The Potential of Rock Art Tourism for Sustainable Socio – Economic Development: The Case of Harar – Dire Dawa Region, Southeastern Ethiopia.

Dagnachew Leta St Mary's University

Abstract

Prehistoric rock art is the earliest form of human communication system. It has aesthetic, spiritual, socio-cultural and artistic values. Ethiopia in general and the Dire Dawa –Harar region in particular is endowed with rock art sites with various themes. However, the values mentioned above are not well known and prompted in a way that contributes to the socio economic development of the host community and the country at large. Many countries are developing their rock art sites as destination for sustainable tourism development. A number of researches are carried out on the meaning and interpretation of Ethiopian rock art sites. Nevertheless, research on rock art from the perspective of sustainable tourism development is almost neglected. Based on this, this research \aimed to find the role of rock art tourism for sustainable socio-economic development in southeastern Ethiopia specifically Harar – Dire Dawa region with an added objective of describing the potential of rock art sites for tourism in Harar - Dire Dawa and in its environs; and examining trends of sustainable rock art tourism development and preparing a code of conducts for rock art tour using a mixed method of research design. The data analysis showed that rock art and its surrounding resources have a high potential for sustainable tourism development in the region under investigation. Therefore, this important resource should be properly managed and promoted to develop in to a significant tourist destination and there by assists the socio -economic development of the region.

Keywords: rock art, sustainable tourism, Harar-Dire dawa, Ethiopia, socio economic development

1. Introduction

The Dire Dawa area is known for its natural and cultural heritage. These heritages include caves and shelters with rock art; cemeteries of British and African soldiers who died during the war against Fascist Italy in eastern Africa; various historical houses with French, Greek, and Armenian architectural influences because of their migration to the city for industrial and commercial purposes; railway museum, and cultural centers which housed material cultures of the Somali and Oromo people are among the attractions of the city (DDCTO, 2008).

Harar, the other focus of this study, is one of the national regional states of Ethiopia. The term "Harar" is derived from among seven ancient settlements which are known as "*Harawegey*". It is located about 50 km southeast of Dire Dawa. The city is endowed with ancient historical and religious attractions. The walled city called *Jugol* was once the seat of an old Islamic sultanate founded around 10th century (HCTB, 2010).

The city of Harar is divided in to two historic centers *Jugol* and the new Harar. There are 82 mosques and 102 shrines in the old city. The city is the fourth world's Islamic center next to Mecca, Medina, and Jerusalem. Harar is renowned for its natural and cultural attractions. The United Nations Educational, Scientific and Cultural Organization (UNESCO) has inscribed the old walled city or *Jugol* as world heritage site in 2006 (Ibid). Besides, other heritage sites such as *Sitti* mountain, Hyena feeding, *Adere* house, Sherif Harar City Museum, Harari Cultural Museum and Adere Museum are major attractions of the city. Many rock art sites are found around Harar and Dire Dawa region. However, these resources are not properly managed so as to develop into tourist destination areas. This study has highlights the sites' great potential for sustainable tourism development that would support the host community and other stakeholders in and around Harar and Dire Dawa.

2. Statement of the Problem

There are many rock art sites in Ethiopia distributed in different parts of the country. Most rock art sites are executed on limestone, sandstone caves, shelters and boulders. South eastern part of Ethiopia, particularly the Harar-Dire Dawa area is known for large concentration of rock art sites. The motifs depicted in these sites are predominantly domestic cattle, wild animals, geometric and human figures, and domestic scene with few plant depictions (Tekle, 2011). So far, there are no researches on the use of rock art for sustainable tourism in Ethiopia and the Harar – Dire Dawa region in particular. In fact, rock art research from archaeological and conservation perspectives are conducted by various scholars. Nevertheless, rock art research from tourism context is still at its infancy. The available researches in rock art did not focus to look into the contribution of rock art for socio- economic development of the host communities. They are preoccupied mainly on culture- historic significance of the sites.

As stated above, the limited works on rock art of the study area, do not give attention on how to develop the sites into sustainable tourism development. In response to this, this research has assessed and analyzed the potential of rock art for sustainable tourism. The study also examines the current trends and prospects of rock art towards sustainable tourism development from different contexts and it tries to show a way for a code of conducts for rock art tour.

3. Objectives of the Study

The general objective of this research is to assess and examine the potential of rock art tourism for sustainable socio - economic development in the Harar and Dire Dawa region.

The specific objectives are:

- > Assessing potential of rock art sites for sustainable tourism development
- Examining the existing trends of sustainable rock art tourism in the region
- > To show a way for code of conducts for rock art tour

4. Significance of the Study

It is widely accepted that the research attempts in the area of rock art tourism is highly useful to policy makers, tourism and heritage related experts, offices and officials and visitors. Therefore, the result of this study would help officials and decision makers to understand and give emphasis to what rock art tourism mean and how to develop rock art tourism. For tourism and heritage related experts, the study give insight on the rock art sites and their challenges towards sustainable tourism development. In addition, the study is hoped to initiate further researches and projects on rock art tourism development. The study will also give highlights on methods of rock art conservation. The study could also be used as model for development of sustainable rock art tourism in southeastern Ethiopia and could be extrapolated to other areas with rock art resources.

5. Literature review: Rock Art Tourism and Research in Ethiopia

The term rock art consists of paintings (pictographs) and engravings (petro glyphs) executed on the walls and ceilings of caves, rock shelters, and boulders (Whitely, 2005; Crabtree, 2006). Phillipson (1985) states that rock art could be used as a source of information for some themes such as vegetation, wild and domestic animals, natural and cultural landscapes, rituals, division of labors and historical events. Above all, rock art is an artistic and archaeological heritage and an irreplaceable record of human's most remote past (Lambert, 2007). In many countries, the significance of rock art sites is well noted and the art is often widely promoted as a tourist destination. Some sites are even listed as a heritage of humankind by UNESCO (Ibid).

Rock art sites are widely distributed throughout the African continent with high concentration in the Sahara region, South Africa, and the Horn (Benjamin et.al, 2012). Due to this, the rock art depictions of the continent are roughly estimated to be about ten million (Willcox, 1984). Similarly, rock art is extensively found in northern, southern and south eastern Ethiopia where there are favorable geographical and geological factors that suit for caves, shelter and boulders. Currently about 52 rock

art sites are identified by researchers in southeastern, southern and northern part of Ethiopia; from which the majority of the paintings are found in southeastern and northern Ethiopia while engravings are found in southern Ethiopia (Tekle, 2011).

Stylistically, the rock art of Ethiopia and the Horn is known as Ethio—Arabian. This style is classified into two stage of development: *Surre–Hanakiya*, and *Dahtami*. These two names are derived from known rock art sites: *Surre* (*Genda Biftou*) found in eastern Ethiopia, and *Hanakiya* and *Dahtami* sites found in Arabia. The Ethio—Arabian style includes naturalistic semi naturalistic, schematic paintings and engravings (Cervicek, 1971, 1979; Anati, 1972).

There are immense rock art sites in Harar-Dire Dawa region. The presence of rock art in this region was first reported by French paleontologists Pierre Teilhard de Chardin and Henry de Monfreid who discovered Porc-Epic cave near Dire Dawa and made excavations in 1920 (Clark, 1954). Many rock art sites are reported by investigators at different period from Harar, Dire Dawa, *Grawa*, *Chelenko* and *Kombolcha*. Most of the paintings are executed on caves and very few of them are depicted on open-air boulders (Temesgen, 2005). Rock art studies in Ethiopia dates less than a century old. Like other disciplines, rock art study was also begun by foreign scholars and travelers. The majority of research focuses on the meanings and interpretation of rock art sites found in northeastern, southeastern and southern part of the country (Agazi, 2007).

Agazi (2001) has studied rock art sites from the *Temben* area. His study reveals the importance of the sites for understanding of the beginning of agriculture (food production) in northern Ethiopia. Girma (2001) has also made new rock art discovery in southern Ethiopia which he used to synthesize the culture and history of prehistoric pastoralists.

Getachew (2006) has investigated on rock art sites found in northeastern Ethiopia. His emphasis is on the contribution of rock art for understanding of early food production. He also assessed the natural and human-made challenges on rock art resources of northeastern Ethiopia.

Temesgen's (2005) study focuses on conservation issues of rock art resources of southeastern Ethiopia. He assesses the state of *Laga Oda* and Porc Epic sites. He also stressed on the conservation of rock art and its potential for sustainable tourism development if adequate conservation measures are taken to curve the natural and human made factors of deterioration.

Recently, Tekle (2011) has published a book on the rock art of Ethiopia. In his work, he describes the rock art sites found in various parts of Ethiopia and brings into attention about the need of conserving this fragile resource. As some of the researchers indicated above, Harar and Dire Dawa and its environs have a paramount potential for rock art tourism resources. Besides, some of the sites notably *Laga Oda* and *Genda Biftou* caves have a potential to be a world heritage site (Tekle, 2011). Insertion in to the world heritage list will have a great outcome by increasing the number of tourists to the sites which in turn brings many advantages to the site and the host community.

Rock art tourism is a niche market. Such resource has a potential for developing tourism in a sustainable way through enhancing the local participation in tourism decision making and socioeconomic benefit through sustainable tourism development (Novelli, 2004). As Harris (2002) stated sustainable tourism development should meet the needs of present tourists and host regions while protecting and enhancing opportunity for the future. It is envisaged as leading to management of resources in such a way that economic, social, and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity, and life support system.

There are countries which developed sustainable tourism in rock art sites such as South Africa, Australia, Newzeland, Sweden, and Norway. Rock art sites in such countries are a means of income and development for different stakeholders of tourism industry such as host community, government, and NGOs (Atthasit, 2004). In dealing with this, in general in Ethiopia and notably the environs of Harar-Dire Dawa has a potential for sustainable tourism development with its rock art sites. The rock arts

sites in Harar-Dire Dawa region is located at the foothills of the escarpment of southeastern Ethiopian highlands rising from the Afar plains all the way to the Harar plateau. Most of the rock arts are concentrated in the environs of Harar around the hills of *Garamulata* and the vicinity of Dire Dawa. But, such sites did not develop in a sustainable and community centered way. Furthermore, the resources face poaching and charcoal creation which led to deforestation and destruction of the rock art sites.

To conclude, investigation on rock art tourism is still at its infancy. Therefore, one of the issues overlooked by investigators is the potential of rock art for sustainable tourism. Hence, an attempt is made to show how this important resource could be used for sustainable tourism development.

6. Methodology

6.1. Study Design

The study follows both qualitative and quantitative methods which are also sometimes known as mixed approach. Spratt et al. (2004) stated that mixed method provides more comprehensive technique for researches going beyond the limitations of a single approach. Descriptive research design is used in conducting this research. Survey was an appropriate method in collecting data during the field season in the study area and from relevant institutions found in Addis Ababa.

6.2. The Subject/Stakeholders

The subject of this study is purposefully selected staffs and managers of heritage from the Authority for Research and Conservation of Cultural Heritage (ARCCH), the Ministry of Culture and Tourism, Dire Dawa and Harar Culture and Tourism Offices, non-governmental organizations working in heritage related areas, scholars and lecturers of higher institutions in related field of studies, and selected individuals and researchers engaged in rock art study.

6.3. Data Gathering Instruments

Questionnaires, interviews, field visit, observations, documents and audio-visual materials were key instruments in this study. Interviews were employed to collect data from managers of heritage from the ARCCH, the Ministry of Culture and Tourism, Dire Dawa and Harar Culture and Tourism Offices. Questionnaires were filled by the staffs of the above institutions, tour operators, travel agents, and tour guides. To avoid bias and subjectivity, the researcher corroborate data gathered with critical observation and supplemented it with secondary document analysis.

6.4. Data Collection Procedures

Each person relevant to the research and part of the sample is selected by using purposive and snowball sampling technique. Next, the purpose of the study was explained to the sample members and then the researcher or agent has administered the interviews. Focus group discussions were also used as a means of data gathering. In addition to this, the researcher or agent had conducted a focus group discussion with aim of gathering information from the host community.

6.5. Data Analysis

The qualitative data analysis has followed the following steps: data reduction (selecting, focusing, simplifying, abstracting, transforming), data display (organized, compressed), and conclusion drawing (Miles & Huberman, 1994). As the research is descriptive, data analysis process had used SPSS (Statistical Package for the Social Sciences) procedure with frequencies and means.

6.6. Data quality assurance

To make the data gathered from different interviewees valid, the researcher documented it both in written and in audio recordings form and translated the concepts directly in word to word. In other words, the information that is found from the informants is interpreted accurately. In order to ensure the collected data are reliable and the results

representative, the sample populations are selected from the local community's elderly people and culture and tourism officers. Besides, to enhance the reliability of the primary data the researcher used secondary sources as verification.

7. Rock art site of the study area

The rock art sites of Harar- Dire Dawa and its environs are found at the foothills of the escarpment of southeastern Ethiopia highlands stretching from the Afar plains all the way to Harar and Dire Dawa plateau. The sites were "home bases" for both hunter-gatherer and later pastoral nomads. For instance archaeological excavation at *Porc- Epic* and *Laga Oda* caves shows human occupation of these sites since 77,000 - 60,000bp and 15,000bp respectively (Clark, 1974). Clark (1954), suggests that during rain seasons pastoralists moved from lowlands of the rift to the foot hills of the Harar escarpment vice versa in search of water and grazing land. The escarpment was relatively rich in water resource and grazing lands than lowlands. Thus, the rock art sites had been centers of attraction for hunter –gatherers and pastoralists since ancient time (Temesgen, 2005). A total of five sites are selected for the purpose of this study. A description of the sites is presented below.

7.1. *Porc* – *Epic*

This cave is located 2 km south of Dire Dawa at the foot of the escarpment rising from the southern Afar plain and straddling the mouth of *Datchatu* River. It is located at 9°29' 19" north, 41° 54' 34" east at an elevation of 1681m above sea level which is close to the top of *GaradErer* or *GendaFelti* hills' that raises are very steeped from the *Wadi* floor on the eastern side. *Porc-Epic* is currently under the rural administration of Dire Dawa Administration Council surrounded by *Janeni*, *Berarti*, *GaradErrer*, *GodeBela*, *Dichaso* and *GendaFelti* villages.

Porc-Epic was first reported by the French paleontologist Pere Teilhard de Chardin and Henry Monfried who made excavations in 1929. Again in 1933, it was excavated by Pere Teilhard deChardin and Paul Warnert, in

the same year Breuil also studied the paintings of *Porc-Epic* (Chardin, 1951), in the mid-1970s Clark and Williams and lastly in 1999, Delumely also made excavation. The above archaeological investigation on the cave showed that the site is rich in paintings of wild animals such as elephants, antelope, buffaloes, giraffe, human figures and geometric symbols painted mostly in red color.

7.2. *Laga - Oda*

The rock art site of *Laga-oda* is located some 38 kms away from Dire Dawa city in the *Guninfeta* Peasants' Association which is close to *Guninfeta* village. It is found at 9° 30'9" north and 1° 40'25" east at an altitude of 2290 meter above sea level. *LagaOda* is known locally as *Goda-Kataba* which means a cave with written records. *Goda-Okotae*, *GendaNemo*, and *Goda-Buttu* rock art sites are found close to this site. It is a limestone rock shelter situated in the escarpment that separates the lowlands of the Afar rift from high plateau grasslands of *Hararghe*. *LagaOda* was first reported by Pere Azais and Oncieu de Champardon in 1933 (Cervicek, 1971). Following this, many scholars had carried out investigations on the site and still the site becomes the focus of research for many scholars interested in prehistoric study.

There are many rock paintings in two shelters (upper and lower) of *LagaOda* cave which are still undiscovered. According to Cervicek (1971), the number of paintings exceeds up to 600 with 250-350 specimens. Apart from paintings, there are also other written records on the wall of the cave. The upper shelter has much larger size than lower shelter. It also has larger number of rock art than the lower shelter.

According to Temesgen (2005), the upper shelter has 60 meter width, 3 meter height, and 4 meter depth from the drift line to the back wall. On the other hand, the lower shelter has 2 meter height, 28 meter width, and 2.5 meter depth. The two shelters of *LagaOda* have relatively large number of paintings than the other rock art sites found in the Harar-Dire Dawa region.

7.3. DagaFrenji/Kimet

The rock art site of *DagaFerenji* is located some 20 kms away from the city of Harar in Error *Dodotta Woreda* at *Genda Roka* rural *kebele* at the village of *Kimet*. It is found to the south east of Harar on the main road to *Jijiga*. It takes some 30 minutes walk from the main road with steep slope. The name of the village "*Kimet*" means jewelry in Oromiffa language. Historically, the name "*Kimet*" is associated with *Harla* people who are assumed to establish a jewelry market on the village. According to locals' consideration, the name of the village was given by the *Harla* people. The name *DagaFerenji* is derived from an Oromiffa word *Daga* which means stone and *Ferenji* is a term used by Ethiopians for foreigners. The two terms together gives a meaning of "the stone of foreigners". According to informants, these were because the local people had observed the stone (rock art) was mostly visited by foreigners.

Red and white colors are used to paint the rock art of this site. The above colors of *Daga Ferenji* show similarity in style with the rock paintings of *LagaOda*, *ShekaSherifa*, *Porc-Epic*, and *Goda Ajewa*. Naturalistic and schematic styles are used to represent domestic cattle like that of *Laga Oda*. The age of the paintings of the region is not dated. However, according to local community's assumption, the paintings are made by the *Harla* people in the 16th century since; the influence of the *Harla* people is high in the region's art and craft development (HCTB, 2010). There is a white mark on the paintings added later by an Italian 'researchers' during the Italian occupation. Currently, the art relatively exists in a good condition. However, the boulder is exposed to erosion and human contact.

7.4. *Olad*

The rock art site of *Olad* is located some 40 kms away from the city of Harar in Error *Dodotta woreda* in *Olad kebele*. The site is found south east of Harar on the main road via to *Babile* and it takes an average of 3 hrs. There are panoramic views at *Olad* which are very pleasant and covered by green plants in all seasons. It is suitable for trekking and climbing. Besides, the site is very close to the *Babile* Elephant Sanctuary,

Argoba village, Sofi-Harla archaeological site, and famous shrines of rural Harar.

Red and black colors are used to paint the rock art of this site. The colors used to paint *Olad* site and the style of the paintings show similarity with rock paintings of *DagaFerenji* except the use of black color at *Olad*. Naturalistic and schematic styles are mostly used in depicting domestic cattle like other rock art sites of the study area. However, cattle paintings of *Olad* are different from other sites in drawing head at normal scale and it is not overstating their horns. The reverse is true in most rock art site of Harar-Dire Dawa region.

7.5. GodaAjewa

The rock art site of *GodaAjewa* is located 28 kilometers from the city of Dire Dawa at the hill of *GodaAjewa* and has a height of 2050 meter above sea level. The cave is found in *Awale* rural *Kebele* at a village called "*AwaleKebele* Peasants Association". *GodaAjewa* cave is found on the top of a hill which is used now as agricultural field by local farmers. The area is fertile and produces many types of crops (DDCTO, 2009). The name of the cave "*GodaAjewa*" is derived from two Oromiffa words "*Goda*" which means a "cave" and "*Ajewa*" which has the meaning of "unpleasant smell". Thus, the two terms gives a meaning of "a cave which has unpleasant smell" (Ibid). In terms of its paintings the site has the same character with the above sites especially similar to *Porc – Epic* and *Kimet* with its red paintings and schematic style.

GodaAjewa and its surrounding area attract visitors and the site also very suitable for trekking and climbing as whole it suits for adventure tourism. In addition, the site located on strategic location to visit the whole village of "Awale" and it's best suit for Para gliding.

8. Result and Discussion

8.1. Potentials of Rock Art sites for Sustainable Tourism Development

Nelson Mandela has themed that "Africa's rock art is the most common heritage of all Africans, but it is more than that. It is the common heritage of humanity" (TARA, 2013). Mandela's statement shows that rock art sites are not only a heritage resource but also they are a universal heritage of all mankind. Therefore, rock art sites have a potential to become a sustainable tourism destination no matter where they are located but what they need is critical assessment and evaluation of their tourism potential. 100% of the respondents have agreed that rock art sites of Harar-Dire Dawa region have potential for a sustainable tourism development based on their values. The majority of the sites are centers of attractions for visitors and researchers.

Researchers have already understood the high potential of rock art for sustainable tourism development from their field observation. Resource assessment requires preliminary survey of the potential of the resource for sustainable development and the categorization and weighting of the resource according to their attractiveness for the purpose of tourism (Deacon, 2006). In this study, the potential tourism resource of a rock art site is evaluated through field work, observation, discussion with experts and managerial staffs engaged in rock art sites of Harar - Dire Dawa region. In addition to field observation, a standardized semi- structured questionnaire and interviews were used to evaluate the potential of rock art sites for sustainable tourism development. In dealing with this, this study has categorized the potential of rock art tourism resources on the basis of its archaeological, historical, economic, aesthetic, and sociocultural values.

8.1.1. Historical and Archaeological Values

As Kofi Anan demonstrated "the rock art of Africa make up one of the oldest and most expensive records on earth of human thought. It shows the very emergence of human imagination" (TARA, 2013). Davis (1984),

states that rock art are used to educate single or group concepts in a particular time and space and also about specific society. It also is used as a rule to direct and reflect a particular culture as a medium of language.

The above statements show that rock art sites can be used as a source in order to know the prehistory and history of mankind. According to the respondents and informants, rock art sites of Harar-Dire Dawa region have significant historical value owing to its age. It shows ancient civilization of mankind in hunting and gathering; and the domestication of animals and its transformation to the modern way of life. Rock art has a potential to be a primary source for prehistory and history because of its stylistic and artistic expression. Based on the above thoughts of respondents, informants and field observation, the historical value of the rock art site has a tremendous contribution in developing sustainable rock art tourism because human beings by their nature have interest to know the past.

Rock art is an artistic and archaeological heritage and an irreplaceable record of man's most remote past (Kerzabi et al., 1986). In line with this, rock art sites of Harar and Dire Dawa region could be developed into centers of attractions due to their archaeological value. Thus, as Teklehas stated it would be necessary to promote Archaeo – Tourism in such kind of rock art sites (Tekle, 2011). Since the rock art sites of Harar – Dire Dawa region like *Porc-Epic* and *LagaOda* have Stone Age archaeological records, they would be ideal sites for Archaeo-Tourism development. Generally, Rock art sites in Harar-Dire Dawa region have historical and archaeological values that could be used for sustainable tourism in the area.

8.1.2. Socio - Economic Value

In other countries, the presence of rock art sites is well known and widely promoted as a tourist destination due to their potential for socio - economic development (Lambert, 2007). Therefore, rock art sites of Harar and Dire Dawa can generate favorable economic benefits to the stakeholders and the host communities residing close to the sites if they are developed in a sustainable way. The sites have significant potential to

bring economic benefit for the host community and stakeholders since it attracts visitors and researchers who have interest to visit heritage sites with historical, archaeological, and geological values. 100% of the respondents believe that the rock art sites of Harar- Dire Dawa region can enhance socio – economic developments.

8.1.3. Aesthetic Value

Rock art sites have a natural setting which creates an extraordinary feelings and spectacular happiness in the minds of the visitors. As mentioned earlier, rock art sites under investigation have panoramic views and have a potential to attract tourists who has a special interest for trekking, and Para Gliding activities.

According to informants, the Harar- Dire Dawa region is attractive and has also a potential to attract visitors due to the presence of rock art sites with historical, geological and archaeological features. In addition to the rock art sites, the natural setting of the area has an aesthetic significance for beauty lover tourists.

8.1.4. Socio- Cultural Value

Cultural tourism has become the fastest growing segment in the tourism sector (Krishan et al., 2006). Therefore, several techniques, approaches, concepts and theories are used as a means to interpret the cultural heritage of rock art sites (Tekle, 2011). Rock art sites of Harar-Dire Dawa region with its caves and shelters can give opportunities to the tourists for experiencing a sense of discovery, cross-cultural understanding and personal achievement. It also involves visiting socio cultural features of local communities attached to natural features of the area. Rock art sites of Harar and Dire Dawa are encountered with cultural landscapes, traditional dresses and life style of the local community rock art sites have cultural attributes that fascinate visitors and can increase the length of stay and its visiting expenditure. Such potential of rock art sites has a potential to permit the local communities to have a value for it and feeling proud and prestige.

According to respondents and informants, 40 % of them assumed that rock art has a much cultural values, 20% believe that it has an economic value in relative to other values, 16.7% believe that it has a social value and the other 23.3% of them agreed under other values.

Generally, Rock art sites of the study area have great potential to improve understanding and respect among different cultures and in a long uses for sustainable tourism development.

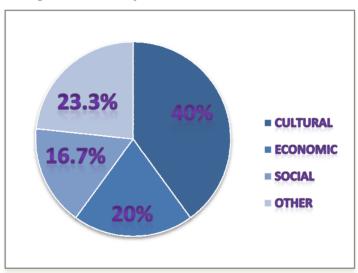


Figure 1. Value of rock art

8.2. Trends of Rock Art Tourism Development in the Study Area: Tourist Flow, Research and Promotion

Eastern Ethiopia has a tremendous potential both in its natural and cultural attractions. When it is compared with the northern route like Axum, Gondar and Lalibela, tourist flow to the site is still lying in a very small number (Dunira, 2013). However, the current tourist flow to the site is better than earlier. In the case of Dire Dawa, Djiboutian is major tourists who came to the city to escape the hot climate of Djibouti. On average, they stay up to 45 days in Dire Dawa. With regard to rock art

sites of Harar and Dire Dawa and its environs, 66.7% of respondents and informants observe visitors who come to visit rock art sites whereas 33.3% of them did not observe visitors who came to visit rock art site. These shows, rock art sites including with other attractions of the region can increase the tourist flow to the region.

Research is major pre – requisite for development of sustainable tourism. 93.3 % of respondents answered that they have observed researchers who came to conduct investigation on the rock art sites; whereas 6.7% do not observe researchers activity in the area. Nevertheless, 60% of the respondents state that such studies do not have implications to ensure the sustainability of the site except its temporary academic achievements. 33 % of the respondents agreed that the studies will have positive impact towards the sustainability of the site and the remaining 6.7% are not sure about the outcome of research results

This shows that the research particularly focusing on sustainable tourism development is still lying at an infant stage. Currently, there are some attempts to promote rock art for tourists. According to informants from regional culture and tourism offices, during the Ethiopian millennium, there are some conservation works conducted at rock art sites in Dire Dawa - fencing and hiring a local security guard. Dire Dawa Culture and Tourism Office also advertises the rock art by using billboards and wall painting in the city of Dire Dawa.

Other private sectors like Muya Abyssinia and other souvenir holders are currently engaged in rock art tourism promotion and using the art as a trade mark in their commodity. Other manufacturing factories in Dire Dawa should also be consulted to contribute their share in the conservation and promotion of this rich cultural heritage.

8.3. Code of conducts for rock art tour:

To protect the sites certain code of conduct should be put in place and observed by all concerned parties.

• Visitors should not touch the paintings

- Keep water away from painted surfaces and other substances on the paintings
- Keep fires outside rock art sites
- Be careful not to brush the painted surfaces by your rucksack, backpack, camera bag or clothes
- Walk slowly and carefully when you are in a painted rock shelter so that you do not stir up dust.
- Use of flash and chemical on paintings is strictly forbidden

Other than the code of conducts, developing rock art conservation and management plan for each site which include a short and long term development schemes; proper cataloguing and documentation of the art; policy reputation and directives which follows a holistic approach are another mechanism for developing a sustainable rock art tourism development for the study area.

9. Conclusion

The presence of these rock art sites in the region has a potential economic, socio – cultural, aesthetic and artistic values. It is also a good source of information for scientific inquiry of the prehistoric society through archaeology and anthropology. Simultaneously, the existences of numerous caves, shelters, open airs, and boulders make the region an ideal place for adventure and Geo-tourism. The sites are also suitable for tourists interested in trekking, climbing, and Para - gliding.

However, most of these rock art sites are facing natural and human made destructions. For such fact, many sites are destroyed and even the surviving ones are at risk. The increasing tourist flow trend in the region and the availability of rock art sites and other attractions are good opportunities to promote tourism. Promotion of sustainable rock art tourism has a benefit for sustainable socio – economic development of the region. It could also play a significant contribution for effective conservation of the art. Various efforts must be undertaken to utilize this

heritage for the benefit of the community. The conservation, management and developmental activities in the region must be in consultation with the local communities. This is because they are the guardian of the heritage sites. Therefore, the most important strategy for development of the site is creating awareness, expanding infrastructural facilities in and around the site and promoting these heritage sites as a tourist destination. In addition, developing rock art trip itinerary and code of conduct is essential so as to safeguard the site from natural and human destructive agents.

Generally, rock art sites are the best sites for tourist destination. If they are properly managed by preparing management plans and by opening infrastructures they become additional tourist destinations. These resources can be the best way to alleviate poverty in the region and can generate alternative sources of income for the region's host community and to the country in general.

10. Recommendations

The following recommendations can help the rock art sites to extend its potential.

- Preparing integrated conservation and heritage management and master plan for the sites.
- Creating awareness and expanding infrastructures in and around the site.
- The rock art sites should be networked with other tourist route in the region like Harar's *Jugol* world heritage site.
- Marketing and promotion should be one of the major priorities for the rock art sites.
- Researches on conservation and planned archaeological investigation should be carried out.

- Create link with international bodies (i.e. TARA and CCBAC) for training, consultation, conservation and management of rock art sites.
- Giving official attention to rock art sites
- Providing a platform for updating research findings on rock art; sharing experiences on the successful application of strategies for managing rock art sites etc.

References

- Anati, E. (1972). *Rock-Art in Central Arabia* (vol. 3): *Corpus of the rock engravings*. Louvain: Institut Orientaliste de l'Universite.
- Atthasit, S. (2004). The ancient rock arts management for sustainable tourism in the west coast of southern Thailand. Bangkok: Silpakorn University Press.
- Cervicek, P. (1971). Rock paintings of Laga Oda (Ethiopia). *Paideuma: Mitteilungen zur Kulturkunde, 17*, 121-136.
- Červíček, P. (1976). Rock Engravings from the Hamasen Region (Eritrea). *Paideuma Mitteilungen zur Kulturkunde*, 22, 237-256.
- Červíček, P. (1979). Some African affinities of Arabian Rock Art. *Rassegna di Studi Ethiopic*, 27, 5-12.
- Chardin, T.P. (1951). Paleolithic age in Harar. World Anthropology Review, 55.
- Clark, J.D. (1954). *Prehistoric cultures of the horn of Africa*. Cambridge: Cambridge University Press.
- Clark, J.D. (1974). *Archaeological & Palaeo-ecological field studies in East-Central Ethiopia* (a preliminary report on the work carried out under the NSF grant no.GS 40588, University of California, Berkeley).
- Crabtree, P. J. (2006). Exploring prehistory. New York: MC Graw Hill.

- Davis, W. (1984). Representation and knowledge in prehistoric rock art in Africa. *African Archaeological Review*, 2, 7-35.
- Deacon, J. (2006). Rock art conservation and tourism. *Journal of Archaeological Method and Theory*, 13(4), 379-396.
- Harris, R., Griffin, T., & Williams, P. (Eds.). (2002). *Sustainable tourism: a global perspective*. London: Butterworth-Heinemann Publication.
- Krishan, K. & Chand, M. (2006). *Basics of Tourism: Theory, Operation and Practice*. New Delhi: Knishka Publishers.
- Lambert, D. (2007). *Introduction to rock art conservation: A Guide to the preservation of aboriginal rock art.* Sydney: South Press.
- Mélanie, D. & Benjamin, S. (2012). Rock Art Tourism in the uKhahlamba/ Drakensberg World Heritage Site: Obstacles to the Development of Sustainable Tourism. *Journal of Sustainable Tourism*, 21(1), 134-153.
- Miles, M. B. & Huberman, A. M. (1994). *Quantitative data analysis*. London: SAGE Publication.
- Novelli, M. (2004). *Niche tourism: Contemporary issues, trends and cases*. Oxford: Oxford University Press.
- Philipson, D. (1985). *The later prehistory of Eastern and South Eastern Africa*. London: Heinman Educational Books.
- Spratt, C., Walker, R. & Robinson, B. (2004). *Module A5: Mixed research methods, Common Wealth of Learning*. London: N.P.P.
- Trust for African Rock Art [TARA]. (2013). *Rock art tourism promotion*. Nairobi: Kenya TARA publishing.
- Tekle, H. (2011). *The Ethiopian rock arts: The Fragile resources*. Addis Ababa: Novell Printing Press.
- Whitely, D. S. (2005). *Introduction to rock art research*. Walnut: Left Coast Press.

- Willcox, A. R. (1984). *The Rock art of Africa*. New York: Halmes and Meier Publisher.
- Agazi, N. (2001). The Holocene prehistoric archaeology of the Tembien Region, Northern Ethiopia (Ph.D. Dissertation. University of Florida).
- Dire Dawa Culture and Tourism Office. (2008 & 2009). *Dire Travel and Tour Guide*. Dire Dawa: Author.
- Girma, H. (2001). *The Emergence of prehistoric pastoralism in Southern Ethiopia* (Ph.D. Dissertation, University of Florida).
- Getachew, M. (2006). New rock art sites in northeastern Ethiopia: Their contribution to the Development of early Food production (M.A thesis in Archaeology, Addis Ababa University).
- Temesgen, N. (2005). Conservation of pre-historic rock art in the Environ of Harar and Dire Dawa, South Eastern Ethiopia (MA thesis in Archaeology, Addis Ababa University).
- Harar Culture and Tourism Office. (2010). *Harar: The Walled city*. Harar: Author.