# Forest allocation, benefit sharing, and management practice in the KOBO community forest among the Sheka peopleOEO

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## Abstract

Sheka people dependency on the Sheka forest has made the people of Sheka create various techniques and strategies that are used to manage the Sheka forest. In the indigenous culture of Sheka people, there is a great deal of forest allocation, benefit sharing, and management practice. Locally, these forests are known as KOBO. This is clearly reflected in the KOBO forest allocation, benefit sharing, and management culture. A framework based on ethnographic information is proposed in this paper; accordingly, qualitative indicators are suggested for different variables relating to indigenous forest allocation, benefit sharing, and management practice among the Sheka people. In Sheka culture, the clan leader (Gebi tato) allocates forests to each member of the clan in the village. The management of the KOBO forest is the responsibility of the individual KOBO holders. All members of the clan who have the KOBO forest are entitled to get a share of the benefits that are derived from the use of the KOBO forest. The KOBO forest is the principal source of honey for the Sheka people. The production of quality honey from the KOBO forest is used for the extraction of trees for house building and another household consumption. The paper concludes that the current KOBO forest allocation, benefit sharing, and management practices could substantially enhance sustainable forest management and social and economic development of the Sheka people.OEZIIII

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Short running title: Forest allocation, benefit sharing and management practice

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Sheka people dependency on the Sheka forest has made the people of Sheka create various techniques and strategies that are used to manage the Sheka forest. In the indigenous culture of Sheka people, there is a great deal of forest allocation, benefit sharing, and management practice. Locally, these forests are known as KOBO. This is clearly reflected in the KOBO forest allocation, benefit sharing, and management culture. A framework based on ethnographic information is proposed in this paper; accordingly, qualitative indicators

are suggested for different variables relating to indigenous forest allocation, benefit sharing, and management practice among the Sheka people. In Sheka culture, the clan leader (Gebi tato) allocates forests to each member of the clan in the village. The management of the KOBO forest is the responsibility of the individual KOBO holders. All members of the clan who have the KOBO forest are entitled to get a share of the benefits that are derived from the use of the KOBO forests. The KOBO forest is the principal source of honey for the Sheka people. The production of quality honey from the KOBO forest creates a huge market demand within and outside the Sheka zone. In addition to the production of honey, the KOBO forest is used for the extraction of trees for house building and another household consumption. The paper concludes that the current KOBO forest allocation, benefit sharing, and management practices could substantially enhance sustainable forest management and social and economic development of the Sheka people.

Key words: KOBO forest, forest allocation, forest benefit sharing and forest management practice

# Introduction

Human and nature interactions form a central part of many society's existence (John Barry 2007; Soga and Gaston, 2020). There is a growing interest in the intrinsic and consumptive values human attached to plant life (Lammerts et al., 2003; Arias-Arévalo et al. 2017; Masiero, 2019), has led to the growing field of traditional forest-related knowledge and management practices (Berkes et al. 2000, ICSU, 2002, Parrotta and Agnoletti 2007, Parrotta et al. 2008). Human and nature conservation have historically been connected with forest benefit-sharing and management practices being the main uses. Forest allocation (Castella et al. 2006, Nguyen 2008, Clement, 2009), benefit-sharing (Crouch et al. 2008, Cock 2010, Mason, 2013), and management practices have been practiced across the world for various purposes(Berkes et al. 2000, ICSU, 2002, Parrotta and Agnoletti 2007, Parrotta et al. 2008). For example, forest allocation, benefit-sharing and different management practices were reported. Forest benefits have featured many people globally. For example, global case studies have obtained forest-related benefits in tropical areas across the world (Biber-Klemm, 2014). Forest allocation, benefit-sharing and management practices are important for many societies (CBD 2016).

These associated benefit and conservation practices have resulted in reverence of forest across cultures. Among the Sheka people in southwestern Ethiopia, a relationship with forest is cultivated in the societies' traditional values and beliefs. For instance, Sheka people allocate the the KOBO forestland (economic forest) based on clan. KOBO forestland (economic forest) owned by individuals who belong to a particular clan, which is found very far from the village owns the KOBO economic forest. The KOBO forest managed and used according to the requirements and wishes of the owner.

Ethiopia is wealthy in its flora and it is evaluated to harbor more than 6000 types of higher plants, of which around 125 are endemic. Ethiopia has the fifth largest flora in tropical Africa. It has been noticed that Ethiopia's common natural forest once secured around 42 million hectares of the nation's aggregate land territory (EFAP, 1993). A similar source showed that by 1989, this figure drastically declined to 2.7 million hectares. Human effects have corrupted the natural forest of Ethiopia for quite a long time (Reusing, 2000).

Notwithstanding this recorded source show that 35%, individually 42 Mio ha of the nation's region was once secured by natural high forest (EFAP, 1994). This figure likewise counts with an investigation directed by MoA in (1998). As per this examination, the annual rate of deforestation was 163,000 hectares in the year of 1970 and 1986. On the off chance that the deforestation proceeded at this disturbing rate, it was additionally evaluated that by 2010, the territory canvassed by natural forest in Ethiopia may be diminished to minor stands of intensely aggravated forestland (EFAP, 1994).

The traditional forest-related knowledge of Sheka people reflects knowledge about how to manage and use forests. The lives of the Sheka people almost all depend on the Sheka forest. The reason why the Sheka people call to Sheka forest as the life of the Sheka people is that the Sheka forest is the shelter, food, and sources of income for the Sheka people; therefore, the Sheka people totally rely on this forest for their livelihood and way of life. Traditional forest allocation, benefit-sharing, and management practices of the Sheka people, is less in conflict with forest as compared to agricultural land use forms. As a result, approximately 2.7

million hectares, which is 24 percent of the nation's territory, a huge segment is found in the South Western Highlands (WBISPP, 1990).

Sheka people dependency on the Sheka forest has made the people of Sheka create various techniques and strategies that are used to manage the Sheka forest. This is clearly reflected in the KOBO forest conservation and management culture. Locally, these forests are known as KOBO. Large tracts of dense and well-protected patches of traditionally managed forests can still be seen in many parts of the Sheka zone. This can be attributed to the traditional forest-related knowledge and management practices of the Sheka people.

The Sheka forest has undergone socio-economic changes with potentially negative consequences for forest conservation in Ethiopia (Woldemariam and Fetene 2007, Hundera 2013). Understanding local and extra-local economic activities and socio-cultural (counting IK and its connection to resource management) examples and procedures are vital because forest cover change is firmly connected to the sustainability of socio-economic development (Fox et al., 1995; Lambin et al., 1999). In Ethiopia, forest-based based research has yielded valuable bits of knowledge into linkages between country employment, financial change, and ecological administration, with critical ramifications for advancement strategy (Yeraswork, 2000; Desalegn, 2000; Woldeamlak, 2003; Dereje, 2007; Gessesse, 2007).

The abnormal state of deforestation has been shown in the Sheka forest in the year of 1971 and 1997(Reusing, 1998). These have been related to a blend of socio-cultural and economic changes in the investigation region (Tadesse and Masresha, 2007). Moreover, the late increments of large-scale investment agriculture in the examination territory have made a critical impact on forestland and change indigenous forest resource management practices.

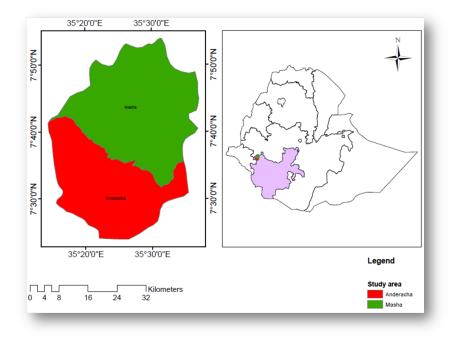
Considering that no current conservation approach fully addresses these emerging challenges to the Sheka forest, there is a need to consider the potential role of traditional forest allocation, benefit-sharing, and management practices in conserving the Sheka forest. Cultural value forest allocation, benefit-sharing, and management practices can strongly influence conservation decisions. Understanding these values and management practices can present a new socio-economic perspective in forest conservation. This paper assesses the values of forest allocation, benefit-sharing, and management practices among the Sheka people in south western Ethiopia and discusses how this traditional knowledge can be intergraded in forest conservation.

## 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 seven urban peasant associations (Pas) in three woredas.

Figure 1: Map of the study area



# Data Collection and Analysis

Data for this study were obtained through an interview conducted over 4 weeks in July and August 2016. The first aim of the survey was to explore respondents' knowledge and practice of traditional forest-related knowledge of KOBO (economic enterprise) forests and investigate their awareness of KOBO (economic enterprise) conservation culture, and forest allocation, benefit- sharing, and management practices in the KOBO community forest. Second, respondents' perceptions of the KOBO (economic enterprise) and management practices of the KOBO (economic enterprise) were explored.

# Participants and setting

The researcher interviewed all research participants that belongs to Sheka ethnic group and other clan leaders (Gebi tato) had identified as "traditional forest-related knowledge experts," i.e., persons recognized by the Sheka community as knowledgeable about traditional forest-related knowledge. Besides clan leaders (Gebi tato) and community elders of Sheka people, the study has used additional potential informants from governmental and non-governmental organizations (NGO). The researcher has got permission from both the government office and traditional committee lead by clan leaders (Gebi tato) association.

During identifying of informants' clan leaders (Gebi tato) were consented to select research participants in providing an appropriate response to the research under investigation. Clan leaders (Gebi tato) and older men whose age is above 50 years and native Sheka ethnic are purposefully selected from members of the traditional committee. The inclusion of the research participant for the interview was based on the level of understanding of traditional forest-related knowledge of Sheka people, as judged by a traditional committee.

In each village, the cultural practice of forest management (KOBO) represented by a headman selected from among male adults; therefore, all females and younger males were purposefully excluded from the study. Younger men were not included in the interviews. This is mainly because the culture of forest conservation practices of Sheka people was forgotten for more than 30 years or longer. For this reason, only Clan leaders (Gebi tato) and older men whose age is above 50 years were purposefully selected.

The reason for the exclusion of female participants from the study is the cultural practice of forest management (KOBO) represented by a headman selected from among male adults only. The Clan leaders (Gebi tato) and older men had experience of forest conservation culture through traditional forest-related knowledge. Therefore, the likelihood of the information they provided mostly reliable. Other criteria that decide whether people who take part in the examination understudy are their readiness to be met and their accessibility while the interviewer was in the network.

All research participants were asked to review and sign a consent form before conducting full interviews. The consent form described the nature and purpose of the study. In the consent form, each informant was notified that their response to the research question entirely confidential and just individuals from the exploration group will approach the data. No data published in dissertations or journals will contain any information through which focus group discussion members may be identified, their anonymity is therefore ensured. In addition to this, the examination member may pull back from the investigation whenever they, along these lines, take an interest wilfully until the point that such time as they ask for something else.

Twenty participants volunteered for this study. This included ten Clan leaders (Gebi tato) and older men from Masha woreda and the remaining ten from Andracha woreda. All research participants were native Sheka ethnic and lived in the study area for more than 40 years and above. Clan leaders (Gebi tato) and older men were recruited from a member traditional committee that was facilitated by a traditional committee. All research participants were gathered for focus group discussions through appointment in advance this was facilitated by a traditional committee.

The most appropriate day was Saturday because it is a market day for both Masha and Andracha woreda and afternoon was the most convenient time for focus group discussion. This is due to after-market all the research participants may come to Clan leaders (Gebi tato) home. However, for an individual interview, the researcher uses the research participant own schedule and needs to travel to their home by appointment. All working hours and weekends were used for individual interviews.

With regard to their choice of the interview setting, in both woredas, all focus group research participants had their first interview at Clan leaders (Gebi tato) home but for an individual interview, the research participants preferred to be interviewed at their own home. Interviews with government and non-government organizations were held at their respective offices during working hours by appointment. The arrangement for research participant was done after giving them a brief introduction about the nature and purpose of the study. During the interview, apart from the researcher and the research participant, any other person was not allowed to enter the room, and the door could be closed until the interview was done.

Being a fluent Amharic and Shekinonoo speaker, the researcher took advantage of his bilingual skills and conducted the interview in either Amharic or Shekinonoo, depending on the preferences of the research participant. In order to gain more credibility by research participants, the principal investigator hire the co-researcher that is a native and first speaker of the Shekinonoo. The co-researcher was trained for three to four hours about the goals and rationale of the study and interview process and the interpreter's role. The co-researcher helped in guiding the principal investigator by organizing the interview and transcribing the audio data.

A single interview lasted for one to two hours. The length of each meeting relied upon the lucidity and detail of the data that the examination member enthusiastically gave. In order to avoid interruptions and background noise, interviews were done in a closed room. Since the practice of forest conservation and management is a little bit older practice the researcher, needs to patiently listen to the research participant to recall that factual event (or story). Then, the researcher must listen to the research participant to complete their views and opinions on how was the culture and knowledge of Sheka people that could serve as forest conservation and management practices that are the key elements that need to be investigated.

Each informant was asked to discuss the factors that might cause the forest cover change in their village. The interview was less structured and open-ended. The aim was to let the research participant explain how the culture of KOBO was used to manage and conserve the Sheka forest and how they the research participant viewed the current expansion of investment agriculture in their village.

The respondent's views on the interview and FGD were audio recorded. The audio recordings were converted to Amharic, written text data. In fact, there were research participants with whom the researcher conducted the interview and FGD in Shekinonoo as they preferred to be held in it even if they knew Amharic very well. Therefore, some of the audio records were converted into Shekinonoo written text. Then, the transcribed Shekinonoo and Amharic data were translated into English by the researcher and an experienced translator who was fluent in Amharic and Shekinonoo, in order to see its consistency.

Accordingly, the data were proven consistent. The translation was context-based. It prioritized content over form because it is unlikely to find a word for word concordance between the local languages and English. Hence, the translation was made by finding equivalent meanings that are rendered in word and deemed most appropriate in the English language. Finally, the translated English text data were analyzed and interpreted thematically.

# **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 and 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 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 behavior, 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 the 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. 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:

1. 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.

2. Consenting government officials who are currently working on environment, forest, and climate change in the Sheka zone

3. 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 woreds (the largest administration unit zone). The study recruits three kebeles (Kebele is the smallest administrative unit of zone).

Sampling technique and data collection.

The study made used both qualitative and quantitative data. Quantitative data were collected through administration of questionnaires to the head of the household and interviews with key informants within the selected area. Qualitative data were collected through key informant interviews (KIIs) and focused group discussions (FGDs). The aim of the data collection was to analyze KOBO forest allocation, benefit-sharing, and management practices of Sheka people.

Data Analysis

Data obtained were analyzed using descriptive statistics and presented in tables, means, percentages and frequency. This was based on the information provided by the respondents. Furthermore, computer software, known as statistical package for social sciences (SPSS) version 21.0, was employed in analyzing the data.

The main objectives of this study is

Ethnographic analysis of KOBO forest allocation, benefit-sharing, and management practices of Sheka people.

### Results

The traditional forest-related knowledge of Sheka people reflects knowledge about how to manage and use forests. The lives of the Sheka people almost all depend on the Sheka forest. The reason why the Sheka people call to Sheka forest as the life of the Sheka people is that the Sheka forest is the shelter, food, and sources of income for the Sheka people; therefore, the Sheka people totally rely on this forest for their livelihood and way of life. Sheka people dependency on the Sheka forest has made the people of Sheka create various techniques and strategies that are used to manage the Sheka forest. Locally, these forests are known as KOBO. This is clearly reflected in the KOBO forest conservation and management culture.

Large tracts of dense and well-protected patches of traditionally managed forests can still be seen in many parts of the Sheka zone. This can be attributed to the traditional forest-related knowledge and management practices of the Sheka people. 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 KOBO culture demonstrates how the Sheka people through their indigenous culture can provide valuable, appropriate, and effective forest conservation strategies. Here under the results of the analysis of "the KOBO culture" are explained in detail by considering key points. Forest allocation, benefit-sharing, and management practices in the KOBO community forest are key points to consider during interviews. Here under, the results of the analysis of "the KOBO community forest conservation culture" explained in detail by considering key points (Table 1).

Statement about the KOBO community forest allocation, benefit sharing and management practice

Do you believe the KOBO forest conservation culture could manage and conserve the Sheka forest? Do you believe the KOBO forest conservation culture help for the conservation of biodiversity? Do you believe the KOBO forest conservation culture very useful for the life of the human being? Do you believe the economic importance of the KOBO forest conservation culture and the Sheka people traditional belief sy Do you believe the protection of the KOBO forest conservation culture associated with benefit sharing Do you believe allocation of the KOBO forest conservation culture fair?

# Forest allocation

Talking about the KOBO distribution, an interviewee said: "The KOBO economic forest is owned by individuals who belong to a particular clan and which are found very far from the village. The KOBO forest managed and used according to the requirements and wishes of the owner. The majority of the respondents (86%) stated that allocation of the KOBO forest conservation culture is fair and the common cultural practice of the Sheka people.

In one village, there may be one particular clan and own an area of a large tract of forestland, for example, the Wollo clan owns the DEDO and GUDO sacred forests located inside the clan territorial and political unit. The same thing holds true for KOBO. In his accounts of the management of the KOBO economic forest as one interviewee put it: "The KOBO economic forest was allocated and administered by that particular clan. All members of the clan are entitled to get a share of the benefits, which are derived from the use of

KOBO forests. The management and conservation of economic forest (KOBO) is the responsibility of the clan leader" (KI-4, 23 Jan. 2016: Masha Town).

Another interviewee, when asked about the distribution and allocation of KOBO, said:

"KOBO forest is a large plot of forest far away from the village were put under the category of KOBO forest. The clan leader (Gebi tato) divided forests into each member of the clan in the village. The allocation of the KOBO forest is not equal to the member of the clan. Not all member of the clan in the village has KOBO forest. In a village where there is relatively less forest, the farmers may be engaged in other economic activities like livestock and farming, than the production of honey. Even among the KOBO forest holders, there is no equitable distribution of KOBO forests among households. As the number of village households had increased from time to time, the KOBO forest holding also decreased. Another reason for the unfair distribution of KOBO forest is that previous KOBO holders only share the KOBO forest to their family and those non-KOBO forest holders do not have KOBO forest at all (FGD-4, 25 Jan.2016 Gecha Town).

The management of the KOBO forest is the responsibility of the individual KOBO holders. A common view among interviewees on the management of the KOBO forest shows that access to the KOBO forest and collection of forest products only for households belonging to the particular KOBO holder. No individual can enter and make use one's KOBO holding for his own consumption. The collection of forest products by people other than the owners' family members is strictly prohibited. The clan leader (Gebi tato) deals with decisions that need to be taken regarding KOBO allocation and administration. The KOBO forest is well protected and is never converted to other land uses and the owner of the KOBO has a birthright to transfer the KOBO holding to the next generation (KI-4, 20 Jan. 2016: Gecha Town).

In the Sheka zone, the KOBO forest conservation culture is implemented in two different ways. According to the REED+ PFM project coordinator in the Sheka zone, there are two KOBOs this is forest-based KOBO and area-based KOBO. In the forest-based KOBO, trees are counted and given to each member of the village; this is very common in a place where there are a high number of populations. The clan leader (Gepi tato) does allocation of trees to the village members. The second one is area-based KOBO system, in which the KOBO forest conservation culture, forest is allocated based on demarcating some geographic feature like rivers, hills or mountain. Based on this unique geographic feature, the KOBO forest are allocated to different KOBO holders. This is also done under the auspices of the clan leader (Gepi tato) (KI-4, 20 Jan.2016 Masha Town).

## Benefit sharing

The KOBO forest is the principal source of honey for the Sheka people. The majority of the respondents (84%) said that there is economic importance of the KOBO forest conservation culture and the Sheka people traditional belief system. The Sheka traditional forest conservation and management practice is not only used for conservation of biodiversity but also serve for the production of quality honey that creates a huge market demand within and outside the Sheka zone. Participants of FGD on Masha woreda consolidated this fact: "the Sheka people traditional forest conservation and management practice there are forests which are used mainly for productions of honey" (FDG3, 25 Jan. 2016: Masha woreda). One-KOBO holder may have up to 120 bee hives. In addition to the production of honey, the KOBO forest is used for extraction of trees for house building and another household consumption" (KI-4, 22 Jan. 2016: Masha Town).

The majority of the trees are used for the production of quality honey. Kinds of honey are produced from different tree species. The types of honey produced depend on the tree species. Due to this traditional knowledge, the Sheka people have identified different tree species. According to the Masha Woreda department of forest and Environment protection, the Sheka people through their indigenous knowledge have been able to identify seventeens tree species during their growing season. This traditional knowledge of honey production was accumulated through the culture of KOBO. The KOBO holder in the Masha woreda stated that

There are two growing seasons for the production of honey in the Sheka zone. One is the month of April and

the second one in December. In all villages, there are abundant honey plants and the Sheka people through their traditional forest-related knowledge to identify the types of tree species from which honey is produced (FGD-4,28 Jan.2016 Masha Town).

The table below shows the types of tree species in their growing season. This knowledge of the tree species indicates that how the people of Sheka follow traditional forest-related knowledge and forest management practices that have developed over time. There are customary rules regarding forest use. In the past, trees were not bought and sold. If anyone cut down trees, a new tree sibling was planted as a substitute. The Sheka people believe that the forest is a life for the Sheka people. According to the Sheka tradition, if a tree falls down for an unknown reason, the Sheka people express their condolence by staying home for three to four days; which is equivalent to the death of the close relative. This popular belief reflects how the Sheka people used to care and manage the Sheka forest.

Table1: Correspondence between folk names of indigenous tree species in the Sheka forest and scientific classification with their flowering and fruiting stage seasons.

No	Local name	Amharic name	English name	Scientific name	Flowering stage
1	Shao	Kerero	-	Aningeria altissima	February-march
2	Omo	Tikur enchet	Red –stinkwood frn weed	Prunus africana	December-January
3	Eto	Shola	Cope fig	Fiscus sur (ficus capensis)	September-October
4	Yino	Dokima	Water barry	Syzgium gunineense	January-February
5	Manjo	Geteme	-	Schefflera abyssinica	June-July
6	Shomo	Bisina	-	Croton macro stachyus	June- July
7	Yo'oo	Wanza	-	Cordia africana	January-February
8	Yigo	Zigiba	Podo	Podocarpus falcatus	January-February
9	Yago	Birbira	-	Millettia ferruginea	January-February
10	Chato	Sisa	Peacock flower	Albiza gummiffera	January-February
11	Kocho	Korchi	Flam- tree lucky –bean tree	Erythrina abyssinica	January-February
12	Ororo	Lule	-	Ekebergia capensis	November- February
13	Yebo	Zemebaba	African fan palm	Borassus aethiopicum	
14	Yeho	Weyira	-	Olea europaea	January-February
15	Karasha	Ye zingero wenber	-	Polyscias fulva	
16	Wundabo	Donga	White pear wood	Apodytes dimidiata	January-February
17	Ho'oo	Kerkeha	Bamboo	Arundinaria alpina	

Source: Masha Woreda Department of Forest and Environment Protection.

# Management practice

The KOBO forest is a community forest, managed, and conserved by the community. The Sheka people have their own institutional organization for forest management. Through these institutions, the Sheka people manage and conserve the Sheka forest. Previously, the KOBO forest has only customary use rights, but not legal grounds. The majority of respondents (85%) believed that the KOBO forest conservation culture could manage and conserve the Sheka forest. One of the main reasons for the decline of traditional forest conservation culture like the KOBO is the state forest law. At the national level, all community forests that were administered by the local people through their indigenous knowledge was administered under state forest law. The state forest law of the southern nations, nationalities and people's region (SNNPR) put community forest under state forest.

Even if the KOBO forest conservation and management culture have a number of economic and ecological significance, it has no legal grounds to protect this culture before the second forest proclamation of the southern nations, nationalities and people's region (SNNPR) come into practice. The southern nations,

nationalities and people's region (SNNPR) has a forest proclamation that was draft in 77/2004 and amended in the year 147/2007.

The first forest proclamation only recognizes state-owned forests and privately owned forest and does not recognize community forests like the KOBO forests. But the second forest proclamation, which came into effect in the year 147/2007, recognizes both state-owned forest, privately owned forest and the community forest and the KOBO forest from the second forest proclamation onwards has got a recognition. Before the second forest proclamation, the KOBO forest was highly exposed to investment expansion in the zone. This is mainly because the first forest proclamation of the southern nations, nationalities and peoples' region (SNNPR) did not recognize the community forest; therefore, the Sheka people did not have the right to claim.

After the second forest, proclamation of southern nations, nationalities and peoples' region (SNNPR) and through the efforts of the Sheka zone administration and non-governmental organization like REED+ PFM, the KOBO forest conservation culture has recognition and the forest under KOBO holding transferred to PFM. After the collaborative efforts of the above- mentioned governmental and non-governmental organizations, KOBO forest holders have got lots of benefited to defending their rights.

For sustainable forest conservation and management, the forest community must benefit from the forest. For this reason, the REED+ PFM works towards forest-based enterprises to benefit KOBO forest holders in the Sheka zone. It is well known that the Sheka zone has a rich potential for non-timber forest products (NTFP). Besides obtaining their legal entity, the KOBO forest under PFM also gained economic benefits from the forest.

In history, Ethiopia never exports food items to the outside world; however, the KOBO forest holder after they are organized under PFM and marketing cooperatives, honey was exported to Europe, North America, and the Middle East. For example, in Masha woreda, there are honey-marketing cooperatives organized from grass root PFM units and are engaged in the production of honey and sell it to the honey processing company. Along with this value, chain the KOBO forest holder exporting honey and obtaining economic benefits from the KOBO forest.

The REED+ PFM in Sheka zone works towards the sustainability of traditional forest management practices like the KOBO forest conservation culture. The REED+PFM support the KOBO forest conservation culture by empowering the community to have a legal entity to administer the community forest and to get economic benefits from the forest. There are cases in Uwa kebele, Masha Woreda, which proves the significance of organizing KOBO forest holders under PFM. The REED+ PFM project coordinator in the Sheka zone explained this point in the following statements:

In Masha Woreda, KOBO forest holders administered Uwa kebele 990 hectares of community forest. Out of 990 hectares, 200 hectares of forest was given to Sheka Development Association for investment purposes. The Uwa kebele KOBO forest holders, since they are legally registered and organized under PFM, brought the cases to the court to defend their rights. Finally, the 200-hectare KOBO forest was given to the Sheka Development Association (FGD-4, 20 Jan.2016 Masha Town).

There are three types of forest in the Sheka zone this is state forest, forestland for investment and forest under local farmers used for agriculture purposes. In the Sheka zone, both Masha and Andracha woreda, all state forests are under PFM and now all forest in the two woredas are PFM-saturated. According to the REED+ PFM, project coordinator in the Sheka zone: by now the REED+PFM works towards the inclusion of the remaining forest cover in the Sheka zone under PFM in the adjacent woreda.

There is a problem of inclusion of all forest cover under PFM. These are boundary problems and conflict over forestland among the clan in the Sheka zone. There is a boundary conflict between forest lands designated for investment and the KOBO forest in the Sheka zone. For example, in Masha woreda Akako kebele, there is a problem of boundary disputes among land designated for investment and the KOBO forest under PFM. Until boundary, conflict settles the inclusion of the KOBO forest under PFM is pending. Another hindrance for the inclusion of the remaining forest cover under PFM is the boundary conflict between clans in the Sheka zone. For example, there is a clan name called Beto and Wello. The conflict between the two clans over the KOBO forestland creates a problem for the inclusion of forest under PFM.

Now through the efforts of the governmental and non-governmental organizations, the KOBO forest can be administered and conserved through PFM. By making demarcation at the village level, the KOBO forest can be administered and conserved in modern scientific ways. Through the efforts of governmental and non-governmental organizations currently, there are 87 forest blocks organized by REED+PFM and the government in both Masha and Andercha woreda organized five forest blocks. The farmer organizes himself or herself to protect the forest and to make a benefit from the forest, but both governmental and non-governmental organizations only give technical and logistic support to the village-level forest block.

#### Discussion

The socio-cultural attachment of forest among the Sheka people is illustrated by the allocation of KOBO forestland (economic forest) by clans. In one village, there may be one particular clan and own an area of a large tract of forestland. For example, the name of the clan is Wollo which means there is a larger territorial and political unit comprising several villages, in those villages the dominant clan is Wollo. Therefore, the name of the clan leader is Wolasha. If the name of the clan is Abelo, the clan leader's name is Abel tata. The management of economic forest (KOBO) regulations are formulated by the clan leader (Gebi tato) and are well enforced.

The Wollo clan owns the KOBO forests located inside the clan territorial and political unit. Each clan has its own clan leader and the name of the clan leader derived from the clan name. The KOBO economic forest was allocated and administered by that particular clan. All members of the clan are entitled to get a share benefit, which are derived from the use of the KOBO forests. The management and conservation of economic forest (KOBO) is the responsibility of the clan leader.

Table 1: Example of the name of clan and clan leaders.

Name of clan	Name of the clan leaders
Wollo	Wolasha
Abelo	Abel tata
Ateso	Atese tata
Yepo	Tepi tata
shiwinao	Shewi nao tata
Fao	Farasha
Chahagi	Chagi tata
Humacho	Humachi tata

Traditional forest conservation culture have had largely synergetic coexistence in developing countries like Africa (Barre 2009, Adom 2016, Araia 2019, Israel and Wynberg 2019). These relationships are reinforced through strong norms and institutions, mainly passed on orally from generation to another. Traditional forest allocation, benefit-sharing, and management practices are highly ingrained in the Sheka people's culture, structuring the community's daily interaction with nature (Woldemariam and Fetene 2007). Among the communities of the Sheka people, knowledge and management practices of forest and how to deal with nature are instilled.

The clan leader (Gebi tato) deals with decisions that need to be taken regarding KOBO allocation and administration. The KOBO forest is well protected and is never converted to other land uses and the owner of the KOBO has a birthright to transfer the KOBO holding to the next generation. The vast majority of research participants knew of oral stories and legends told by their ancestors pertaining to the forest. This illustrates a high level of integration of the KOBO forest into traditional Sheka culture. Through oral stories, tells of the KOBO forest, stories of accomplishments or encounters with KOBO forest. Using folk stories, the elders pass the knowledge to the young generation, a key factor in maintaining connection to cultural practices and traditions (Berkes et al., 2000).

There was an overwhelming acknowledgement of traditional forest allocation, benefit-sharing, and management practices, with above 85% of the respondents stating that they used the KOBO forest economic purpose. Despite changes in religious beliefs and the expansion of modern agricultural investment in the study area, the Sheka people maintained strong connections with nature across many aspects of their culture. In traditional societies with strong cultural reference to forests, there is a relatively peaceful coexistence (Parrotta 2007, Parrotta 2008, Berkes et al. 2000, and Soga 2020). While the Sheka people may use forest for different household consumption, unwanted tree cuts in the KOBO forest remain culturally unacceptable. To the contrary, many other people across the world destruct forests for a variety of purposes.

The economic benefits of forest products, such as honey has been observed in Sheka people's culture. For example, the KOBO forest is the principal source of honey for the Sheka people. The Sheka traditional forest conservation and management practice is not only used for conservation of biodiversity but also serve for the production of quality honey that creates a huge market demand within and outside the Sheka zone. The Sheka people traditional forest conservation and management practice there are forests that are used mainly for the production of honey. The One-KOBO holder may have up to 120 beehives. In addition to the production of honey, the KOBO forest is used for the extraction of trees for house building and another household consumption. The importance of the KOBO forest to the Sheka people is directly related to cultural perception.

Even if the KOBO forest conservation and management culture have a number of economic and ecological significance, they have no legal grounds to protect this culture. The cultural importance of KOBO forest allocation, benefit-sharing, and management practices could be integrated into KOBO forest management and conservation approaches. This study opens avenues for exploring justifications for conserving the KOBO forest within Sheka forests. The people of Sheka could be enlisted in law enforcement activities against KOBO forest destruction. Such integrated conservation efforts with the Sheka people, who are culturally attached to the KOBO forest, are promising tools to effectively manage and conserve KOBO forest in increasingly human-dominated landscapes.

#### Conclusion

The case study presented on KOBO 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 KOBO 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 KOBO culture is productive and efficient for forest types and tree species, contributing to the conservation of biodiversity. Thus, the KOBO 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 the species, contributing to the conservation of biodiversity.

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### Declarations

Ethics approval and consent to participate: The study was approved by the CAES Research Ethics Review Committee at the University of South Africa (UNISA) on 10/02/2015 with Ref #: 2015/02/004, name of applicant: Mr GH Shoddo, student #:53342852. Decision: Ethics Approval, Supervisor: Prof Teshome Soromessa Aurgessa, Qualification: Postgraduate degree.

# Consent for publication: "Not applicable".

Availability of data and materials: All data generated or analyzed during this study are included in this published article (see literature cited).

Competing interests: The authors declare that they have no competing interests.

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