

Development of Community-Based Ecotourism, A Case of Choke Mountain and Its Environs, Ethiopia: Challenges and Opportunities

Corresponding author: Sintayehu Aynalem Aseres (MA)
Tourism Management, School of Business and Economics, Madawalabu University
PO. Box 247, Bale Robe

And Dr. Belay Simane
College of Development Studies, Addis Ababa University, Addis Ababa, Ethiopia

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Abstract

Naturally, culturally and historically, Choke Mountain has potential tourism attractions which are perfect to develop community-based ecotourism. However, these potentials were not exploited. Therefore, the study aimed to investigate challenges and opportunities for developing Community-based ecotourism. To achieve the intended objectives, mixed research approach was employed. Data were collected via extensive review of literature, questionnaire, interview, and field observation. In the study, 64 Samples were selected purposively from Culture and Tourism office at regional, zonal and woreda level and 10 samples were taken from Agriculture and Rural Development at Zonal and Woreda level. The collected data were systematically organized, described, verified, analyzed, and interpreted accordingly. The findings of the research showed that low level of awareness, poor conservation activities, less co-ordination and partnership effort of stakeholders, population growth were the major challenges. On the other hand, diversified tourism potentials, special attention of different governmental and non-governmental agencies, cooperatives and private organizations, and accessibility of the historic routes were the major prospects to develop community-based ecotourism in Choke Mountain and its surroundings.

Keywords: Choke Mountain, Challenges, Community- Based Ecotourism and Opportunities

1. INTRODUCTION

Ethiopia is land of multiple tourist attractions and a visitor friendly people who are conscious of its historical, cultural and natural heritages; it was this recognition of a great potential, the tourism industry has been started in 1960's in the country (Ayalew, 2009). Choke Mountain and its Environs have tourism potentials such as the stunning landscapes like Aba Jime forests, Arat Mekerakir, Molalit cave, Lake Bahire Giyorgies in line with unique biodiversity resources which include plant, animal, and bird species. Currently, 41 bird species are found in Afro tropical highland biome of Choke Mountain including endemic Abyssinian Long claw (*Macronyx flavicollis*). Some of the bird species are endemic for Ethiopia such as Abyssinian Long claw, Wattled Ibis, Thick-billed Raven, White-collared Pigeon, and Black-winged Lovebird.

There are 16 animal species found in Choke Mountain and its Environs such as Leopard (*Panthera pardus*), Golden/Common Jackal (*Canis aureus*), Common Bush Back (*Tragelaphus scriptus*), Abyssinia Colobus, Common Duiker, Spotted Hyena (*Crocuta crocuta*), Anubis Baboon (*Papio Anubis*), Bush Pig (*Potamochoerus porcus*), and Common Duiker (*Sylvicapra grimmia*). The area is also home of many afro alpine and sub- afro alpine plant species. There are 85 plant species found in the area. Particularly, Kosheshila (*Acanthus Sennii*), Korch (*Erythrina brucei*), Gimy (*Euryops pinifolius*), Ashengidye (*Kniphofia foliosa*), and Gibra (*Lobelia rhynchopetalum*) are endemic for Ethiopia.

A head of these, the rural communities of Choke Mountain and their surrounding have colorful cultural values which include both tangible and intangible cultural heritages like living styles, traditional systems, artifacts, built environment, social structure, architecture, paintings, and other historical values like historical buildings, palace, battle fields, story, and oral tradition (Abebaw, 2002). The best cultural tourist sites are Merto le Mariyam monastery, Debre Worq monastery and Dima monastery, and Washa Giyorgies Filfil church and, T/Haymanot palace and broken bridge.

1.1 SITE DESCRIPTION

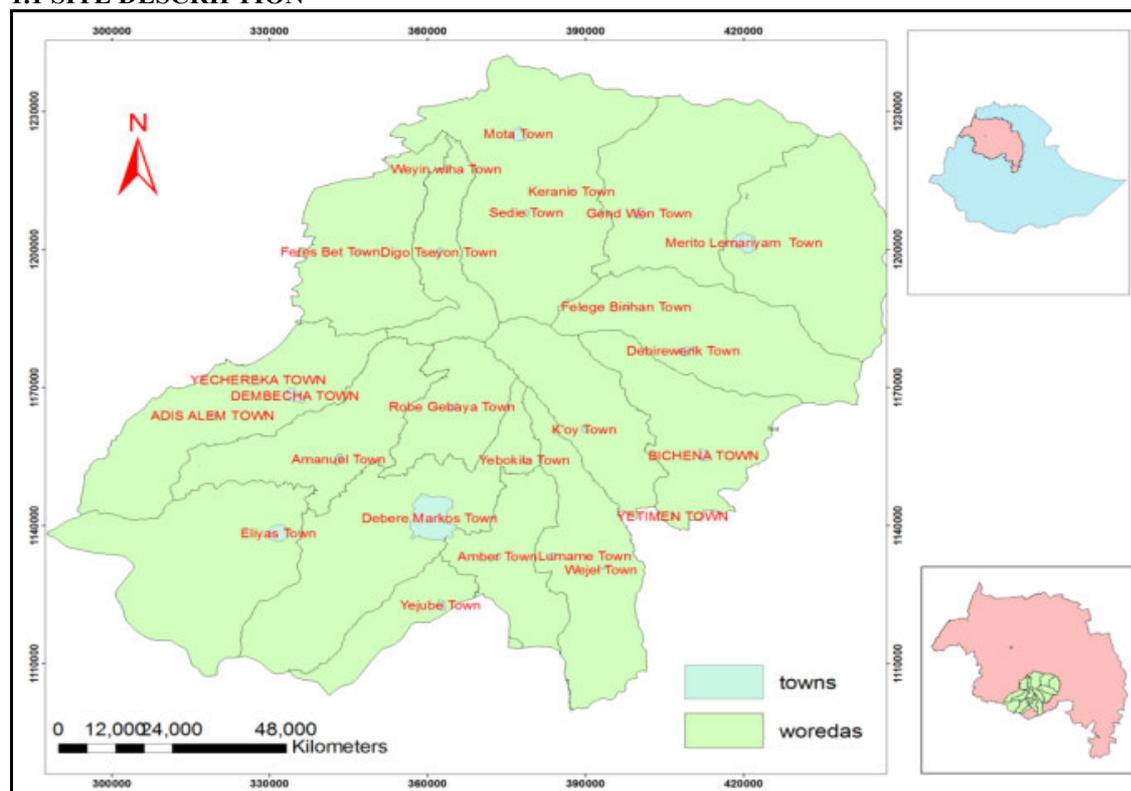


Figure 1 map of the study area (source: Aseres SA, 2015)

Geographically, Choke Mountain is found in East and West Gojjam in northern part of Ethiopia. The catchment area of Choke Mountain covers nine woredas. The mountain lies between $10^{\circ}42'N$ latitude and $37^{\circ}52'E$ longitude. The area has different topographical features ranging from 2800 to 4088masl, which includes plateau, deep incised valleys, escarpments, plains, and gorges. Climatically, Choke Mountain region is found within six climatic zones. These are; Upper Kola, Lower Weyna Dega, Upper Weyna Dega, Lower Dega, Upper Dega and Wurch (Belay S. et.al, 2013). The average temperature is between $0^{\circ}C$ to $30^{\circ}C$ and gets 200 to 2200 mm rainfall.

Indeed, Choke Mountain is the water tower of the Upper Blue Nile river system in Ethiopia. It is the source of more than 23 rivers and 273 small springs which are the main tributaries of Upper Blue Nile (Teferi et al., 2010). Some of the major rivers that are originated from this mountain are Chemoga, Temecha, Gedeb, Tijan, Tefe, Teme, Azewari, Sede, Inat Muga, Gilgel Muga, Zimbl, Komed, Oromo Meshageriya, Tiliku Abeya, Tinishu Abeya, Ayabab, and Gudela. Therefore, these abundant water resources have been used to develop nature based tourism activities such as swimming, boating, hiking, and fishing along with many alternative purposes like sources of electricity, drinking or tapped water, washing water, and irrigation.

1.2 METHODS AND MATERIALS

The study aimed to investigate challenges and opportunities of developing community-based ecotourism in Choke Mountain and its Environs. To realized the intended objectives local communities, tourism experts from culture and tourism offices, staffs of agriculture and administration offices were subjects of the study. The data were collected mainly through questionnaire, personal interview and field observation.

Both open and close-ended questionnaires were designed and distributed for 74 respondents. The questionnaires were covered general background of the respondents, ecotourism potentials, challenges and opportunities for Community-based ecotourism development in the area of Choke Mountain and its environs. Closed ended questions were prepared in three types. Such as yes or no, multiple and five likert scale, (1 is strongly agree and 5 is strongly disagree). Finally, 63 questionnaires were properly filled and collected, and the remaining 11 were not collected due to respondent related problems.

The researcher conducted in depth interviews with heads of Tourism and Culture office, religious leaders in Merto le Mariyam, Dima Giyorgies and Debre Worq Monasteries, natural resources experts, Historian and local elders. The researcher was conducted checklist guided field observation to observe the potential ecotourism activities and took pictures of mega tourism resources.

2. RESULTS AND DISCUSSION

2.1 Potential Ecotourism activities

As it is revealed by respondents, Choke Mountain has huge tourism potentials to develop community-based ecotourism activities in terms of natural, cultural, and historical ecotourism activities. Since Choke Mountain and its environs have spread geographical topography with varied features of wildlife and other nature based tourism resources, many nature based ecotourism activities could be developed.

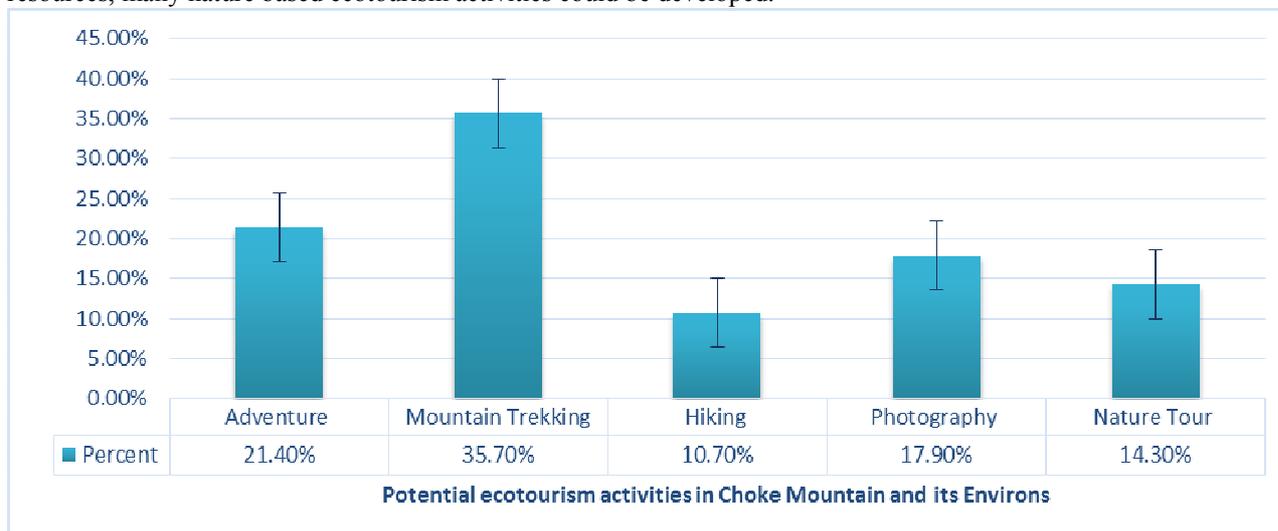


Figure 2 Nature based ecotourism activities

As it is presented in figure (2) above, 35.7 % of respondents believed that Choke Mountain has huge potentials for mountain trekking, and it is followed by adventure (21.4 %), photography (17.9 %), nature tour (14.3 %), and hiking (10.7 %).

Therefore, Choke Mountain could be recognized as a premier venue for a range of outdoor ecotourism activities.



Mountain trekking, caving, paragliding, hiking, photographing, nature touring, wild life viewing, bird watching, and other nature associated activities are some of the promising ecotourism activities in Choke Mountain. Choke Mountain and its environs have very interesting natural resources with blessed favorable climate, grand mountain scenery and a tradition of generous hospitality such as striking landscapes, caves, fauna and flora, and water bodies. So that it can offer superb opportunity to develop mountain trekking, hiking, and mountain climbing as it is organized in Simien and Bale mountains. In the area, there are domestication of horses, mules and donkeys, and

it is a good opportunity for trekking.

Caving is the other possible ecotourism activities in Choke Mountain and its surroundings. The Molalit and Bahire Giyorgies caves are the most spectacular and extensive underground caverns which are an extraordinary natural and cultural phenomenon of breathtaking beauty.

Bird Watching is also another possible ecotourism activities which could be develop in Choke Mountain. Due to its suitable environment for varieties of bird species, it has a great potential for the watcher to watch birds. Because the area has over 41 bird species, it could be also an ornithological paradise for bird watchers.

Paragliding now looks set to become the latest feature of Ethiopia's burgeoning adventure tourism, and it is possible to be applied in Choke Mountain.

Camping is possibly the perfect tourism activities to visit the four Stepped Mountain (Arat Mekerakir), and Molalit Cave. In this case, campers may pitch a tent to climp in and enjoy a good night's sleep. Local communities are the most part and they would be advantageous. They are highly involved in different activities like providing guiding services, supplying accommodation, and catering services to the campers.

Photo tour is also another activity that can be developed in the vicinity of Choke Mountain. The geographical feature of Choke is broken by numerous spectacular landscapes which are marvelous. Along with the home of many bird, animal and plant species, it creates an opportunity for both domestic and international visitors who appreciate the beauty of nature to experience photo tours.

Choke Mountain and its environs has potential cultural tourism resources which include both built environment (churches, monasteries, buildings, and material heritages in the different monasteries and churches,) and intangible cultural resources (communities' living styles, church education, festivals, religious ceremonies, and handicraft productions). Due to this, Choke Mountain has great potentials to develop culture based ecotourism activities. This is supported by the highest percentage of respondents (86.6 %). They suggested that pilgrimage/religious tourism activities (getting blessing, visiting churches and monasteries, attending religious rituals, festivals, ceremonies and other spiritual activities) could be developed in the religious sites. The remaining 21.4 % of respondents were suggested that festival related tourism could be developed which includes experiencing social holidays and festivals, and local performing cultures.

2.2 Challenges and Opportunities for Community Based Ecotourism Development in Choke Mountain and its Environs

Ecotourism has emerged as one of the fastest-growing sector of the tourism market, but it is found at its tot stage in the parts of Ethiopia. Although Choke Mountain has potentials to develop community-based ecotourism, still these potentials were not exploited. In fact, a particular destination whether it is fragile or potential, has its own challenges and opportunities for tourism development (Kauffmann, 2008). Likewise, the vicinity of Choke Mountain has its own challenges and prospects in the development of Community-based ecotourism. In relation to this, most of the respondents identified the persistent challenges and prospects as follows.

1. Challenges

► Poor Tourism Infrastructural Development

There is a serious problem of shortage in number, type, and quality of tourism infrastructure development. The tourism infrastructure like accommodation establishment, road and transportation, destination facilities and services, and public and institutional supplies are very poor and limited in number. Lack of air transport from Addis Ababa to Debre Markos for many business class tourists is aggravating the problem since the rout between is somewhat tiresome. However, tourists want remote and exotic experience. Besides this, there are inadequate destination facilities and services (inadequate shopping facilities and destination signage, limited commercial facilities, limited information communication, banking services and limited public and institution facilities) which are the big challenges for its development.

► Population Growth led Challenges

Currently, the number of population in Choke mountain region is rapidly increasing. As a result of this, the demand of agricultural farming land is increasing. This causes negative consequences on the environment such as, illegal community settlement, encroachment, poaching, deforestation, and overgrazing, which are the inexorable challenges that are highly distract biodiversity resources.



Picture 1 illegal activities in and around Choke Mountain

The qualitative data analyzed from interviews showed that the level of community awareness for conservation is very low. Some of the informants said that “the mindset of the rural community of Choke Mountain region is not ready for welcoming and accepting both the tourism activity and tourists”. This is due to low level of community’s awareness and illiterate and old-fashioned. Consequently, ecosystem of Choke Mountain has been being threatened because of illegal activities of local communities like clearing of forest for construction and fuel wood, expansion of agricultural farming land, and hunting of wild animals. Most of the rural communities in the area lead subsistent way of life because they are following traditional farming system along with traditional ways of raring of sheep, goat, horse, and cattle. These also have negative impact on the ecosystem and it may bring ecosystem degradation such as soil erosion, water pollution, deforestation, migration, and extinction of wild life, and at the end, Choke Mountain ecosystem will lose its natural beauty.

Concerning to communities awareness toward conservation activities, the respondents from Agricultural and Rural Development Bureau were concluded that there is low level of community awareness toward conservation activities. Based on figure (3) below, the majority of respondents (71.4%) replied that communities have low level of awareness.

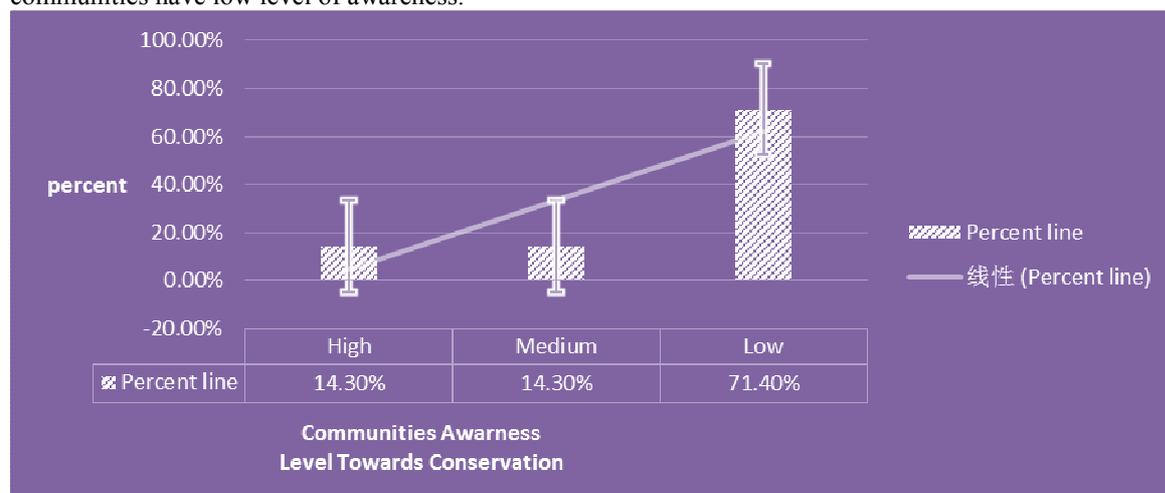


Figure 3 **Communities awareness towards conservation**

Currently, the ecosystem of Choke Mountain is highly threatened. The natural resources are degraded due to the human settlement and ever-mounting population pressure. The study which was conducted by Addis Ababa University showed that 607 km² wetland and 22.4 km² water body were lost in Choke Mountain within the last 20 years (1986 to 2005) (Teferi et. al., 2010).

Recently, there are poor conservation activities to rehabilitate the ecological balance of Choke Mountain (Mean=3.86 and SD= 1.069). Community-based ecotourism highly depends on maintaining the natural landscapes and a rich flora and fauna; therefore, helping communities to earn money from it and provides both an incentive for conservation and an economic alternative to destructive activities is very important (Omar, 1995; Watkin, 2003). Therefore, Community-based ecotourism is a tool for biodiversity conservation (Kiss, 2004). The result revealed that community-based ecotourism is a good way of rehabilitating the threaten ecosystems of Choke Mountain (Mean= 1.43 and SD= .787).

Table 1 **Conservation activities and community-based ecotourism in Choke Mountain**

Conservation activities in Choke Mountain	Valid N (List wise)	Min	Max	M	Sd
Conservation activities in Choke Mountain	7	2	5	3.86	1.069
Community-based ecotourism is a tool for biodiversity conservation in Choke Mountain	7	1	3	1.43	.787

Note: M= mean and Sd= standard deviation, Min= minimum and Max= maximum and likert scale value of 1 is strongly agree and 5 is strongly disagree

► **Less Administration and Co-ordination Effort of Government**

Community based ecotourism, as a logical component of community development, requires effective co-ordination of the various stakeholders. Governments, the private enterprise, local communities, and NGOs all have vital roles to play in the area of eco-tourism activities in Choke Mountain (Meguid, no date). Every country (especially the less developed ones) should set up clear guidelines to achieve effective participation of those stakeholders and to achieve the desired ecotourism goals. Based on the data analyzed from interviews, the various governmental actors in Choke Mountain (at Zonal, Woreda, and Kebele level) have assumed less administration and co-ordination effort for the sustainable development of Choke Mountain and its surroundings. Naturally, Choke Mountain chains have no buffer zones. As a result, there is no clear boundary demarcation

among the nearby woreda. This indicates the gaps in administration work and the nearby woreda as no sense of ownership to protect Choke Mountain from its disruption that highly weakened and undermined the coordination and integration effort of the actors to ensure sustainable utilization of natural resources.

› **Incapability of Financial and Human Resources**

By its nature, tourism sector is more of labor intensive and requires huge investment to develop tourism infrastructure in the destinations (Meguid, no date). Similarly, to develop community-based ecotourism in Choke Mountain, it requires huge investment capital and human resources. But the result revealed in this study is that there is financial incapacity to undertake practical job in the site like tourism resource mapping and inventory, promotion, research and development. Besides, it is difficult to develop tourism infrastructure to facilitate community-based ecotourism development.

On the other hand, trained manpower in the field of tourism is highly needed to undergo the development projects effectively. However, as it is gained information from key informants and field observation, there are shortages of trained manpower resources in the area. Even though there are ecotourism society groups in different parts of Choke Mountain particularly in Senan and Bebugn woreda, they do not have ecotourism concepts. It is pointed out that these groups are not strong enough to develop ecotourism sites by compromising the environmental, economic, and socio-cultural impacts.

› **Demolition of Natural and Manmade Heritage Resources**

Although the area of Choke Mountain has bestowed with natural and manmade heritages, those heritages are now degrading because of poor conservation and protection of heritages as it is discussed above. In light of the nature based resources, the tangible and intangible cultural heritages are integral elements to develop community-based ecotourism in Choke Mountain and its environs. Nonetheless, in all possible sites, there is poor conservation habit to protect and double the values of the cultural resources. This problem is serious especially in many of churches and monasteries.

2. Opportunities

To set aside effective enlistment of many resources for development, it is imperative to analyze the different opportunities that Choke Mountain area has. Based on the data analyzed, the different opportunities were identified and summarized as follows.

› **Diversification of Potential Tourism Resources**

The fundamental opportunity of Choke Mountain and its environs for community-based ecotourism development is its mammoth tourism potentials which include biodiversity resources, lovely and spectacular landscapes, colorful culture and ancient history. The selection criteria of a particular site for community-based ecotourism are the availability of unique scenery, cultural and historical values, and accessibility of the sites (Kauffmann, 2008). Thus, the area of Choke Mountain has fulfilled those criteria. The presence of mountain chains, unique scenery, and cultural and historical values of the area are crucial to develop ecotourism, and all the sites are easily accessed to visitors by vehicles or horse.

› **Accessibility of the Historic Rout**

Choke Mountain and its Environs have ground opportunities due to its accessibility of the historic rout (starting from the capital city of Addis Ababa to Mekelle via Debre Markos, Bahir Dar, Gondar, Lalibela and Axum in different directions. Choke Mountain is not far from the main historic rout and can be easily accessed by car or on pack animals.

› **It is water tower of the Upper Nile Basin Countries**

Because Choke Mountain is said to be the water tower of the Nile basin countries, it gets due attention from many governmental and nongovernmental institutions. Those institutions from the Nile basin countries bring their endeavor for the rehabilitation of the area to ensure the ecological balance of the Nile basin countries. Additionally, the area seeks the attention of many national and international conservation bodies to rejuvenate its endangered ecosystem.

› **Involvement of co-operatives**

Some co-operatives have been being attached themselves in the area to protect the biological and physical resources of the area to realize the objective of sustainability. For instance, Organization for Rehabilitation and Development in Amhara (ORDA), UNESCO, European Commission, has working for the rehabilitation of the area to develop ecotourism enterprises other projects owned by NGO'S are highly involved. Thoroughly, all this voluntary actions of many organizations and private individuals have a big deal of creating awareness of the area across many people who are living within and outside the area. This could be a foundation time to develop community-based ecotourism.

› **Low conflict of interest between ecotourism and agricultural activities**

Because the hubs of the Mountain chains are not favorable for agricultural activities, the local communities are highly settled out of the main natural ecosystem of the mountain which is proposed to be a protected area. As a result of this, Choke Mountain is a potential site to develop community-based ecotourism besides its splendid tourism appeal without any conflict between the agriculturalist and the tourism developers. Thus, it has an

opportunity to substitute the agricultural economic basis of the local communities through tourism activities devoid of any confrontation action.

› **Current conservation policy**

According to key informant, Ato Birhan “The current conservation strategies carried out by the Ministry of Agriculture and Rural Development is another positive external factor to develop community-based ecotourism in the rural areas” (Feb 15, 2013). The conservation policy has been being applicable in all corner of the country for sustainable use of natural resources so as to achieve the millennium development goal.

Now a day, with active community participation, there is community-based conservation in Choke Mountain and its surroundings to assure the sustainable usage of natural resources despite of its ineffectiveness. For instance, there are different conservation programs like reforestation and greening programs, water and soil conservation, and other strict control of deforestation, and illegal hunting of wild animals which are proved the principle of community-based ecotourism.

CONCLUSION and RECOMMENDATION

Although the County of Choke Mountain is the potential site to develop community-based ecotourism, there are different constraints which could affect the development projects. Poor infrastructural developments, rapid population growth (which resulted for expansion of farming land, illegal community settlement, overgrazing, demanding of fuel woods, and increasing poaching and encroaching), low community awareness towards conservation, shortage of trained manpower, financial incapability, poor administration and co-ordination effort of stakeholders, low conservation and protection of tourism resources, and limited attention given by Culture and Tourism Bureau are the persistent challenges.

On the other hand, there were some opportunities identified in this study. Diversification of potential tourism resources, accessibility of the area with the historic routes, its water tower of the upper Nile basin countries, the involvement of many co-operatives, special attention given by different governmental and nongovernmental organizations, government policy which gives attention to conservation of natural ecosystem, and low conflict of interest between ecotourism developer and agriculturalist are the opportunities for the exploitation of its potentials and community-based ecotourism development.

Therefore, to exploit the ecotourism development opportunities and minimizing the challenges, the following recommendation is forward. It has to have broader awareness creation program for the wider communities towards the tourism business and its impacts on their lives by providing adequate trainings.

To ensure sustainable community-based ecotourism project development, local communities must undergo various capability-building programs. This in turn, enables the communities to provide them with skills which are needed to manage the tourism activities that are going to be developed in Choke Mountain and its environs. Similarly, adequate training programs also needed for tourism officers and service providers to increase their understanding levels towards tourism development. In the other hand, even though there are many ecotourism societies in different woreda, they have no ecotourism concept. So that it is vital to provide adequate and timely trainings for ecotourism societies.

To develop sustainable community-based ecotourism projects, the win-win partnership of stakeholders are highly needed. All government bodies in all levels should strengthen their partnerships with local communities, NGO's, private organizations, religious institutions, and academic institutions. Debre Markos University and Technical and Vocational Training College in the town (specifically Tourism and Hotel training) should be participating in the development projects. The local communities should be the development actors to assure the sustainability of community-based ecotourism. Communities should be actively participant in the initial planning phase, managing, controlling of the tourism business, and sharing of benefits.

Different measurements should be taken for the conservation of natural and built environment as well as cultural heritages so as to increase socio-economic, cultural and environmental values. Strict rules and regulations should be established to prohibit the illegal community activities like overgrazing, deforestation, hunting, settlement, and vandalism of cultural heritages. For the reduction of deforestation which is caused by high demand of fuel wood consumption, it is advisable to produce and supply local energy saving tools like fuel wood stove and biogas.

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