Abstract

Even though natural resources have a certain contribution for development of tourism in Ethiopia with its major contribution to livelihoods of the majority of Ethiopians, large of attractive natural and cultural resources are exposed to degradations or threats due to negligence (EPA, 1997). Therefore, the main objective of this study was assessing Ecotourism Development or alternative options for sustainable use of natural resources which will improve the livelihood of local communities and conservation of SSHS. To this end, the research has attempted to integrate both qualitative and quantitative approaches. Questionnaire, Key informant interview, Focused group discussion, direct observation and literature reviews were employed as instruments of data collection. The participants of the study were members of the local community, community leaders (Ababa Geda), and related stakeholders like Agriculture and Rural Development office, Cultural and Tourism office, SSHS experts and Small and Micro enterprise office at woreda administration level. Four Kebeles were selected purposefully from 8 Kebeles which were surrounding the Sanctuary. The collected data using households’ survey were analyzed by frequency and Percentage. The findings showed that SSHS and the surrounding community have an excellent opportunity to develop ecotourism as an alternative livelihood. The analyses of the study revealed that natural and cultural resources such as abundance and diversity of bird, mammals, scenic landscape, hot springs, natural caves, waterfall and attractive vegetations are the main ecotourism potential in SSHS. Other opportunities include favorable weather conditions, local institutions and policy. So, developing ecotourism can engage a wide cross section of people and it is the most promising strategy to reduce the sever livelihood and diversify local livelihood options. However, at current time major constraints keep the potential opportunities from being developed. These include: lack of adequate infrastructure, lack of local community involvement and participation and unsustainable livelihood, inter-ethnic conflict, natural resource exploitation and lack of trained manpower. Thus, it is a crucial time for developing ecotourism to protect the beauty and environmental quality of the area and to improve local livelihood. In light of those circumstances, I strongly recommend all the concerned bodies to focus on the significance of developing ecotourism in the SSHS and the surrounding area.

Keywords: Ecotourism, attractions, conservation, livelihood, Senkele Swayne’s Hartebeest Sanctuary, Protected area.

1. INTRODUCTION

1.1 Background and justification

Ecotourism is often perceived as an excellent tool for promoting sustainable development in developing countries. More than just tourism to natural areas, ecotourism has increasingly become an aspect of resource conservation as well as local. As a result many developing countries have supported ecotourism as a means of achieving development and environmental protection at the community level, since it is not only to ensure conservation, but also to improve the living conditions of adjacent inhabitants with respect to health, education and levels of personal income (Honey, 2002). People-centered and a community-based approach to ecotourism focus on promoting the quality of life and increasing the awareness of eco-tourists and local residents about conservation (Scheyvens, 1999; WTO, 2008). Despite the universal acknowledgement of the establishment of sustainability criterion around economic and socio-cultural dimensions, Weaver (2008) notes that sustainable tourism is premised on economic benefits to be received by host communities. To counter the stress on biodiversity by conventional tourism, Drumm and Moore (2005) opine that ecotourism and its appropriate strategies provide a sustainable transition into the zone of minimum negative impacts.

An integral part of ecotourism that underpins the sustainable development paradigm is community participation. Certainly, there is now a growing body of evidence to suggest that top-down approaches to planning and management of ecotourism have failed to attain sustainable results. Along with the “participation-ecotourism” debate, Scheyvens (1999) identified two perspectives: local participation in the decision-making process; and local involvement in the benefits of ecotourism development. To be able to shift that category of community activities that pose a threat to biodiversity conservation to that of opportunities and sustainable development, necessitate the participation of all stakeholders, especially local residents (Drumm and Moore,
2005). The effects of the people at the grass root level, has become necessary in the promotion of ecotourism in the world. Consequently, community participation has become an important strategy to build an empowered community and to enhance tourism destination performance.

Despite ecotourism’s increased acceptance as a development tool, the decision to undertake such projects must still be carefully weighed. In some cases, the economic and social costs of ecotourism initiatives have been greater than the benefits derived by the local populations (Lindberg et al., 1998). Arguably, the operation of ecotourism facilities without any associated negative impacts is an ideal imagination. In practice, there has been variety of socio-economic and environmental problems have arisen (Boo 1990, cited in Stone, 2002). In this regard, Buchsbaum (2004) argued that ecotourism is faced with the task of balancing the damage caused by tourists and the preservation of ecosystem for posterity.

Ethiopia holds a massive ecotourism development potential. But, ecotourism is still in its infancy in Ethiopia. However, Ecotourism development in Ethiopia is getting increasing interest and attention because the country has a unique biodiversity, spectacular topographic features and rich cultural resources. Ethiopia’s Protected Areas, which includes national parks, game reserves, wildlife sanctuaries and other controlled hunting grounds covers about 14% of the country, are most suitable for ecotourism development (SDPASE, 2008). Although most protected areas are compatible for ecotourism development, they face a number of challenges related with the local community inhibited the area before and it signifies the multifaceted challenges of the tourism development activity due to the extremely less regard for the local community involvement. The majority of conservation problems were attributed to Ethiopia’s adoption and implementation of an exclusionary protected-area policy and to the causes and consequences of its prolonged engagement in two particular conflicts Jacobs and Schloeder (2001). In general, any tourism development excluding local community is proved unsuccessful. This study, therefore, seeks to explore how local participation affects sustainable development and benefit thereof, from the Senkele Swayne’s Hartebeest Sanctuary.

1.2 Statement of the problem

Even though natural resources have a certain contribution for development of tourism in Ethiopia with its major contribution to livelihoods of the majority of Ethiopians, large of attractive natural and cultural resources are exposed to degradations or threats due to negligence (EPA, 1997). In line with this, as stated by (Messana and Netsereab, 1994) the Senkele Swayne’s Hartebeest Sanctuary is also one of the protected areas in Ethiopia established in 1976 to protect the Swayne’s hartebeest (Alcelaphus buselaphusswaynei).

However, its natural resources are seriously damaged especially; it is affected by human and/or livestock interferences since up to today. Moreover, today the country has lost key plain species like the black rhinoceros and several other species now face the threat of extinction (IUCN, 1996). Due to lack of data, there also cause for concern over how many other species may be at risk (Hillman, 1993). Additionally, several of Ethiopia’s National parks have declined in size (Jacobs and Schloeder, 1993). These setbacks are the result of human encroachment and conflicts among the different local communities surrounding for most protected areas in general and Senkele Swayne’s Hartebeest Sanctuary in particular.

The Senkele Swayne’s Hartebeest Sanctuary is also home to a diverse array of unique plant and animal species, hot Springs, spectacular landscape and its plain with attractive grass and the culture of the nearby communities which are most important tourist attractions and massive potential for ecotourism development. However, from its’ establishment in 1976 the sanctuary and the local community live buffer zone of the Sanctuary are facing a lot of challenges related with biodiversity conservation and livelihood needs. It is under continuous threat from unsustainable human activities and non proactive resource management. It also faces many problems of which the most important has been and still is the inter-tribal conflict among surrounding kebeles from SNNP and Oromia regional state pastoralists. There is common encroachment in all sections of the Sanctuary by pastoralists and their herds. As the result, great number of livestock observed in the Sanctuary. At the same time, the conflicts between the various pastoralist groups impose much pressure on the wildlife and their habitat.

Furthermore, this is also due to shortage of appropriate employee and lack of participation of the local communities in the management of the protected areas. Realizing these situations, developing ecotourism in the Senkele Sanctuary area can be remedy to contribute for the stated problem. Ecotourism development most of the times aims to provide a balance between the economy, the environment and society. This stresses the idea that all sides are interdependent and must coexist in order to promote successful long-term development. In line with this Ecotourism is viewed as a viable tool for attaining sustainable development, brings the promise of achieving conservation goals, and improves the well-being of local communities and generates new business.

Active local participation in the planning process and in operations management has been deemed essential to achieving conservation and sustainable development goals of ecotourism. If Ecotourism is to be established and have a lasting benefit, the challenges and opportunities for its establishment, have to be understood. That is the main reason why I set out to study them.
To the degree that analysis of some literatures, indicated most of the studies have not been focused on sustainable management of natural resources relating to ecotourism in and around protected area. Particularly in SSHS, a little research is done on the population status of Swayne’s hartebeest and attitudes of local community towards the conservation area and no study has been done so far on issues related to ecotourism. In an attempt to overpass these gaps the study focus on assessing ecotourism potentials, current ecotourism practices, challenges and opportunities of ecotourism development. Therefore, this study fills this gap and the findings of this study will have a paramount importance to suggest ways to improve current ecotourism practices in protected areas (SSHS).

2. MATERIALS AND METHODS

2.1 Description of the study area

The study was conducted in Senkele Swayne’s Hartebeest Sanctuary, Oromia Regional State. It is located at 53 km south of the Shashemene-Arba Minch road near the town of Aje and 320 km away from Addis Ababa (the capital of the country). It lies at latitude and longitude of 38° 17.00’ East 7° 12.00’ North. The altitude of the Sanctuary is estimated to be ranging from 2000 to 2100 a.s.l. The Sanctuary was established in 1976 to protect the Swayne’s hartebeest (*Alcelaphus buselaphus swaynei*), a mammal endemic to the country (Messana and Bereket Netsereab 1994).

The 200 km² area occupied by the hartebeest in 1972 was reduced to about 58 km² in 1973, and then to 36 km² (Messana and Netsereab, 1994).

![Figure 1: Map of Senkele Swayne’s hartebeest sanctuary](image)

The described vegetation communities at Senkele based on the height of grass are: Pennisetum rassland type, mixed grassland and the vegetation in the Sanctuary is best described as montane savanna and comprises various different habitat associations such as savanna woodland, natural grassland (with fewer tree and shrubs) and, in the valleys, rich shrub land (Birdlife International, 2003).

In addition to the Swayne’s hartebeest, other wild animals that occur in Senkele Sanctuary are Bohor Reedbuck (*Redunca reducna*), Warthog (*Phacoceroerus aethiopicus*), Greater kudu (*Tragelaphus strepsiceros*) and Oribi (*Ourebia ourebi*). Among the primates, vervet monkeys (*Cercopithecus aethiops*) can be seen in a restricted forest area. Crested porcupine (*Hystrix cristata*), Aardvark (*Orycteropus afer*) and Abyssinian hare (*Lepus habessinicus*) are also observed. Spotted hyenas (*Crocuta crocuta*) are very rare, probably numbering less than 10, and have never been observed in packs of more than three animals (Hunting Technical Service, 1976).
2.2 Human settlement and land use system
In the Senkele Plains, the dominant land users up to 1940 were the pastoralists. Subsequently, the influx of new elite following the Italian war (1936-1941), led to the development of mechanized farming in the area. In the late 1960s, areas of pasture in the area were increasingly brought under cultivation and the pressure on remaining pasture was intensified (Messana and Bereket Netsereab, 1994). Crop production is the main activity followed by livestock rearing. The principal crops of the area are maize (Zea mays) and potato (Solanum tuberosum) but in limited areas, haricotbeans (Phaseolus vulgaris) is also observed. Greater number of livestock in particular characterizes Siraro Woreda and the study area.

Before 1990, the number of settlers in and around the border of the Sanctuary was non-existent. After 1991, people started to show resistance against EWCO through a variety of action such as occupation of the territory, livestock grazing and fire wood collection in the Sanctuary. Those who occupied the land built huts along the border of the Sanctuary and expanded their farmland (Nishizaki, 2004).

2.3 Research methodology
The major activities of the study were started by conducting a reconnaissance survey in and around SSHS from December 2014 to January 2015 time frame. After a reconnaissance was done, sampling design for household survey and other concerned stakeholders were undertaken and finally, sample size determination was made.

2.3.1 Study population
A sample of Kebeles which were surrounded the Senkele Swayne’s Hartebeest sanctuary in the selected site namely: Loke Sifo, Senbete Lencho, Kela Lalima, and Kite Tesisa were the study population.

2.3.2 Sample size determination and sampling procedure

2.3.3 Sample size determination and sampling procedure
The households Kebele who were part of the study were purposefully selected from Siraro woreda surrounding area of Senkele Swayne’s Hartebeest Sanctuary. Four kebeles were purposively selected to address the research questions and objectives of the topic under the study.

This is due to the fact that those kebeles are surrounding the sanctuary and they have high intervention with the sanctuary. Those kebeles are Loke Sifo, Senbete Lencho, Kela Lalima, and Kite Tesisa. Accordingly, each has a total household of 1588, 1200, 1064, and 924 respectively. Sample size was determined by considering margin of error (8%)

\[ n = \frac{N}{[1+N(e)^2]} \]  \hspace{1cm} \text{(Israel, 1992)}

Where; \( N \) = the total population that will be studied=4776
\( n \) = the required sample size
\( e \) = the margin of error which is = (8%)

\[ n = \frac{4776}{[1+4776(0.08)^2]} \]
\[ n = 151 \]

To get the distributions of sample size across each kebeles we calculate by using formula:

\[ n' = \frac{n(N'/N)}{n} \]
\[ n' = \frac{151(1588/4776)}{1588/4776} \]
\[ n' = 50 \]

So the distributions of sample size across the kebeles are 50, 38, 34 and 29 for Loke sifo, Senbete lencho, Kela Lalima and Kite Tesisa correspondingly. Based on the name list of member households in each kebeles households were selected using random sampling technique.

2.3.4 Data sources and data collection tools
Both primary and secondary data were used in the study. Primary data were collected through household survey, key informant interviews, focus group discussions, and direct observation. Secondary data were collected from published and unpublished materials sources.

2.3.5 Structured questionnaire
Questionnaire consisting of both open and closed ended questions were used to obtain information from the samples of 151 households selected from four kebeles. The questionnaire surveys were used to generate quantitative data and it was translated into Afan Oromoo before administration.

The actual questionnaire survey were preceded by a pilot testing using five questionnaires in two kebeles (Bitana Kubi and Jarti Bokole) which were not to be sampled. Based on the feedback obtained adjustments were made in the questionnaire.

The data collection was carried out with the help of the scouts of the Sanctuary. Before the commencement of data collection, training was given to the enumerators on how to fill out the questionnaires and how to approach sensitive questions related to illegal activities. To gain people’s confidence, the purpose of the study was clearly presented to the respondents. The questionnaire was alternating male and female respondents and different age groups.

2.3.6 Key informant interview
For the purpose of this study, semi-structured questionnaires were delivered. Key informants were selected from different offices of the woreda depending on their relevance to the issue under study.

The offices from which key informants were selected include Culture and Tourism office, Agriculture
Accordingly, a total of 12 Key interviewees (two Aba Gada, and two experts from each of the offices mentioned above) were selected for the interview.

2.3.7 Focus group discussion
Focus group discussion is important data collection tool to generate the qualitative information on the issue. The FGD involved 40 households, at the rate of 10 households per kebele. The discussants were community representatives, religious leaders’, women, local elders and landless young groups resident in the kebeles.

2.3.8 Direct observation
Field observation is another method applied to shed more light on the status of issues under investigation in the study area. It was also used to verify information and compare responses gathered by other data collection tools. During field observation, the study site was visited and photos of the site and notes were taken. Thus, the researcher opinion on his visit of the study area was included in the analysis.

2.3.9 Secondary data collection
The use of secondary sources plays a major role in the field work research, especially at the study area. In an effort to make this research more valid, creditable and applicable secondary sources which are important to the study were reviewed. For this purpose, both published and unpublished sources were investigated thoroughly especially books, web pages, policy directives, reports, project papers, annual and action plans, etc which support ecotourism development were reviewed and analyzed.

2.4 Method of data analysis
According to Creswell (2003, 190), ‘the process of data analysis involves making sense out of text and image data. It involves preparing the data for analysis, conducting different analyses, moving deeper and deeper into understanding the data, representing the data, and making an interpretation of the larger meaning of the data. Accordingly, the data gathered from different sources, is accumulated in the way that is easy to manage. Data collected from sample households were coded and entered into Statistical Package for Social Science (SPSS). The result of analysis was interpreted and discussed using descriptive statistics (frequency and percent etc). The researcher uses data gathered through key informant interview, focus groups discussions and direct observation to strengthen the quantitative data.

3. RESULTS AND DISCUSSION
3.1 Knowledge of respondents towards Ecotourism
Low level of knowledge and lack of community interest in ecotourism development will affect the overall performance and sustainability. Some researchers proved that lack of ecotourism knowledge is critical barrier that limits the ability of locals to participate in ecotourism development which contributes to a lack of local tourism leadership and domination of external agents. Limited awareness of ecotourism can contribute to fake expectations about the benefits of ecotourism and lack of awareness for the changes associated with ecotourism. Thus, the table below shows the result of respondents’ knowledge on ecotourism and major source of information.

Table 1: Distribution of HHs by their Knowledge of ecotourism and major source of information

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aware</td>
<td>105</td>
<td>69.5</td>
</tr>
<tr>
<td>Not aware</td>
<td>46</td>
<td>30.5</td>
</tr>
<tr>
<td>Total</td>
<td>151</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: own survey, 2015

The findings in the above table 1 indicated, majority 69.5% of respondents were familiar with the term ecotourism while the remaining (30.5%) of the sample households do not aware the term ecotourism. At the same time, the researcher also tried to ask question on major source of information to familiar local communities with term of ecotourism. Accordingly, 29.8% of sample households were familiar with term ecotourism via Small and Micro Enterprise experts while 23.2% of them from SSHS experts. Whereas the remaining 16.6% of sample households aware the term via Culture and Tourism office experts.

In addition during FGD they informed as different stakeholders are working in collaboration with local communities to create awareness on ecotourism issue. Particularly, culture and tourism office and micro and small enterprise office are taking vital role.

Moreover, key informant interviewers also replied as they attempt to familiar local communities with ecotourism using different opportunities like meeting.
3.2 Ecotourism potentials in and around SSHS

From components of tourism industry attraction was the main root. Consequently, there were various ecotourism potentials in and around SSHS area including unique attractive natural resources that can attract tourists. Thus, respondents were asked the question, as ecotourism potentials found in Senkele Sanctuary and its surrounding or not. Accordingly, as depicted in table 9 below majority 97.4% of sample households responded as SSHS and its surrounding was rich enough with ecotourism potentials while a very few 2.6% were responded reverse.

Aba Gada

Table 2: ecotourism potentials in and around SSHS

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there tourism potentials in Senkele Sanctuary and its surrounding?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>147</td>
<td>97.4</td>
</tr>
<tr>
<td>No</td>
<td>4</td>
<td>2.6</td>
</tr>
<tr>
<td>Total</td>
<td>151</td>
<td>100</td>
</tr>
</tbody>
</table>

If "yes", what are the main attractions or potentials in this location?

| Wildlife   | 28 | 18.5 |
| Birdlife   | 1  | .7   |
| Scenery    | 12 | 7.9  |
| Communities culture | 5  | 3.3  |
| All of the above | 101 | 66.9 |
| Total      | 147 | 97.4 |

Source: own survey, 2015

As responses of the households indicated in table 2 above, the majority 66.9% of sample households were responded the main ecotourism potentials in and around SSHS including endemic wildlife (mammals), endemic birdlife, unique scenery and attractive community’s culture. While 18.5% of them replied as the main attraction is wildlife of SSHS. Similarly, 7.9% responded as scenery is the main attraction found in and around SSHS.

In addition data obtained from SSHS management and Culture and Tourism office indicated presence of numerous ecotourism potentials in and around SSHS. Therefore, it is possible to say that SSHS is where ecotourism business can operate. Thus, these attractions presented below.

A. Wildlife

i. Rich diversity of Birds

According to data obtained from SSHS management office, Culture and Tourism office which recorded n 2006 E.C and responses of discussant indicated there is numerous bird species present in the area. As data shows there around 191 bird species recorded from the sanctuary. From these Aquila clanga, Mycteria ibis, Bostrychia carunculata, Gyps africanus, Circaetus gallicus, Terathopius ecaudatus, Melierax metabates, Buteo rufinus, Spreo fischeri and Onychognathus salvadori, Cercomela and scotocerca are example of bird species recorded in SSHS.

ii. Wildlife (mammals) of SSHS

As data obtained of researchers direct observation indicated that SSHS was a home for diversified and populated mammal species. Accordingly, in addition to the Swayne’s hartebeest, other wild animals like Bohor Reedbuck, Warthog, Greater kudu, Oribi, vervet monkeys, Aardvark Abyssinian Hare and Spotted hyena are observed. Generally, according data recorded 2006E.C there is 1698 mammals of different species in the sanctuary.

B. Scenery

Among tourism attraction scenery (attractive landscape) is also take major place. According to data obtained from different offices (SSHS management and Culture and Tourism office) SSHS also surrounded by its’ unique landscapes. From them Mount Borama, mount Lalima, Re’itu Valley which have symbol of five finger and Borena hill (view point where the whole sanctuary and Hawassa town were clearly observable) are the main beautiful landscape found around SSHS.

C. Vegetation

As data obtained from different offices depicted the vegetation in the sanctuary is best described as montane savanna, and comprises various different habitat associations such as savanna woodland, attractive natural grassland (with fewer trees and shrubs) and, in the valleys it is possess with shrub land.

D. Other attractions found in and around SSHS

According to data obtained, SSHS and its’ surrounding possess another attraction like hot springs, natural caves, waterfalls and conference place. These includes, Adabe and Wogare hot spring, Qanani and Gabata cave which

\(^1\)Aba Gada is community leader in Oromo Geda system
is used as spiritual site by local community, Adabe Bilate water fall and Aradda Jila where Aba Geda call community for conference and communities culture. Additionally, there is also a plan to organize night club band to show cultural dance to tourists and Museum which is under construction is tourism potential of SSHS.

### 3.3 Tourists at SSHS and their Status

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there any tourist visits the area (SSHS and its’ surrounding) before?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>130</td>
<td>86.1</td>
</tr>
<tr>
<td>No</td>
<td>21</td>
<td>13.9</td>
</tr>
<tr>
<td>Total</td>
<td>151</td>
<td>100</td>
</tr>
<tr>
<td>If &quot;yes&quot;, how was their status?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very large</td>
<td>9</td>
<td>6.0</td>
</tr>
<tr>
<td>Large</td>
<td>33</td>
<td>21.9</td>
</tr>
<tr>
<td>Few</td>
<td>61</td>
<td>40.4</td>
</tr>
<tr>
<td>Very few</td>
<td>27</td>
<td>17.9</td>
</tr>
<tr>
<td>Total</td>
<td>130</td>
<td>86.1</td>
</tr>
</tbody>
</table>

Source: own survey, 2015

Tourists (customers) are the core of tourism industry. In line with this, sample households were asked question whether any tourist visits the area before or not. As shown in (table 3) above the majority 86.1% were confirmed as tourists was visited their locality before while only about 13.9% of them never seen tourists at their site. And also regarding the status of their numbers the most 40.4% of sample households indicated tourists visited their locality before were few in numbers while 21.9% of them said they are large in numbers. The rest 17.9% and 6.0% were responded as the tourists visited their locality (SSHS) were very few and very large respectively.

Additionally, data obtained from Siraro Wored Culture and Tourism office shows in 2006 and 2007 E.C the number tourists’ visit the area 497 and 552 respectively.

### 3.4 Interest of Respondents on Ecotourism to be developed in Their Locality

Interest can affect the degree of community participation and ownership in ecotourism development. Thus, to better understand how the communities’ feels if ecotourism to be developed in their locality the researcher point out questions for them on the issue. Therefore, as the finding in the figure 2 below shows the majority of sample households’ 56.6% were replies as they proudly very happy if ecotourism is developed in their locality.

Likewise, 35.1% of sample households’ from selected households’ responded as they were happy. In contrast, equivalent ratios 4.6% of respondents were replied as they were no opinion and disturbed respectively if ecotourism is developed in their locality.

Figure 2: Feeling of respondents if ecotourism has to be started or developed in their locality

Additionally, during key informant interview expert from Culture and Tourism office stated as, ecotourism is compulsory in our area because it profits local community, contributes to conservation of natural resources and generates income with minimum environmental impact.

### 3.5 Attitude of Respondents towards Other Means of Livelihood and Community Participation in Ecotourism Development

If the community is not interested in ecotourism development, the development of ecotourism will fail, given that community participation is a central element of ecotourism development. Therefore it is important to examine the community’s interest in ecotourism development first and foremost. Thus, sample households were
asked whether they can fulfill their livelihood without farming or not. As it is depicted in table 11 below most 95.4% of sample households were replied as they cannot survive without farming. While only few 4.6% of sample households were responded as they can survive without farming. Generally, result implies as they have negative feelings about the new means of livelihood unless it is as additional alternative.

Table 8: Attitude of respondents towards other means of livelihood and community participation in ecotourism development

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you think you can survive without farming?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>7</td>
<td>4.6</td>
</tr>
<tr>
<td>No</td>
<td>144</td>
<td>95.4</td>
</tr>
<tr>
<td>Total</td>
<td>151</td>
<td>100</td>
</tr>
<tr>
<td>Do you think that community participation in Ecotourism development is important?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>135</td>
<td>89.4</td>
</tr>
<tr>
<td>No</td>
<td>16</td>
<td>10.6</td>
</tr>
<tr>
<td>Total</td>
<td>151</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: own survey, 2015

The development of ecotourism primarily demands the involvement of local people to protection and conservation of resources. So, the participation of local communities is one of the characteristics of ecotourism. Accordingly, as indicated in table 4 above, the majority 89.4% of respondents were informed as participation of local community in ecotourism development is important while the remaining 10.6% replied as community participation in ecotourism development is not important.

Additionally, Aba Geda stated as local community participation in ecotourism development have vital role and also he informed as now a day’s status of community participation in ecotourism development is increases when compared with previous.

Likewise, key informant interviewers also stated as local community participation in ecotourism is crucial for various objective and they also replied as their participation get better than previous. Currently, some local community is participating and benefiting from ecotourism operation in the area and it has to be expanded. They are participating by forming association and saving their capital. These associations includes: SSHS Culture and Tourism Association. This association has 40 members of which 25 are males and 15 are females. Provide handcrafts which are made from local grass to tourists; horse rent association, which rent horse to tourist so as tourist enjoy horse riding; Darartu Association, which provides honey to tourists.

3.6 Significance of Local Community Participation in Ecotourism Development

As researcher rose above under attitudes of respondents on community participation in ecotourism development, the participation of local communities is one of the characteristics of ecotourism. Accordingly the researcher tried to ask question respondents on issue of the significances of community participation in ecotourism development. As it is depicted in figure 3 below 39.1% of sample households’ responded as participation of local communities in ecotourism development could improves local community’s livelihood while 13.9% of them said it could create a sense of ownership to local communities. Similarly, 17.9% indicated as it has significant role in develop awareness in to local communities to earn income from tourists through selling cultural materials. Whereas the remaining 9.9% and 8.6% were said it could reduce threats and contribute to conservation of SSHS and increase job opportunity for locals.

Figure 1: significance of local community participation in ecotourism development

Source: own survey, 2015
In addition Aba Geda stated that community participation ecotourism has its’ high significance as it has a great role in generating income for local community by increasing job opportunity.

3.7 Respondents’ Involvement in Management and Decision Making Process and Kind of Issue they involved in.

One way of insuring participation in ecotourism development is political participation where the communities are participated in decision making. For instance, in political participation if a community is asked to input local priorities, knowledge and experiences into the development process, a reasonable expectation is created that this input will be incorporated and reflected in the planning processes and outcome. If a protected area is to be succeeding in its conservation objectives, it must win support from the local communities. Communities are expected to share their view and knowledge. It is vital to note that meeting and plan take place automatically with including participating of the whole group (balancing age, gender, kebele………..). Thus, sample households were asked the question whether they have been involved in any management and decision making process or not. Accordingly, the results find out in table 12 below shows the majority 62.2% of respondents from selected household heads has been involved in decision making process while the remaining 33.8% do not got chance to involved in any management and decision making process.

And also the researcher tried to identify the issues they have been involved in. As indicated in table 5 below 22.5% of household heads reported as they involved on issue about forming association whereas 20.5% of respondents from selected sample households told as they have involved in subject of protection and conservation of SSHS. And also, 11.9% of respondents got chance to involved on issue about providing cultural materials for tourists to improve their livelihoods. Whereas the remaining 6.6% and 4.6% of them got chance involved issues on discussion about penalties for illegal activities inside the sanctuary and protecting boundaries of sanctuary respectively.

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you been involved in any management and decision making process concerning of the Sanctuary?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>100</td>
<td>62.2</td>
</tr>
<tr>
<td>No</td>
<td>51</td>
<td>33.8</td>
</tr>
<tr>
<td>Total</td>
<td>151</td>
<td>100</td>
</tr>
<tr>
<td>If yes”, on what issue?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protection and conservation of SSHS</td>
<td>31</td>
<td>20.5</td>
</tr>
<tr>
<td>Forming association</td>
<td>34</td>
<td>22.5</td>
</tr>
<tr>
<td>Providing cultural materials for tourists</td>
<td>18</td>
<td>11.9</td>
</tr>
<tr>
<td>Boundaries of SSHS</td>
<td>7</td>
<td>4.6</td>
</tr>
<tr>
<td>Penalties for illegal activities inside SSHS</td>
<td>10</td>
<td>6.6</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>62.2</td>
</tr>
<tr>
<td>If No, what is the reason that you couldn’t involved in management and decision making process?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Didn’t got opportunity</td>
<td>34</td>
<td>22.5</td>
</tr>
<tr>
<td>Personal problem</td>
<td>17</td>
<td>11.3</td>
</tr>
<tr>
<td>Total</td>
<td>51</td>
<td>33.8</td>
</tr>
</tbody>
</table>

Source: own survey, 2015

Additionally, sample households were asked the reason why they couldn’t involve in management and decision making process. Thus, as depicted in table 5 above 22.5% of sample households raised as they couldn’t involve in any management and decision making process for the sake of didn’t got opportunity while the rest 11.3% for them personal problem.

During key informant interview experts from different offices stated as, Participation of local community is increasing from time to time. Sanctuary management have started to work in collaboration with stake holders like Culture and Tourism office, Small and Micro Enterprise office, Agriculture and Environmental Protection office and other at woreda level including local community. Therefore all the stake holders raise the issue about the sanctuary relative to their scope in public meeting. Moreover, data obtained from SSHS management office put current stakeholders of SSHS with their relationships as the following:

3.8 Current stakeholders of SSHS

SSHS management office, Local Communities, Aba Geda, Culture and Tourism office, Administration office, Administrative Office of Peace and Security, Small and Micro Enterprise office, , Land and Agriculture and Environmental Protection office at Siraro woreda.

3.8.1 Stakeholders’ relationships

- SSHS management and local community have relation on resource utilization in sanctuary. Sanctuary
management regulates resource access by local community. Local community also associate and support protection and conservation of sanctuary. They also provide various products and sell to tourists.

- Culture and Tourism office support sanctuary by studying various tourism potentials of the area. It also supports sanctuary by promoting tourism attractions in and around sanctuary and work with sanctuary management in developing ecotourism. They also solve conflict of resource access which occurs between sanctuary staff and local community with Aba Geda. They also work on awareness creation, inform them about the value of attraction and motivate them to participate in tourism activities.
- Land and Environmental protection office work with Sanctuary management and Aba Geda on issue related to demarcation of Sanctuary and approval of map of sanctuary and protection of its boundary from expansion of settlement to it and other illegal activities.
- Administration office play role in that it administer all government offices in supremacy.
- Administrative office of peace and security with Aba Geda support sanctuary in maintaining peace and security of tourists, local communities and SSHS staffs as well as controlling illegal activities in sanctuary.
- Small and Micro Enterprise informs the local community how to associate and work in tourism activities as well as how to save their capital obtained from tourism activities.

3.9 Local Communities Engagement in Ecotourism (diversifying local livelihood) Related Activities

Table 6: involvement of local community in ecotourism activities

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you ever engaged in any kind of ecotourism (diversifying local livelihood) related activities in your localities?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>29</td>
<td>19.2</td>
</tr>
<tr>
<td>No</td>
<td>122</td>
<td>80.8</td>
</tr>
<tr>
<td>Total</td>
<td>151</td>
<td>100</td>
</tr>
</tbody>
</table>

If “yes”, in what type of ecotourism activities were you involved?

<table>
<thead>
<tr>
<th>Activities</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selling of local handicrafts</td>
<td>18</td>
<td>11.9</td>
</tr>
<tr>
<td>Selling of local foods</td>
<td>4</td>
<td>2.6</td>
</tr>
<tr>
<td>Local transport</td>
<td>6</td>
<td>4.0</td>
</tr>
<tr>
<td>Guiding</td>
<td>1</td>
<td>.7</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>19.2</td>
</tr>
</tbody>
</table>

Source: own survey, 2015

Regarding local communities’ involvement in ecotourism activities as it is shown in table 6 above the majority 80.8% of the respondents expressed as they couldn’t involve in any ecotourism (diversifying local livelihood) activities while only 19.2% expressed as they involved in ecotourism activities. Furthermore, responses of respondents on activities they were engaged in is selling of handicrafts, selling of local foods, giving local transport and guiding 11.9%, 2.6%, 4.0%, and 7% respectively.

Additionally, during key informant interview one of Culture and Tourism office and Aba Geda stated that currently some of local communities are engaged in different ecotourism activities by creating association. Those associations are includes: Senkele Culture and Tourism Association, this association has 40 members of which 25 are males and 15 are females which provide cultural materials made from local grass for tourists, Horse Rent Association (rent horse to tourist as tourists enjoy horse riding), Darartu Association (provides honey to tourists), Guri Kombolcha association, this association has 22 members of which 10 are male and 12 are females and they are working on hatching grass to sell for house construction and making local handicrafts, Abdi Rabbi Association, this association is formed from 24 members of which 10 are females and 14 are males and this association is working on patrolling of the SSHS and gets benefit from punishing when livestock graze prohibited area in the Sanctuary. In addition to this association there is also residents engaged in different activities individually. From those activities, local community near to the sanctuary provide cultural food and coffee for customers, local youngsters give service for customers in different means like guide and local transport particularly motor bicycle.

3.10 Economic Contribution of Ecotourism in the Study Area

As indicated in table 7 below the majority 77.5% of respondents replied as ecotourism has no contribution in their economic improvement while only 22.5% of them responded as ecotourism has contribution in their economic improvement. Moreover, 8.6% of respondents’ were responded as ecotourism improve their economy through create job opportunity, while the remaining 7.3% and 6.6% were replied as ecotourism improve their economy throughout income generation and improve their livelihood respectively.
Table 7: economic contribution of ecotourism

<table>
<thead>
<tr>
<th>Responses</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is ecotourism contributing to any economic improvement in your livelihood?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>34</td>
<td>22.5</td>
</tr>
<tr>
<td>No</td>
<td>117</td>
<td>77.5</td>
</tr>
<tr>
<td>Total</td>
<td>151</td>
<td>100</td>
</tr>
<tr>
<td>If &quot;yes&quot; in what way?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create Job opportunity</td>
<td>13</td>
<td>8.6</td>
</tr>
<tr>
<td>Income generation</td>
<td>11</td>
<td>7.3</td>
</tr>
<tr>
<td>Improve livelihood</td>
<td>10</td>
<td>6.6</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>22.5</td>
</tr>
</tbody>
</table>

Source: own survey, 2015

Additionally, expert from Small and Micro Enterprise stated as, ecotourism development in and around Senkele is initiating the local communities towards the conservation of the sanctuary by creating employment opportunity and generating income to local community. It also creates awareness to local community. So local communities conserves sanctuary if they get benefits from it and awareness creation is enhanced. Through conservation of sanctuary climate change is controlled and local community agricultural productivity is improved. Local community will have a sense of ownership and conserve the sanctuary if there is benefit sharing.

3.11 Challenges to Develop Ecotourism in and around SSHS

As data obtained from different offices (SSHS management and Culture and Tourism Office), key informant interview and direct observation shows, there are themes of challenges which were identified as socioeconomic and environmental challenges for developing ecotourism in the study area. These includes; infrastructural challenges, lack of local community involvement and participation and unsustainable livelihood, inter-ethnic conflict and natural resource exploitation, trained manpower, awareness and financial resources.

3.12 Infrastructural challenges

The current tourism facilities and overall infrastructure at SSHS and in the surrounding area are limited. There is no accommodation and service give body for customers in area at all and visitors have not an option unless staying at Shashemene or Hawassa town after visiting. Only small cafes and restaurants found at Aje town near to the sanctuary. For visitors that want to stay night there is no any hotels or other means unless tourists hold their own tent. Additionally, transportation in the sanctuary and the surrounding is a big challenge for those who are not using private vehicles. Telecommunication and health services also other limited services in the area.

Generally, in and around the sanctuary accommodation, transportation and facilities are poor and on the side of the community, basic infrastructural needs like clean water are not satisfied. For example, local people in Kebeles have to go long distance to get clean water.

3.13 Resource Use Patterns from the Sanctuary

The use of resources from the sanctuary is another challenge. Local people live around the Sanctuary depend on the natural resources of the sanctuary for their livelihoods in different ways. The most important resources communities use from the sanctuary is pasture/grazing land. Majority of the communities live around the sanctuary have no grazing land and this condition influence many problems to the area. For example, there is high compete on forage between wildlife and livestock (over grazing), wildlife behavioral change and disturbance during sensitive period (breeding time) and influence unsatisfied visit to tourists since the number of livestock is greater than wildlife in the area. There are also collecting acacia trees for fire wood and thatching grass illegally from the park. Generally, there is high illegal encroachment to the sanctuary particularly high number of livestock with their nomadic.

3.14 Local People’s Involvement and Participation

The development of ecotourism primarily demands the involvement of local people so as to support biodiversity conservation. The participation of local communities is one of the characteristics of ecotourism. Some focus group discusants raised the issue of local involvement as the very import aspect to establishment of ecotourism in the SSHS. However, as data shows above in result and discussion the current participation and involvement of community is not adequate. Those who do not participate were replied as they do not get chance to participate in decision making process. And also during FGD some the discusants replied as some of sanctuary staffs saw communities as bad neighbors to wildlife. Generally, this issue is a great challenge to implement or develop ecotourism in the area.
3.15 Opportunities to Develop Ecotourism
There are various favorable conditions exist to develop ecotourism in and around the SSHS. The existence of multiple natural and cultural ecotourism potentials, interest of the local community, and the existence of supportive materials grass in the area is attractive and used for building house, making cultural handicrafts.

3.16 Multiple Ecotourism potentiality of the area
Unlike any another protected area in Ethiopia, SSHS and its’ surrounding is endowed with natural and cultural attractions. So, the numerous potential ecotourism resources in the sanctuary and the surrounding area have the opportunity to be developed into ecotourism products.

Among them, wild mammal Swayne Harebeest (endemic) Oribi, Warthog, spotted Hyena, Greater kudu, Bohor reed buck etc, Landscape view like Mount Borama and mount Lalima, Re’itu Valley which have symbol of five finger, Adabe and Wagore hot spring, Qanani and Gabata cave which is used as spiritual site by local community, Adabe Bilate water fall, Aradda Jila where Aba Geda call community for conference, Borena hill view point where the whole sanctuary and Hawassa town were clearly observable, vegetations like different acacia species, attractive grass, various bird species including endemic to our country and Local community’s Culture. Additionally, there is a plan to organize night club band to show cultural dance to tourists and Museum which is under construction is tourism potential of SSHS.

3.17 Attitude of Community towards Ecotourism
In spite of limited awareness, perception and interest of majority respondents have a positive attitude if there is an establishment of ecotourism in the SSHS and the surrounding. A key informant interviewer also signifies the importance of developing ecotourism and they noted this is the only and best option to redeem the Sanctuary from its deteriorating condition.

3.18 Future Plan to Diverse and Improve Ecotourism Activities in and Around SSHS
As per idea stated by key informant interview and researcher direct observation, Tourist lodge is under construction to solve problem of accommodation to tourists and there is a plan to give adequate training to local community to prepare cultural food and provide for tourist. So, Derartu Association which provide honey before is also have plan to provide cultural food to tourists. Museum and visitor information center is under construction. Additionally, Aba Geda Eman Worana fortress’ is also planned to construct in SSHS nearly. Siraro woreda Culture and tourism office is also plan to organize association of night club to show cultural dance to tourists’.

There is also plan to develop tourism in the surrounding attraction outside sanctuary. Local communities are organizing and training by culture and tourism office on how to prepare more handcraft which prepared from local grass thatching from sanctuary and sale to tourists.

4. CONCLUSION AND RECOMMENDATIONS
4.1 Conclusion
The study on ecotourism development in SSHS revealed that majority of respondents has been involved in management and decision making process in different issues (how to form association and its significance, protection and conservation of SSHS and its importance, penalties for illegal activities inside the sanctuary and boundaries of sanctuary and providing cultural materials for tourists to improve their livelihoods).

The study also revealed that majority of respondents was familiar with the term ecotourism. At the same time, the study also revealed source of information respondents can familiar with term and they gained information from Small and Micro Enterprise experts, SSHS experts and from Culture and Tourism office experts. The study also revealed ecotourism potentials found in and around SSHS that includes endemic birdlife, endemic mammal, beautiful scenery, vegetation and etc. Additionally, the study point whether tourist visits the area before or not and data shows as tourists visit the area before even if their number is few. And also the study try to point out the feeling of local community if ecotourism is to be developed to their locality and the finding shows the majority of sample households responded to be proudly very happy. However, as survey finding shows, majority of respondents’ responded that as they cannot fulfill their livelihood without farming.

The results of this study also indicate that the majority of respondents believe as participation of local community in ecotourism development has vital role. Simultaneously, they notify its’ significance as the following: improves local community’s livelihood, create a sense of ownership, develop awareness how they can diversify their livelihood and increase employment opportunity. At the same time, currently some local communities was engaged in different ecotourism activities (diversifying livelihood) through providing of local handicrafts and food, giving local transport such as horse rent, motor bicycle and guiding tourists.

Additionally, the study revealed the challenges and opportunities to develop ecotourism in and around Senkele Swayne’s Hartebeest Sanctuary. The conflict between staff of SSHS and local community when they are banned from access to the SSHS, Lack of infrastructure, facilities and services in and around SSHS are the major
challenges to develop ecotourism in the area. Whereas favorable conditions to develop ecotourism in and around the areas are: tremendous tourism attraction in and around SSHS; The landscape in and around SSHS is beautiful and easily accessible by all means of transportation and on foot; grass in the area is attractive etc. The Future plan to diverse and improve ecotourism activities in and around SSHS are: Tourist lodge is under construction to solve problem of accommodation to tourists and there is a plan to train local community to prepare cultural food and provide for tourist. So, derartu association is organizing to provide cultural food to tourists. Museum and visitor information center is under construction. Siraro woreda Culture and tourism office is organizing night club to show cultural dance to tourists. There is also plan to develop tourism in the surrounding attraction outside sanctuary. Local communities are organizing and training by Siraro wereda Culture and Tourism office on how to prepare handcraft and provide for tourist. And place for those local community engaged in preparing handcrafts also under prepared. Furthermore, at present, ecotourism development in and around SSHS was still in its infancy and the conservation effort being taken at the Sanctuary is not hopeful since the number of population is increases time to time and the need of land for livelihood also increases at the same time.

4.2 Recommendations
The following points are recommended to solve problem and improve the current Ecotourism development in the study area:

- It is vital to realize awareness creation, benefit sharing, creating employment opportunity with balancing of age, sex, kebeles etc to create sense of ownership to local community.
- Sanctuary should be demarcated and fenced with agreement of all concerned stakeholders and local community and indigenous tree should be planted surrounding the boundary.
- There should be a buffer zone between community’s village and Sanctuary to protect intensive use area (breeding site, nesting site, feeding site) from disturbance.
- Attractions in and around the Sanctuary should be developed, promoted to bring more customers to the area.
- As revealed by study participation of local community in ecotourism is very less. So continues training and encouragement should give to local community to increase their status in ecotourism development activities.
- There is lack of adequate infrastructure and services in the area like accessible road, telecommunication, hospital, clean water, hotels, lodges, camp site etc in the area. Particularly, constructing road that connecting SSHS to Hawassa town is more advantageous. So, to improve customer stay at the area and income generation these problems should be overcome.
- There is lack of post signs which can inform tourists what is prohibited to do in the sanctuary and also post sign proximity of Aje and Hawassa town. So, it is better if these post signs were there.
- Generally, the current ecotourism development in and around SSHS is in its infancy. So, to improve this government and concerned stakeholders must to do in collaboration.

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