<table>
<thead>
<tr>
<th>No.</th>
<th>Statements</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>U</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>My knowledge of second and foreign language makes me feel superior to those who don't know it.</td>
<td>16</td>
<td>13</td>
<td>20</td>
<td>21</td>
<td>-</td>
</tr>
<tr>
<td>24</td>
<td>I believe that studying second and foreign languages helps me to get a better job than studying in the mother tongue.</td>
<td>23</td>
<td>31</td>
<td>12</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>25</td>
<td>It is unsuccessful to use Sidama language as medium of instruction, since a child already knows it.</td>
<td>12</td>
<td>29</td>
<td>21</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>26</td>
<td>To teach in the Sidama language will make it more difficult for a youngster to learn a second language later.</td>
<td>16</td>
<td>22</td>
<td>22</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Average of the Respondents</td>
<td>16.5</td>
<td>23.5</td>
<td>18.7</td>
<td>11</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23.5%</td>
<td>33.6%</td>
<td>26.7%</td>
<td>15.7%</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

In table 4, the students’ attitude towards the role of their mother tongue (Sidama language) in comparison with second/ foreign language is described statistically. The table contains four statements, but the cumulative statistics is considered to see the point at hand. Accordingly, 40 (57.1%) students disclosed that the Sidama language has equal role and status as that of the second or foreign languages. But, 29.7 (42.4%) respondents stated that they don’t agree (disagree) in the equality of Sidama language in the status and role compared with second or foreign languages. Only 2.5 (3.5%) students failed to decide on the issue.

Table 5: Classroom Teaching and Learning Resources

<table>
<thead>
<tr>
<th>No.</th>
<th>Statements</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>U</th>
</tr>
</thead>
<tbody>
<tr>
<td>28</td>
<td>It is unsuccessful to use a mother tongue as medium of instruction, because of lack of textbooks and other educational materials.</td>
<td>18</td>
<td>25</td>
<td>18</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>29</td>
<td>It is unsuccessful to use a mother tongue as medium of instruction, because of the lack of general reading materials.</td>
<td>18</td>
<td>31</td>
<td>12</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>30</td>
<td>It is unsuccessful to use a mother tongue as medium of instruction, because of a shortage of trained teachers.</td>
<td>14</td>
<td>18</td>
<td>21</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>
It is unsuccessful to use a mother tongue as medium of instruction, because of inadequacy of vocabulary.

<table>
<thead>
<tr>
<th>Average of the Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
</tr>
<tr>
<td>8.5%</td>
</tr>
</tbody>
</table>

The above table, table 5, illustrates the attitude of the learners towards the availability of learning resources for mother tongue based classroom teaching and learning context. The table shows that only 24.5 (34.9%) students stated that there are enough resources for teaching and learning in Sidama language. However, 41.8 (58.8%) students mentioned that there is scarcity of learning and teaching resources in Sidama language. 5.5 (7.8%) respondents couldn’t decide on the stated point. According to most respondents, there is clear teaching and learning resource limitations in Sidama language.

### Teachers Questionnaire

**Table 6: Teachers Interest and Motivation**

<table>
<thead>
<tr>
<th>No.</th>
<th>Statements</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>U</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I enjoy teaching in Sidama language.</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>I always find it easy to teach learners in Sidama language.</td>
<td>3</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>I sometimes feel discouraged to teach learners in Sidama language.</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>-</td>
</tr>
</tbody>
</table>

**Average of the Respondents**

<table>
<thead>
<tr>
<th></th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>U</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3</td>
<td></td>
<td>3.7</td>
<td>2.3</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>32.7</td>
<td></td>
<td>33.6</td>
<td>20.9</td>
<td>14.5</td>
<td></td>
</tr>
</tbody>
</table>

The above table displays the data concerned with the teachers’ interest and motivation to teach the Sidama language. Accordingly, 7 (66.3%) teachers disclosed that they are interested to teach various subjects in the Sidama language. But, 43(35.4%) teachers indicated that they are not so much interest and motivated to conduct classrooms in the Sidama language. This shows that most of the teachers are interested in teaching subjects in Sidama language, however, some teacher lose their interest and motivation to impart different subjects in the Sidama language.

**Table 7: Classroom Interaction and Checking Learners’ Understanding**

<table>
<thead>
<tr>
<th>No.</th>
<th>Statements</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>U</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>There is always an interaction between myself and my learners when I teach Sidama language.</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>In a classroom situation, learners always ask follow up questions in Sidama language.</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Learners always ask clarity seeking questions in tests and examinations since Sidama language is a medium of instruction.</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
I always look forward to setting the tests in Sidama language to test my learners’ understanding of the instructional language.

<table>
<thead>
<tr>
<th>No.</th>
<th>Statements</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>I sometimes feel compelled to code switch in my teaching to Amharic language.</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Code switching is always a resort when I ask questions for revision.</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Average of the Respondents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.5</td>
<td>13.6</td>
<td>18.1</td>
<td>54.5</td>
<td>13.6</td>
</tr>
<tr>
<td>9</td>
<td>To mark my learners’ scripts is always a pleasure</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>My learners always have a problem in writing assignments in Sidama language.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Average of the Respondents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.5</td>
<td>22.7</td>
<td>22.7</td>
<td>36.3</td>
<td>18.1</td>
</tr>
</tbody>
</table>

Regarding the classroom interaction and checking the learners’ understanding, according to table 7, 7.5 (68.3%) teachers replayed that the classroom interaction with learners and the learners understanding in the Sidama language classes are good. Nevertheless, 2.75 (24.9%) teachers don’t agree on this. In addition, 0.75 (6.8%) teachers couldn’t decide their position. This conveys that due to the use of Sidama language as medium of instruction, the degree of classroom interaction is improved and the extent checking understanding is facilitated.

**Table 8: Code switching and Marking Assignments**

<table>
<thead>
<tr>
<th>No.</th>
<th>Statements</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>I sometimes feel compelled to code switch in my teaching to Amharic language.</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Code switching is always a resort when I ask questions for revision.</td>
<td>2</td>
<td>2</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Average of the Respondents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.5</td>
<td>13.6</td>
<td>18.1</td>
<td>54.5</td>
<td>13.6</td>
</tr>
<tr>
<td>9</td>
<td>To mark my learners’ scripts is always a pleasure</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>10</td>
<td>My learners always have a problem in writing assignments in Sidama language.</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Average of the Respondents</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2.5</td>
<td>22.7</td>
<td>22.7</td>
<td>36.3</td>
<td>18.1</td>
</tr>
</tbody>
</table>

Table 8 illustrates the date related to code switching and marking assignments in the Sidama language classes. Most of the respondents, 7.5 (68.1%), replied that they feel code switching to other languages during mother tongue based instruction is not appropriate; 3.5 (31.7%) said that they agree on code switching. On the other hand, the respondents were asked about their interest of marking their learners’ assignment and if their students experience writing problems. Accordingly, 6 (54.4%) respondents expressed that they are not interested to mark their students’ script; they also confirmed that their students have problems of writing in the Sidama language. Conversely, 5 (45.4%) stated that they are interested to correct their learners’ assignments; they said that their students’ writing in the Sidama language has no problem.

**School Parents’ Interview**

The other tool which the researcher has employed to gather data was an interview. Six school parents were interviewed to reflect their views on the seven semi structured questions. The first question was “Learners should be taught in their mother tongue language at primary level. Do you agree on this view?” Accordingly, three parents confirmed their agreements, where as two parents said that they disagree on the issue. The rest, one individual disclosed that he partially agrees. This shows that, like that of the students, the parents’ perception is not uniform on the importance of using mother tongue in the schools. The second question forwarded to respondents was “Do you think your child is able to perform at his/ her level best because Sidama language is used for
teaching and learning? Why?” Two of the respondents said that since the Sidama language became the medium of instruction, our children’s academic performance showed progress. This is because, they said, our students can cope up with the school environment very easily since the language used at home and school is the same. The other point is that the students can understand what the teacher say without any language related problems. On the contrary, three respondents disclosed that they don’t think. When they tried to justify their answers, said that some of the words are new for the students as they were created by the text book writers. This resulted in poor performance of the students.

The other question raised during the interview was “Do you think your child perform better in the exam if she/he is taught and examined in her/his indigenous language, Sidamigna?” Among the interviewees, two of them replied positively to the issue. That means they have thought that their children’s perform well in the exam because they were taught in their language. On the contrary, three respondents reacted negatively to the contribution of the Sidama language for better performance of their children in the exams. One respondent shared the views of the former respondents equally. This shows that most of the respondents reacted that they don’t think mother instruction improves their children’s exam results. Two questions: “How does teaching in the medium of Sidama contribute to students’ in schools?” and “To what extent do you encourage your child to speak Sidama even at home?” were also forwarded to the school parents. For the first one, they said that since the Sidama language is used as medium of instruction, it creates communicative environment by which the learners can claim whatever they need in the class and in the school compound without any reservation. In addition, it enforces the children to stay in the school happily which in turn reduces the dropout rate.

The last inquiry to the parents was “Are you happy if Sidama language becomes the medium of instruction throughout your child’s education? Why?” Most of the parents replied that they won’t be happy if the language is used as a medium of instruction throughout their child’s education. The reason behind is that the students will not stay throughout their life in the Sidama areas. Moreover, they join different higher education institutes where courses might be delivered in other languages. This might create confusion in the students’ academic career.

SUMMARY OF THE FINDINGS AND RECOMMENDATIONS

Summary of the Findings
The main objective of the present study is to investigate the attitude and perception of school community towards mother tongue based classroom instruction. The findings under the first objective, the attitude and perception of the community on mother tongue based classroom instruction, revealed that around half of the respondents in the students category have a positive attitude and perception and the rest half have a negative attitude and perception towards using mother tongue as a medium of instruction. Regarding evaluating the attitude of teachers and learners in imparting and learning classroom knowledge in mother tongue, though some of the students stated that leaning in Sidama language doesn’t contribute for their participation, most of the students disclosed that mother tongue promotes students involvement during classroom lesson. Surprisingly, this result is confirmed by teacher with equal figure in quantitative data. The other issue related to teaching and learning is measuring students’ performance through exams and assignments. Most of the parents don’t believe that their children’s results were improved due to the use mother tongue in classroom. In relation to this, the teachers revealed that they are interested to administer tests, exams and assignments in a class, but their learners’ have been experiencing varieties of problems in their writing.
The last objective of the study is sorting out the opportunities and challenges that the learners and the teachers as well as the parents are experiencing in handling mother tongue based Education. Most of the students revealed that the main problem lies on the scarcity of references and learning materials in the Sidama language. Similarly, some students pointed out that learning in Sidama language affected their attempt to learn second/foreign languages. On the contrary, the students disclosed that learning in the Sidama language has improved their classroom participation and interaction. This can be considered as an opportunity.

Recommendations
Based on the above findings, the following recommendations are forwarded for further implementations of mother tongue based classroom education.

- Awareness raising trainings on the advantages of mother tongue schooling should be designed and delivered particularly to students and parents.
- Concerned bodies should develop reference materials and avail textbooks so that students can have opportunities to develop their ability to use the language.
- Teachers should read different ways of teaching writing in other languages and use alternative approaches to teach writing in the Sidama language.

References


The Need, Practice and Challenges of Guidance and Counseling Services in Selected Sidama Zone Secondary Schools of SNNPRS Ethiopia

Adane Wako
(adane_wako@yahoo.com, School of Behavioral Sciences)

ABSTRACT
The general objective of this study was to assess the need, process of practice and challenges of guidance and counseling services in selected secondary schools at Sidama Zone of SNNPRS, Ethiopia. The study used survey design and 258 student, 3 school counselors and 4 school directors were participated in the study. Descriptive statistics like percentages, mean, range, and Standard deviation were used as data analysis techniques for close ended items. Open ended items were narrated qualitatively. The result indicated that there is high counselor student ratio in the study areas. Students have favorable perception about school counseling programs and characteristics of their school counselors. However, students face different psychosocial problems that need the help of school counselors. The main problems are low students self concept, lack of proper study skills, time management problem, lack of assertiveness among female students in their teaching learning process, and different problems students with special Needs face. Majority of students are not utilizing counseling services. The major reasons are lack of awareness about the service in their school, and weak link between school counselors and school community. Counseling services in schools are not being implemented due to different problems. These problems are related with pre-service training, administrative problems, lack of proper guideline and manual, and counselors' personal problems. Recommendations for different stakeholders on ways of improving school guidance and counseling services were forwarded.

Keywords: Guidance and counseling, Need, Counselor, School administrative, Preparatory and Secondary schools

INTRODUCTION

It is believed that education is an investment in the future for nation, the future of each individual student, and society at large. In this investment process, as Adebowale (2012) said there is imparting and acquiring of knowledge through teaching and learning, especially at a school or similar institution. Since learning is a broad and lifelong process, nearly all human beings can anticipate common experiences. These experiences are developmental/growth, educational, and vocational in nature. These experiences are significantly shaped by one common setting among others- the school. It is in the school that a person’s development is stimulated and shaped for the great experiences of his life: learning, living with others and working.

However, it is assumed that with the increasing complexities in the society, industrial and technological development all going hand-in-hand, the succeeding generation will find it difficult to adjust themselves both to the society, work, family and schools. As Gysbers(2001) noted, social structures and social and personal values continue to change and become more diverse. Emerging social groups are challenging since people are on the move from place to place in search of economic, social and psychological security.

This implies students need appropriate personal and social skills to achieve optimum benefits from the educational program. With this point in mind, no one can undermine the role of guidance and counseling within the education system. Because, the service is part and parcel of education and aimed at assisting individuals to discover themselves, their worth, aptitudes, capabilities, weakness and know the way to move forward in life to be useful to oneself and his community. Hence, as Rashid et.al, (2011) stated the role and responsibility of the counselor in educational institutions is
much complex as compared to other organizations since there are legal, professional and organizational issues involved in counseling with children.

To achieve the above mentioned optimal benefits, it is not deniable that schools need well trained school counselors. As different writers and researchers (Baker & Gerler, 2004; Erford et al., 2003; Myrick, 2003; Schmidt, 2003; Sink, 2005; Sink & MacDonald, 1998) cited in Denise and Lisa (undated) described the role, functioning, and training of school counselors have been directly influenced by societal changes and fluctuating social concerns. These additional expectations will require school counselors to periodically reevaluate guidance program priorities and their own productivity and effectiveness. With this point in mind, this research want to assess the need, implementation process and challenges in the provision of guidance and counseling services in selected preparatory and secondary schools.

**Statement of the Problem**

The aims of guidance and counseling service are similar to the purposes of education in general—to assist students in fulfilling their basic physiological needs, understanding oneself and acceptance of others, developing associations with peers, balancing between permissiveness and controls in the educational setting, realizing successful achievement, and providing opportunities to gain independence (Heyden, 2011). Counseling services prepare students to assume increasing responsibility for their decisions and grow in their ability to understand and accept the results of their choices (Gibson, 2008; Kauchak, 2011). The ability to make such intelligent choices is not innate but, must be developed. This educational integral part of service is not being implemented similarly in the world. It is effectively being used and implemented in the educational system of developed nations.

When we look at the experience of Ethiopia, eventhough the concept is new (Yusuf, 1998), it is getting better attention for the last ten years than before. However, its need and mode of implementation is not well researched. The emerging issues of personality maladjustment, poor study habit, career choice and knowledge of one's aptitudes add skills etc, make it obligatory for our educational planners and administrators to build appropriate guidance and counseling programme into our education system at different level for the development of the individual student into an adult personality, intellectual and functional proficiency, discipline and confidence. As, Yusuf (1998) described one of the challenge of Ethiopian school counselors is excess number of students which does not comply with the number of counselors. However, such comprehensive study were not carried out in South Nation and Nationalities People Regional State (SNNPRS) of Southern Ethiopia and that is why this research is initiated to fill this gap.

**Objectives of the Study**

The general objective of this study is to assess the need, mode of practice and challenges scholars faced while implementing guidance and counseling services in their placement areas.

**Specific Objectives**

More specifically, the study is intended to achieve the following specific objectives. So, the study will:

- Identify the gap between the need and sufficiency of guidance and counseling officers at each schools of the study area
- Assess implementation process of the service being rendered in schools
- Identify the challenges schools face in offering the service
- Find out the challenges professionals face in rendering the service in the schools
- Propose possible intervention mechanisms.
RESEARCH METHODOLOGY

Subjects of the study
The required data were collected from students, school counsellors and school administrators of secondary high schools from Hawassa University technology villages. In this study, four secondary schools namely Tabour, Addis Ketema Wondogenet and Yirgalem preparatory were considered. Hence, representative samples of students from grade nine and eleven were selected using stratified sampling techniques. Finally, analysis of 258 students, 3 counselors and 5 principals/vice principals were done.

Data Gathering Instruments
In order to gather the required information self report questionnaire that depicts the existing gap in the area of guidance and counseling services in schools will were developed. The items for all participants contained both close ended and open ended items developed after rigorous review of literature in the area.

Data Analysis techniques
To analyze the quantitative close ended data, Statistical Programs for Social Science for Window version twenty (SPSS 20.0 Statistics Software) was used. After the data has been entered into the computer, different statistical analyses were made for different purposes. Accordingly, descriptive statistics such as percentage, mean, and standard deviations were used to express the proportion, average, and variability of certain characteristics of the variables. In addition, open ended data were described and interpreted in words qualitatively.

DATA ANALYSIS
The following section deals with the presentation, analysis and interpretation of the data gathered through questionnaires from students, counselors and school administrators.

Demographic Characteristics of Participants

<table>
<thead>
<tr>
<th>Items</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of School</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tabour Preparatory and Secondary School</td>
<td>69</td>
<td>26.7</td>
</tr>
<tr>
<td>Addis Ketema Preparatory and Secondary School</td>
<td>55</td>
<td>21.3</td>
</tr>
<tr>
<td>Wondogenet Preparatory and Secondary School</td>
<td>70</td>
<td>27.1</td>
</tr>
<tr>
<td>Yirgalem Preparatory and Secondary School</td>
<td>64</td>
<td>24.8</td>
</tr>
<tr>
<td>Total</td>
<td>258</td>
<td>100.0</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>143</td>
<td>55.4</td>
</tr>
<tr>
<td>Female</td>
<td>115</td>
<td>44.6</td>
</tr>
<tr>
<td>Total</td>
<td>258</td>
<td>100.0</td>
</tr>
<tr>
<td>Educational Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade 9</td>
<td>126</td>
<td>48.8</td>
</tr>
<tr>
<td>Grade 11</td>
<td>132</td>
<td>51.2</td>
</tr>
<tr>
<td>Total</td>
<td>258</td>
<td>100.0</td>
</tr>
<tr>
<td>Residence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urban</td>
<td>152</td>
<td>58.9</td>
</tr>
<tr>
<td>Rural</td>
<td>106</td>
<td>41.1</td>
</tr>
<tr>
<td>Total</td>
<td>258</td>
<td>100.0</td>
</tr>
<tr>
<td>Mean Age of students</td>
<td>17.30</td>
<td></td>
</tr>
</tbody>
</table>
As can be seen from the above table, 26.7% of students were from Tabor Preparatory and secondary schools, 21.8% were from Addis Ketema and the rest 27.1% and 24.8% are from Wondogenet and Yirgalem Preparatory and secondary schools respectively. Tabor and Addis Ketema preparatory and secondary schools are found in Hawassa city whereas the rest two are from other town. The numbers are proportional and there is no this much disparity. Concerning gender of the study participant, 55.4% are male and the rest 44.6% are female participants. Here, the major reason for disparity is most discarded items belong to female participants. Interms of educational status, the majority 51.2% are from grade 11 whereas 48.8% are from grade 9. The number is proportional. But at the beginning number of grade 9 students were larger than grade 11. But most improperly filled and not returned papers are from grade 9. Lastly, the table depicts residential place of participants. Accordingly, the majority (58.9%) are from urban areas whereas the rest 41.1% of participants are from rural areas. The average age of participant students is 17.3 years old.

Concerning counselors, data were gathered from 2 female counselors and 1 male counselor. As far as school administrators are concerned, the data were collected from 3 male directors/vice directors) and 1 female director.

**Need of Counseling Services In Schools**

As far as need of the service is concerned, assessing counselor student ratio in schools was one technique. With this regard, the data collected from school administration indicated that on the average counselor - student ratio in the study area is 1: 3363.

**Table 2: Availability of counselors in respective schools**

<table>
<thead>
<tr>
<th>Name of Preparatory and Secondary School</th>
<th>Availability of counselor</th>
<th>Number of counselor</th>
<th>Total No. of students in the school</th>
<th>Gender counselor</th>
<th>Experience of counselor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tabour School</td>
<td>Yes</td>
<td>2</td>
<td>6801</td>
<td>Both male</td>
<td>Over 10 years</td>
</tr>
<tr>
<td>Addis Ketema School</td>
<td>Yes</td>
<td>1</td>
<td>3138</td>
<td>Female</td>
<td>&lt; 2 years</td>
</tr>
<tr>
<td>Wondogenet</td>
<td>Yes</td>
<td>1*</td>
<td>4701</td>
<td>Male</td>
<td>&lt; 2 years</td>
</tr>
<tr>
<td>Yirgalem</td>
<td>Yes</td>
<td>2**</td>
<td>5543</td>
<td>Female</td>
<td>&lt; 2 years</td>
</tr>
</tbody>
</table>

* The counselor was almost quitted his job for the last two month during data collection  ** one counselor was on maternal leave during data collection

**Priority Areas that Need Psychologist Intervention in Schools**

There are so many problems that need professional support to prevent, intervene or rehabilitate ones it happened in schools. With this regard, students and school administrators were asked to identify their priority area that need school counselors professional support. Accordingly, students were asked to list their top five priority area from 20 identified problems that can be managed by school counselors. Accordingly they identified the following priority areas among twenty listed problems.

1. Promotion of students self concept in the teaching learning process (55) = 21.2%
2. Helping students to use scientific study skills (65) = 25.1%
3. Empowering students in time management skills (24) = 9.3%
4. Helping Female students to be effective in their learning (28) = 10.8%
5. Helping Students with special Needs (32) = 12.4%
On similar manner, school administrators indicated that, disciplinary cases, low motivation of students to engage themselves in teaching learning process, lack of study technique, cheating, disruptive behavior in class, disrespect for teachers, low academic performance, harassment of female students, not doing assignments and homework on time, late coming to school, fighting among students and bullying are some major problems commonly mentioned among others on the given open ended items.

**Practice Of The Service**

As far as implementation process of counseling service is concerned, students and counselors were asked to different questions to draw conclusion. Students were asked in close ended question as *“Do you think that in your school, the guidance and counseling service is being offered in effective manner?”*. As can be seen from the following table, only 90(34.9%) responded that it is being offered in effective manner in their school. The majority 106(41.1%) responded that it is not being offered in effective manner. The rest 62(24.0%) responded it is difficult for them to decide whether the service is being offered in effective way or not.

<table>
<thead>
<tr>
<th>Response</th>
<th>Yes</th>
<th>No</th>
<th>Difficult to Decide</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>90</td>
<td>106</td>
<td>62</td>
<td>258</td>
</tr>
<tr>
<td>percent</td>
<td>34.9</td>
<td>41.1</td>
<td>24.0</td>
<td>100</td>
</tr>
</tbody>
</table>

As far as the utilization of the service is concerned, the researcher asked the participants whether they visited the counseling office or not. As can be depicted on the following table, the majority 165 (64.3%) didn’t visit the center to get the service. Only 92(36.7%) visited school counseling center.

<table>
<thead>
<tr>
<th>Response</th>
<th>Yes</th>
<th>No</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>93</td>
<td>165</td>
<td>258</td>
</tr>
<tr>
<td>percent</td>
<td>36%</td>
<td>64%</td>
<td>100%</td>
</tr>
</tbody>
</table>

As far as gender disparity is concerned among the users of the service, the data is presented on table 5 as follow.

<table>
<thead>
<tr>
<th>Gender</th>
<th>male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>58</td>
<td>35</td>
<td>93</td>
</tr>
<tr>
<td>No</td>
<td>85</td>
<td>80</td>
<td>165</td>
</tr>
</tbody>
</table>

The chi square indicates there is no significant difference between males and females in the utilization of counseling service in the schools. But males are better users than females. Among the none users of the service, the following top four reasons were identified as a challenge not to use the service. The majority 50(30.3%) of students replied that they do not have awareness about counseling service, followed by fear 46(27.9%) believe that there is no adequate counselor in their school and the rest 27(16.3%) replied that they fear break of confidentiality as a reason not visit school counselor for their psychosocial problems.
Table 6: Challenges not to use Counseling service by students

<table>
<thead>
<tr>
<th>S/N</th>
<th>Reasons for not using the counseling Service</th>
<th>Number of respondent</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lack of awareness about the service</td>
<td>50</td>
<td>30.3%</td>
</tr>
<tr>
<td>2</td>
<td>Fear</td>
<td>46</td>
<td>27.9%</td>
</tr>
<tr>
<td>3</td>
<td>Thinking that there is no experienced counselor</td>
<td>42</td>
<td>25.5%</td>
</tr>
<tr>
<td>4</td>
<td>Fear break of confidentiality</td>
<td>27</td>
<td>16.3%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>165</td>
<td>100%</td>
</tr>
</tbody>
</table>

On the other hand, those who visited the school counselor for the service mainly focused on about study skills, personal issues and social problems.

Table 7: Reasons of students to visit school Counselor

<table>
<thead>
<tr>
<th>S/N</th>
<th>Reasons for visiting School Counselor</th>
<th>Number of respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>About Study skill</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>Personal Problem</td>
<td>29</td>
</tr>
<tr>
<td>3</td>
<td>Social problem</td>
<td>15</td>
</tr>
</tbody>
</table>

The other factor that may enhance students’ utilization of the service is their perception about the service and professional practice. With these regards, the following tables depict students’ perception about the their respective school counselor.

Table 8: Students perception about their school counselor

<table>
<thead>
<tr>
<th>S/N</th>
<th>Characteristics of counselor</th>
<th>High Frequency</th>
<th>Medium Frequency</th>
<th>Low Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Scale</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Preparedness</td>
<td>98</td>
<td>85</td>
<td>75</td>
</tr>
<tr>
<td>2</td>
<td>Expertness</td>
<td>83</td>
<td>101</td>
<td>74</td>
</tr>
<tr>
<td>3</td>
<td>Confidentiality</td>
<td>88</td>
<td>101</td>
<td>69</td>
</tr>
<tr>
<td>4</td>
<td>Genuineess</td>
<td>94</td>
<td>102</td>
<td>62</td>
</tr>
<tr>
<td>5</td>
<td>Punctuality</td>
<td>89</td>
<td>95</td>
<td>74</td>
</tr>
<tr>
<td>6</td>
<td>Availability</td>
<td>82</td>
<td>95</td>
<td>81</td>
</tr>
<tr>
<td>7</td>
<td>Empathy</td>
<td>73</td>
<td>99</td>
<td>86</td>
</tr>
<tr>
<td>8</td>
<td>Problem solving quality</td>
<td>68</td>
<td>97</td>
<td>93</td>
</tr>
<tr>
<td>9</td>
<td>Reflective skill</td>
<td>77</td>
<td>100</td>
<td>81</td>
</tr>
<tr>
<td>10</td>
<td>Ability to understand a problem</td>
<td>72</td>
<td>102</td>
<td>84</td>
</tr>
<tr>
<td>11</td>
<td>Listening quality</td>
<td>86</td>
<td>92</td>
<td>80</td>
</tr>
<tr>
<td>12</td>
<td>Being Model for others</td>
<td>94</td>
<td>87</td>
<td>77</td>
</tr>
</tbody>
</table>

As can be seen from the above table, almost in all characteristic qualities of the counselor students have medium perception. On the other hand, school counselors were asked about their sources of referral of students for counseling services using rating items. All three respondents rated the role of student self referral, unit leaders, subject teacher and parents as a great deal source for their referral of counseling service. But friends, home room teacher and principals were rated as a little source for referral of students for counseling purposes.

Concerning the time and number of sessions they spend with the client, all participant counselors responded that they spend 45’ to 1 hour on average per session and it takes 2 to 4 session for a
clients problem. However, the number of session depends on nature of problem as replied by the counselor.

Challenges In Delivery Of Counseling Service

As far as problems related with provision of school counseling is concerned, data were collected from school administrators and counselors. From school administrators (directors and Vice Principals) side, all respondents state that there is lack of commitment and creativity by professionals to promote the profession in the school. Even though there are so many problems in schools, counselors are reluctant and disinterested to carry out their duties properly. For counseling services, except one participant, the rest school directors stated that they provided office and necessary materials like computers, chair, table and other facilities. The one that didn’t provide office stated the counselor share office with other teachers. On the other hand all school directors have responded that they do not have any reference and job description to evaluate the effectiveness of their counselor unlike other teachers. When they are asked to express their impression about guidance and counseling service, they replied that it so essential and support the teaching learning process. But all reported that the service in their school is not this much effective.

Additionally, lack of cooperation among counselors, low commitment, health problem, lack planning skills, and absence of appropriate rooms for the service in schools are some challenges mentioned by school administrators. From Counselors side, only one school counselor responded that s/he has got on job training on guidance and counseling. But the rest replied that they didn’t get any training that prepares them for the position. In addition to provision of guidance and counseling, they engage in other activities like School Improvement Program (SIP), research, club coordination activities, and other administrative issues. In relation to pre-service training, except one, the rest responded that the contribution of pre-service training is not a great input to prepare them for school counselor position. As far as their practice is concerned, two of the school counselors responded that they focus on preventive activities where as only one counselor responded focuses on remedial aspect of counseling.

As far as their job description and evaluation system is concerned, all of the respondents stated that there is no job description that guides them. Instead they will be evaluated by their engagement in other non professional activities than counseling service they provided. The other challenge that all counselors described is that number of students in their respective schools and the available counselor does not match. The numbers of students are too much and beyond their capacity to address their needs. Besides, lack of conducive office, lack of budget allocation, lack of coordination among stakeholders, lack of awareness among school community about the service, defensiveness of clients during the session, and lack of proper guideline are among the challenges they mentioned.

DISCUSSION

Result of the study has identified top five student priority areas that need psychology professionals’ intervention. Accordingly, Promotion of students self concept in the teaching learning process (55) = 21.2%, helping students to use scientific study skills (65) = 25.1%, empowering students in time management skills (24) = 9.3%, helping Female students to be effective in their learning (28) = 10.8%, helping Students with special Needs to cope with the challenge they face (32) = 12.4%. In similar manner school directors and v/principals stated they need the help of counselor for various psychological problems exist in their respective schools. All these mentioned (identified) problems are psychological in nature and have their own adverse impact in student learning. These findings align with the finding of Charles Onencan (2008) and Terje and Cherinet (2004) which is conducted on comparison of Guidance and Counseling services in Ethiopian and Norwegian Secondary schools.
As far as availability of school counselors are concerned, in all schools there were counselors. With the exception of one counselor, the rest are BA degree holder of Psychology and have less than two years of experience in counseling at school level. Majority of counselors stated that that they didn’t get proper training about the ways to manage school counseling programs. Only one counselor MA degree holder and served over 25 year and have got different on-service refreshing training. As far as their gender of professionals in the study area is concerned, only one sex category of professionals is assigned in one school. So that gender disparity is not considered while professionals are recruited and assigned for the respective schools by the concerned officials. This align with what Euvrard (1996) established that those periods allocated for guidance in South Africa schools were not utilized optimally because of inadequately trained counselors. Similarly it align with the finding of Rutondoki (2000), many educational planners and heads of institutions are not trained in guidance and counseling methods”.. In America, school counselors lack effective organizational and counseling skills Chireshe(2006). Concerning counselor student ratio in schools it is found that counselor student ratio is 1: 3632. This is similar with previous finding of Yusuf(1998) and Yirgalem(2013) which stated that the number is too far from standards. But the result is too far away from the standard which is recommended by American School of Counselors Association (2007) that suggests an ideal 1:100 counselor student proportion . Besides, it is too far from what Shertzer et al(1980) recommended that one full- time counselor for 300 pupils in secondary schools.

As far as utilization of the service by the students are concerned, only 93(36%) of the respondents visited the school counseling office in order to benefit from the service. The majority165 (64%) are not using the service. Among the users, they visited the school counselors to cope with different psychological problems. This is similar with the finding of Yirgalem(2013) which stated study skills and fostering healthy heterosexual relationship to be the most important functions of school guidance and counseling programs. Similarly, this finding align with what Terje and Cherinet(2004) listed as a major reasons why Ethiopian students visit the counselor.

In this study, students have favorable perception as far as the service is concerned and this is similar with the finding of Beker Hadji(2002), and Yirgalem(2013). As stated above, the majority didn’t visit the school counselor to get the service. This is similar with what Yirgalem(2013) stated that less than a quarter of students utilized the services in their schools in its study area. The reasons for under utilization of the service in this study area are Lack of awareness about the service, thinking that there is no experienced counselor, and fear of break of confidentiality.

Concerning the challenges faced in the provision of the service different points can be raised. In this study, school administrators stated that lack of commitment and creativity by professionals to promote the profession in the school is mentioned as the major challenge. This mainly match with what Yusuf(1998) has said that school some professionals lack professional preparations and motivation to render the service. On school counselors side, Lack of proper facility like office, stationery and budget has been mentioned as a hindrances to provide guidance and counseling service in their respective schools. This align with different previous finding of Abdela Muzeyin(1984), Yusuf(1998), Terje and Cherinet (2004) and Yirgalem (2013). This contradict with the finding of Lehr and Sumarah (2002) states that effective School Guidance and Counseling services in American schools have adequate resources, equipment and space and also it does not fulfill the necessary equipments stated by the manual in Federal Ministry of Health(2007).

Additionally, school counselors stated that absence of proper manual and any job description about the service in schools and to evaluate the professionals. Moreover, counselor participants of this study stated that initial training is not well prepared them to be effective school counselor. This align with the finding of Yusuf(1998), and Terje and Cherinet(2004). But it contradict with what
Chireshe(2006) stated that some African countries (Uganda, Malawi, Zambia, South Africa, Botswana and Nigeria) have School Guidance and Counseling services policies.

SUMMARY, CONCLUSION AND RECOMMENDATION

Based on the information’s gained at present, summary, conclusion and recommendations are given.

Summary
The general objective of this study was to assess the need, process of practice and challenges of guidance and counseling services in selected secondary schools at Sidama Zone of SNNPRS, Ethiopia. In order to achieve this purpose, questionnaire was developed that assess need of counseling service in secondary schools, mode of its implementation process, factors that hinder the service and possible intervention strategies. The subjects of the study were 143 male and 115 female students; 1 male and 2 female counselors; 3 male and 1 female school directors.

Both close ended and open ended questionnaires were used to collect the data. Documents were also used to obtain the necessary information for the study. The data gathered were analyzed using various quantitative statistical tools such as percentages, coefficient of variation and Chi-square; and triangulation method of qualitative approach.

The analysis made has brought the following major findings.

- The results of this study revealed that students have favorable perception about school counseling programs,
- There is high counselor student ratio in the study areas,
- Gender diversity of professionals in the study is not well addressed
- Students encounter different psychosocial problems that need psychological intervention,
- Majority of students are not utilizing counseling services
- Counselors engage in different activities in addition to provision of counseling services
- Counselors face different problems
- There is no guideline that describe job description and their assessment
- Counselors are not motivated to promote the service in schools
- The role of preservice training was rated as poor to equip and prepare professionals to be school counselors
- School counselors lack cooperation to work with school and non school community

Conclusion
From the above findings, the following conclusions were drawn.

- There is high need for the service as stated by all participants
- There is favorable perception about the service with low awareness of the service by students
- Majority of Students are not using the service effectively due to lack of awareness followed by fear about the service.
- Absence of any guideline is a challenge for professionals and school administrators

Recommendations
Up on the findings and conclusions, the following recommendations are forwarded to different concerned bodies.
Counselors should work hard to create awareness about counseling service for school community
Counselors should be creative and a role model in their profession for others
Appropriate facilities should be fulfilled for effective counseling by the school administrators
The service should be gender sensitive
Budget should be Allocated
Additional counselors should be employed by government using the existing opportunity
Proper guideline and job description should be developed for school counselors
Pre-service training should be reconsidered in the manner to suit to school counseling

References
ABSTRACT
This paper tried to discuss an investigation of students’ attitudes and perceptions of group work in higher institutions and the implications these perceptions and attitudes have in learning in higher institutions. To do so, the following key terms were considered. In this study, the researcher clearly identified the research problem to be assessed and the objectives to be achieved. The target populations were also determined. Then he cogently revised the related review literature and organized the scholars’ viewpoint based on the action plan set. He also integrated the reading he has made with the research problem and objectives, and then contextualized it. Moreover, the researcher collected data through questionnaires that helped him disclose student’s feelings and thinking about group work. He used the Likert scale method of measuring attitude and perception where the respondents indicated their attitudes and perceptions by saying ‘yes’ or ‘no’. Apart from this focused classroom discussions were employed to uncover students’ feelings concerning the importance and effect of group work towards their learning. Then the researcher analyzed the nature of group work, the possible variables that may speed up or delay group or collaborative work in learning. He drew on data from students of two universities addressing the factors that speed up group work and factors that hinder it. The research results drawn from the questionnaire, and focused group discussion were cogently discussed and interpreted. Finally, the research result implications, confusions and misconception were clearly stated in the conclusion.

Keywords: Attitudes, Perceptions, Group work, Awareness, Instructor/s, Focused discussion, Needs assessment, Impact, Likert scale, Implications, Misconceptions, Confusions

INTRODUCTION
Students in higher institutions are expected to be creative and good thinkers in any field of study so that they can be effective in their academic work as well as in the job world. This skill could be enhanced through sharing experiences and by working in collaboration using group work as a learning strategy. Wikipedia, the Free Encyclopedia portrays “Group work is a form of cooperative learning strategy. It aims to cater for individual difference, develop students’ knowledge, generic skills (e.g. communication, collaborative skills, and critical thinking skills) and attitudes”. This indicates how helpful group work is for learning and sharing experiences. The use of different strategies like group work also contributes to the quality of learning and teaching in particular and to quality of education in general. Thus this research aimed at assessing students’ attitudes and perceptions towards group work as a means of learning in higher institutions.

Statement of the Problem
Many scholars like Harmer (1991), Jacques (2000) & Johnson. et al (1991) believe that group work helps students generate ideas, narrow topics, learn concepts in depth and develop decision making skills; enables them get on with people from different background; makes them see and understand other people’s point of view to negotiate; encourages them to speak out; assists them to be sensitive to other’s feelings and to upgrade their teamwork abilities. Despite the consideration of the importance of group work to the teaching and learning process, it is alleged that the attitudes and perceptions of students towards this method affect their learning positively or negatively. This will in turn influence teaching and learning that takes place in the classroom. So, studying the students’ understanding and their thinking towards this strategy has paramount importance.

Thus, this research work focuses on students’ attitudes and perception towards group work for two reasons. Primarily the thoughts of reflection in his reading and the lurking assumptions in his university work gave the researcher an insight to explore his students’ perception and his own
methods of instruction. As a result, the researcher decided to investigate incidents (puzzling events) that occur in relation to group work in higher education where he works in. Hence, the questions, how do learners perceive group work as a learning strategy? Do the perceptions and attitudes of students towards group work affect learning in higher institutions? How can a university instructor make students interested to work in groups?, attracted the researcher’s attention.

The second reason to begin this research is that the researcher personally believes that knowing students’ needs and problems about group work helps instructors to design appropriate tasks and activities four group work based upon the learners’ needs and to follow a suitable strategy. The researcher thinks that knowing students’ attitudes and feelings towards group work will also help instructors to find ways to develop students’ awareness about the use of group work and to give continuous tutelage. The researcher further thinks learners need to be equipped with different learning strategies to learn their lesson successfully. For instructors too, studying learners’ needs is invaluable in order to follow the appropriate strategies and to set relevant tasks to the already chosen strategies. This belief made the researcher think of this problem and find solution. So the researcher decided to get first hand information about their interest from the students themselves. To this effect, he intended to involve students to uncover their interests and problems concerning group work.

Objectives of the Study
The general objective of this study is to investigate the perceptions and attitudes of university students towards group work. It also purports to:

- Examine students’ belief about group work
- Identify the problems students face while working in groups
- Investigate the students’ attitudes towards group work.
- Check if the perceptions and attitudes of students towards group work affect their learning in higher institutions.

METHODS AND PROCEDURES OF THE STUDY
Instruments
In this study the researcher employed two methods of data gathering: questionnaire and focused group discussion. First he distributed questionnaires to get first hand information about students’ attitudes and perceptions towards group work. Next, he undertook focused group discussion with some randomly selected groups of students raising some key questions. Here, the researcher raised some key questions and registered the participants’ responses and observed their feelings towards the questions. Finally, the results of the discussion and the comments students’ forwarded were classified and prepared for data analysis.

Sampling Techniques
It would make the research more reliable if the entire sample groups were asked. Unfortunately, due to the vast number of population of the study sample, the researcher selected a limited number of the sample population randomly. There were more than 5,000 first year students in the 2009/10 academic year in the two selected universities where the study was undertaken. Hundred students from different departments were chosen in each university. Then the researcher randomly distributed the questionnaires to different ability groups in different departments.

Procedure
In the research process, the researcher first distributed questionnaires, which contain closed and open-ended questions to get information about students’ perception and prior knowledge of group work. Then he carried out focused group discussions with some randomly selected students of the sample group as part of a discussion lesson. This is intended to uncover learners’ feelings concerning group work (to study the affective domain) and to create awareness about the
importance of group work in learning. Here the researcher asked questions, listened to the students’ responses, watched them how they felt about group work and received solutions they recommended. He also asked what the students felt after the discussion. This is to cross-check if there are changes after the discussion. The results of all these activities were analyzed and interpreted using tabulation and self report method. A descriptive report method is used to write the research report.

DATA ANALYSIS AND INTERPRETATION OF RESULTS

As it is stated in the methodology part, in this study, the researcher employed a descriptive data analysis and report method to disclose students’ feelings and thinking about group work. He also used the Likert scale or Semantic Differential Method of measuring attitude and perception where the respondents indicated their attitude and perception by saying ‘yes’ or ‘no’. To cross check this, the researcher undertook focused group discussion concerning the importance of group work, students attitudes and perceptions about group work, the awareness students have about group work, and about the clarity of the purpose of group work. In this chapter, the results of the students’ questionnaire and the focused group discussions were analyzed and tabulated. Then the research results were interpreted in the following sub-sections.

**Questionnaire Analysis**

In this section, the questionnaires were analyzed and interpreted part by part. First, the closed questions were tabulated under four captions and interpreted. Then, the open-ended questions were analyzed and interpreted one by one.

**Analysis of the Closed Questions**

The students’ questionnaire was designed to get information about students’ perceptions and attitudes towards group work. The questions were not grouped like they are grouped for this analysis. This is done purposely to control students who answer questions randomly. However, in the analysis the questions were grouped under headings or captions like students preference, their awareness about the importance of group work, clarity of purpose of group work, and negative attitudinal implications towards group work that the researcher considered as key points to make sound analysis.

<table>
<thead>
<tr>
<th>Q. No</th>
<th>Items</th>
<th>yes</th>
<th>percentage</th>
<th>No</th>
<th>Percentage</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I like to work in groups</td>
<td>183</td>
<td>91.5%</td>
<td>17</td>
<td>8.5%</td>
<td>200</td>
</tr>
<tr>
<td>14.</td>
<td>I prefer assignments to include</td>
<td>142</td>
<td>71%</td>
<td>58</td>
<td>29%</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td>group work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>I prefer individual assignments</td>
<td>100</td>
<td>50%</td>
<td>100</td>
<td>50%</td>
<td>&quot;</td>
</tr>
<tr>
<td>19.</td>
<td>I enjoy the interaction in group</td>
<td>174</td>
<td>87%</td>
<td>26</td>
<td>13%</td>
<td>&quot;</td>
</tr>
<tr>
<td></td>
<td>work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>When I work in groups I feel happy</td>
<td>173</td>
<td>86.5%</td>
<td>27</td>
<td>13.5%</td>
<td>&quot;</td>
</tr>
</tbody>
</table>

Table 1 shows that the majority students like group work as a learning strategy (Q1.). However, as item No. 18 in the questionnaire indicates, many students (50%) prefer individual assignments in their learning. This contradicts with their previous responses, and still students have confused understanding of group work and they need awareness about it. The majority of students (71%) for
Q. no. 14 preferred assignments to include group work, but a significant percentage of students (29%) did not prefer assignments to include group work. This group of students did not think that they are learning when they work assignments in groups. This will have a negative impact in employing group work as a means of learning in particular and on their education in general. The majority of students also reflected that they enjoy the interactions in group work and they are happy while working in groups (Q19, 22). This is a good quality that students need to develop while learning using group work as a learning strategy as mentioned in the review of related literature (2.1, 2.2 & 2.4).

Table 2: Students' Awareness about the Importance of Group Work

<table>
<thead>
<tr>
<th>Q. No</th>
<th>Items</th>
<th>Students' Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>Group work is helpful to my learning</td>
<td>Yes: 181, 90.5%</td>
</tr>
<tr>
<td>4.</td>
<td>Group work increases confidence and encourages broad participation.</td>
<td>Yes: 185, 92.5%</td>
</tr>
<tr>
<td>5.</td>
<td>Group work develops my listening skills</td>
<td>Yes: 173, 86.5%</td>
</tr>
<tr>
<td>6.</td>
<td>Group work helps me create positive relationship with other students</td>
<td>Yes: 185, 92.5%</td>
</tr>
<tr>
<td>8.</td>
<td>Group work helps me generate well-vetted ideas, narrow a topic, and develop decision making skills</td>
<td>Yes: 168, 84%</td>
</tr>
<tr>
<td>9.</td>
<td>Group work helps me learn concepts in depth</td>
<td>Yes: 175, 87.5%</td>
</tr>
<tr>
<td>10.</td>
<td>Group work develops cooperative learning</td>
<td>Yes: 189, 94.5%</td>
</tr>
<tr>
<td>11.</td>
<td>Group work gives me chance to help others</td>
<td>Yes: 179, 89.5%</td>
</tr>
<tr>
<td>12.</td>
<td>Group work provides me the opportunity to analyze concepts</td>
<td>Yes: 175, 87.5%</td>
</tr>
<tr>
<td>17.</td>
<td>For me, teamwork is really useful</td>
<td>Yes: 176, 88%</td>
</tr>
<tr>
<td>23.</td>
<td>Group work helps me reflect what I learn</td>
<td>Yes: 179, 89.5%</td>
</tr>
</tbody>
</table>

Table 2 describes that students are aware of the importance of group work. The majority students have good knowledge of the importance of group work. The points listed as check lists in this table are the uses of group work identified by many scholars as it is mentioned in Chapter two. Many of the respondents (84%-94.5%) said ‘yes’ for the questions that are concerned with the uses of group work, which shows that they have good understanding of the importance of group work. Others (5.5%-16%) replied ‘No’ to the check lists, which have a negative implication towards group work as a learning strategy. These groups of students need to have a brainwashing and awareness that initiate them to engage in the process of active learning using group work as a way of learning because students in higher institutions are expected to develop Higher level and reflective thinking, independent learning and self-confidence.

Table 3: Clarity of Purpose of Group Work

<table>
<thead>
<tr>
<th>Q.No</th>
<th>Item</th>
<th>yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Instructors tell students the purpose of working in groups before giving group tasks</td>
<td>145</td>
<td>72.5</td>
<td>55</td>
<td>27.5</td>
</tr>
<tr>
<td>25</td>
<td>Instructors do not tell students about the purposes of group work before they give group tasks</td>
<td>62</td>
<td>31</td>
<td>138</td>
<td>69</td>
</tr>
</tbody>
</table>

Table 3 tests students’ perceptions and feelings on the clarity of the purpose of working in groups. Many of the respondents (72.5& 69%) replied that their instructors make clear the purpose of group work. However, a significant percentage of students’ responses (27.5% & 31%) indicated that their instructors do not make the purpose of group work clear. As it is stated in the review of literature,
group work functions very well if we set clear purpose and provide very well designed activities and switch the type of group work we use for the given task.

Table 4: Negative Attitudinal Implications towards Group Work

<table>
<thead>
<tr>
<th>Q. No.</th>
<th>Items</th>
<th>Yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.</td>
<td>I profit nothing from group work</td>
<td>30</td>
<td>15%</td>
<td>170</td>
<td>85%</td>
<td>200</td>
</tr>
<tr>
<td>7.</td>
<td>For me, group work is time wasting</td>
<td>42</td>
<td>21%</td>
<td>158</td>
<td>79%</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>I learn more from reading than discussion</td>
<td>93</td>
<td>46.5%</td>
<td>107</td>
<td>53.5%</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>I come up with more ideas on my own</td>
<td>117</td>
<td>58.5%</td>
<td>83</td>
<td>41.5%</td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>I learn a lot from the instructor’s lecture than from group work</td>
<td>98</td>
<td>49%</td>
<td>102</td>
<td>51%</td>
<td></td>
</tr>
</tbody>
</table>

Table 4 contains attitudinal checklists that indicate negative implications. Many of the respondents have positive attitudes about the importance of group work since they have replied positively. Nevertheless, there is still attitudinal difference concerning group work because many students (42%) for Item No. 7, said that group work is time wasting. This has a negative implication to the learning process. Learning will become active when students are willing to learn through the designed strategies.

Analysis of Open-ended Questions

In the open-ended questionnaire, students were asked how they perceived or understood group work (Item No 26 of students’ Questionnaire). Many of the respondents (about 95%) replied positively. They stated that group work is essential learning method; that it is a technique that helps them to have deeper understanding on different issues; that it assists them to share ideas, gain knowledge; that it is a basic means for the learning and teaching process; it makes everybody confident; that it is important to cooperate and to reflect; that it helps them to generate different ideas and to develop communicative skills. However, some (about 5%) of the respondents replied negatively by focusing on the limitations or drawbacks of group work. They said that it is time consuming; it is like waste of time; it is nothing but making someone dependent on the other. These groups of students think that they are not learning while they are working in groups. Thus they need to have awareness about the importance of group work.

Students were also asked who benefits from group work (Item no 27). The responses students replied were grouped in three different ways. Many of the respondents said that passive and less performing, some weak and some clever students, students who cannot understand ideas by reading alone and good participants benefit from group work. Some also said all students, all members of the group, benefit from group work. A few of the respondents said ‘I benefit from group work’. The response to this particular question indicates that many students do not think that they are benefiting from group work. This will also have a negative impact on their learning. However, those who said all members of the group can benefit from group work, and I benefit from group work have positive attitudes and they are confident enough to work in groups. Hence, they can benefit a lot.

Students listed the reasons why they do not like working in groups (Item No. 28). The question was designed purposely to cross check with the students’ responses on the yes or no questions. They mentioned that all group members do not participate equally; that it is time consuming; that students do not use their full potential; there is marking problem; that many students depend on few; it is a burden on students; that it is difficult to reach decision; that some groups contain clever students
and some groups contain less ability students. Here some of the points students mentioned are the drawbacks of group work, but the benefits of working in groups outweigh the demerits. This shows that it is very crucial to create awareness among students about the importance of group work, and to immerse them into the participation. For the question that says, ‘what do your instructors do before they ask you to work in groups? ’ (Item No.29) Many respondents replied that instructors give the work without giving information and reference; that they simply give group work. However some students replied that instructors introduce the way they do the group work, and they give helpful information to students. This has the implication that instructors need to make the purpose of working in-groups clear.

The researcher also forwarded the question, ‘what do you want your instructors to do while you are learning? ’ (Item, No.30). The respondents gave the following responses. They need their instructors to give lecture, clear information, write short and clear notes on the black board, make students do individually (few), motivate students to work in groups, give detail notes, give handouts, give explanation, to teach me vividly (few), tell the purpose of group work, give individual work, give short and brief notes, write note on board. Though all the methods the students mentioned are methods of teaching and learning, the students in higher institutions should not be dependent. They need to be critical thinkers, and good reflectors. This expectation will be practical when they are aware of the importance of working in group and willing to work in groups.

Analysis of the Focused group discussion

The researcher forwarded the question, ‘Does your understanding about group work affect your learning? ’ The students reflected by saying ‘yes’, and giving their justifications. They said that their understanding affects learning positively or negatively. It affects negatively for those who do not like working in groups. It also affects learning positively for those who are interested to work in groups.

For the question that states, ‘What are the benefits of group work? ’ many of the discussants mentioned that it helps them to exchange information, to have positive relationship with each other, to understand each other and gain knowledge. However, some of the discussants said that group work has no benefit and it is time consuming because all members do not participate. The researcher also raised a question whether they like their instructors to allow them to work in groups or to give lectures which read as, ‘Do you like your instructors to give you lectures? Or do you like them to allow you work in groups? ’ Many of the students reflected that they want their instructors to give those lectures and short notes. However, some reflected that they want their instructors to do both giving lecture and allowing them to work in groups.

‘Do your instructors tell you about the purpose of group work in every activity? ’ was another question raised. Many of them explained in the focused group discussion that most instructors do not tell their students the purpose of working in groups, but some instructors tell the purpose of group work sometimes. This shows that there is a gap between learners’ awareness about the purpose of group work and the application of group work in learning. ‘ As it is indicated in the review, students better work in groups when they know the purpose of working in groups. Group work also functions very well if we provide very well designed activities and switch the type of group work. Lastly, the researcher asked the discussants the question, ‘ What problems do you face while working in groups? ’ The discussants listed problems like: Shortages of references, only few students participate, difficult to reach decision and some students dominate the group as problems that affect them while working in groups.
CONCLUSION AND RECOMMENDATIONS

Conclusions

This research investigated the students’ attitudes and perceptions towards group work in the learning and teaching process. It is to be hasty to generalize that all students have either negative or positive attitudes about group work because of the variable nature of attitudes and perceptions as it is described in the related literature review. However, it is possible to infer from the data collected that many of the students have positive attitudes and perceptions towards group work (see Table 1 of the Analysis part). One of the research questions was concerned with the extent to which learners perceived group work as an important learning strategy. To answer this question the perceptions of the learners’ immediate response to the yes or no questions was calculated, and it indicated a positive implication. The research results have shown that there is a positive shift of attitude towards group work as an important strategy of learning in many of the learners’ mind. Nevertheless, the response to open-ended questions (Q. 27 and 30) showed that the students have blurred views about the importance of group work and still they need more motivation and awareness creation about the benefits of group work. Even they need to have a know how of the merits and demerits of group work. The research result also showed that there is a misconception of the application of group work and group assignment as learning strategies. Students relate group work with assignments and marking only. Thus there should be a clear demarcation between learning in groups and group assignment and marking.

The question, ‘Do the perceptions and attitudes of students towards group work affect learning in higher institutions?’ was another prompt raised in the research statement. The answer is ‘yes’. As the data indicated, there are students who perceived group work as a means of gaining knowledge, sharing experience, learning from others. Thus, these groups benefit a lot from working in groups (see Tables 1 & 2). On the contrary, there are some groups of students who think working in groups is time wasting (Table 4 of the Analysis shows this). This group will lose chance of learning and they will be victims when ever group work is used as a learning method because they will not be willing to work in groups. Hence, they need more awareness creation and motivation. They should know that the purpose of group assignment is both for evaluation and learning from each other whereas the purpose of group work as a learning strategy is for learning and experience sharing. How can a university instructor make students interested to work in groups?’ was also a key question raised in the Statement of the Problem. As the research data indicted, students did not have clear view about the purpose of working in groups, so instructors need to make the purpose of group work clear to all students so that each member of a group can contribute his own share and learn from the group work. Not only do this but instructors also need to motivate students how they can adjust themselves to deal with a variety of situations, types of input, and purposes of working in groups.

As the result of the questionnaire (see open-ended question No. 30) and the focused group discussion showed, many students lacked confidence in using group work as a learning strategy, and they crave for the instructors to provide them lecture notes, handouts and more explanations. However, higher institutions are places where students should develop independent learning and learning from their peers and groups, or others. To be successful in their learning students need to develop strong skills in independent and effective thinking, critical analysis, problem-solving, and reflecting. To develop these skills, students need to immerse themselves into the activities.

Recommendations

The researcher recommends the following points based on the findings:

- Instructors should be aware of the purpose and type of group work when they design tasks and activities to be done in groups both in the classroom and outside.
Instructors and other stakeholders should create awareness that students can benefit from working in groups.

Instructors need to make the purpose of group work clear to all students so that each member of a group can contribute his own share and learn from the group work.

They need to make a survey of the needs and problems of their students while designing tasks to be done in groups.

Instructors need to motivate students how they can adjust themselves to deal with a variety of situations, types of input, and purposes of working in groups.

Instructors need to make clear that group assignment is related with both marking and learning.

Students themselves should be willing to learn from their peers and groups.

They should also be willing to cooperate to learn in groups and work together actively.

To strengthen this attitudinal result further detailed experimental study should be carried. That is, it needs more empirical research since attitude and perception are not observable variables which need researching again and again.

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The Praxis and Status of Indigenous Conflict Resolution Mechanism and Its Relation with Formal Justice and Security Structures among the Sidama

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Introduction

No society is an island. Since antiquity, societies have been contacting one another for various sociocultural, economic, political and environmental reasons. As a result, new ideas, practices and way of life have been diffusing from one society to the other both voluntarily and involuntarily. Particularly in contemporary societies, the influences of globalization and massive information flow by the media, capitalistic market penetration and rapid urbanization, internal and external migration, an ever increased religious and education expansion and democratization processes on the social fabric of any society, particularly the non-Western societies, are higher. These new processes either altered or transformed or co-existed with the indigenous ideas, practices and ways of life that have been practiced for years. The Sidama, as with most other Ethiopian societies, have experienced the above social changes. Some of these changes are imposed on them by the agents of these changes forcefully. These impositions have been stifling local activities. Yet, some of these changes are accepted by the society voluntarily in order to adopt their life with the changing environment.

This study attempts to investigate the praxis and status of indigenous conflict resolution practices against the backdrop of the above social phenomena. Particularly, this study tries to; (1) examine the current status of indigenous conflict resolution practices, (2) compare community members view of it vis-à-vis the formal conflict resolution practices and (3) identify the relationship between the indigenous and the formal conflict resolution institutions. The discussion on the proceeding pages is based on data gathered through interviews, and focus group discussions with key-informants such as elders, community and religious leaders, knowledgeable persons and experts about the issue at hand, observation and document analysis related with the subject under study.

This study has been organized into five parts. First, it begins by introducing the study area and then follows changes the indigenous conflict resolution mechanisms undergone through time and its current status. Thirdly, it presents the perception of community members towards ICRMs vis-à-vis the formal one. Fourthly, it identifies working relations between the indigenous and statutory institutions regarding conflict resolution. Finally, the study closes the discussion through stating concluding remarks.

An Overview of Sidama Society

Sidama, who live in south eastern parts of Ethiopia, are one of the ethnic groups in Ethiopia. They are found between the longitudes of 37º: 92’ and 39º: 14’E and latitudes of 6º:14’ and 7º: 18’N (Markos et al, 2011). The relative location of Sidama is Oromiya Regional State in Northern east and Southern east, Gedio Zone and Oromiya Regional State in South and Wolita Zone in West. Administratively, the Sidama is one of the 14 Zones that make up today’s Southern Nations, Nationalities and Peoples Regional State and it consists of 19 Woreda and 528 rural Kebele and Hawassa being its administrative center.

The Sidama are the Cushitic language speaking society and the language they speak is known as SidamuAfo(SidaamuAfoo). This language belongs to the Highland East Cushitic groups together with Kambata, Hadiya, Gedio and Burji languages and it is one of the major five languages in Ethiopia spoken by around 3.3 million speakers (Ibid). Religiously, the Sidama practices Christianity (Catholic, Ethiopian Orthodox Church, and Protestant), Islam and indigenous religions.
The Sidama are patriarchal society where males are heads of households and follow a patrilocal settlement pattern. In addition, they trace their descent through male line.

Economically, agriculture is the dominant economic activities and especially Sidama is well known by its coffee and ensut production, which are the main sources of cash and staple food, respectively. The rural inhabitants are mainly engaged in agricultural activities, like cultivation of plants and rearing of cattle. Beside the agricultural activity, they subsidize their livelihood by petty trade. Using hoe they produce different plants like enset, pea, chickpea, maize, bean, and so on. Productions beyond consumption are provided to market for transaction. Trade items like crops, cereals, fruits, vegetables, dairy products and other trade items are brought to the local markets.. They transact these trade items with cash money in order to buy commodities. Beside those petty trading, in the local market, the inhabitants sell coffee and chat, which are their main source of cash, with the neighboring societies.

Types of Conflict in Sidama
This study was conducted in a homogenous society. Most of the residents have similar socio-cultural and economic background. Hence, the conflicts discussed below occurred in an intra-“tribe” setting. Conflicts could arise between individuals or groups from the same clan or sub-clan and also between clans. Different types of conflicts arise in the study area with varying frequency. conflicts due to homicide and arson are extremely rare while others like resource and money related conflicts are ubiquitous.

My field data, collected from informants, and the woreda court and police offices in the study area revealed the following as the major types of conflicts: Disputes over land holding; removal of border marking stone ;destruction of property; arson; blood feuds, quarrel and physical injury; disputes over irrigation of water and grazing land. Other conflicts include theft, betrayal among trade partners, polygamy and adultery practices and abduction of girls. These are the major types of conflict in the study area. Particularly, disputes that arise from land related is the major reason for the occurrence of other kinds of conflict like homicide, arson, physical injury (damage of teeth, damage to eye or ear and amputation of different body parts), quarrel and destruction of property (cutting of opponents enset, chat, coffee).

As the study area is one of the highly densely populated areas, the Zone Administrative Council estimates that the population density to be 260 persons per square km, land shortage is acute. Someone may plough or plant a tree by crossing a marked border of a neighbor.Hence, land related disputes are common. Dispute over money are another commonly observed micro-level conflict. It occurs between lenders and borrowers, when the latter fail to pay back the debt totally or partially. Such kind of conflict is a widespread problem among the rural people. In addition, there are also other lender-borrower conflicts over sharing of cattle, goat, sheep, donkey, ox and the likes. The lender may give animals for the borrower to return it either with interest or to own the offspring of those animals exclusively. However, the borrower may deny ownership or sharing of those animals.

Marriage related disputes are also common among the Sidama. Conflicts like extramarital sexual relationship, the practice of polygamy, abduction of girls, girls’ refusal to accept arranged marriage, and so on are common in the study area. Another type of conflict that is observed in the study area with least frequency is homicide. It is the most serious offences which cause social tension and economic costs. In addition, conflicts that inflict body injuries are also common. Like breaking of teeth, cutting of ear, strike to an eye and amputation of different body parts are observed in the study area. On such occasions of conflicts, different methods of conflict resolution have been used by the members of the society. These conflict resolution mechanisms in the Sidama are broadly classified as indigenous mechanisms of conflict resolution and formal mechanisms of conflict resolution, (which is provided by the state).
Both methods are functional in Sidama in the process of conflict resolution. While the formal mechanism of conflict resolution was imported from the European legal system via the codification of the penal code of 1930 and the other six codes from the second half of the century, the indigenous mechanisms of conflict resolution, which are time-tested and effective, are made by the people and derive its legitimacy from participation and consensus of the community (Abera: 2003, cited in Alula and Getachew, 2008:1). However, the state’s adoption of the formal conflict resolution mechanisms marginalized indigenous practices and their authority and legitimacy was challenged by the new modernizing process of the country. Consequently, the formal methods assumed the leading roles while the indigenous practices hold a secondary place.

In the following part, this paper tries to investigate the changes and continuities the indigenous conflict resolution mechanisms undergone through time and their current practices and status in resolving conflicts in the study area.

Changes the Indigenous Institutions Undergone

Until the Sidama incorporation into the larger Ethiopian polity at the end of the nineteenth century, the Sidama had their own administrative and justice system that addresses conflicts between themselves and the neighboring societies. However, the pan-Ethiopian nation building under Emperor Menelik II stifled these local initiatives partially. Subsequently, the ancient Ethiopian religio-legal code, FethaNegast, the ‘law of the king,’ was introduced. Despite the introduction of new justice system, the indigenous conflict resolution mechanism was continued to serve side-by-side with the new formal court system. According to Markos et al (2011), Oyvind (2002), the newly introduced politico-legal institution had the main purpose of maintaining order by checking any possibility of local riot against the new order. Due to this, the indigenous conflict resolution mechanism had enjoyed partial autonomy over concerns which were purely local in resolving conflicts particularly with social, cultural and economic dimensions where the main interest of the imperial order was relatively minimal. Whenever there were conflicts that hamper the general peace and security, their settlement was according to the law of the king (FethaNegast) through melkagna (non-Sidama district governor).

However, the partial autonomy of the indigenous conflict resolution mechanisms did not stay for long. The Criminal Code of the 1930 and the Proclamation of Administration of Justice of 1942 of the Imperial Regime replaced the indigenous conflict resolution mechanisms by the formal court system allover Ethiopia. It denied legal recognition for those indigenous institutions of law and authority (Oyvind, 2002) and (Markos et al, 2011). The declarations of these Codes and Proclamations and the abolishment of the indigenous conflict resolution mechanisms, however, did not stop their operation in practice. In fact, Oyvind (2002) and Markos et al (2011) wrote that the system was not completely crushed out by these code and proclamation. They continued to serve as conflict resolution mechanisms on the areas of disputes which arise out of the network of kinship, economic and social rights and duties existing between Sidama.

This implies the resilience of the indigenous conflict resolution mechanisms in spite of the state’s unprecedented effort to stifle its operations. Nevertheless, this resilience did not cop up with the influence exerted by the Derg regime. As informants and studies such as Bahru (2002), Yirga (2008), Ambaye (2008) wrote, it was during the Derg regime-accusing the system being oppressive, anti-people and obstructive to the normal functions of the formal courts-that the indigenous conflict resolution mechanisms encountered sever challenges from the state and stifled local initiatives. As a result, these indigenous conflict resolution mechanisms were forced to operate in semi-clandestine fashion.
As informants and the above studies witnessed, the *Derg* time was the toughest of all for the indigenous conflict resolution mechanisms to operate. As the peasant associations were the maker and breaker of everything in the *Derg* regime, this period was a hibernation era for the indigenous system. Following the new political notion of self-determination of the people in post-1991 era, these indigenous conflict resolution mechanisms start to revive and get constitutional recognition. The constitution grants these indigenous conflict resolution mechanisms the autonomy of addressing conflict issues other than criminal cases in accordance with the constitution and based on the consent of the conflicting parties. Hence, currently those indigenous conflict resolution mechanisms are working side-by-side with the formal court system. In addition, their role in resolving family and rural landholding disputes is recognized and as such they are given the role of dealing with these cases before the formal court entertain the cases. The following section discusses the general features and practices of indigenous conflict resolution mechanisms in Sidama.

**Values and Beliefs Systems Related to the Indigenous Conflict Resolution Mechanisms**

Indigenous conflict resolution mechanisms are credited for their quality of reconciliation, compensating the victim, restoration of peace and legitimacy among the members. Despite the critics forwarded against indigenous institutions denial of any role for women, youth and socially outcaste groups (like potters, tanners and so on) in the decision-making processes; they continue to enjoy high legitimacy among the members. Contemporary productions of literature regarding indigenous conflict resolution mechanisms, such as Alula and Getachew (2008) and Tarkegn and Hannah (2008), are also recommending their significance in resolving conflicts at grass-root levels. Such literatures indicate the success of indigenous conflict resolution mechanisms in revealing truth, provision of win-win solutions, and reconciling conflicting parties. In addition, these studies show that the high legitimacy of the systems among the members. Therefore, discrediting their role at lower levels is not plausible, because as Oshaghae (2000:213-214) points out, “resolution of more serious conflicts is impossible without the management of less serious conflicts at the lower levels”.

As far as indigenous conflict resolution mechanism among the Sidama is concerned, the beliefs, values and procedures the system involves during conflict resolution take credit for the system’s success in maintaining peace and harmony of the society. This section discusses those values, beliefs and procedures the indigenous conflict resolution mechanisms involve in the study area.

**Halale-The Supreme Truth**

*Halale* is one of the values that the Sidama are most concerned about in their conflict resolution endeavors. The indigenous conflict resolution mechanisms among the Sidama centered on the utmost importance of revealing *Halale*-the supreme truth. Ambaye Ogahto describes *Halale* as follows;

> They (elders) explore and investigate the background of the conflict. They critically examine the motives of each party. The elders as well as the audience pose different questions to the conflicting parties. After this examination, the elders invoke the values of the Sidama *Halale*(true way of life).

That is why one of my informants explained this value of *Halale* saying “revealing *Halale* is more than receiving ox” which is also substantiated by several authors. Tarekegn (2008) explains that “truth” is said to be more important than receiving economic compensation. The aim of the conflict resolution is not punishing the wrongdoer; rather it is directed toward the restoration of former relationships between disputants. In doing so finding *Halale* is the primary task of the conflict resolution system. Once *Halale* is revealed, deliberation over the causes of the conflict, intents of the perpetrator, the corresponding sanction and other resolution related issues followed. Truth telling entails the acknowledgement of the wrong done and can lead to asking for forgiveness. Once the truth is revealed, then justice, forgiveness and reconciliation follow. It is such truth revealing caliber that enables the system to provide just decisions and win-win solutions and restoration of former relationships between the conflicting parties.
Indigenous ways of conflict resolution processes are known for their open and active participation of the participants during the investigation, examination and deliberation of the resolution processes. As a result, everyone has an equal opportunity to express his (women never take part in the decision-making processes) opinion, suggestions and the possible solutions regarding the issues under deliberation. In order to avoid miscommunication and misunderstanding between different participants regarding the conflict under deliberation, the Sidama indigenous conflict resolution mechanism employ a procedure called *affini*, a procedure that reassure clarity and mutual consensus regarding the issue at hand. Frequently, the leader of the council heard of saying "*affini*" — means do you understand? Do you listen? Through *affini* the conflict resolution mechanism tries to establish a mutual understanding about the nature of the conflict, which paves the way for binding and mutually acceptable decisions.

**Sera**

*Sera* is the customary law of the Sidama, which dictates the expected behavior of every members of the society. It is very broad. It is a code of conduct, an administrative guideline, a conflict resolution mechanism and many other things. It deals with issues that range from the very simple relationship one should have with her/his neighbors, supporting the needy, the poor and the sick to such severe conflicts, like arson, homicide and inter-“tribe” conflicts, and different socio-economic and political issues. Oyvind Aadland describes *sera* in the following way:

> "Sera is a set of local cultural norms or codes regulating the communal social structure and interaction. ..... sera is almost an ethic and moral codex. It may be seen as an unwritten law, but it constitutes at the same time the morality and the conscience of the individual and the community."

Therefore, the whole processes of conflict resolution at all structural levels are guided on the basis of the *Sera* depending on the nature of the conflict. The *sera* also stipulate the amount and kind of punishments’ that could be sanctioned on the offenders if they are found guilty.

**Oath**

When disputants fail to attest the case by evidences or witnesses, s/he requests the defendant to show her/her innocence through oath. Or in the occasion when the troublesome is unknown, the claimants mentions a person that s/he suspects. Then the suspect requested to admit or refute regarding the case s/he was suspected of. If s/he refutes, the elders request him/her to show him/her innocence through oath. Since corrupting *halale* is one of highly disapproved behaviour which result denigration and losses of acceptance among members of the society, the suspects avoid false telling and vowing on false grounds. The procedure of taking oath serves as an ingredient for the indigenous conflict resolution mechanism in revealing truth. In a nut shell, the quality of providing just decisions, win-win outcomes, reconciling conflicting parties, restoring relationships and establishing lasting peace between the conflicting parties emanate from the indigenous system’s ability of using the above values, ideas and procedures which are respected and internalized by members of the Sidama society. As a result, no one dares to violate these indigenous value and belief system, rather every one conform to decisions reached through the above processes.

**Major Types of Indigenous Conflict Resolution Mechanisms**

As has been said elsewhere in this study, the Sidama have their own conflict resolution mechanism—which is called *Songo*-literally it means assembly. Generally, these indigenous conflict resolution structures are classified into four levels. They are *OlluSongo*, *AyiduSongo*, *BosoteSongo* and *GareteSongo*. 
1. **OlluSongo**

*OlluSongo* is the lower structure of conflict resolution in the study area. It has the authority of resolving conflicts between people who live in one locality, who have intimate and close social ties and relationships. This structure predominantly addresses conflict between the members of a village due to their day-to-day interaction. Conflicts that are addressed at *OlluSongo* structure include, minor family affairs, disputes between friends, quarreling between neighborhoods *eddir* issues, refusal to payback debt, claim over property ownership, property destruction by cows, goats, chicken and so on that are caused by the members’ day-to-day interaction. The authority of *OlluSongo* structure is limited under village jurisdiction. It assembles frequently to address conflict issues and has no fixed places to see cases. Conflict issues could be addressed at any convenient places.

Conflict resolver at this structure are elders of the locality known for their reputation and seniority. In some instances, they could be mutual friends of the disputants this is because of the fact that disputants in most cases are from the same village belonging to the same clan and sub-clan who meet frequently, and the natures of conflicts are minor in severity. As a result, elders and intimate persons of the disputants serve as conflict resolver. The procedures of presenting cases to *OlluSongo* structure involve various forms. For instance, an angry party could bring complain to the attention of elders or the elders themselves could call the disputants to settle their dispute if they are convinced that the existence of such conflicts could affect the day-to-day activities of the villagers. Since the conflict is between intimate parties who have a close social network, elders at this structure do not propose a binding decision. Rather, they facilitate situations that enable the conflicting parties to discuss their differences in order to resolve their conflicts’ amicably.

2. **AyiduSongo**

*AyiduSongo* structure is found next to *OlluSongo* structure and it addresses conflicts between different villages over the utilization of irrigation canal, grazing land, abduction and the like that lead two different villages into conflict. In addition, conflicts between the members of different villages are resolved through *AyiduSongo* structure. In addition, *AyiduSongo* has the authority of seeing cases that are not settled at *OlluSongo* structure. Conflict parties who appear at this structure belong to different clans and villages. As a result, mediators at *AyiduSongo* structure are the *chimmisa* of *OlluSongo* (elders of lower structure) of each village. Both villages’ elders organize committee and work jointly to discuss on issues that lead the villages or the individuals into conflict. The *chimmisa* of each villages discuss on the issue at any convenient venue. Their decision can be appealed to the next higher structure found above them. Dissatisfied party can appeal its case to the next higher structure.

3. **BosoteSongo**

*BosoteSongo* is the third structure of conflict resolution in the study area which consists of the lower *AyiduSongo* structures. Conflicts that are not resolved at lower structures are referred to *BosoteSongo* in order to see the case by the clans’ council. This structure resolves any conflicts, be it homicide or quarrel between friends, which happen between clan members. Unlike *OlluSongo* and *AyiduSongo* structures, *BosoteSongo* structure has its own fixed venue called *Gudumale*—which means rendezvous. In *BosoteSongo* structure, conflict resolvers are selected carefully. The elders reputation and acceptability, mastery of *sera* knowledge, passing through various rite initiations are considered during their selection. The elders facilitate discussion between conflicting parties. The decision at this structure is not binding. It can be appealed to the next structure. In this connection, *BosoteSongo* structure differs from the former two lower structures on the following points. Firstly, the lower two structures resolve simple disputes of the members of the villager, whereas the *BosoteSongo* resolves all types of conflicts beyond the village levels, but under its jurisdiction. Secondly, another point of variation is regarding to the nature of the conflict resolvers. The lower
structures use village elders where mastery sera knowledge and other rites of passage as such is not critical, while BosoteSongo structure conflict resolvers are expected to fulfill the above criteria. Thirdly, BosoteSongo structure has a fixed meeting places unlike the lower two structure which assemble at any convenient places. The above variations withstanding, there are some common features that these three structures share. Firstly, in almost all instances disputants belong to the same clan and sub-clan. Secondly, the decisions delivered at those three structures are not binding as any dissatisfied party can appeal the case to the next higher structure.

4. GareteSongo
This is the fourth and final structure of conflict resolution as far as indigenous conflict resolutions in the Sidamais concerned. GareteSongo has the authority of resolving conflicts of any kind that may arise between different clans, sub-clans, villages and families. It serves as the last resort of conflict resolution and its decisions are binding. It addresses any issues that are directly appealed to it or cases referred to it by the lower structures. Every clan leaders are conflict resolvers at this structure. The GareteSongo also has a fixed meeting times and venue to see cases. Despite the fact that GareteSongo is the final structure of conflict resolution, when they face controversial and ambiguous issues which divide the assembly, the elders refer the case to the neighboring Songos of other “tribe” to consult and resolve their problems.

The above four structures of conflict resolutions are used to resolve conflicts that arise either at family, village, inter-village, clan, or “tribe” levels. The lower two structures, which are confined under their respective locality, resolve minor disputes that arise due to the members’ day-to-day interaction. BosoteSongo structure addresses conflicts of any type that arise between clan members. The fourth structure, GareteSongo, resolves any conflicts that arise between different clans of, which is the higher structure of conflict resolution and the final appellate structure in the study area.

Actors Involved in the indigenous Conflict Resolution Processes

1. Conflict Resolvers
Actors involved in the conflict resolution processes as mediators in the study area are predominantly elders (Chimesa) clan leaders (Moti), religious leaders (Woma) and ritual leaders (Gadana). Those conflict resolvers are credited with having extraordinary quality to see things that are not endowed to the ordinary persons. Horowitz (2007) writes as, it is crucial for a mediator to be trusted by the parties to a conflict, and in order to achieve that, s/he must be an upright and honorable person, who shows will and determination to help the parties. In this regard, conflict resolvers in the study area, are selected on the basis of their good reputation, wisdom, exemplary deed, expertise in sera knowledge, experiences, patience, commitment, talent in delivering just decisions and other calibers. Due to the above qualities of conflict resolvers, they are highly trusted and respected by the wider society. As a result, conflict resolvers are effective in maintaining peace and resolving conflicts. Because, the above calibers of the conflict resolvers provide them authority which enabled them to control access to resources and social networks that go beyond clan boundaries and generations. In addition, in case of religious leaders, they possess supernatural power reinforced by superstitious beliefs.

The elders put their knowledge and skills at the service of the parties on voluntary basis. They do not request payment for their services. Rather, being called as Chimesa(elder) provides them mental satisfaction. Of course, the disputants (most of the time the offenders) voluntarily provide some services to the conflict resolvers at the end of the conflict resolution process. Such services include provision of food and drinks. If the resolution ends successfully, the litigants prepare a kind of small party to signal the end of hostility and the re-establishment of new relationships.
2. Conflicting Parties

Conflicting parties are the key actors in the conflict resolution process. Because, the existence of the system depends on the presence of conflicting parties who bring their cases in search of justice. If conflicting parties were not there, it would be impossible to have the system of conflict resolution. Disputants were asked why they prefer the indigenous conflict resolution mechanism vis-a-vis the formal court system. Their preferences to the indigenous conflict resolution mechanisms are subscribed to three issues. First, their familiarity with the language, custom, beliefs and procedures of the conflict resolution context made them to bring their case to the indigenous conflict resolution mechanisms. Disputants are not alien to the indigenous mechanisms in contrast to the formal court system where they face a lot of bureaucratic ups and downs. For instances, one informant said, “here, no sheet, no pen, no application letter”. Also Mamo (2008) shares my informant’s viewpoint. He writes that the cost of pursuing a dispute through formal structures begins with buying sheets of paper and getting the case written. The informants’ view shows that how formal court procedures are alien for them, where the system requests them to begin their case through written application and to follow each formal procedure which is quite alien and strange for someone who cannot read and write.

One of my public prosecutor informants working in the formal court underscores the above procedural complexities of formal court system by saying, “I am frightened whenever I go to verdict. My fear is not losing of judgment; rather I fear the likelihood of humiliation and embarrassment that could come from the judge.” The formal court system is as such alien let alone to the disputants who have rural background, but also for people who are working in it. As a result, disputants lean toward the system which they are familiar with. Where they are familiar with the language, the people, the procedure and the context. Such familiarization is one of the reasons for local people’s persistent preference to indigenous conflict resolution mechanisms. Secondly, conflicting parties have full trust in the neutrality of conflict resolvers in the indigenous system, while they associate the government court with bribery and corruption. The elders’ good reputation, humble character, truthfulness, sincerity, and self-critical characteristics win the heart of disputants to bring their case before them. There is no fear among disputants facing corrupted decision since the elders are entrusted by the society for their delivery of just decisions.

For this reason, disputants are ready to accept the decision of elders. Almost all of the informants react in similar fashion regarding the elders’ decision. They said, “what can I do if it is the elders’ judgment because I cannot be against Chimesa.” The informants’ response implies many things about the legitimacy of the indigenous conflict resolution mechanisms. On the one hand, disputants are ready to accept the elders’ decision even if it is against their interests. Despite claimants’ chance of winning their cases in the formal court system, they prefer their cases to be seen by the indigenous conflict resolution mechanisms. Here, claimants are ready to lose something, because they know elders do not make corrupt decisions rather they recognize elders’ attempt of searching win-win solution that opens door for reconciliation. On the other hand, the claimants give priority to the interests of the public at the expense of their interests. Because they are aware of the elders’ decision is intended toward maintaining peace and security of the society. When they say, “I cannot be against Chimesa”, it shows that they prioritized the interest of the public at the expense of their interests. Disputants trust on the system and their readiness to move away from the zero-sum destructive outcomes to the positive sum constructive outcomes are the unique features of indigenous conflict resolution mechanisms that increase its legitimacy.

Thirdly, cost and time efficient approach of the indigenous conflict resolution mechanism is another source of legitimacy that make it preferable by the disputants. An informant that went into conflict with his trade partner due to refusal of reimbursing debt says, “the benefits of appealing to the formal court are fatigue, expenses and appointment”. But, the indigenous conflict resolution mechanisms enabled them to save time and cost that would be wasted. Firstly, cases are held in the
proximity of the disputants’ residence. This saves time and cost they could incur if they go to the formal court system. In addition, elders’ provide the service free of charge and the conflict resolution process by itself does not demand costs as formal court systems do, like hiring of lawyer. In addition, disputants’ proximity to the context of conflict resolution process enabled them to follow their case while they are working. This enables them to save time and costs that could have been wasted for transport, accommodation and related things. In a nutshell, the disputants’ familiarity with the indigenous system, their trust on the elders, time and cost effectiveness of the indigenous system are some of the reasons behind the local people’s persistence preference of the indigenous conflict resolution mechanisms to the formal court system.

The Relationship between Indigenous Institutions of Conflict Resolution and the Formal Court System
This sub-section discusses the existing relationship between the indigenous and formal court system in the study area.

The Federal Democratic Republic of Ethiopia Constitution (1995) declares:

The constitution shall not preclude the adjudication of disputes relating to personal and family laws in accordance with religious or customary laws, with the consent of the parties to the dispute. Particulars shall be determined by law (Article 34(5)).

The above Ethiopian Federal Constitutional provision implies the presence of legal pluralism in Ethiopia. Getachew (2008) notes legal pluralism as the coexistence of state and non-state forms of laws to operate side-by-side. Upon the preference of the people, legal pluralism provides opportunity for the people to go either ways to deal with their conflicts. The constitutional recognition of non-state laws to operate side-by-side with the state apparatus does not mean that they are totally entitled to entertain every aspect of conflicts. Rather non-state laws are entitled to deal with conflicts related to personal and family disputes. Otherwise, the rest of issues particularly criminal cases are not permitted to those indigenous institutions to deal with. In addition, Article 34(5) of the Federal Democratic Republic Ethiopia Constitution (1995) implies that, those non-state institutions can run cases if and only if, the consent of both conflicting parties to a conflict is given. This leads to the point that the constitutional recognition of the indigenous conflict resolution mechanisms is partial since the constitution allows them to address particular conflict issues. In spite of the above constitutional provision, the field data collected from the study area show that the indigenous mechanisms of conflict resolution have been dealing with all aspects of conflicts ranging from the inter-personal quarrels to homicide in first degree. Since this is clearly contrary to the constitutional provision, it creates a lot of conflict between state and indigenous institutions. Due to this conflict between the indigenous conflict resolution mechanisms and formal court system, the relationship between those two institutions regarding to conflict resolution in the study area is far from unequivocal. Both cooperation and conflict characterize the relationship between these institutions. These cooperative and conflicitive aspects of relationship between the two institutions are discussed below.

Cooperation between Indigenous Institutions of Conflict Resolution and the Formal Court System
Since both institutions are sources of peace and security in the study area, it is apparent that their cooperation is inevitable. Both the indigenous institutions of conflict resolution and formal court system are working together in certain areas as far as peace and conflict resolutions are concerned. Those cooperative works are done for the sake of mutual benefits. Both institutions’ cooperative work for mutualbenefit is viewed when they see issues regarding to family dispute such as divorce, property division and land disputes. According to informants in formal court system, resolutions of those conflicts are virtually left to the indigenous institutions in the study area. The Federal Constitution (1995) in Article 34(5) and Southern Nations, Nationalities and Peoples Region State,
Land Administration Proclamation Number 10/2007 provide that the indigenous conflict resolution mechanisms are given the authority of resolving conflicts related to personal and family disputes and rural land holdings, respectively, based on the conflicting parties consent. In most instances, as confirmed by informants working in government courts, they refer conflicts related to family and rural land holding to the indigenous conflict resolution mechanisms, before the formal court addresses the case.

Informants in the formal court system explained that their first step before receiving any cases related to family and land disputes is to check whether or not disputants consulted the indigenous conflict resolution mechanisms for their cases. When they get cases that have not been seen by the indigenous system, they send the disputants back to the indigenous institution (to deal with them). In case of divorce and related family disputes, the *woreda* court gives three months as a period of contemplation for the disputants to discuss the issue thoroughly. If the indigenous institution fails to reconcile such family and land disputes that are referred back to them by the formal court, as a last resort the formal court adjudicates the disputants according to the law of the region. Another area of cooperation between these institutions is related to offenders who finished their prison years at the prisons. Even if the plaintiffs are punished by the formal court, it is expected to finish her/his cases in indigenous ways before s/he is reintegrated into the society. Especially, if the case is homicide, the slayer is expected to finish the case and get purified her/himself in the indigenous way.

Since indigenous institutions are known for their reconciliatory power, the formal courts are positive about the indigenous institution efforts toward reconciling the slayer, who finished prison years, with the victim family to avoid further animosity between them. This reconciliation and purification processes facilitate the slayer’s total reintegration into the society. In addition to this, the *woreda* court consults the indigenous institutions before granting pardon or amnesty to the prisoners in order to assess the possibilities whether the prisoners can reintegrate peacefully with the society or not. Furthermore, according to informants, officials in the formal court advice prisoners to finish their cases through indigenous conflict resolution mechanisms for the better future relations between disputants.

The above cooperative working conditions explicitly reveal the presence of division of task between the indigenous and formal court system. The indigenous conflict resolution mechanisms focus on addressing conflicts related to family and land holdings, whereas the formal court have been provided with opportunities to deal with criminal and other related issues that jeopardize public peace. This division of labor at least has two significances. Firstly, the indigenous institutions’ involvement in the resolution of family and land holding disputes has positive contribution to the wellbeing of the society. As far as these indigenous institutions tend to reconcile (than to punish) disputants, they diminish the tendency towards the dissolution of the family institution which is the fabric of society. Also the probabilities of ensuring sustainable peace between the disputants are high. Second, since the capacity of the formal court in providing decisions are limited, the indigenous institutions’ roles in addressing the above area of disputes ease the burden of the formal court that would be wasted in resolving those family and land holding disputes. Hence, formal courts can concentrate on other criminal and related issues. In a nutshell, these two institutions, which are sources of peace and security in the study area, work cooperatively for mutual benefits of the society. The functional difference between the indigenous conflict resolution mechanisms and the formal court system is that the indigenous institutions address conflicts that have social and economic dimensions whereas the formal court decides upon conflicts that involve violation of laws, particularly criminal cases that are threat to the wellbeing and harmony of the society.
Conflict between Indigenous Institutions of Conflict Resolution and the Formal Court System

Another area of relationship between the indigenous and the formal court system is characterized by conflict of interests. This is observed in relation to as to which institution shall resolve conflicts that have criminal nature, like homicide, burglary, aggravated robbery, and etc. Particularly, the conflict is over the legitimacy of indigenous institutions in resolving those kinds of criminal offences. The state institutions claim that resolving criminal cases, particularly that are threats to public peace, are not the mandates of the indigenous system and the formal court system argues that the indigenous institutions do not have constitutional provision to address homicide and criminal cases. The formal court system blames the indigenous institutions for their intervention in the work of the formal court system. Claiming that the indigenous institutions are creatinga lot of problem in the normal functioning of the court. The formal court system blames the indigenous institutions’ for their act of pressurized disputants not to bring to their cases to formal court, pressurizing disputants to withdrawal their cases, to avoid testifying their cases by evidence if withdrawn is not permitted, labeling disputants that appear in the formal court as deviant, back biting of those claimants and so on.

One informant in the zonal court underscores the above claim referring to a case under due processes. He said, “Two brothers intentionally murdered their neighbor cruelly following disputes over land holding: …this is what happened in reality; particularly, in the cases of homicide, some individuals are perpetuating lot of atrocities with the intention to finish it in the indigenous conflict resolution mechanisms.” Conversely, elders of the indigenous institution counter claim that it is their right to be adjudicated by the system they want. A 70 year elder informant said, “The government in one tongue says you can use your culture, custom and other things;on the other tongue it denies our right to be adjudicated by our fathers’ custom”. And he questions the position of the state and labels it as “rhetoric”. Such conflict of interest is another feature that characterizes the relationship between the two institutions. This could affect public peace and sometimes it leads them into tensions due to their competition in addressing conflicts that have criminal nature.

Generally, indigenous and formal court systems of conflict resolution mechanisms have both cooperative and conflicting relationships. Those cooperative and conflicting relationships have their own effects on peace and security of the society. As the former enriches mutual benefits of the society, the later undermines public peace. In short, the indigenous conflict resolution mechanisms survived the challenges that were presented by the external actors. The system passes through different influences that came in the form of different codes and proclamations, threatening the survival of the indigenous institution. Nevertheless, today, the indigenous institutions not only survive, but also started to have experiencing some forms of revitalization and they contributing a lot through restoring peace and stability.

CONCLUDING REMARKS

The indigenous conflict resolution mechanism in the Sidama area is playing significant role in maintaining peace and harmony of the society. It is serving as source of justice for the local people and it is also easing the burden of the state apparatus of peace and justice. It helps the local people to improve their productivity by saving their times and costs that could have been incurred in search of justice out of their work place. And it also creates sustainable peace among disputants by avoiding animosity and vengeance that would otherwise be a challenge for economic, social, cultural and political development of the society. However, this relationship is undermined by the conflicting nature of relationship between these institutions. Therefore, this indigenous institution needs due consideration of different bodies that work toward the holistic development of society. Finally, I want to say this study is not the exhaustive or conclusive enough about the subject under study. There could be some issues this study fails to address due to time constraint and unforeseen things. So, I invite others to carry out further studies on the issue at hand. Particularly, it is my wish...
to see other studies about the relations between the indigenous and the formal court system of conflict resolution.

**BIBLIOGRAPHY**


