



Degradation of Preserved and Isolated Church Forests in Asebot, Ethiopia

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Abstract:

Ethiopia is a country endowed with unique endemic fauna, flora and forest resources. Dry evergreen Afromontane forests are few patches of forests that now remain around farmlands and churches. The remaining parts have been occupied or converted into agricultural lands. Asebot is one among such patchy remnant forest located in Oromiya region under the administration of Ethiopian Orthodox Tewahado Church (EOTC). EOTC has more than 30,000 churches that are located around regions of once the nation's dominant forests and it plays a significant role in conservation strategies. Asebot is a monastery established by an Ethiopian saint, Aba Samuel, and it has two churches, one belonging to the nuns and the other to the monks. It was during the 12th century that the Asebot monastery owned the Asebot escarpment that is mainly composed of indigenous tree species and animals. The church explains the significance of trees in providing shelter and food source for living beings and its significance in the global environment. They give an understanding about the role of biodiversity in preserving the natural resources and about the conservation of resources for future generations. This attitude developed by the church towards the community is an opportunity developed for the conservation of natural resources. The grace of the holy places is due to the surrounding biodiversity and surrounding communities which will give a healthy atmosphere. But the Asebot forests are now being degraded compared to other church forests in Ethiopia due to forest fire and continuous encroachment by the illegal wood loggers. Integrated mitigation measures should be adopted to restore the forests and flourish the church forests.

Key words: Asebot, Afromontane forest, degradation, reforestation programme

Introduction

Ethiopia, located in the horn of Africa between 3-150 N latitude and 33-480 E longitude is a country endowed with varying topography. The country has dry, temperate and tropical climates and the temperature varies from 470C in Afar region to 100C in the highlands (Tamire 1997). The country owns unique diverse flora and fauna.

The forest resources are diminishing due to various factors that are influencing the biodiversity of the country. Despite this reduction, the resources from the forest have potential contributions to the nation's economy (WBISP 2004). Ethiopia has a wide range of ecological variation associated with rich species diversity that need to be preserved. The forest resources are getting changed due to agricultural expansion, over-grazing, forest fire, exploitation for natural resources and natural hazards.

Therefore research and development efforts are needed to conserve the natural resources and regain the glory of Ethiopian forests with its natural rich biodiversity (Tadesse et al. 2007). This paper describes the church forests, their role in conservation of degrading forests and how the society can actively participate in this to help the church community. The special study of a preserved forest of Asebot monastery and the present day scenario are discussed.

Church forest

The forests located around the churches comprise local as well as global hotspots. They are critical conservation areas that provide ecosystem services. In Ethiopia the patches of forests that are left around the churches are the remnants of dry afromontane forest cover that comes under the conservation practices by Ethiopian Orthodox Tewahido Churches (EOTC) (Wassie et al. 2005a). Some churches that are established after 1960s have developed forests around them by rehabilitation processes that are not the natural afromontane forests (Wassie 2002). The church forests possess woody indigenous tree

species. The two tree species, *Juniperus procera* and *Prunus Africana*, which are listed in IUCN redlist, are mostly found in church forests (IUCN 2006). The church forests comprise of many rare and unique species that make the preservation of these forests crucially important. The forest management is receiving attention in terms of timber production, and non-timber value products from the forests. These resources are being degraded from the forests due to human settlements and utilization. Therefore, increased afforestation and efficient use of forest resources should be given attention (Yitebitu et al. 2010).

Ethiopian Orthodox Tewahido Churches(EOTC)

EOTC is an indigenous and integral Christian Church of Africa, being one of the most ancient churches in the world and founding member of World Council of Churches. These churches have a long history of planting, protecting and preserving trees. In Ethiopia, the existence of large old aged trees indicates the presence of an Orthodox church in the middle. These forest resources around churches form an important biodiversity comprising plants, animals and micro organisms(Wassie 2004).

Role of EOTC

Deforestation in Ethiopia is becoming severe as the human invasion is increasing. Now the church forests are the easy access for resources that are being used by humans. The remaining high forests in Oromiya region are under the administration of EOTC. Under these circumstances, the church is now the refuge for remaining forest resources that can be considered as in situ biodiversity conservation (Wassie 2002, 2007). Dry afro-montane forests of Ethiopia are facing severe degradation due to commercial exploitation and encroachment, the churches thus trying to preserve the remaining forests.

Conservation strategies

In situ and ex situ conservation practices are required for the degrading land resources around churches, being important for

the landscape ecology. The church ecosystems should be preserved to provide knowledge about individual species and assemblage of species and its synecology for communities (Wassie 2005a and b).

Asebot monastery

The monastery established by Ethiopian saint Father Samuel is located within western Hararghe Zone of Oromiya region. The Asebot monastery has two churches: one in the middle of the mountain, named Debre Wegeg Aba Samuel, for nuns, and the other on top of the hill, Debre Wegeg Kidist Selassie, for monks. The monasteries are education centres for disciples, the monks and nuns also being dedicated workers involved in bee keeping, forest management and farming for their needs.

Asebot forest

The remnant dry evergreen afromontane forest in plateau of Hararghae around the Asebot monastery is under degradation by forest fire and encroachment by illegal wood loggers. Timber harvesting, over-grazing, conversion to farm lands and recurrent fire are major implication faced by the monastery in preserving the forest resources (Adefires and Worku 2009). As a consequence, the forest needs utmost afforestation practices to conserve the biodiversity.

The church utilizes the wood and other resources in a sustainable way, but the individuals around make use of the undefined forest borders and irregular forest edges for encroachment. The transformation of forest land to agricultural land every year is also leading to the disappearance of forests. According to Mekonnen et al. (2012), the Asebot forests are getting degraded to an irreversible level of destruction of the natural habitat. This is due to frequent forest fires and encroachment by the people. Massive loss of biodiversity resources and habitat destruction are increasing and thus affect the livelihood of local communities in the district. An immediate intervention is needed to reduce the pressure on forest and mitigate the habitat.

Future perspectives for preservation

The land resources around churches and monasteries are rich in indigenous species. They should be given more attention for conservation as they have a crucial role in preserving these resources. Therefore,

- The forest and land use policies should be implemented.
- Encourage the afforestation programmes by the society from school to college and university levels.
- Continuous awareness programmes and campaigns in these areas to reduce the encroachment.
- Creating alternate source of employment to the communities involved in this wood logging activity.
- Planting of timber yielding fast growing tree species and economically important plants that can provide a livelihood to the people around.

BIBLIOGRAPHY

_____. 2004. WBISP (Woody Biomass Inventory and Strategic Plan Project). Forest Resources of Ethiopia, Addis Ababa.

Adefires, W. and Z. Worku. 2009. "Forest fire at Asebot forest: Causes, Impact and Implication for Sustainable Management of the Ever Fragmented Dry Evergreen Afromontane Forests in Ethiopia." In: Tackling the Frequent Forest Fires Incidence in Ethiopia, Forum for Environment, edited by Ensermu Kelbessa and Abenet Girma. Addis Ababa Proceedings of a Workshop, Occasional Report No. 2/2009.

Mekonnen, Eyasu, Lisanework Nigatu, and Kassa Oyicha. 2012. "The tragic loss of biodiversity resources and carbon stocks in Asebot Forest and its Implications." Paper presented at the International Conference on Biodiversity Conservation and Ecosystem Services for Climate Change Mitigation and Sustainable Development, Haramaya University, Ethiopia.

Tamire, H. 1997. Desertification in Ethiopian Highlands. RALA Report No.200. Norwegian Church AID, Addis Ababa, Ethiopia.

Wassie, Alemayu. 2004. “Ethiopian Orthodox Tewahido church forest: The blue prints of the lost forest resources in the northern Highlands of Ethiopia.” Research on the role of the lost forest Resources of Ethiopia.

Yitebitu, M., E. Zewdu, and N. Sisay. 2010. “Ethiopian Forest Resources: Current status and future management options in view of access to carbon finances.” Literature review prepared for the Ethiopian Climate Research and Networking and the United Nations Development programme(UNDP), Addis Ababa.