Review on Ecotourism Opportunities and the Challenges for Natural Resource Management in Ethiopia

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Abstract
Ethiopia has faced rapid deforestation and land degradation that is a cumulative outcome of extensive forest clearing for agricultural use, overgrazing, exploitation of forests for fuel wood, fodder and construction materials, setting of fire to create pasture land, expansion of settlements etc. Ecotourism development is, nowadays, increasingly used for its multipurpose. By promoting ecotourism through the protection of the environment, biodiversity is preserved, jobs are created, market for local products is created, environmental education within the communities is promoted, and understanding of local peoples and cultures are fostered among the tourists who visit these communities. Even if Ethiopia has various protected areas in different part, the areas have been challenged largely by human-induced constraints. Ecotourism is becoming more attractive because it is believed that it makes it possible to improve income generation without harming the environment. These goals are sometimes not met, however, and environmentally unfriendly or economically unsuccessful ecotourism tends to prevail in many developing countries, questioning the validity of its original concept. Therefore, careful assessment of cultural, environmental, and economic aspects is necessary when introducing ecotourism to a region.

Keywords: Challenges, Ecotourism, Natural resource management, Tourism

1. Introduction
Tourism comprises the activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes (UNWTO, 2010). It is the largest and fastest growing industry, which has the best possibility for generating many new jobs worldwide. It could be act as business in rural areas since it does not require year’s long vocational trainings (Rannersmann, 2003). Although tourism contributes to the economic development, in latter periods it resulted in very negative environmental impacts due to the large number of visitors (mass tourism) damaging destination areas of tourists. Because of this, since in the 1990s, the tourist concern for environmental issues increased and ecotourism became known and tourism is recognized as an economic sector that needs to develop sustainable (Holden, 2003). Ecotourism has become one of the economic sectors that generates substantial income and maintains conservations of protected areas. In developing countries tourism or ecotourism has become one of the economic sectors that generates substantial income and maintains conservations of protected areas. For example, in Kenya in Amboseli National Park the income obtained from ecotourism is 18-20 times more than the income obtained from agricultural activities (Thedros, 2002).

In case of Ethiopia because of the majority of its population are engaged in agricultural activities instead of on off farm activities like ecotourism, natural resources are exposed to extreme degradations (EFCOT, 2003). For example, the Central Ethiopia Rift Valley (CERV) areas that endowed with a number of lakes and huge potentials of natural resources used for recreation are affected by excessive land degradation, deforestation, and over-irrigation (Legeessa et al, 2003).

Ecotourism is the alternative means of income generations and off-farm activities to minimize degradations pressure on endangered environments in rural areas of Ethiopia (EFCOT, 2003). Ecotourism could be as a good example of alternative income generation and off-farm activities which benefit local communities while achieve the conservation goals of natural resources. Furthermore, assessment of ecotourism or simple nature tourism does not need more facilities and depends on locally obtained facilities or natural capital of the poor that can be managed locally (Scwenk, 2002).

Ecotourism was known since 1990s when environmental issues of tourist destination areas increased (Sindiga, 1999). It was introduced in Ethiopia as component of soil and water conservation under Land Use Planning of Oromia (LUPO) aims to create alternative income generating options to reduce pressure on natural resources. For example, the Integrated Forest Management Project (IFMP) introduced into Adaba-Dodola in the West of Bale Mountains National Parks in the aim of conservation of natural forest (Sisay, 2004). IFMP organized forest association dwellers by developing ecotourism through creation of non-wood income generating that reduce degradation of forest of project area (Taddesse, 2007).

Ecotourism could be a link between protected areas and local communities by generating income for local communities while conservation goals of protected areas achieved. Ecotourism could be very important where the ecosystem is fragile and other forms of natural resource management might be impossible (Brodnig, 2006). Protected areas are essential for biodiversity conservation. They are the cornerstones of virtually all
national and international conservation strategies, set aside to maintain functioning natural ecosystems, to act as refuges for species and to maintain ecological processes that cannot survive in most intensely managed landscapes and seascapes extinct (Dudley, 2008). Protected areas act as benchmarks against which we understand human interactions with the natural world. Today they are often the only hope we have of stopping many threatened or endemic species from becoming extinct (Dudley, 2008). So the objective of this paper is to review ecotourism opportunities and challenges for natural resource management in Ethiopia

2. Ecotourism Development in Ethiopia

2.1 Origin and Differentiation of Ecotourism

Ecotourism evolved from growing concerns about the negative environmental and socioeconomic effects of tourism development. Ecotourism has become everything that mass market tourism is not. Rather than massive beachfront hotels, it tends to feature smaller facilities, attractively designed using sustainable local materials. Rather than isolating tourists from local communities in all-inclusive resorts, it features engagement with local culture, nature, and communities. Rather than despoiling the environment, it seeks to protect and enhance it (EGA, 2008).

Hector Ceballos-Lascurain (1987) provided one of the first formal definitions of ecotourism, which was later adopted by the International Union for Conservation of Nature as their official definition in 1996, as traveling to relatively undisturbed or uncontaminated natural areas with the specific objective of studying, admiring, and enjoying the scenery and its wild plants and animals, as well as any existing cultural manifestations (both past and present) found in these areas (cited in State of Ecotourism Nepal, 2004). According to this definition, ecotourism can involve both cultural and environmental tourism and, in addition, benefits to the local population should be an integral part of the activity.

Ziffer (1989) proposes a more restrictive definition with a stronger prescription about the types of activities that can be considered to be ecotourism. To her, ecotourism is a form of tourism inspired primarily by the natural history of an area, including its indigenous cultures. The Eco tourist visits relatively undeveloped areas in the spirit of appreciation, participation and sensitivity. The Eco tourist practices a non-consumptive use of wildlife and natural resources and contributes to the visited area through labor or financial means aimed at directly benefiting the conservation of the site and the economic well-being of the local residents (Diamantis, 1999).

Ecotourism is “environmentally responsible travel and visitation to relatively undisturbed natural areas, in order to enjoy and appreciate nature (including any accompanying cultural features both past and present), that promotes conservation, has low visitor impact and provides for beneficially active socioeconomic involvement of local populations” (IUCN, 1996).

2.2 Development of ecotourism in Ethiopia

The concept of ecotourism is a new phenomenon to and it is difficult to explain its significance achievement since the approach of ecotourism is not widely disseminated in Ethiopia. The government of Ethiopia also has recognized development and promotion of ecotourism and provided consultancy services for a number of potential developers of ecotourism sites. Although, developers and policy makers do not properly take the idea of ecotourism, some investors started to involve in development of ecotourism in different regions of Ethiopia. Bishangari Eco-Lodge located at Eastern of Langano Lake in Oromia Region and Village Ethiopia located at Afar Region (Bilen) is examples of these private ecotourism developments in Ethiopia (Theodros, 2004). In past few years, LUPO aims to create alternative income generating means such as ecotourism to reduce the pressure on the natural resources of land through conducting a pre-feasibility study of proposed areas on the potentials of ecotourism (Scwenk, 2002).

2.3 Ecotourism and Protected Areas of Ethiopia

Today protected areas are aimed at conserving biodiversity and large scale of natural ecosystems. However, these protected areas are increasingly facing a number of challenges (Wearing and Neil, 1999). Protected areas are important destinations for a growing tourism like ecotourism given that it uses diverse nature, landscapes and biodiversity as major attractions. In these protected areas, there might be a potential threat to, and an opportunity for conservation of natural resources. If properly planned and managed ecotourism may minimize the environmental impacts while significantly contributes to the protected areas (Strasdas, 2002).

Okello (2003) showed that the relationship between protected areas and local communities is a key factor in the long term conservation of the natural resources in and around these protected areas. However, in many cases, the relationship faces conflicts. The perceptions of local towards protected areas are negative. They perceived the protected areas as a burden on their land use. People living near protected areas have subsistence needs that are direct opposition to the needs of the park. Enough attention was not given to the process of involving local people in decision making and park management activities. On other hand, the conservationist
blamed the local people as a major threat to the conservation of the protected area.

From Ethiopian protected areas (National Parks), of which only two are gazette ones, the Semen Mountains National Park and Awash National Park. The other protected areas including the game reserves, sanctuaries, national forest priority areas etc. are not gazette. The main objectives of these protected areas are to protect natural resources of the country (Shibru, 1995) but recently most of protected areas of Ethiopia are exposed to severe degradations due to failure of creating alternative options like ecotourism, which are off-farm activities.

2.4 Potential of Ecotourism Resources in Ethiopia

Ethiopia is endowed with unique cultural heritages and attractive natural resources that attract tourists (MoCT, 2006). The country has several parks and reserves to shelter its flora and fauna which can be visited to sight see these animals and explore their natural havens. Ecotourism represents an approach to tourism that emphasizes on environmental and cultural preservation. It highlights opportunities for tourists and other visitors to experience aspects of the country’s ecology and natural endowments as well as unique features of its archaeology, history and culture. Ecotourism is responsible travel to natural areas that conserves the environment and sustains the well-being of local people (TIES, 2015). Ethiopia has immense Ecotourism resources including both Natural and Cultural attractions. The following category specifies the major highlights of the potential Ecotourism potentials in Ethiopia (MoCT, 2006).

- Exotic Ethiopian Mountains. Ethiopia has so many attractive mountains like The Bale and Semien Mountains, mountains in wag and lasta, Northeastern Tirai the Irob region, Chilalo Mountains in Arsi, Ziquala peaks and Fantalle in Awash national park. These places are best suitable for individual trekkers, hiking parties and for professional climbers.
- Ethiopia’s lakes have varied features of great interests to Eco tourists: These includes: birds, wildlife, vegetation, colorful ethnic groups, historic churches and monasteries, unusual geologic features and much more.
- Extensive and nice looking Ethiopia’s national parks, like Nechsar, Mago, Omo, Awash etc are spectacular places for Eco tourists to watch the real African big wild life and enjoy the breathtaking surrounding landscapes.
- The underground caverns and rock arts of Sof Omer in Bale, Lega goda at the vicinity of Dire dawa, Shebe found at a short distance from Dila town are places to admire the works of nature, rock paintings and carvings of people and animals.
- Battle sites like Adowa and Maqdala and places of significant political events like Boru Meda, Entoto, and Ankober etc are most interesting sites for history loving Eco tourists.

2.6 Opportunities of Ecotourism

Ecotourism, a recent but widely hailed tourism alternative (Schaller, 1998), has high potential to be an instrument for rural economic development and environmental conservation. Figure 1 illustrates the role tourism plays in poverty reduction and natural resource management.
Source: (UNESCO, 2007)
Figure 1: Linkages between Tourism with poverty reduction and Environment management

Economic Benefits
The economic benefits of ecotourism as identified by different scholars (Anderson, 1996; Koeman, 1998; Agrusa and Guidry, 1999; Desenbrok, 2002; Ngece, 2002; Lowmen, 2004; Kiss, 2004 and Weggoro, 2008) include;
- Employment opportunities
- Creating new jobs
- Diversifying regional economies
- Catalyst for development
- Ecotourism stimulates profitable domestic industries like hotels and other lodging facilities, restaurants and other food services, transportation systems, handicrafts, guide serves etc.
- Minimize leakage
- Ecotourism constitute a great deal of gross domestic product.
- Foreign Exchange earnings
- Development of infrastructure
- Transfer of income

Environmental Benefits
Ecotourism, if properly managed and applied, can benefit the environment in the following ways (Anderson, 1996; Ngece, 2002; Dassenbrock, 2002; Kiss, 2004 and Weggoro, 2008).
- Ecotourism is relatively less-pollutant industry, which can enhance the conservation and promotion of natural and cultural heritages.
- Ecotourism will foster responsible tourist behavior, conservation of important wild life habitats and ecosystem.
- It is best alternative activity to environmentally damaging activities like farming, logging and mining. Although ecotourism may not be able to preserve these untouched areas as they would if human contact were prohibited, it can help to protect them from the dangers of destructive agricultural practice, mining and industrialization. “The flora and fauna may be bothered [due to ecotourism development], but at least it will not be destroyed” (Dasenbrock, 2002).
- Encourages individual conservation efforts- informed tour guides and educational pamphlets can incite tourists to become environmentalists, thereby promoting conservation efforts.
- Encourages small scale infrastructure construction: - the infrastructure demands of ecotourism industry primarily include the construction of small scale hotels and transport systems, there by maintaining a healthy balance between expanding tourism industry and protecting natural resources.
Social Benefits
Ecotourism development, in addition to economic and environmental benefits, might contribute socially by enhancing local community esteem and provides the opportunity for greater understanding and communication among people of diverse background. Ecotourism helps for political empowerment of local communities and fosters respect for different cultures (helps to develop tolerance). It is an important vehicle for promoting cultural exchanges (Agrusa and Guidry, 1999; Nepal, 2002; Weggoro, 2008).

2.7 The impacts of Ecotourism
Generally, tourism can have both positive and negative impacts on economic, cultural and environmental resources depending on circumstances how it is managed (Strasdas, 2002). In other words, tourism causes three major impacts in host societies: economic, cultural or social and environmental impacts. Assessing these impacts whether positive or negative is impossible in the Third World due to difficulties in measurement and a lack of local control over the industry (Lea, 1988). Okello (2003) stated that in areas, where tourism impacts on country and society, there may well be conflicts with competing demands for other sectors of the economy, or with community interests at large. Ecotourism is thus an important concept in tourism development to solve these problems.

2.8 Challenges of natural resource management in Ethiopia

2.8.1 Forest Degradation
The forest resource of Ethiopia is probably changing more rapidly at present than any time in human history due to the interference of human being. Deforestation in Ethiopia occurs when locals clear forests for their personal needs, like fuel, hunting, agriculture, housing development, etc. (Demele and Badewe, 2001). The main causes of deforestation include population pressure (expansion of Agricultural land), overgrazing, timber cutting for construction, fuel and wildfire. In Ethiopia, the rapid rate at which the population increased (2.6% annually - 2007 population census report), is among the main factors that contributes to high rate of deforestation. The need for cultivated land, wood for fuel and wood for construction materials increased with rapidly growing population (Berry, 2003).

2.8.2 Conflicts
Historically, the now evicted locals had been sparsely inhabited in many of the conservation areas for a long time. Upon the eviction, the indigenous people are forced to use resources that are outside the protected areas (Fiallo and Jacobson, 1995). However, as population increased unsustainable land use practices outside the protected areas made life difficult. Thus, demand for resources found people illegally use and then destroy the natural resources inside protected areas and getting into conflict with conservation authorities (Lumprey, 1990). Complete removal of the local people from using the resources in protected areas at the time of establishment resulted in conflict between the conservationists and the people (Davey, 1993). A major bottleneck in wildlife conservation is the inadequate direct benefits that local communities derive from wildlife related tourism (Earnshaw and Emerton, 2000).

Despite the obvious economic benefits that wildlife brings, many farmers, herdsmen and ranchers living adjacent to parks look upon wild animals with considerable respect (Kaltenborn et al, 2003). Ethiopia’s geographical location and physical feature has resulted in the diversification of wildlife (Shibru, 1995). Many of Ethiopia’s protected areas exist on paper only; while others have declined in size or quality (Schloeder and Jacobs, 1993). The protected areas of Ethiopia are also faced different challenges. For example the area became under increasing human pressure impacting the habitat available to the native wildlife.

2.8.3 Grazing
Grazing by livestock has been an important issue for the management of the national parks and protected areas. Overgrazing by domestic livestock is an important cause of land degradation in arid (Perveen et al., 2008) and semi-arid ecosystems (Huang et al., 2007).

In Ethiopia Overgrazing results in decreased soil cover, increased erosion, decreased quality and productivity of range resources, reduction or elimination of the natural regeneration of woody species and preferred forage species, bush encroachment in some areas and loss of biodiversity (EBTF, 2008). Awash, Abijata-Shala and Nechsr national parks, encroachment and grazing forced many wildlife species out of the park due to increased competition for forage (Hillman, 1991, Gebre Michael and others, 1992, Jacobs and Schloeder, 2001). According to Zewdu and Yemisrach (2003), the level of rural poverty, lack of incentives, increasing demand for grazing and many other multi-faceted problems have put a lot of stress on the conservation strategy of the country.

Desalegn stated that authorities consider cattle grazing on Nechsr NP as the most pressing problem of the park for several reasons as the park warden explained: “Grazing in the park negatively affects biodiversity by exhausting grasses and related resources; common use of the grassland plains by wildlife and domestic animals increase the risk of disease transmission to and from wildlife; and their presence in the park makes the park less
natural resource depletion and environmental degradation associated with tourism activities are sometimes biodiversity and forest reigns, but current these protected areas are highly influenced by fire. Bushfire is the jobs, providing a sense of community ownership, and bringing in revenue that can be used to manage protected population and livestock pressures like heavy grazing of under story; the cutting of trees for construction, farm and other natural resources, they can be expected to support and participate in efforts to conserve and sustain them. The ecotourism potentials of Ethiopia has been facing a number of threats due to increasing human population and livestock pressures like heavy grazing of under story; the cutting of trees for construction, farm tools and fuel; expansion of cultivated area. Ecotourism could be a link between protected areas and local communities by generating income for local communities while achieving the conservation goals of protected areas. The experience of different countries revealed that ecotourism has played a great role as a viable strategy in sustainable natural resources management mainly forest, wildlife and soil. Ethiopia’s Ecotourism potential is huge and unmatched but the sector is in its infancy stage. Most of the national parks and protected areas of the country are under pressure from the surrounding communities in search of cultivable land, grazing land, or wood for different purposes. Ethiopia is endowed with different natural and ecotourism attractions which will be the potential for natural resource conservation and economic development. The absence alternative options or ecotourism and


tourists as they are interested more in observing wild animals (Desalegn, 2008). These referring to the signs of exhaustion in the grass cover, the authorities argue that the park area suffered from overgrazing by the cattle emphasizing that the cattle population is well beyond the carrying capacity of the area (Bolton, 1973). A similar case of habitat loss and fragmentation has also been reported for all National Park in Ethiopia, the shortage of pasture land to the local people and the local community direct involve on protected area in order to feed their cattle (Hillman, 1988).

Fires are the major disturbance of the earth ecosystems, and it is impossible to understand plant and ecosystem evolution without considering their impact (Bond and Kelley, 2005; Pausas and Kelley, 2009). We assume that fire is a natural component of our ecosystems; however wildfires (non-controlled fires) often pose important threats to public safety, properties, and forest resources (Martell, 2007). Ethiopia is one of the world’s known biodiversity and forest reigns, but current these protected areas are highly influenced by fire. Bushfire is the major destructive agent in Ethiopian protected area which was impacted by the local peoples. (Desalegn, 2008) argued that in Nechzar National Park the identifying problem is fire by Guji people. They said that, “in our culture, we had a practice of burning grass before the rain”. Such practices can destroy tree and grasses at the early stages of their growth. Fire is a basic part of the ecology of semi-arid rangeland ecosystems; it often results in bush encroachment, greatly reduced forage production and major changes to the structure and species composition of the vegetation. Fire bans result from well-meaning initiatives taken by politicians and technicians who lack a good understanding of the role of fire in the ecology of dry land ecosystems (EBTF, 2008). There for similar factors all national parks of Ethiopia.

2.8.4 Un Controlled Fire

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2.9 Mechanisms to Minimize the Impacts of Ecotourism

Natural resource depletion and environmental degradation associated with tourism activities are sometimes serious problems in tourism-rich regions (Neto, 2002). Controlling ecotourism within the limit of the carrying capacity of the environment can be accomplished through sound management techniques or the use of economic instruments like user charges (or entrance fees), various kinds of taxes and imposing a limit on the number of visitors or tradable permits (Anderson, 1996). In order to minimize the side effects of tourism/ecotourism, government intervention at different levels is needed in the following ways (Tisdell, 1997):-

- Limiting the number of tourists and tourist operators based on the carrying capacity of the area,
- Improving the patterns or logistics of tourism movements to reduce environmental damage or adverse effects,
- Providing appropriate environmental education to tourist operators and tourists. Whether it is through tour operators, lodges, national parks, private reserves, or different types of ecotourism related activities, education can make a difference. Education is one of the most crucial elements of ecotourism because it can change the way people (both locals and tourists) think about the environment,
- Introducing technological improvements to reduce environmental damage,
- Imposing restrictions on buildings,

3. Summary and Conclusions

Even though natural resources in Ethiopia have great contribution for the development of tourism in general and ecotourism in particular, most of natural resources are highly exposed to degradation. Deforestation is one of the major factors contributing to land degradation by exposing the soil to various agents of erosion which in turn greatly affects agricultural productivity.

Ecotourism can be used as a way to promote community based natural resources management and livelihood diversification. It can help fuel economic development and conserve protected areas by creating local jobs, providing a sense of community ownership, and bringing in revenue that can be used to manage protected areas in a sustainable way. If local communities directly benefit from the use of their land, water, forests and other natural resources, they can be expected to support and participate in efforts to conserve and sustain them.

The ecotourism potentials of Ethiopia has been facing a number of threats due to increasing human population and livestock pressures like heavy grazing of under story; the cutting of trees for construction, farm tools and fuel; expansion of cultivated area. Ecotourism could be a link between protected areas and local communities by generating income for local communities while achieving the conservation goals of protected areas. The experience of different countries revealed that ecotourism has played a great role as a viable strategy in sustainable natural resources management mainly forest, wildlife and soil.
sustainable management of natural resources are the major problems Ethiopian protected areas. Some management problems on natural resources like deforestation and social related problems like food insecurity which are contributed to aggravate poverty that might be a major threat to natural resources most of the protected area.

4. Future work of line

- Efforts should be made to improve the promotion and marketing of the ecotourism potentials.
- Developing and creating diversified livelihood, promoting the development of ecotourism, encouraging benefit sharing and conservation of natural resources of the park and giving the ownership sense of the local people over the natural resources of the park are very necessary for sustainable use of ecotourism resources.
- Increasing the awareness of local communities towards ecotourism or nature tourism is very important.
- More emphasis should be given on the local community members not directly involved in tourism would also be a valuable source to determine whether the supposedly little negative impact on the communities or on the environment.
- Awareness campaign on environmental protection, wildlife conservation and management should be done among the local people.

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