

The contribution of GUDO forest conservation culture is key to biodiversity conservation

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ABSTRACT

Background: The Sheka people have long been sustainably managing and conserving the Sheka forest by utilizing different procedures. Shockingly, these indigenous methods for natural resource management are ordinarily absent from scientific forest management and not archived. This paper aims to document “the GUDO culture” and demonstrate how the Sheka people through their indigenous culture can provide valuable, appropriate, and effective forest conservation strategies. Thus, every culture has a system of beliefs that guides their interactions with nature. One of the traditional forest management practice commonly found in Sheka zone is the GUDO.

Results: The GUDO is a designated forest area mostly found in the mountainous and the rocky area of the Sheka zone. It is found mostly in rocky and mountainous parts of the Sheka zone. They are cultural symbols related to indigenous beliefs and signify spiritual connections to the forestland.

Conclusions: This paper concludes that the GUDO forest conservation culture is illustrated in the Sheka people forest utilization, protection, and management. Therefore, the GUDO forest conservation culture provides important insights into the protection of various forest types and tree species, contributing to the conservation of biodiversity.

Keywords: Gudo Culture; Forest; Indigenous Belief; Natural Resource Management.

INTRODUCTION

Recent developments in the field of traditional forest-related knowledge have led to renewed interest in the conservation, management, and sustainable use of natural resources. This interest has been increasingly recognized, documented, and utilized both in developing and developed countries (Parrotta, 2000; Parrotta & Troper, 2012; Menzies & Butler, 2006). The role of indigenous knowledge in forest conservation in Africa has also been recognized in recent years. Its potential contribution to Africa’s ecology has not been well studied. Recently, very few studies have been conducted to depict the contribution of traditional knowledge to biodiversity, climate change; and combating desertification.

Traditional forest-related knowledge has upheld the occupations, culture, personalities, and the woodland and farming assets of the neighbourhood and indigenous networks everywhere throughout the world (Parrotta and Troper, 2012). Traditional forest-related knowledge (TFRK) is of specific significance to

indigenous networks, people groups, and countries (Martinez Cobo, 1986/7). Numerous specialists have put accentuation on incorporating traditional forest-related knowledge and scientific knowledge for the protection of timberland nature forests (Baker, 1992; Michel and Gayton, 2002).

The issue of traditional knowledge of forest management has received considerable critical attention. A good evidence of this is what is mentioned by Parrotta and Troper (2012). The authors viewed that traditional forest-related knowledge, innovations, and practices contribute to sustainable development in several ways. According to the authors, widely used products such as plant-based medicines and cosmetics, agricultural and non-wood forest products, and handicrafts are derived from traditional knowledge of forest management. He also goes on to say that most indigenous and local communities live in areas containing the vast majority of the world’s forest (and agricultural) genetic resources called biodiversity hotspots. The traditional knowledge and techniques used to sustainably manage and use these genetic resources and ecosystems can

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provide useful insights and models for biodiversity conservation practices and policies.

Human interactions with nature have shaped both the attitudes and behaviors of people towards nature (Cristancho and Vining, 2004). Thus, every culture has a system of beliefs that guides their interactions with nature. One of the traditional forest management practices commonly found in Sheka zone is GUDO. GUDO is a designated forest area mostly found in the mountainous and the rocky areas of the Sheka zone. Today, deforestation is one of the major environmental challenges affecting the world however; the Sheka people through their indigenous knowledge of forest conservation strategies can sustainably manage the Sheka forest.

The Sheka people have long been sustainably managing and conserving the Sheka forest by utilizing different procedures. Shockingly, these indigenous methods for normal asset administration and nearby adjustment techniques are ordinarily absent from scientific forest management and not archived. "The GUDO culture" demonstrates how the Sheka people through their indigenous culture can provide valuable, appropriate and effective forest conservation strategies.

This article explores the contribution of GUDO forest conservation culture as a means to biodiversity conservation in the Ethiopian context. Focusing on the spiritual connections to the GUDO sacred forest, this article critically analyses how culture and spiritual connections to the GUDO sacred forest contribute to biodiversity conservation. Therefore, the GUDO forest conservation culture provides important insights into the protection of various forest types and tree species, contributing to the conservation of biodiversity (Figure 1).

Materials and Methods

Description of the Study Area

The Sheka Zone is located at about 670km from Addis Ababa. It is found in the South Nations Nationalities and Peoples Regional State. The Sheka zone shares boundaries with the Oromia Regional State in the North, Bench Maji Zone in the South, Gambella Regional State in the West, and Kefa Zone in the east. The total area of Sheka was 2175327 ha. Geographically, the Sheka Zone lies between 7°24'–7°52' N latitude and 35°31'–35°35'E longitude. The Zone has three woredas namely: Masha, Andracha, and Yeki. In the Zone, there are 56 rural and 7 urban peasant associations (Pas) in three woredas.

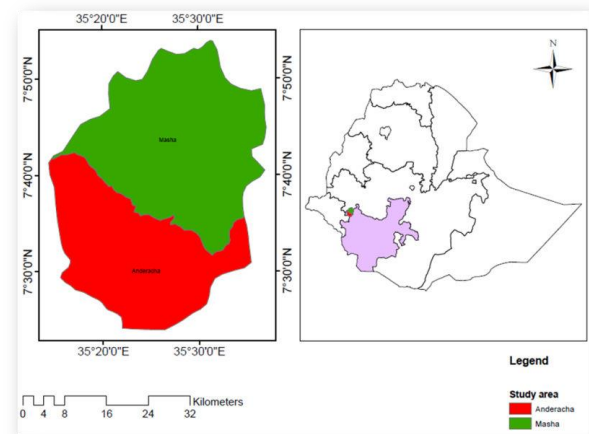


Figure 1: Map of study area

Recruitment Process

Access in qualitative research refers to how a research investigator going to gain access to the people he needs to interview. For qualitative research that employs ethnographic methodology like this, it is heavily dependent on key informants (community leaders, clan leaders). The Sheka zone has organized a community leader and clan leader for consolidate the tradition of the Sheka people. For any research purpose, the information required in relation to the Sheka people's tradition is obtained from community elders and clan leaders (Gebi tato). Accordingly, the zone administration allowed me to gain access to make an interviews with community elders and clan leaders (Gebi tato).

This research employed criterion sampling for this study in line with an ethnographic methodology that examines the shared patterns of behaviour, convictions, and dialect inside a social gathering; and to do this requires broadened times of perception by the researcher (Petty et al., 2011). Criterion sampling involves reviewing and studying 'all cases that meet some predetermined criterion of importance' (Patton, 2002, p. 238). To know their knowledge and practice of traditional forest-related knowledge, there must be explicit inclusion/exclusion criteria that include specifications for methodological rigor.

This required the direct participation of Sheka community elders and clan leaders were sought for recruitment in order to investigate their views on culture and practice on traditional forest-related knowledge and the current state of forest cover change because of agricultural investment expansion. Recruitment of participants was required in order to document the traditional forest-related knowledge via semi-structured interviews. The inclusion criteria for this study were as follows:

- Consenting community elders and clan leaders (Gebi tato) currently working in Sheka traditional committee. This ensured that all community elders and clan leaders (Gebi tato) participants once had traditional forest-related knowledge.
- Consenting government officials who are currently working on environment, forest, and climate change in the Sheka zone.
- Consenting government officials who are currently working in the Sheka zone of the culture office.

The study recruited participants from the community elders and clan leaders (Gebi to) currently working in Sheka traditional committee from the three zonal woredas (the largest administrative unit Zone). The study recruits three kebeles (Kebele is the smallest administrative unit of zone) mostly affected by the high rate of deforestation, mainly because of agricultural investment expansion.

Setting Interviews

It is believed that the place where the researcher does the interview will have an impact on the answer that he gets. Nouria Bricki and Judith Green (2002) identified three main pre-conditions for an interview setting. These include:

1. Is there enough privacy for the interviewee to feel comfortable in giving honest answers?
2. Is there too much privacy, making the interviewee uncomfortable?
3. How can you organize the space and people to make sure the interviewee is relaxed?

The settings for the interviews conducted during this study were chosen to suit the convenience of participants and to minimize interruption to their schedules. Prior to commencing data collection, the interviews were conducted in three main sites: the Sheka zone has three woredas Yeki, Masha, and Andracha. In each woreda, there were selected researcher participants.

For government officials and one NGO working in the zone, the interview will be conducted in the manager's office. For farmers, the interview will be done at the farmer's house, and for focus group discussions, the discussion was held at the clan leader's (Gepi tato) home. A total of 20 farmers were interviewed and 10 community elders for two focus group discussions for each woreda. One NGO project manager and three government officials were interviewed. Most first interviews and all second interviews with community elder's participants were conducted in their home, and focus group discussions were done at the clan leader's (Gepi tato) home on their day off from work.

Since the majority of community elders are from a rural part of the country appointment of community elders 'to clan leader's (Gepi tato) home was done in advance. Responsible government officials in the area of forest and rural development were willing to their office for me to conduct the sole interview. Both interview and focus group discussions were taken at weekend times for community elders, but for government official's appropriate working days were selected.

Focus group discussion

Data were collected by focus groups, one for each village, involving people crosswise over age gatherings. Gathering sizes changed from 10 to 12. Six villages were purposefully selected, two from each kebele. The reason for the selection of the village is that (1) population size, (2) proximity to the main road, (3) the presence of plantation agriculture (4) the presence of the sacred site. Various participatory methods, such as timelines, wealth ranking, and participatory mapping, have been used to collect qualitative data on the following: over the last four decades,

from 1972 to 2013: issues of forest cover change and sociocultural and economic factors for forest cover change, village history, resource management practices and land allocation for investment, harvesting of local resources by outsiders, and spatial aspects of resource use and access.

Analysis of forest cover change and Socio-cultural (including IK and its relation to resource management), and economic (both local and extra-local) impacts or implications (observed or potential) of forest cover change in the region at the household level will be examined by focusing on the livelihood of the local population. The study Kebeles are chosen because they are around plantation agriculture sites. In 2007, the three study kebeles had an estimated population of 7285 (CSA, 2007). Questions will be retrospective and focus on the forest cover change and the decline of indigenous knowledge.

RESULTS AND DISCUSSION

Cultural and religious beliefs related to forest management

Human interactions with nature have shaped both the attitudes and behaviors of people towards nature (Cristancho and Vining, 2004). Thus, every culture has a system of beliefs that guides their interactions with nature. One of the traditional forest management practices commonly found in Sheka zone is the GUDO. GUDO is a designated forest areas mostly found in the mountainous and the rocky area of the Sheka zone. Participants of FGD on Gecha Town consolidated this fact: "GUDO" is a protected forest area where cultural ceremonies were practiced. It is found mostly in the rocky and mountainous parts of the Sheka zone. They are cultural symbols related to indigenous beliefs and signify spiritual connections to the forests land.

Like other communities living around forest areas, the Sheka people use the forest in their culture and tradition. Forest is not only used for consumption but also for spiritual purposes. The way in which cultural and traditional practices were used for forest conservation, the GUDO culture was identified. The GUDO forest conservation culture plays a great role in the conservation of the Sheka forest this is mainly because it is believed that when a person cuts a single tree from GUDO forest, a person will die in the village. The GUDO cultures in the Sheka zone greatly influence the use of GUDO forest for any other economic activities. Trees in the GUDO sacred forests are untouchable. Nobody sets out to contact this tree, and villagers stated:

Nobody is permitted to cut down these trees in the GUDO sacred forest, and any individual who cuts these trees will be rebuffed. There is a society story in Sheka about a man who cut down a tree in the GUDO sacred forest: he died the next day by thunder and lightning. Similarly, another interviewee said a young man in the Anderacha woreda once cut down a tree in the GUDO sacred forest and passed away soon afterward.

This folk story reminds us of how the Sheka people are much closer to nature, particularly with forest resources. The GUDO culture or the GUDO festival is most significant to the Sheka people. The Sheka people as a community are able to express

their gratitude to the GOD (Shemayo tato). Before the GUDO ritual starts, the clan leader (Gebi tato) informs all village members to sit and attend worshipping ceremonies then worshipping starts soon. After praying to the GOD (Shemayo tato), about the good harvest season and for the health and peace of the past year, the clan leader (Gebi tato) and religious leaders of the community give their blessings for the forthcoming year. After worshipping and praying, a lunch is served with oxen, sheep, and goat meat. After lunch, a ritual is performed by dancing. Most youngsters come together and perform traditional dancing. Finally, elders blessing the villagers as the next generation to be a year of good harvest and health of a people then this is the end of the GUDO cultural practice.

According to the Sheka people custom, no extraction is allowed in GUDO sacred forests, except for the harvesting of trees for home consumption at the forest margin. Neither cultivation of land nor cutting of trees for domestic use, nor trees used for beehive are allowed in GUDO sacred forests. If a tree dies in the GUDO sacred forest, it is left to decay naturally; nobody is allowed to cut it, and even the branches of a dead tree cannot be used for fuel wood. Trees in the GUDO sacred forest should also be respected. Violation of the GUDO culture can result in serious punishment. At Masha woreda Keja Town, the clan leader (Gepi tato) said:

For any village member that has violated the culture of GUDO, it is the responsibility of the clan leader (Gepi tato) for the enforcement of the GUDO cultural practice. If any villager enters the GUDO sacred forest for the purposes of grazing, collecting fuelwood, or logging, it is believed that the violator of the GUDO culture would be cursed and die as a consequence. Once it was investigated and discovered that the violator had entered into the GUDO sacred forest and used the forest for any other purpose, he would be asked why he did. Then, according to GUDO culture, he would be penalized. The penalty is curing him, which resulted in death.

Due to this, GUDO sacred forests exist in the study area. GUDO are crucial conservation sites characterized by high biodiversity. They are found more than four to five per villages and in some village, there may be more than ten GUDO sacred forest sites (see Table 3). Among the three locally identified forest conservation cultures are DEDO, KOBO, and GUDO, the GUDO is the most common cultural practice in the study area and seems to be the most known and respected cultural sacred site used for spiritual purposes in the Sheka zone. Indigenous knowledge of forest conservation culture is tightly interwoven with traditional religious beliefs, customs, and land-use practices. In this regard, GUDO forest conservation culture continues to provide tangible (foods, medicines, wood, and other non-timber forest products, water, and fertile soils) and intangible (spiritual) benefits for the Sheka people.

All research participants from Masha and Anderacha woreda knew where these GUDO sacred forest stands. All of them were worshiped at least once in GUDO sacred forest. More than ten GUDO sacred forests were visited during the field visit. In Masha woreda alone, there are more than 85 GUDO cultural sites. GUDO sacred forest is a crucial conservation sites characterized by high biodiversity. The study found that there

are many other large trees in the GUDO sacred forest, including Red-stinkwood frn weed (*Prunus africanus*), Cope fig (*Ficus sur*), Water barry (*Syzygium gunineense*), Podo (*Podocarpus falcatus*), Peacock flower (*Albiza gummigifera*), Flam- tree lucky bean tree (*Erythrina abyssinica*), African fan palm (*Borassus aethiopicum*), and White pearwood (*Apodytes dimidiata*), and Bamboo (*Arundinaria alpina*). A common view amongst interviewees on how a tree serves the Sheka people through their life depicted that the Sheka people consider the forest as a lifetime treasure. Trees can serve society from life to death. Talking about this issue, an interviewee from Masha woreda said:

In Sheka people, the leaves of a tree called "Chako", which is used to cure the child when a child is dehydrated. A particular tree is used for funeral services when any member of the villager dies. A part of a tree called "Guno", which is used for shrouding the dead body of a deceased person. Therefore, a tree serves the people of Sheka from life to death that is from the birth of a child to the death of an old man.

For the Sheka people, forest conservation and management is part of the culture of the Sheka people since they are the forest-based community. Participants of FGD both from Masha and Anderacha woreda have responded to the cultural implication of GUDO in the conservation and protection of the Sheka forest. Worshipping around GUDO is a form of forest protection strategy implemented by the Sheka people. This kind of local belief system that totally hinders the use of forest resources among the people of Sheka and this practice of worshipping passed on from generation to generation since time immemorial. The practice of worshipping around GUDO (sacred forest) considers the GUDO sacred forests as spiritual or sacred sites over a period of time, and the local belief on GUDO sacred forest prohibits the exploitation of forest resources in the Sheka zone.

The protection of the GUDO sacred forest enables the conservation of natural forest from earlier anthropogenic disturbances, allowing trees and other plant species to reproduce. The entire designated GUDO sacred forest area put under the imposition of local cultural beliefs. Within the GUDO sacred forest, the flora and fauna in the area should not be touched. For example, no one can have access and use right of a GUDO sacred forest either for domestic use or for commercial purposes. Because of the spiritual connections to the culture of GUDO, GUDO sacred forest are able to sustainably manage the Sheka forest in the GUDO. Even if the culture of GUDO was rapidly declining, the GUDO forest is still kept and protected well. Each informant could readily describe GUDO culture and how the culture positively contributed to the conservation of the Sheka forest. Many informants could recall details of GUDO culture that had practiced some 30 years before. One of the key informants (KI-3, 4 Jan.2016: Masha Town) explained the culture in the following statements:

The GUDO sacred forest has religious or spiritual significance, passed on from generation to generation, who used the GUDO sacred forest and signifying traditional use and occupancy of a given region. GUDO is a well-protected forest area and is used

for worship. Mostly found in the hilly and rocky areas and covered by dense forests. In the GUDO culture, worshiping practices are led by the clan leader (Gebi tato). The GUDO culture may be celebrated each year or within three - or ten year's intervals. In almost all kebele (the lowest administrative and political unit), there is more than one GUDO sacred forest. In one kebele, there may be more than ten GUDO sacred forests. The Sheka people claim that they are decedent from Israel and the protection and conservation of the GUDO sacred forest are related to the historical fact found in Old Testament in the whole bible. In the whole bible, Abraham scarifies his son Isaac in the hilly and rocky area (Genesis 22:2).

The location of the GUDO sacred forest in the hilly and rocky areas made it the culture of GUDO to have spiritual significance and, in turn, contribute to the conservation of GUDO sacred forests. The decision not to use the GUDO sacred forest for any other purpose is enforced by the clan leader (Gebi tato). Despite the high rate of deforestation in the Sheka forest and, a rapid decline in the forest conservation cultural and traditional conservation the GUDO sacred forest still exists. This was mainly because of the strong cultural and spiritual belief of the Sheka people in the GUDO culture.

The Sheka people believed that worshiping in the GUDO sacred forest has supernatural meanings. This can be seen in religious beliefs and spiritual connections with nature, particularly in GUDO sacred forests. The spiritual connection of the GUDO sacred forest governs the Sheka people daily lives and passed on from generation to generation. The GUDO culture (worshiping at forest) serves to explain the harmony between nature and the GUDO culture. The Sheka people through the GUDO culture sustainably manage local GUDO sacred forests, despite limited modern scientific forest management. The GUDO forest exists in each kebele of the Sheka zone as village protectors (see Table 18). The GUDO sacred forest is usually hundreds of years old and still unreachable. The Sheka people believe that this GUDO sacred forest can provide safety, fortune, and good harvests for their villages. The traditional forest management practices related to the GUDO culture demonstrate that the Sheka people have their own knowledge, beliefs, and management practices related to forests inherited from their generations.

The GUDO forest conservation culture is illustrated in the Sheka people forest utilization, protection, and management.

Therefore, the GUDO forest conservation culture provides important insights into the protection of various forest types and tree species, contributing to the conservation of biodiversity.

Conclusions and Recommendations

The case study presented on GUDO culture demonstrates that the Sheka people have their own indigenous knowledge, beliefs, and management practices related to forest. This cultural and belief system is inherited from their ancestor since time immemorial and evolving over generation. The culture of GUDO described in this article shows that it still exists in every element of local forest utilization, protection, and management and allocation of forest. As the study clearly shows, the GUDO culture is productive and efficient for forest management, and this useful culture has demonstrated its significance in the protection of various forest types and tree species, contributing to the conservation of biodiversity. Thus, the GUDO forest conservation culture is illustrated in the Sheka people forest utilization, protection, and management provide important insights into the protection of various forest types and tree species, contributing to the conservation of biodiversity.

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