

Conservation Challenges of Gibe Sheleko National Park, Southwestern Ethiopia

Alemneh Amare

Department of Natural Resource Management, Wolkite University, Wolkite, Ethiopia Email: <u>alemneh.amare@wku.edu.et</u>

Received 22 February 2015; accepted 20 April 2015; published 22 April 2015

Copyright © 2015 by author and Scientific Research Publishing Inc. This work is licensed under the Creative Commons Attribution International License (CC BY). http://creativecommons.org/licenses/by/4.0/

Abstract

An effective management practice of protected areas is one of the best methods to harmonize nature conservation in a given ecosystem. However, the implementation of conservation management plan of protected areas through community approaches is the major conservation challenge in Ethiopia. This paper described the major conservation challenge of Gibe Sheleko National Park, southwestern Ethiopia. Data were organized during training workshops and panel discussions with participants held at Wolkite University, Ethiopia. Stakeholders included park managers, scouts, community and local administrative representatives, farmers, district and zonal administrations, conservationists and researchers. The participants reported that livestock grazing, encroachment, logging, expansion of agricultural investors and settlements in and around were the major challenges of the park. Moreover, limited community awareness and little conservation attention by the government officials also affected the protected area. As means to overcome these conservation challenges, innovative and develop new interdisciplinary approaches to support the practices aiming to solve current conservation challenges. Therefore, to introduce communitybased conservation approaches, enhance public awareness of the locals, pay better conservation attention by the government and develop conservation bylaws are the best mechanisms to preserve Gibe Sheleko National Park.

Keywords

Community-Based Conservation, Conservation Problems, Ethiopia, Gibe Sheleko National Park, Protected Area

1. Introduction

Ethiopia's unique topography and biological diversity has resulted in a high level of endemism (Abunie, 2000). More than 320 mammals (39 endemic), 918 birds (19 endemic), 240 reptiles (16 endemic), 71 amphibians (30

endemic) and 172 fishes (38 endemic) species are recorded in Ethiopia [1]-[4]. The country's protected areas, such as national parks and wildlife sanctuaries, are rich with distinctive flora and fauna and the country is one of the top twenty five richest countries in the world in terms of biodiversity [5]-[7].

Protected areas play a vital role in biodiversity conservation. Over the past 25 years, the number of protected areas in developing countries has grown [8]. For example, Ethiopia had only two protected areas before 1970 but today has more than 55 protected areas to conserve its natural ecosystems and wildlife heritage [9]. However, these protected areas are exposed to severe pressure from anthropogenic activities (fire wood collection, farming, over exploitation, bush fire by the investors and farmers around the park, charcoal production and harassing wild animals) that threaten their existence and sustainability [10] [11]. Anthropogenic activities are directly influencing wildlife survival across different regions [10] [12]. In addition, poor protected area conservation management strategies and policies coupled with limited community participation in conservation practices have significantly affected biodiversity. Conservation policies are crucial for the development of sustainable wildlife tourism and the preservation of resources [13]. Many countries, such as Botswana, Namibia, Zambia and South Africa, have adopted participatory approaches to conserve their wildlife resources for sustainable utilization, including community-based conservation of protected areas [10] [14]. However, in the eastern parts of Africa, such practices are major challenges due to confrontations with local communities [15].

2. Materials and Methods

2.1. Study Area

Gibe Sheleko National Park was established only in 2009 and is administered by the southern region. The park is about 174 km southwest of Addis Ababa, on the edge of the Ethiopian highland massif and covers 248 km² in three districts of the Guraghe Zone. This park is unique due to its high bird species diversity and woodland ecosystem. In this paper, I used Gibe Sheleko National Park as an example to highlight the important challenges that many national parks face in Ethiopia.

2.2. Methods

From 15 to 16 June 2014, I provided training on sustainable forest and biodiversity conservation and discussion workshops at Wolkite University for 38 participants from different stakeholders including park managers (3), scouts (4), community leaders (3) and elders (3), zonal representatives (4), farmers (4) (before and after the establishment of Gibe Sheleko as a National Park), district administrators (3), indigenous people representatives (4), administrators (3), state farm representatives (3), agricultural investors (2), researchers and conservationists (2). The workshops were aimed to share opinions on conservation challenges and future improvements for the sustainable management of Gibe Sheleko National Park. All participants talked management problems or challenges and highlighted opportunities of the current status of the park. Participants' perceptions were classified into three dimensions; 1) commitment from the park's staff; 2) absence of community-based conservation practices; and 3) little conservation attention by the government.

3. Discussion

3.1. Park Wardens

Park staff members described the conservation efforts they confronted, including encroachment by illegal settlers when they tried to block the entrance to the park. Scouts were employed by the community to take the crucial role of implementing protected area policies. Livestock was left in the park (Amare *pers. obs.*), because the zonal and regional administration has not established regulations to prohibit grazing activity inside the park, where grasses are abundant. There had been no discussion or communication before the park's establishment on how to regulate the activities carried out by the people in the area. Scouts reported to the respective park and conservation officials about anthropogenic activities. However, they did not obtain any response to their reports and the scouts became passive and negligent of the protected area rules. They also began to fear their social lives within their communities could change if they enforced these rules. They also described the park was clearly demarcated due to little regional conservation attention and limited budget. The establishments of core, buffer and transitional zones in protected areas, as well as the establishment of policies and practices are vital for a park's protection [10] [14] [16].

3.2. Local Communities

Community elders, farmers and indigenous peoples who have lived more than 20 years around the park confirmed that district officials allowed other people to make them but used the vehicles to take these products out of the park to sell them. Grazing had been one major activity in the area long before it became a park. According to [17] [18], the major threats of protected areas are urbanization, agricultural expansion, accessibility and resource extraction. Very few participants living around the park knew the park had already been established but they still regarded the land as their property and considered cutting trees for house construction and building agricultural equipment to be their right. This seems to be due to their limited awareness about protected area management and an inability to get equal benefits from the ecosystem. In principle, they saw an opportunity to obtain economic benefits from the park but did not do it because of limited infrastructure presented. Community-based approach wildlife conservation promotes both the quality of the local people's living and the conservation of resources in the area [19] [20]. In principle, conservation is a "win-win" approach, which means the communities should obtain direct compensation when the protected area is created, in addition to ecosystem services, while at the same time the protected area must be conserved by the community. They knew the park provided ecosystem services, such as recreation (natural views and wild animals), hot spring, and small streams as sources of holy water and fishing activities as a source of food. However, they need extra benefits that directly impact their livelihood. If they do not obtain enough benefits, they may read just the protected area in some ways that affect the conservation goals and increase species extinction in the park. The community can make a decision about protecting the ecosystem [20] if awareness is created about the benefits of protected habitats. Benefit sharing and the inclusion of local people in the protected area's management can improve local support for conservation [13].

3.3. Higher Officials

Participants also reported that officials allowed investors to conduct agricultural practices at the edge of the park. These investors were directly affecting the protected area by introducing domestic species, manipulating wild animal habitats, burning trees, and carrying out illegal agricultural practices. Furthermore, regional and district management officials and decision makers had not taken immediate action to prevent such activities. Surprisingly, some officials even purchased land from local people for agricultural practice and charcoal exploitation; it can cause the community said "I do not care if my activities damage the park, because the officials are doing it already". Therefore, the district and zone administrator provided less attention to biodiversity conservation and provided only a limited budget and infrastructure for protected areas. Expanding infrastructure and supporting the community around the protected area is effective link between conservation and poverty reduction [21]. The primary goal of the Ethiopian government remains the alleviation of poverty through food production [3] and one fundamental problem for conservation is the limited funding that is available for it. The federal conservation authority also neglects regional parks, especially in relation to re-demarcation and capacity development related trainings. During the workshops officials recognized their reluctant behavior to work on conservation and had agreed to do better in the future with stakeholders. The officials also agreed to re-locate the illegal settlers and farmers to protect the park. Applying an effective policy about protected area conservation and ecosystem services provision that can use a participatory approach is vital to facilitate the mission from both social-economic and ecological perspectives [18].

4. Conclusion and Future Conservation Directions

Understanding the conservation challenges of the Gibe Sheleko National Park is essential for designing effective conservation management strategies. In summary, these challenges were the following: 1) the park's staff was not psychologically, socially or economically empowered; 2) the park's inside and outside limits were not clearly delineated; and 3) government officials, decision and policy makers did not involve the local community in the protection of the park. Not only staff members of the protected area need to be committed but also community centered conservation as well as conservation authorities need to implement the necessary principles and policies to conserve national parks. Therefore, all the participants agreed on the following: 1) increasing awareness is needed and should be done; 2) conservation attention must be prioritized; 3) community-based conservation approaches must

be practiced; and 4) punishments through traditional or modern laws must be adopted in order to conserve the Gibe Sheleko National Park. Protected areas mainly exist to maintain biological diversity, but they should also address the needs of the local people living on subsistence economy by adopting socially responsible management approaches and being able to fully integrate even people outside the park as an indicator of progress in reducing poverty. Furthermore, Wolkite University especially conservationists, the University research and community service office together with park officials should establish conservation education center that helps to raise awareness to the community.

References

- [1] Vreugdenhil, D., Vreugdenhil, A.M., Tilahun, T., Shimelis, A. and Tefera, Z. (2012) Gap Analysis of the Protected Areas System of Ethiopia, with Technical Contributions from Nagelkerke, L., Gedeon, K., Spawls, S., Yalden, D., Berhanu, L. and Siege, L. Ethiopian Wildlife Conservation Authority (EWCA), Addis Ababa.
- [2] Wilson, D.E. and Reeder, D.M., Eds. (2005) Mammal Species of the World: A Taxonomic and Geographic Reference. 3rd Edition, The Johns Hopkins University Press, Baltimore.
- [3] Young, J. (2012) Ethiopian Protected Areas: A "Snapshot". WordPress, 23.
- [4] Amare, A., Hernandez, A., Hayward, M. and Hylander, K. (in Press) Human-Wildlife Conflict in and around Gibe Sheleko National Park, Ethiopia. *Biodiversity and Conservation*.
- [5] Morgan, W.T.W. (1973) East Africa. Longman, London, 410.
- [6] Yalden, D. and Largen, M. (1992). Endemic Mammals of Ethiopia. *Mammal Review*, 22, 115-150. <u>http://dx.doi.org/10.1111/j.1365-2907.1992.tb00128.x</u>
- [7] Gole, T.W. (2003) Conservation and Use of Coffee Genetic Resources in Ethiopia: Challenges and Opportunities in the Context of Current Global Situations. *Globalization and Equity: The 4th Annual Global Development Network Confe*rence, Cairo, 19-21 January 2003.
- [8] Naughton-Treves, L., Holland, M.B. and Brandon, K. (2005) The Role of Protected Areas in Conserving Biodiversity and Sustaining Local Livelihoods. *Annual Review of Environmental Resource*, **30**, 219-252. http://dx.doi.org/10.1146/annurey.energy.30.050504.164507
- [9] Murray, M. and Admasu, B. (2013) Development of a Marketing Strategy for Wildlife Tourism in Ethiopia. Unpublished Report, 65.
- [10] Wilfred, P. (2010) Towards Sustainable Wildlife Management Areas in Tanzania. Tropical Conservation Science, 3, 103-116.
- [11] Reddy, R.U. (2014) Conflicts between the Conservation of Elephant and Human Activities: In the Case of Babile Elephant Sanctuary (BES), Ethiopia. *European Academic Research*, 2, 1280-1292.
- [12] Abunie, L. (2000) The Challenge of Conserving Ethiopian Wildlife: Overview. Walia, 31, 56-61.
- [13] Tessema, M., Lilieholm, R., Ashenafi, Z. and Leader-Williams, N. (2010) Community Attitudes toward Wildlife and Protected Areas in Ethiopia. *Society and Natural Resources: An International Journal*, 23, 489-506. http://dx.doi.org/10.1080/08941920903177867
- [14] Lewis, D.M. and Alpert, P. (1997) Trophy Hunting and Wildlife Conservation in Zambia. *Conservation Biology*, 11, 59-68. <u>http://dx.doi.org/10.1046/j.1523-1739.1997.94389.x</u>
- [15] Nishizaki, N. (2004) Resisting Imposed Wildlife Conservation: Arssi Oromo and Senkelle Swayne's Hartebeest Sanctuary, Ethiopia. *African Study Monographs*, **25**, 61-77.
- [16] Tedla, S. (1995) Protected Areas Management Crisis in Ethiopia. Walia, 16, 17-30.
- [17] Salafsky, N., Salzer, D., Stattersfield, A., Hilton-Taylor, C., Neugarten, R., Butchart, S., Collen, B., Cox, N., Master, L. and O'Connor, S. (2008) A Standard Lexicon for Biodiversity Conservation: Unified Classifications of Threats and Actions. *Conservation Biology*, 22, 897-911. <u>http://dx.doi.org/10.1111/j.1523-1739.2008.00937.x</u>
- [18] Scolozzi, R., Schirpke, U., Morri, E., D'amato, D. and Santolini, R. (2014) Ecosystem Services-Based SWOT Analysis of Protected Areas for Conservation Strategies. *Journal of Environmental Management*, 146, 543-551. <u>http://dx.doi.org/10.1016/j.jenvman.2014.05.040</u>
- [19] Scheyvens, R. (1999) Ecotourism and the Empowerment of Local Communities. *Tourism Management*, 20, 245-249. <u>http://dx.doi.org/10.1016/S0261-5177(98)00069-7</u>
- [20] Tisdell, C. and Wilson, C. (2003) Economics of Wildlife Tourism. *Economics, Ecology and the Environment*, **88**, 1327-8231.
- [21] Scherl, L.M., Wilson, A., Wild, R., Blockhus, J., Franks, P., McNeely, J.A. and McShane, T.O. (2004) Can Protected Areas Contribute to Poverty Reduction? Opportunities and Limitations. IUCN, Gland and Cambridge, UK.