

Original Research

Indigenous knowledge practices in danger of extinction due to cultural and environmental changes: The case of Gojjam, Amhara region

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Abstract

Indigenous knowledge has become a popular term throughout the world, referring to the knowledge that indigenous people inherit from their ancestors, most often through oral traditions. It is known as the pinnacle of modern society, particularly in the arts, medicine and conservation. Meanwhile, indigenous knowledge practices are stereotypically labeled as backward and superstitious because of which they face endangerment and eventual extinction. This paper is a case study and explores the indigenous knowledge practices that are endangered at different levels, mainly because of environmental and cultural changes. The changes in people's ways of life and the unfavorable attitude of the younger generation toward local products have contributed to the decline of indigenous knowledge practices. Plastic products that are flooding the market throughout the country, urban and rural, have played a major role in the endangerment of the harmless, durable, and culturally and aesthetically valuable local products. In the same way that indigenous peoples and indigenous knowledge are connected, so are indigenous peoples and their indigenous languages. This paper also examines the youth language, which is believed to be deprived of words and concepts that are strongly tied to local knowledge systems. The author argues that well-managed indigenous knowledge practices leveraged with scientific knowledge can immensely contribute to realizing sustainable development by empowering local communities. It is therefore critical that indigenous peoples and policymakers work together to revitalize useful indigenous knowledge practices so that they can be passed down to future generations. The study was carried out in Finote-Selam and the surrounding areas in West Gojjam, Ethiopia.

Keywords: Indigenous Knowledge, Environmental Changes, Cultural Changes, Gojam, Ethiopia

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Introduction¹

We learn from the literature that indigenous knowledge (also known as traditional knowledge, folk knowledge, or local knowledge) refers to the experiential knowledge of indigenous people developed and continues to develop over a long period of time by playing crucial roles for their survival and development (see Warren, 1991; Mistry, 2009). The World Bank report (1998, p.15) states that, “indigenous knowledge is stored in people’s memories and activities and is expressed in stories, songs, folklore, proverbs, dances, myths, cultural values, beliefs, rituals, community laws, local language and taxonomy, agricultural practices, equipment, materials, plant species, and animal breeds.” UNESCO (2003) reports that indigenous knowledge (IK) is the extended interactions of indigenous peoples with the natural environment and plays a significant role as the foundation for the promotion of scientific knowledge and modernization. Japan's success story of establishing a prosperous modern state by incorporating the IK systems with the western scientific knowledge has been taken as an optimal model to be strictly followed by developing countries like Ethiopia.² Meanwhile, the entrenched misconception about IK that it is unscientific, backward, and change-resistant widely prevails in the modern world. As a result, some of the indispensable IK practices are dying out without leaving their traces (Reyes-Garcia et al., 2013).

In Ethiopia, IK remains vital to satisfy the spiritual, material, and medicinal needs of millions of its indigenous people since time immemorial. It has played a crucial role in the use of traditional medicine and a variety of homemade utensils and other tools to satisfy the material needs of the local people. The World Bank (1998) reports that, although IK is vital and hence of high priority, it is at risk of becoming extinct, especially in developing countries of Africa, Asia, and Latin America. In this study, the IK practices that were once the order of the day but are now endangered are identified. The rapidly depleting environment and changing culture are discerned as the major causes contributing to the serious decline of IK practices. It was also reported that moving away from IK systems and instead relying heavily on scientific knowledge systems may result in the loss of the former (Argawal, 1995; Mistry &

¹ I thank my colleagues Drs. Balew Demisse and Endalew Aseffa for their valuable comments on the first draft of the paper.

² See Kebede Michael’s (2007) book entitled, ጃፓን እንደምን ሰለጠነች? lit. “How did Japan civilize?”.

Berardi, 2016). The change in people's way of life, and the mass production of cheap and inorganic polymers are identified as additional factors for the endangerment. In a society where IK is viewed as unmodern and hence not worthy of promotion, unveiling its huge importance is of utmost priority. The alarming loss of IK systems calls for urgent propagation efforts towards preserving them for future generations. Since IK, for the most part, passes on from generation to generation through oral traditions, folk arts, material culture, dances, carvings, paintings, and performances; multimedia documentation efforts play a crucial role (Vivero, 2001; Vivero et al., 2005; World Bank, 1998). IK documentation and recording efforts enable the creation of a knowledge bank, which can then be incorporated into conservation and development projects (Mistry, 2009; Warren, 1991). Since there is no significant protection mechanism in place so far, it is believed that this study would spur the local people and policy makers to take steps to maintain and revitalize those IK practices that are still valuable to society. It would also contribute to keeping concerned individuals, groups or institutions from taking documentation measures as some of the material cultures are facing extinction without being transmitted to the next generation. Through describing the youth language, the paper examines the missing link between the old and the younger generations, who have an unfavorable attitude towards using local materials. Since issues surrounding IK are vast and, in many respects, spatially and/or culturally specific, it is believed that case studies can uncover specific issues in some detail so the lessons learned could be adopted in wider localities and contexts (Mistry, 2009).

Methodology

As mentioned above, IK encompasses a wide array of accumulated knowledge by indigenous peoples of different geographical locations and cultures. Any change in the fabric of culture and ecosystem, increasing mobility, expansion of urban centers, modern education, infrastructure and the unrestricted use of media, cellphone and other digital technologies greatly contribute to the decline of these invaluable knowledge practices (Maffi, 2002; Luz et al., 2015). The aim of this research is primarily to identify the IK that are alarmingly declining from Finote-Selam and the surrounding areas in Gojjam, Ethiopia. According to Bokamba (2008), urban centers are divided into primary and secondary in which the former signifies big cities and the latter towns that allow inhabitants maintain close ties with rural settings where the

ecology of the language is well-preserved. Whereas Finote-Selam represents an urban setting, the surrounding villages represent rural settings. The qualitative data are mainly on the material culture deemed to be widely used by people in Gojjam but no longer in use or rarely used at present. The bulk of data and information were collected through observations in market places, churches, and public gatherings over the years. Since IK is often transmitted orally and has little prestige, critical data were collected through oral communication with key informants and family members. As a native born and raised in the area, I have also used the introspective method. Secondary sources were also used to gather a significant amount of ethnobotanical and ethnozoological data.

There are few works available on different aspects of IK practices in Gojjam. These include the works of Abiyot et al. (2006), Gebeyehu et al. (2014), Manaye et al. (2021), Mesfin (2014) and Nigusse et al. (2018). All of them consider the use and conservation of ethnomedicinal plants. The work of Vivero et al. (2005) entitled, “The Red List of Endemic Trees and Shrubs of Ethiopia and Eritrea” was also used as a valuable resource for this chapter. On the other hand, no data is available that deals with endangered IK systems. This chapter aims to fill this gap, and identifies environmental and cultural changes as major causes of endangerment and possibly eventual extinction of IK practices.

Cultural change and indigenous knowledge

As mentioned, IK is at the core of indigenous identity, culture, language, heritage and livelihoods that must be protected, preserved and transmitted through generations. It is particularly imperative to note that, as there is a strong relationship between culture and IK, the changes witnessed in the culture and people’s way of life are among the factors that adversely affect the IK systems (Maffi, 2002). This study shows that there exists a general feeling that the culture and way of life of people are immensely in a state of change and that the transfer of IK from one generation to the next is at stake. In the following sections, some of the cultural traits that are at risk at the research site are described.

Personal names

The endangerment of IK all starts from the naming tradition, in this case, anthroponyms or personal names. As well known, naming a child in Gojjam is not only a matter of identifying the name bearer, but also conveying a complete message about circumstances surrounding the birth of a child (Zealelem, 2005). The child-father name harmony, conveying a complete message, has been a typical feature of bestowal of personal

names in Gojjam. Such semantically loaded names include male names like አደባባይ ይስማው /addäbabay yəsmaw/ lit. ‘Let the public hear it.’, አንተዬ ግዛቸው /antäyye gəzat[ʃ]äw/ lit. ‘You! govern them!’, ይከበር ድምቡሩ /yəkäbär dämbäru/ ‘Let the border be honored.’, etc. and female names like አገረ ድልነሳ /agäre dälnässa/ lit. ‘My country became victorious.’, ሁሉንቻይ ጌታዬ /hullunʃay getaye/ lit. ‘my tolerant God/Lord’ and ባንቻየሁ ጌትነት /bantʃayyahu getännät/ ‘I behold richness through you.’, etc. expressing circumstances related to publicity, diligence, pride, victory, appreciation, and good wishes. These kinds of names which were once more loved are now considered ‘old-fashioned’ and too burdensome, particularly by the young generation. They are therefore giving way to shorter, biblical, and sometimes non-indigenous names that are considered modern and more acceptable. It seems that the shift from the ‘old-fashioned’ names to the ‘new-fashioned’ names is going on speedily in towns where a limited number of names dominate. The same phenomenon is spreading out in rural areas where there is now strong passion for short and biblical names, especially noticed at schools. The young generation in big towns, with a huge appetite to the so-called ‘modern’ names sometimes goes through legal processes to change their ‘traditional names’ bestowed by their parents (Zealelem, 2005). The negative attitude towards the semantically loaded personal names of Gojjam is caused by the influence of culture contact which is manifested in the expansion of urban life, modern education, media, and internet that promote ‘modern’ city names. Among the abraded trends in this connection are the use of vocatives and addressing a person in a respect form within and outside the family. The most frequently used vocative kinship terms are አባባ /abbabba/ for fathers, እማማ /əmmamma/ for mothers, ወንድማለም /wondəmmäläm/ for brothers, and እ(ሀ)ታለም /ə(hə)taläm/ for sisters. Students were respectful to their teachers who used to address them as ገሼ /gäʃʃe/ (male teacher) and እትዬ /ətəyye/ (female teacher). These family and respectful names and utterances are disappearing because of the spillover effect of addressing family members by their first names and teachers by the English noun ‘teacher’, both phenomena eroding endearment and respect in the community.³

Swearing, pleading, praising, cursing, and greeting expressions

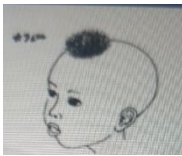
Swearing or personal oath or self-pledge is another impoverished IK that has become endangered. Such expressions as እኔ ልሙት /əne ləmut/ lit. ‘Let me die!’ to mean ‘by my death!’, አባቴ ይሙት /abbate yəmut/ lit.

³ The words and expressions are presented as they are used in the Gojjam variety.

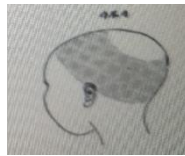
‘Let my father die!’ to mean ‘by my father’s death!’, etc. and begging or pleading expressions like አፈር ስሆን /afär səhon/ lit. ‘please help prior to me becoming reduced to dust’, ስቀበር /səkk’äbbär/ lit. ‘do help me before I am doomed to the tomb’, etc. are among the quickly disappearing expressions. Swearing expressions such as አይኔን ጨለማ ያርገው /aynen f’älläma yargäw/ lit. ‘Let my eye turns to be dark!’ and ትምርቴን ይደምሰው /təmərten yədämässäw/ lit. ‘Let my education be dismissed!’ to mean ‘in the name of my education be dismissed’ are heard rarely perhaps due to less seriousness on the matter or more propensity towards religious swearing expressions. Expressions of deep concern like እኔ ደፋ ልበል /əne däfa ləbäl/ lit. ‘Let me fall face-down in your stead.’, እኔን በርሃው ይብላኝ /ənen bärəhaw yəbləñ/ lit. ‘Let the desert eat me alive for you.’, etc. are limited in the mouths of lenient elderly women concerned about others. Benediction expressions like እንዳባይ ተጋፋ /əndabbay tägafa/ lit. ‘Become strong like River Nile!’, እንደጣና ስፋ /əndät’ana səfa/ lit. ‘Become as wide as Lake Tana!’, and cursing expressions like ባጭር ቅር /batʃtʃ’ər k’ər/ lit. ‘May your life be cut short!’, ሃብትህን ለበይ ይስጠው lit. /habtəhən läbäy yəst’äw/ ‘May your wealth be given to looters!’, etc. are becoming less and less common. The extended greetings when meeting and departing ደና ሰነበትህ /dəna sänäbbäth?/ ‘How have you been lately?’, when meeting a person after a few days vs. ደና ሰንብት /dəna sänbət!/ ‘Good bye!’, when departing from a person for few days, ደና ከረምህ /dəna kärrämh?/ ‘How well did you live through the rainy season?’, when meeting a person after the rainy season vs. ደና ከረም /dəna käräm!/ ‘May you survive the rainy season well!’, when departing from a person for the coming rainy season, ደና ባጅህ /dəna badzdzäh?/ ‘How well did you live through the dry season?’, when meeting a person after a dry season and ደና ባጅ /dəna badz!/ ‘May you survive the dry season well!’, when departing from a person for the coming dry season, etc. are all withering away especially from the young generation. The extended time-bound greetings when meeting have now been reduced to ሰላም ነው? /sälam näw?/ lit. ‘Is it peace?’ to mean ‘Is it peaceful for you?’ when meeting and ሰላም ሁን! /sälam hun!/ ‘Have peace ahead!’ and ቻው /ʃaw/ (from the Italian *ciao*) or the English *bye!* even by monolinguals when departing. Participants in the study hold that the influences of the media and urban lifestyle have substantially influenced the ever-declining social bond and the resurgence of individualism, both of which hinder the transmission of IK systems to the next generation.

Hair styles

Indigenous hair styles were among the popular cultures that have gone through rapid changes. Under normal circumstances, women in Gojjam cut their hair short, also called ምድምድ /mədməd/ ‘short and evenly cut hair’. The reason for such a conservative hairstyle is their tight schedule that gives them no chance to take care of long hairs. They also mention that ventilation of hair is possible when it is cut short. On the other hand, research informants reiterate that, traditional hairstyles such as ቃሬ /k'arre/ or ቁንጮ /k'unj'o/ which refer to lock of hair on shaved head of a boy and ሳዱላ /sadulla/ and ጋሜ /gamme/ which refer to the lock of round-shaped hair around the head of girls were common until recently and are unseen in towns, and dying out in rural areas supplanted by the so-called modern hairstyles. The reason for the abandonment of such traditional hairstyles is that they are labelled as a sign of ‘backwardness’. At present, schoolgirls in the countryside mostly follow the pattern of their mothers but are not prohibited to grow their hair and make it ነፈሬ/አፍሮ /gofäre/afro/ or ሹርባ /šurrəbba/ traditional braids with cornrows sometimes decorated with beads.



ቁንጮ /k'unj'o/



ሳዱላ /sadulla/



ነፈሬ/አፍሮ /gofäre/afro/



ጋሜ /gamme/

Together with the changing hairstyles, the words such as ነቀሰ- /näk'k'äs-/ and ከፈከፍ- /käfäkkäf-/ which refer to combing the traditional hair style ነፈሬ/አፍሮ /gofäre/afro/ are being replaced by the words አበጠር- /abätt'är-/ which refers to the combing of hair, and ሰር- /särr-/ to the making of particularly the ሹርባ /šurrəbba/ hair style. Prior to the imported ማበጠሪያ /mabätt'är'yä/ ‘comb’ made of metal or plastic, people used the homemade comb called ማዶ /mido/ made of wood that served the same purpose. In this way, the indigenous people’s capacity to make their own utilities has been hampered (Cotton, 1996; Tinsae et al., 2012).

Body adornments and jewelry

Body adornments and jewelry are the other IK practices declining through time. Tattoos, for instance, were among the popular body adornments widely used by women until recently. The widely known tattoo in Finote-Selam and the surrounding areas is known as ጥቁራት /t'əkk'urat/ and it was made with exquisite designs on the neck. Neck

tattooing was practiced sometimes for the purpose of suppressing the development of goiter. Apart from beautification, tattooing on the ደድ /dædd/ ‘gum’, ግንባር /gənbär/ ‘forehead’ and እጅ /ædʒdʒ/ ‘surface of the hand between knuckles and wrist’ were also customary. Gum tattooing was done on men too for an attractive look and well-patterned teeth. During epiphany, it was commonplace to use እንሰሰላ /ənsosəlla/ ‘Impatiens tinctoria’ for decorating the feet and hands of girls. However, it is not widely used these days. Since no one is interested any more, tattoo making has dwindled considerably and tattoo makers are doing something else to support their living. It is to be noted that, whereas tattoo making in the modern world has become a growing and expensive enterprise, its gradual abandonment in the developing world like Ethiopia must be a point of discussion.



የእግዳላ ጥቁራት
/yäägäy t'əkk'urat/



የእንገት ጥቁራት
/yäängät t'əkk'urat/



የግንባር ጥቁራት
/yägənbär t'əkk'urat/



የድድ ጥቁራት
/yädädd t'əkk'urat/

Another area of IK on the verge of extinction concerns traditional jewelry worn to adorn women. አልቦ /albo/ ‘silver-made chain put on leg’, ጨረቃ ጠልሰም /tʃ'äräk'a t'älsäm/ ‘silver-made necklace with various shapes’, ጠገራ ብር /t'ägära bərr/ ‘flat circular silver wider than a regular coin which once served as currency’, አምባር /ambar/ ‘armlet’ and ደሪ /dəri/ ‘silver-made necklace chain’ are among the well-known jewelry used mostly by brides and women during holidays and weddings. ማርዳ /marda/ ‘blue necklace put on for children’ and ዛጎል /zagol/ ‘white shell-like jewelry often put on as neck attraction’ were arranged in a chain and worn by children on their necks. At present, although they are occasionally used during holidays, most women and young girls are no longer showing interest in these traditional items. They are rather obsessed with the use of cheap imported jewelry purchased from street vendors. Apart from that, silver has become quite expensive and hence blacksmiths doing this jewelry are no longer practicing their traditional trades putting knowledge transfers at risk.



ዛጎል /zagol/



ድረ /dəri/



ጠገራ ብር /t'ägära bərr/



ጨረቃ ጠለሰም /š'äräk'a t'älsäm/

Traditional clothing

The endangerment of local knowledge is also observed in traditional clothes that are being replaced by cheap fabrics in recent decades. ጥልፍ ቀሚስ /t'əlf k'ämis/ and ትፍትፍ ቀሚስ /təftəf k'ämis/ 'designed/decorated/colorful dresses made of cotton' and ጉንፍ ቀሚስ /gunnəf k'ämis/ 'extra-large dress in size made of cotton' and many other traditional costumes used by women are hardly seen. As a result of scarcity of raw materials such as cotton and silk thread and the time-taking labor they take, these items are not continuing in the current generation.⁴ Since the market is nowadays flooded with costumes which combine the modern and the traditional, the original costumes are at risk. Costumes such as ወንጨሬ /wontʃ'ärre/ 'traditional pair of trousers', ባት ተሁለት /bat tähulätt/ 'traditional pair of trousers tight on the legs', ካባ /kabba/ 'traditional overcoat' and እጅ ጠባብ /ədʒdʒä t'äbbab/ lit. 'narrow cuffs' were widely used by the clergy and honored people in old times. They are nowadays supplanted by shorts and ordinary pairs of trousers. In former times, the use of sackcloth ማቅ /mak'/ and wool mantle ቦርኖስ /bärnos/ was common. The former was worn during sad times such as death of a close relative and the latter in ordinary days mostly to dispel cold weather. ባና /bana/ was also a handmade blanket made of wool. All these traditional overwear and the skills to make them from sheep wool are almost extinct in the research area. There is no doubt that the present-day belts and medically prescribed waist bandages are modern versions of the traditional መቀነት /mäk'ännät/ or ድግ /dəg/. With the decline of women and men wearing traditional costumes, sorrowfully and correspondingly, the knowledge of making them is also in decline. Most of these items are now produced sporadically for tourist consumption and hence limited to souvenir and expensive shops. Whereas artists have preserved some of them and use them when performing in traditional shows, many women and men still embellished themselves with traditional costumes during holidays such as New Year, Easter, and Christmas. Informants mentioned the once ubiquitous tradition of

⁴ Producing specially designed cotton-made traditional costumes for women have become a lucrative business in big cities like Addis Ababa though they are quite expensive, afforded by few.

knitting laces, hats, scarfs, towels, and sweaters by young people from colorful threads using the knitting needle called ኪሮፕ /kirof/ and small iron sticks from umbrella stretchers is no longer a common sight. As a result of the flooding of markets by imported new and used fabrics, the knitting skill vanished altogether along with hand-made items.

Traditional schools

Easy access to cheap products and scarcity of raw materials has changed the material culture of young students in the Ethiopian Orthodox Tewahido Church schools. The hand-made objects such as ደበሎ /däbälo/ ‘coat made of sheep-skin with its fur’ worn by church school students together with a piece of underwear in the church yard or outside the church when they go to collect their snack by soliciting from nearby households have gone through tremendous changes. Then, they started to wear ደበሎ /däbälo/ together with ጋቢ /gabi/ ‘cotton toga’. After that, they abandoned ደበሎ /däbälo/ and started to use ጋቢ /gabi/ only. Then, ጋቢ /gabi/ was soon superseded by ጎጃም አዘነ /godzdam azzänä/ lit. ‘Gojjam saddened.’, a fabric made of wool thread handwoven, or machine made. Informants believe that all these shifts took place in the last couple of decades. They stated that church school students dropped ደበሎ /däbälo/ mostly because it was considered ‘primitive’. They dropped ጋቢ /gabi/ because it is not durable and is not dirt resistant. In contrast, ጎጃም አዘነ /godzdam azzänä/ is now widely used for its durability, resistance to dirt, lightness, and easiness to wash. Although it is widely accepted as a regular wear especially in the countryside, most people are uncomfortable wearing ጎጃም አዘነ /godzdam azzänä/ during church services and holidays.



ደበሎ /däbälo/



ደበሎና ጋቢ /däbälo & gabi/



ጋቢ /gabi/



ጎጃም አዘነ /godzdam azzänä/

Church school students used to carry a handmade bag called አኮፋዳ /akofada/ together with a stick to defend themselves from dogs until it was completely replaced by plastic bags. They live in tiny huts built surrounding the bigger hut of their teacher. The number of traditional church school students named after የቆስ ተማሪ /yäk'es tamari/ lit. ‘student of priest’ or የቆሎ ተማሪ /yäk'olo tamari/ lit. ‘student of roasted wheat/barley/garbanzo’ which has now changed to ያብነት ተማሪ /yabännät

tamari/ lit. ‘student of model church school’ was big in Gojjam. These young church school students are expected to go through long hours of rehearsals and citations notwithstanding the hardships in food, housing, and health. Due to these inescapable hardships, diminishing assistance from parents and weakening support from the community, and above all the narrowing of job opportunities after long years of schooling, most students leave traditional church schools to lead different lives (Mezmur, 2011; Sergew, 1974; Setargew, 2004). Hence, research participants expressed their concern that the current realities would have serious and negative consequences for the future.

That the number of conversant persons in the classical language ግዕዝ /gə'əz/ ‘Ge’ez’ is decreasing means the manifold body of knowledge in the language will be left underexplored. Sumner (1991) underlines that to internalize the Ethiopian Philosophy well, the knowledge of Ge’ez oral traditions including proverbs, songs and folktales is indispensable. Pankhurst (1990) also notes that the Ethiopian medicinal texts were first written in Ge’ez which still requires deeper analyses of these texts in the language. የግዕዝ ቁጥሮች /yägə'əz k'ut'rotʃtʃ/ ‘Ge’ez numerals’, namely ፩ ‘1’, ፪ ‘2’, ፫ ‘3’, ፬ ‘4’, ፭ ‘5’, ፮ ‘6’, ፯ ‘7’, ፰ ‘8’, ፱ ‘9’, ፲ ‘10’, ፳፩ ‘11’, ፳፪ ‘12’, ... ፳፯ ‘20’, ... ፷፱ ‘30’ ... ፻ ‘100’, ፷፻ ‘200’ ..., ፲፻ ‘1000’, ፻፹፻ ‘1,000,000’ and so on, ፊደል /fidäl/ (Ge’ez/Ethiopian script): ሀ, ለ, ሐ, መ ... ጥ; ስርዓተ ነጥብ /sərə/atä nät'əb/ ‘punctuation marks’: ፣, ፤, ፡ and so on and የቀን መቁጠሪያ /yäk'an mäk'ut'är'yä/ ‘Ethiopian calendar’ are central not only as the nucleus in the Ethiopian indigenous knowledge systems but also the unique cradles of civilization. Handmade መስቀል /mäsk'äl/ ‘cross’ of various sizes and designs were made of wood, nickel, bronze, silver, and gold by local craftsmen. These days, most of these items are sold in Addis Ababa to tourists or local elites at expensive prices. The use of ጥፈት /t'əfät/ ‘amulet’, which contains magic scrolls written in Ge’ez, adorned with black and red colors and rolled up in a leather case tightly sewn and produced by exorcists (däbtära), were worn by almost every child from a Christian family for protection from evil spirits. These are completely disappearing especially in towns (see also Mercier, 1979). It is disconcerting to witness the fading use of these historical items due to strong pressure from imported systems of knowledge. Having realized the importance of Ge’ez, foreign universities like the University of Hamburg, have devoted academic programs and big research projects on the study of the manuscripts and the multitude IK encoded and stored in them. Therefore, promoting the traditional church schools and other tangible and intangible treasures of the Ethiopian Orthodox Church has

the potential to maintain IK and to increase the flow of tourism to the country which has a significant economic impact in the nation (Mezmur, 2011; Abebaw, 2002; Setargew, 2004). Mounting evidence shows that traditional education, particularly church education, played magnificent roles in training students the deeper religious studies beyond the basic reading and writing of Ge'ez prior to the advent of modern education. In future decades, unless a decisive measure is taken, especially in rural Ethiopia, the situation may put knowledge of Ge'ez at stake. Unless addressed directly, we may soon witness the waning of major teachings such as ቅኔ /k'əne/ 'a potent figure of speech for expressing feelings', ዜማ /zema/ 'the art of combining vocal and instrumental sounds to produce beauty of form, harmony and expression of feeling' and አቋቋም /ak'ak'am/ 'chanting integrated with sistrum, drum and prayer staff' (Mezmur, 2011; Setargew, 2004). At the current rate, the fear is that we may not find a good number of well-versed church scholars who can explore the body of knowledge in the great books of Ethiopia such as መጽሐፈ ሊቃውንት /mä'səhafä lik'awənt/ 'book of scholars', መጽሐፈ መነሳሳት /mä'səhafä mänäkosat/ 'book of monks', የመጽሐፍት ትርጓሜ /yämäs'əhaft tərg'ame/ 'translation of books', ፍትሐ ነገስት /fətəha nägäst/ 'the book of the laws of kings which deals with secular and ecclesiastical laws', አቡሻህር /abuʃahər/ 'the book of astronomical concepts', ባህረ ሃሳብ /bahrä hassab/ 'the book of wisdoms related to calendars', and many more theological doctrines of the Ethiopian Orthodox Church.

The popular church paintings (also called folk paintings) that are the unique features of the Ethiopian Orthodox Church are also among the fields of IK facing endangerment. These paintings locally known as የቤተክርስቲያን ስዕሎች /yäbetäkəräst'an sə'əlotʃtʃ/ 'church paintings' are predominantly portrays of God, Jesus Christ, Virgin Mary, Apostles and the most popular Saints on parchments, icons, cloths, or walls of churches by combining various colors. All these artistic activities including preparing the colors by mixing plants, animal products, soil, and water; along with traditional brushes made of cattle tails, furs, reed, and feather pens were done by self-taught artists. Unfortunately, this stunning IK of traditional painting is not being transmitted to the young generation due to the reduced attention given to it by society in general and the fact that it is being printed using computers and other technologies (see Abebaw, 2002; Sergew, 1974). With the decline of traditional art work and influence of the urban variety of Amharic, local color terms such as ወንዝ አይፈፈ /wonz ayfäre/ 'algae-color', ደማደም /dämadäm/ (derived from the term 'blood' for 'red'), ቅዘኔ /k'əzäne/

(derived from the term ‘diarrhea’ for ‘yellow’), ቅጠልያ /k'ət'äləyya/ (derived from the term ‘leaf’ for ‘green’), አመዴ /amäde/ (derived from the term ‘ash’ for ‘white-grey’), and so on are not in use today. Thanks to the Ethiopian Orthodox Church, which still has a huge appetite and influence on such art, there is still a good chance to preserve and transfer these paintings to the next generation.

Traditional food and eating habits

Traditional food items and table manners are worth mentioning among endangered IK practices. Home-prepared foods and drinks were quite commonplace practiced in almost every household, until more recent decades where we witnessed gradual decline in some of such items. For instance, the organic nigger seed oil called ቅባ ኑግ /k'əba nug/, the organic traditional cheese called መጣጣ (አይብ) /mät'at'a (ayb)/ and the organic honey-mead called ጠጅ /t'ädzɔɔ/ were served routinely but are not consumed as much now. Except the last one (ጠጅ) which is still found in its corrupt form for commercial purposes, the other two are extremely rare. They are seldom used mostly due to the acute shortage of nigger seed oil and organic honey. Apart from that, the preparation is tiresome, consuming much time and energy. In traditional Gojjam society, the ability to prepare such foods and drinks for home consumption was indicative of the social class of the family in which women play most vital roles.

The later changes surrounding family meals and table manners have drawn attention in recent years. In earlier times, family members used to eat together from the same communal basket table called ሞሰብ /mosäb/ ‘handmade and beautifully woven round basket from grass adorned with colored threads’. There was the tradition of ባርኮ /barko/ ‘a piece of blessed እንጅራ /ændzära/ ‘flat bread from ጤፍ /t'ef/⁵ “Eragrostis tef” offered by the husband to the wife just before attendees forward their hands to the ሞሰብ /mosäb/'. The husband and wife can exchange ጉርሻ /gurfa/ ‘handful of rolled injera with stew’, though not frequently observed in rural communities. Formerly, children had to stand up nearby holding lamps particularly at dinner times. The children would be offered ዳረጎት /darägot/ ‘big handful of injera with stew’ by the father as an early sampling until they assume their turn. Table manners were strictly observed. Licking fingers, sending hands into another’s territory, taking unfairly large portions of ጉርሻ /gurfa/, starting the meal ahead of the

⁵ It is a cereal with which እንጅራ /ændzära/, the staple food in Ethiopia, is used to scoop up stew and other ingredients and take it to the mouth.

father's blessings, starting to eat before the father does, talking over adults, leaving the eating circle before the blessings from the elderly and without kissing the ሞሳብ /mosäb/, etc. were considered impolite and dishonoring to the family. It was common to extend ጉርሻ /gurša/ to guests even if the guest may be satisfied by pleading በሞቴ /bämote/ lit. 'by my death', ጭቃ ስሆን /tʃ'ək'a səhon/ 'for my sake so I wouldn't turn into mud', etc. to show one's love and extraordinary generosity. Eating meals is considered a dignified affair where both the humble and the rich partake of God's blessings with thankfulness while pleasantly conversing with guests and family. They take the time to properly chew and digest the food and not rush as if food was a side activity. "Food is king", they said. People engaged in the consumption of it must act like one. The eating habit has changed from collective eating sitting around communal round basket tables to individual consumption using small individual plates and picking food from different bowls of stew. There are people critical of this eating habit. They claim that the more recent system encourages individualism at the expense of family ties and communal practices that promote family attachments. At present, more and more families are not practicing the blessing of meals and the tradition in which the father offers the first bite to his wife, ባርኮ /barko/, and to the son ዳረጎት /darägot/. Some complain that the solemn way of eating እንጅራ /ændzära/, has evolved for the worst. The traditional way of making እንጅራ /ændzära/, its size, and the methods and tools used to make it have changed locally and abroad. Some hasten to gorge themselves with large bites in quick successions bereft of the dignified and paced ways of traditional eating. The more recent eating habits consider food as something that must be performed fast. Packing unbearably large portions into the mouth to save time and run has become the unfortunate habits of especially the younger generation. Participants have described some outrageous eating habits where those who experience scarcity of food may take advantage of neighborhood events such as weddings, burials, or holiday celebrations and consume embarrassingly large amounts concerned about where the next meal may come from. They also mentioned the contribution of the current education system which disregarded የግብረገብ ትምህርት /yägbrägab tēmært/ lit. 'ethics education' from the curriculum.

Traditional coffee ceremony

Another compelling change is observed in the practice of coffee ceremony. Beyond the taste of coffee, coffee ceremony is a unique Ethiopian cultural tradition which has a significant social impact in daily personal encounters, hospitality, and mutual respect among neighbors.

The turn of each member of the ceremony is known as ተራቲም /täratim/ and is served using የቡና ገንዳ /yäbunna gända/ ‘wooden flat panel to place the cups’ and ፍንጃል /fändʒal/ ‘cup’ preferably by spreading ቁጠማ /k'et'äma/ ‘fresh green grass’ on the floor as rug. Since this type of grass has become scarce, people use either the ordinary natural grass or a grass-like plastic product imitating the natural. The wooden flat panel is also being displaced by synthetic or plastic-made panels particularly in towns as the former is scarce and more expensive. The hand-made ceramic coffee pot called ጀብና /dʒäbäna/ is being displaced by metal coffee pots produced in small-scale factories. In the same way, the factory-made mortars or electric coffee grinders are quickly replacing the traditional wooden mortar called የቡና ሙቀጫ /yäbunna muk'ätʃʃa/.



የአጠቃላይ ገንዳ ቁጠማ
/yäng'in gända & k'et'äma/



የአጠቃላይ ገንዳ ቁጠማና የብረት ገንዳ
/yäng'in gända, k'et'äma & yäfabrika gung'aa/



የአጠቃላይ ገንዳ የብረት ገንዳ
/yäng'in gända & yäfabrika gung'aa/



የላቲክ ገንዳ ቁጠማና የብረት ገንዳ
/yälaitik gända, k'et'äma & yäfabrika gung'aa/



የላቲክ ገንዳ የብረት ገንዳ
/yäng'in gända & yäfabrika gung'aa/

The traditional coffee ceremony was accompanied with የቡና ቁርስ ‘coffee snack’ mostly roasted wheat/barley/garbanzo, or boiled peas and beans or እንጆራ /ändzära/ ‘flat bread’ with ብትን ድቁስ /bättən dəkk'us/ ‘chili pepper powder’ or ድቁስ /dəkk'us/ ‘mashed pepper with spices’ or እንጎቻ /əngotʃʃa/ or ቁጥ /kitt'a/ ‘mini-sized flat bread’. One of the children in the family is ordered to run around and call all members of the neighborhood to the ተራቲም /täratim/ and guests are served by age, from the older to the younger.⁶ The ritual of conducting ተራቲም /täratim/ has three rounds, namely አቦል /abol/ ‘first round’, ሁለተኛ /hulättäppa/ ‘second round’ and ቦረካ /bäräka/ ‘third/last round’ served once or twice every day. Participants in the study assert that the daily tradition to conduct the coffee ceremony in three rounds consumes time and has become uneconomical. However, it is also used as a platform for family gossip, the latest news, and problems that need to be resolved. Through it all, friendships and intimacies are built while the social fabric of the neighborhood is strengthened.

Traditional games

There are several indoor and outdoor games that have been fading away over the years. School games are among these declining games.

⁶ Nowadays, neighbors call each other for ተራቲም /täratim/ using their cell-phones.

These include ሰኞ ማክሰኞ /säjɲo maksäjɲo/ lit. ‘Monday-Tuesday’, ሽመለ ቃንድዮሽ /ʃəmälä k'andäyyoʃ/ lit. ‘stick fight’, አገር ሽኝኝቶሽ /agär ʃəjəjɲətoʃ/ lit. ‘seeing off of an area’ and መሐረብ ንጥቆሽ /mäharäb nət'koʃ/ lit. ‘snatching handkerchief’ and other enormously competitive games were omnipresent in schools and neighborhood meadows. It was believed that these sport activities were best venues for best athlete recruits, albeit they are minimally practiced today. There were many educational activities done by combined efforts of students, teachers and school administrators like ሽርሽር /ʃərrəʃərr/ ‘excursion’ to rural areas, lakes or mountains, ክርክር /kərəkkər/ ‘debate’, ስነ ጥበብ /sənä t'əbäb/ ‘arts’ and ጥያቄና መልስ /t'əyyak'enna mäls/ ‘question and answer’ competitions, etc. These activities were helpful as teaching aids to appreciate the environment and to have a better future as good writers and confident communicators. Their contribution in creating healthy competitions among student contenders was immense. Among the outdoor games, traditional field hockey and its accompanying ceremonial activities are diminishing. The field hockey instruments include ገና /gänna/ ‘hockey stick’, እሩር /ərur/ ‘hockey ball made of wood’, ጥንግ /t'əng/ ‘hockey ball made of hides’ and እንቁራ /ənk'urra/ ‘hockey ball made of wood’. The term አምቦ /əmbə/ refers to the score point earned by the team. All these words and concepts are well-recalled by adults and elderly. Not only that, the knowledge of making the hockey instruments and applying the rules and regulations of the game is not known by the current generation. Furthermore, the original traditions of celebrating ገና /gänna/ ‘Christmas’ which includes lyrics performed by the youth have changed considerably and it is worrisome that the current generation is more attracted by online games. The traditional hockey could not continue as it was before because of (a) lack of sufficient fields that can accommodate the games, (b) lack of sufficient forest trees and other materials to make the hockey stick and ball, and (c) loss of interest among the youth. ገበግ /gäbät'a/ (a game consisting of a board with a double row of twelve holes and 48 pebbles) was a popular traditional indoor game throughout the nation, may be with different names in different languages. Old and young, women and men, all played this world’s oldest indoor game. Each player is expected to know the rules before starting playing, which requires some time to sit down with senior players to learn and join the club. It was an enjoyable game particularly during holiday and leisure times. In towns, ገበግ /gäbät'a/ was replaced by ዳማ /dama/ ‘checkers’ and rarely by chess. Another well established indoor game was ካርታ /karta/ ‘cards’ prepared from used carton boards and thick papers. Most of these games were

played for fun. Nowadays, imported cards are mostly used for gambling purposes which have spread out into small towns and villages. The youth used to play football and volleyball and compete at schools and neighborhood meadows, thanks to the open spaces close to their homes using handmade balls made of scraps of cloth called ቡትት ኳስ /butətt k^was/ and later factory-made plastic balls overshadowed the scrap balls to extinction. They used to play ball games such as ኳስ አበደች /k^was abbädätʃtʃ/ lit. ‘A ball became mad.’, ኳስ እንቅርቅሶሽ /k^was ənq'ərək'əboʃ/ ‘ball dribbling’, etc. It is noticeable that lack of sufficient public spaces for sports and relaxation has had serious ramifications causing erosion of social bonds and outdoor activities particularly for children and the youth. Equally, the lack of open spaces, particularly in towns, has jeopardized outdoor sports such as running, throwing, and jumping exercises, beside holding sporting events, lowering the chance of success for gifted athletes. This circumstance has affected many young people to become increasingly isolated from social games and other outside activities, which has led them to get obsessed with cellphone-based games and addictions.

Traditional meetings under tree shades

Like in other places, trees play vital roles in providing essential ecological, economic, and cultural services in Gojjam (see section 4 on details of plant life and IK practices). Cultural activities such as under-tree discussions on issues related to development, conservation and reconciliation used to be conducted in assemblies under trees called ሸንጎ /ʃəŋgo/. The major community affairs to be addressed and given solution include ሸምግልና /ʃəmgələnnə/ ‘settling local disputes through አውጫጭኝ /awtʃatʃəpp/ ‘way of identifying the guilty through interrogations and investigations’ (also called አውሰ /əwwəs/). The cases could be አፈላማ /afälama/ ‘case of crop damage by cattle’, ይናፋ /yənafa/ ‘case of seducing a married woman’ or other conflicts caused by land ownership disputes, homicide, denials such as borrowed money, beating, etc. At the beginning and end of each assembly, religious leaders or reputable elders give their prayers and benedictions. All these ingenious community activities take place under prominent trees preferably ዋርካ /warka/ ‘Ficus vasta’, ዋንዛ /wanza/ ‘Cordia africana’, ወይራ /woyra/ ‘Olea europaea’, ሰሳ /säsa/ ‘Albizia gummifera’, etc. These trees are no longer abundantly accessible, making under-tree community discussions obscure, especially for the youth. The tradition of maintaining open spaces with large tree shadows to carry out social activities such as gatherings, festivities, etc.

was an exciting event. It served as the focal point for the community where peacemaking and special celebrations were carried out. More than providing shades, prominent trees served as a symbol of oneness and social cohesion. Absence of such trees with open spaces robs communities of the blessings associated with them. It is noticeable that lack of sufficient public spaces has had serious ramifications causing erosion of social bonds and outdoor activities particularly for children.

Traditional constructions

Traditional construction refers to the construction of traditional houses, water mills, wooden bridges, out-of-home storage facilities such as barns, cattle pens, etc. The most endangered IK among all these are traditional houses and traditional mills. Like in other Ethiopian regions, until recently, mud-plastered (from soil, stones, straw and water) grass-thatched houses were common in rural villages and even in small towns in Gojjam. One of such artistically exquisite, highly textured grass-thatched houses with evenly cut and carefully arranged grass top is known as ክፍክፍ ቤት /kəfkəf bet/. This type of house was constructed most often as church, but it can also be owned by individuals who enjoy a high profile in the community. Nowadays, these grass-thatched houses, well-recognized for regulating the outside temperature, are found only sporadically in rural villages. In towns, these types of houses are especially constructed for traditional attraction in recreational and cultural centers. Overall, several decades have passed since the grass-thatched houses were replaced by tin-roofed and mud-plastered houses which have themselves given way to the emerging modern houses made of concrete blocks, cement, and sand. People believe that it is easier to construct የቆርቆሮ ቤት /yäk'ork'orro bet/ 'tin-roofed house' relative to የሳር ቤት /yäsar bet/ 'grass-thatched house' including ደርብ /därb/ and እሳተ ከላ /əsätä källa/ with one upper floor made of concrete mud and stone to resist fire. Such traditional houses have reached the level of extinction, and with it, the local engineering capacity by and large due to serious shortage of the special type of grass called ዘባ /zäba/ 'Hyparrhenia rufa'. Informants told the researcher that the places where this type of grass used to grow are now agricultural fields and/or settlements. The discontinued traditional house constructions infer the withering away of skills for constructing such houses and the interruption of the transfer of the knowledge. As a tradition, whereas ክፍክፍ ቤት /kəfkəf bet/ or የሳር ቤት /yäsar bet/ 'grass-thatched houses' were constructed collaboratively with the community, የቆርቆሮ ቤት /yäk'ork'orro bet/ 'tin-roofed house' is constructed mainly by paid carpenters. This situation has a negative

impact on the deep-rooted tradition of team spirit and strong social bond among community members. These days, the modern rectangle-shaped churches are replacing the traditional circular churches together with their internal partitions especially in towns.

Traditional mill which is known as የውሃ ወፍሬኔ /yāwuha woffʃo/ lit. ‘water mill’ and its መዘውር /mäzäwwər/ ‘turbine’ have become old words and concepts following the shift from traditional water mills to the new diesel and electric-powered mills. Apparently, the scarcity of all-season rivers that can spin the watermill has contributed to the shift to የሞተር ወፍሬኔ /yämotär woffʃo/ ‘diesel mill’, and in towns where there is electricity, to የኮረንቲ ወፍሬኔ /yäkorränti woffʃo/ ‘electric mill’. Sadly, the traditional engineers’ local knowledge which encompasses selecting the site, producing and molding the barrels and the spinning stone and designing and installing the parts of the water mill, have all vanished. It was also a common practice that women would grind grain by using local grinding stones of different sizes called የድንጋይ ወፍሬኔ /yädəngay woffʃo/ ‘stone grinder’ and የወፍሬኔ መጅ /yäwoffʃo mädz/ ‘small stone grinder’. Although the traditional grinding tools are still available in rural areas, people in towns tend to prefer the diesel or electric mills to save time and energy, despite the high charges. The decline in these local products indicates lack of loyalty to local products, and the loss of interest by stone carvers to continue exercising their expertise.



የድንጋይ ወፍሬኔ
/yädəngay woffʃo/



የውሃ ወፍሬኔ
/yāwuha woffʃo/



የሞተር ወፍሬኔ
/yämotär woffʃo/

Traditional utensils

The other seriously endangered items in traditional societies are household utensils and equipment. The hand-made brooms called ሙርጅ /murədz/ is one endangered equipment made of a special grass called ሙሬ /mure/ collected from the wilderness during the rainy season. Due to lack of raw material, no one makes ሙርጅ /murədz/ at present and hence the skill set required to make it is either extinct or near extinct. Whereas people in towns widely use synthetic brooms, in the countryside, other available grass types or branches of shrubs and ferns are used to clean houses, compounds and threshing floors. ጭራ /fʃəra/ made of horse tail to

expel flies is produced in low quantity and even then for commercial purposes only. The local ባህላዊ ጥላ /bahəlawi t'əla/ ‘traditional umbrella’ made of palm branches are among the near-extinct local products. From old archives, we learn that this traditional umbrella was widely used in Ethiopia until factory-made umbrellas appeared in the markets. From the study participants’ perspective, except perhaps for a few individuals among the Awi ethnolinguistic group whose culture is more connected with the traditional umbrella, no artisan can be found these days who can make such umbrellas.



ጎሳ /gäsa/



ባህላዊ ጥላ /bahilawi t'əla/



ማዳበሪያ ላስቲክ /yämädabär'a lastik/

Informants reported that a good number of young students in towns do not ascertain ዋገምት /wagämt/ ‘an instrument made of cattle horn used by traditional healers to sack coagulated blood from swollen parts of the body’ to relieve pain. This type of medical treatment is no longer provided frequently by local practitioners. Other disappearing utensils made of horn include የቀንድ መለኪያ /yäk'änd mäläkiya/ ‘small cup for drinking local liquor’ and የቀንድ ዋንጥ /yäk'änd wantʃ'a/ ‘horn-made vessel to drink traditional beer’ carved in various designs, sizes and patterns that are not widely known and used at the present time. የቀንድ ብትር /yäk'änd bəttər/ ‘short stick made of animal horn’ and የቀንድ ማንኪያ /yäk'änd mankiya/ ‘spoon made of animal horn’ are almost out of sight. The main reason for the disappearance of local products made of horn is the absence of the environment that encouraged the skills. With the loss of demand is vanishing the skills of ‘horn artists’ known as ዋንጥ አንጣጭ /wantʃ'a ant'aʃ/ to continue producing horn-made products and transfer their knowledge to the young.

Traditional household equipment

Due to change in the way of life and the disappearance in local tannery, the use of household items such as አንቀልባ /ank'älba/ ‘leather baby sling’ and መጠጊያ /mätt'äg'y'a/ ‘leather straw-packed pillow’ are substituted by foam and garment-made slings and pillows. Other leather materials such as ላመነት /lamänät/ and ጅ/ዠንዲ /dʒ/z/ändi/, processed from hide of cattle which were used to sleep on by spreading them over traditional bed such as የረጥባ አልጋ /yärät'ba alga/ ‘bed made of wooden

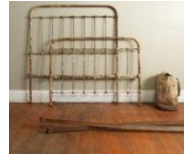
legs and thin metal bars’, የጠፍር አልጋ /yät'äfer alga/ ‘bed made of wooden legs and leather strappings’ and የጎማ አልጋ /yägomma alga/ ‘bed made of wooden legs and rubber strappings’ have disappeared. These types of beds are no longer made and are superseded by የሽቦ አልጋ /yäḥbo alga/ ‘bed made of wires and metal legs’, የፋሊም አልጋ /yäfalim⁷ alga/ ‘bed made of wires and wooden legs’ and የእንጨት አልጋ /yänገ'ät alga/ ‘bed made of wood entirely’.



የጠፍር አልጋ /yät'äfer alga/



የላስቲክ አልጋ /yälastik alga/



የሽቦ አልጋ /yäḥbo alga/

The use of ሰሌን /sälen/ ‘local mat made of palm leaves’ and ዳውጃ /dawəጃጃ/ ‘local mat made of special grass’ that were mostly used to sit on by spreading them on መደብ /määdäb/ ‘traditional seat made of mud and straw used to sit or sleep on’ are now rare. The reasons for the decline are scarcity of the raw materials and lack of skilled persons to make them. These days, የላስቲክ ምንጣፍ /yälastik mən'taf/ ‘plastic rug’ is replacing local products which were a means of additional income for rural dwellers who used to make and bring them to the market.



ጃ/ጠንዳ. /dʒ/ʒ/ändi/



ሰሌን /sälen/



ዳውጃ /dawəጃጃ/

Furthermore, plastic mats are now more available than the traditional ones at the markets. Mattresses like የሳር ፍራሽ /yäsar fəraj/ ‘grass/straw mattress’ and የጥጥ ፍራሽ /yät'ət' fəraj/⁸ ‘cotton mattress’ were very popular until recently. Since cotton and garment are expensive for the commoners, the most abundant mattress is የማዳበሪያ ፍራሽ /yämädabär⁹a fəraj/ ‘sack from fertilizer bags’ (outer part) and pieces of cloth, inorganic polymer products and straw (inner part).

⁷ It is the modified form of the English word ‘family’.

⁸ It is also known as /fərnaf/.

Traditional handicrafts

Ethiopia is well-known for its widely recognized handicraft traditions of smelting iron ores, tanning hides and skins, weaving clothes, pottery, basketry and carving which were crucial to the livelihood of people, urban or rural (Raymond, 1999). In basketry, knowledgeable people make baskets of different sizes, namely the big size ቅርጫት /k'ərɨʃat/ made of ሸምብቆ /ʃämbäkk'o/ 'reed' or ቅርቀሃ /k'ərək'äha/ used to measure grain and keep and carry things, ቅምባ /k'əmba/ made of reed and medium size to serve the same purpose but sometimes plastered with mud mixed with ash for strength and ኮለል /koläl/ made of the same material to carry things and measure small quantities. These local products are not seen today since hard and soft plastic materials have replaced them. The scarcity of reed and bamboo, resulting from climate change and deforestation, has forced experts to abandon their expertise. A closer look at imperiled IK practices in Gojjam reveals that traditional music instruments cannot escape the situation. There was a time when ከራር /kərar/ 'five-string musical instrument' was widely used in the 1970s when the young generation was obsessed by the instrument and used to sing ፋኖ /fanno/ and ቸ በለው /tʃä bäläw/ as a way of igniting resistance against the Derg. ከራር /kərar/ then became a popular instrument and was made of local materials. The traditional flute called ስንጥርጥይ /sənt'ərt'əy/ (also called ዋሽንት /wəʃənt/) was a product of reed until replaced by plastic and metal conduits. The main reasons for the replacement are the scarcity of reed and easy access to plastic products (see more on this in section 5). Thanks to the Ethiopian Orthodox Church, most of the traditional musical instruments such as በገና /bägäna/ 'local harp', መለከት /mäläkäät/ 'local trumpet', እምቢልታ /əmbilta/ 'local organ', etc. are respectfully preserved being used in psalms and prayers. ጥሩምባ /t'ərumba/ 'traditional blowing instrument' is used to bring the attention of people for meetings and to brighten weddings and religious and non-religious festivals. It was made by everybody using ቅል /k'əl/ 'gourd' with cylindrical shape and by connecting it with a hollow from reed. Through time, ቅል /k'əl/ 'gourd', which was mostly collected from the wilderness, became scarce and calls for the replacement of traditional ጥሩምባ /t'ərumba/ by modern ጥሩምባ /t'ərumba/ made of copper or bronze which is relatively expensive. Similarly, ቃዛ /k'azza/, a use-and-throw knife made from reed, is no longer used due to shortage of reed. The main ingredients of traditional beer, namely corn, wheat, or barley, were roasted using መጋፊያ /mägaf^ya/ 'pelvis bone of cattle' which is now

replaced by a spade, which rounds the neighborhood to serve the purpose.

The other endangered handicraft products suffering from high level imperilment are containers of liquids and solid products. The gradual decline of such local products has adversely affected the production and use of storage and measurement facilities. Leather-made sacks of different sizes such as አቆማዳ /ak'omada/, ጭልጌ /ʈʰəlge/, ጀምብ /džämb/ and ቀርቦታ /k'ärbätta/ were widely used to store and measure grain, pepper, honey, etc. ቀረጢት /k'ärät'it/ serves the same purpose but is made of textile. All these containers are now replaced by the so-called ማዳበሪያ /madabär^ya/ 'fertilizer sack' and ፌስታል /festal/ 'plastic bag' throughout the regions (see section 5 for more on plastic infestation). Like solid containers, the use of liquid containers made up of clay soil is declining over time. These glazed or unglazed products include the small pots such as ድንጉኝ /dänguŋŋ/, ኩስኩስት /kuskust/ and ቶፋ /tofa/ used to cook or to keep a small quantity of flour or liquid; the medium size ሽንክላ /ʃənkəlla/ and ገምቦ /gämbə/ used to keep liquids such as ጠላ /t'älla/ 'traditional beer' and ጠጅ /t'ädzdz/ 'honey mead' and to fetch water from a river, and the big ones such as ማድጋ /madəgga/, ቢዴ /b^wadde/ and ጋን /gan/ out of which the last two are stationed at home to keep a large amount of liquid. All these local products have given their ways first to ቦርሚል /bärmil/ 'barrel' or ገረወይና /gäräwäyna/ and nowadays to ጆሪካን /džärikan/ 'plastic liquid container'. The major reasons mentioned by users for abandoning the local products in favor of the plastic ones are easy access and durability of the latter. Other reasons are the ever-decreasing number of potters due to diminishing demand and the very strenuous labor from mixing mud and ash, to molding and burning with maximum care to produce good ones. ሰታቴ /sätaቴ/ 'big clay pot for cooking meat stew' and ወጭት /woʈʰət/ 'small flat clay pot for cooking thick stew from peas and beans flour' are no more plentiful presently. Such pots have all been reduced into the generic name የሽክላ ድስት /yäsäkla dəst/ 'clay pot' and speedily replaced by የብረት ድስት /yäbərät dəst/ 'metal pot'.

Locally fermented and distilled alcoholic drinks particularly አረቄ /aräk'e/ and ጠጅ /t'ädzdz/ 'honey mead' used to be carried using ኮዳ /kodda/ 'small jar made of metal' and ደምበጃን /dämbädžan/ 'glass jar'. These materials are now superseded by plastic products of various sizes readily available everywhere. Though their products are invaluable to society, the social status of craftsmen and women in the community was unfortunately belittled and unappreciated. Such stereotypes have challenged the continuity of precious IK from continuing. It should be

noted here that, due to the influx of meretricious factory-produced items and the corresponding shortage in raw materials for dexterously produced local handicrafts, and above all the skills of producing them are now all gradually disappearing.

Weaponry

The production and use of weaponry is also vulnerable to change and endangerment in Gojjam. Until recently, it was a common place to see people carrying pole weapons such as አንካሴ /ankasse/, ጦር /t'or/ and ኩላብ /kullab/, all spears made from iron ores smelted by smiths with varying shapes. Most of these were used to kill wild animals for meat, hide and other useful body parts. Nowadays, as a result of cleared forests, game animals are not available and hence the production and use of such tools appears to be out of date. Aside from that, carrying such silent weapons has become a sign of lawlessness especially in towns. Guns such as ገንደ /g^wande/, ዲሞትፈር /dimotfär/, ቤልጂግ /beldzig/, ሞኒፎር /mönifär/, አልቢን /albin/, ፊሎቦር /filobärr/, ውጂግራ /wädzigra/, ረሽ /räš/, መስኪቶ /mäsketto/, etc. were once common and it was a sign of one's bravery. According to the research participants' viewpoint, the number of gun owners in society was decreasing considerably following the change of government in 1991, which demanded people disarm. Whereas the heydays of these firearms have passed, many today prefer to own more automatic weapons, such as Kalashnikov. In those days, children would be trained to be sharpshooters first with ፊሎቦር /filobärr/ for which the bullets could be bought for a dime from ordinary shops. Further training was offered for high level guns as required. This kind of tradition could not be sustained primarily because of the high price of bullets and, above all, because of the restrictions imposed in the name of security. It is from the perspective of participants that, with the loss of sporting events with guns, so did gallantry and bravery among the young.

Traditional measurements

Traditional measurements are among the threatened IK practices in Gojjam. Among the above handicraft products, most of them were widely used as measuring tools for solids largely grains and for liquids largely traditional bear and honey mead. Before the advent of the units of measurement and facilities, the local people used to measure their land in terms of ገዝም /gäzəm/, ቀላድ /k'äläd/ and ቃዳ /k'ada/. For small plots of land, they used to stretch ገመድ 'traditional rope made of plant peels' and መጫኛ /mäj'anna/ 'leather rope'. Following the acute shortage of private plots of land, people do not have to worry about the big units of

measuring land, and whenever necessary, they use plastic ropes. It was also common to use body parts as in ጋት /gat/ ‘the distance between the little finger and index finger resting’, ስንዝር /sənzər/ ‘stretching distance between thumb and middle finger’ and ክንድ /kənd/ ‘from the elbow to the tip of the middle finger’ to measure small lengths. These traditional units of measurement are being used very seldom and only in the countryside.

Harmful practices

From the author’s point of view, not all IK practices that are endangered are harmless. Shibru (2013 E.C.) advises not to take all IK practices as useful. Instead of taking everything indiscriminately, being skeptical and exerting more efforts to find the truth is one of the foundations of scientific approach. Female genital mutilation and child marriage, for instance, are among the esteemed cultural practices labelled ‘backward’ and harmful by the scientific community. Along with religious doctrines, local communities strongly believe that female circumcision is helpful to control high temptations and early engagement of girls in sexual activities. Parents still believe that “If a girl is not cut, she will break everything in the house.” (Basazinew, 2018; Guday, 2005; Kerebih & Mulunesh, 2014). Although creating awareness on the negative physical, intellectual, psychological, and emotional impacts of such harmful practices is going on, from the group discussions, it was possible to grasp that these harmful traditions are still practiced in rural areas and in some situations in urban areas as well. Circumcision of baby boys is still openly practiced in a traditional way. Likewise, cutting of uvula is widely done by local people. Due to shortage of healthcare providers and its long history in the community, traditional practitioners do all these activities in daylight by applying herbal medicine using unsterilized traditional utensils to heal the wound. Except few irregularities, child marriage is a relatively better controlled harmful culture in rural Gojjam (Guday, 2005). Other unacceptable traditions that are declining and hopefully will soon disappear for good in the foreseeable future include, for instance, ቅምጥ /k’əmmət/ which refers to a ‘reserved wife’ kept in another locality to serve the man shuttling between her and the head wife, and ደም መመለስ /däm mämälläs/ ‘blood feud’, which refers to a retaliation killing for an earlier homicide committed against the family. Excruciatingly, the victim of such retaliation could be a relative of the killer but with no connection to the killing committed. ደረት ድቂ /därät dəkk’i/ ‘beating of the chest with two fists (punches)’ and ፊት መፍጀት /fit mäfdzät/ ‘rubbing and wounding the forehead and cheek’, prolonged grief, etc. are among harmful practices

performed by women and still observed in some places in Gojjam. Gender bias and child labor are other major traditions in Gojjam which still need much attention to ease the burden on women and children.

Environmental degradation and indigenous knowledge

As mentioned in previous sections, the strong link between environment and IK is crystal clear. The environment mainly involves the home and the village, the plant and animal life, water bodies and other geographical landscapes, to which people are strongly attached (Cotton, 1996; Maffi, 2002). We learn from the literature that all the environmental, cultural and spiritual realities of the local people are realized in the IK practices (see Mistry, 2009). Haugen (1972) and Mühlhäusler (2003) also stated that ecolinguistics investigates how people interact with their physical environment and how language, which is at the heart of IK, changes as the environment changes. Deforestation is one of the major crises which refer to the loss of such irreplaceable rich vegetation and the wildlife within. As mentioned, plants and animals play an omnipotent role for human beings as a source of oxygen, food, medicine, construction material and energy. Hence, any environmental catastrophe such as deforestation has a direct effect on all these essentials and on the IK practices that are strongly connected. Unfortunately, the provider (forest) of all these basic needs is being devastated by the provided (human being).

Deforestation and traditional medicine

Ethiopia is one of the crisis areas where deforestation has reached an alarming stage. According to Shibru (2010 E.C.), the major reason for the declining forests in Ethiopia is poverty which can be manifested in the overarching dependence on the forest for firewood and construction, for making tools and expansion of settlements and agriculture. In southern Africa, where there are a plethora of parks and botanical gardens, about one-tenth of the plant species are included in the red list (Golding, 2003). It is not therefore difficult to imagine the level of seriously endangered plant species in Ethiopia, where there are very few parks and almost no botanical gardens. A worthwhile point to ascertain the catastrophic effects on IK and the environment is to consider the flora and fauna. Abiyot et al. (2006, p.88) write the following concerning the forest reserve in West Gojjam:

At present, only patches of secondary scrub and woodland vegetation are restricted to hills and river valleys. Trees of the genus *Ficus* (Moraceae) are the common forms around Geray and Menz

districts and Finote Selam Town. They appear in agricultural fields. The remaining vegetation is found following rivers and streams, rocky spots, hills and around churches. The vegetation is cleared for firewood, charcoal and agriculture.

The scarcity and eventual loss of plant species have contributed to the serious decline of ethnomedicinal plants still widely used in rural areas where modern medicine has not expanded yet. More than 70% of the human and 90% of the livestock medicine are extracted from plant and animal products in low-income countries like Ethiopia (Manaye et al., 2021). From these, medicinal plants take the lion's share (Mesfin, 2014). Abiyot et al. (2006) have identified the following major medicinal plants from Finote-Selam and the surrounding areas.

Local name	Pronunciation	Scientific name	Part	Use
ካዋ ሸንኩርት	/nätʃtʃ/ ʃənkurt/	Allium sativum	bulb	treats pneumonia and used as mosquito repellent and anti-malaria
ልግጣ	/ləgətt'a/	Calpurnia aurea	seed & leaf	treats rabies & malaria and as insecticide and to repel mosquito
ፓፓዮ	/papaya/	Carica papaya	seed	for abortion and to treat malaria
ጉመሮ	/gumäro/	Capparis tomentosa	root & leaf	mosquito repellent & insecticide
ምሳና	/məsanna/	Croton macrostachyus	leaf	treats ringworm & malaria
ቤቶ	/beto ⁹ /	Gnidia involucrata	root	treats sexually transmitted diseases, tuberculosis, mental problem, intestinal pain & malaria
ፊጦ	/fet'o/	Lepidium sativum	seed	treats abdominal pain & malaria and used as mosquito repellent
አንዶድ	/əndod/	Phytolaca dodecandra	leaf & root	parasites & used as mosquito repellent
ሚሚ ዛፍ	/mimmi zaf/	Melia azedarach	leaf	treats blood pressure, used as mosquito repellent & insecticide
ጠምበለል	/t'ämbäläl/	Jasminum abyssinicum	seed & leaf	treats rabies, hepatitis and malaria, used as mosquito repellent & insecticide
ክትክታ	/kətkəttə/	Dodonaea angustifolia	fruit	treats malaria
ጥጥ	/t'ət'/	Gossypium barbadense	branch	treats malaria
ስሚዛ	/səmiZZa/	Justicia scimperiana	leaf	treats hepatitis & malaria
አንቁርይ	/ənk'urəyy/	Momordica foetida	root & leaf	used as mosquito repellent & insecticide
አጸ ዘዌ	/əs'ä zäwwe/	Cyphostemma adenanthum	root & leaf	used as mosquito repellent & insecticide

⁹ It was not known by informants.

Malaria is the most prevalent disease treated by applying medicinal plants that can justify the importance of IK for the survival of people. From the foregoing list of plants, whereas ምሳና /mäsanna/ ‘Croton macrostachyus’, ሚሚ ዛፍ /mimmi zaf/ ‘Melia azedarch’, ከትክታ /kətkəttə/ ‘Dodonea angustifolia’ and ልግግ /ləgətt’a/ ‘Calpurnia aurea’ are trees, others are either shrubs or herbs. Most of these trees and other shrubs like አባሎ /abalo/ ‘Lannea schimperi’, climbers like አረግ ሬሳ /aräg resa/ lit. ‘climber of corpse’ ‘Zaharnia scabra’ and አጋም /agam/ ‘Carissa spinarum’, which were widely used for medicinal purposes in the area, have become scarce due to the declining vegetation. The shoots and leaves of መቅመቆ /mäk'mäkk'o/ ‘Rumex Abyssinicus’ are edible, and the flour of its dried root mixed with hot water can be applied to treat high blood pressure. The climber የአይጥ አረግ /yayt' aräg/ lit. ‘climber of rat’ ‘Cissampelos mucronata’ is used mainly for tying and can also be applied to cure itch and arthritis. The interviewed informants told the research team that ዳማ ከሴ /dama käse/ ‘Ocimum tamifolium’, and አረግ ሬሳ /aräg resa/ ‘Zaharnia scabra’ are ideal treatments for flu, headache, breathing trouble and pneumonia. አዞ አረግ /azzo aräg/ lit. ‘climber of crocodile’ ‘Clausena anisate’ is applied for wound and tooth pain. አንዳሁላ /andahulla/ ‘Kalanchoe densiflora’ is used to treat wound and tooth ache. የለንቋጣ ዝልግልግ /yälänk^watt'a zələgləg/ ‘viscous from Grewia ferruginea’ can be applied to ease cattle delivery. ቁልቁል /k'ulk^wal/ ‘Euphorbia candelabrum’ is applied for rabies. ሬት /ret/ ‘Aloe’ is used to treat dandruff and sunburn on the face. The sour fruit called እንቆቆ /ənk'ok'o/ obtained from እንቆቆ ተክል /ənk'ok'o təkəl/ ‘Embelia schimperi’ was widely-known for its medicinal value to kill ኮሶ /koso/ ‘tapeworm’. As the name implies, the flower of ኮሶ ዛፍ /koso zaf/ is used to kill the same parasite ኮሶ /koso/ ‘tapeworm’. By administering a juicy mixture from the fruit and leaf of የኮክ ዛፍ /yäkək zaf/ ‘peach tree’ with ጤና አዳም /t'ena addam/ ‘Ruta chalepensis’, sudden illnesses of humans and animals are treated (see also Strelcyn, 1973; Haddis, 1988). Unfortunately, these plants are not easily accessible and hence their utility as food and medicine is not as frequent as it was before. As a result of climate change, the highland tree ነጭ ባህርዛፍ /nätfj bahəzaf/ ‘white Eucalyptus globulus’ (also called አመዴ /amäde/ derived from the word አመድ /amäd/ ‘ash’) whose leaves are boiled and applied as a remedy for flu and breathing problems by way of fumigation has become rare. Instead, the regular eucalyptus has taken over both the lowland and highland areas (Nigusse et al., 2018). Plants such as ልምጭ /ləmmətʃtʃ/ ‘Clausena anisata’ and ከያ /kəya/ widely used for cleaning teeth have become rare,

and to the wonder of informants, they are cut into pieces and brought to towns for sale. Other than its medicinal value, እንዶድ /ændod/ ‘Phytolacca dodecandra’ was widely used to wash clothes. After the introduction of soap and other detergents and due to its shortage as a riverine and wetland plant, the easy application of እንዶድ /ændod/ for both purposes has withered away. On top of that, the knowhow to prepare እንዶድ /ændod/ has also disappeared. We used to play a variety of games using እምቧይ /əmb^way/ ‘Solanum indicum’ collected from the plant called ዘርጮ /zärtʃ^o/. Its yellow circular non-edible fruit was also applied to treat wounds from ሙጃሌ /mudžäle/ ‘jigger/Tungiasis’ which is no longer a serious problem in Gojjam. The plant እምቧይ /əmb^way/ and its fruits are seen rarely these days and hence the games and its medicinal value are fading away all together. Following jigger’s disappearance, the pins, namely መድፊ /mädfē/, መድፊ ቁልፍ /mädfē kulf/ and ወረንጦ /woränt^o/ which were used to remove the tiny flea and its eggs from affected body parts (mostly feet and hands) are no longer serving the same purpose but used to pick out tiny thorns piercing the body part.

Interviewed participants of the research believe that treating ailments takes place either by applying part of the plant (bulb, leaf, seed, fruit, root, branch) on the patient internally or externally. As a tradition, herbal medicines are mostly collected early in the morning empty stomach, before breakfast, and sometimes mixing the parts with fresh water, milk, traditional beer, etc. የቀንድ ካራ /yäk'änd karra/ ‘knife with horn handle’ with which parts of medicinal plants are cut, የወይራ አንካሴ /yäwoyra ankasse/ ‘spear from olive tree’ with which roots of medicinal plants are dug and extracted, የድንጋይ አለሎ /yädəngay alälo/ ‘round stone’ with which medicinal ingredients are dashed and ወፍ ያልቀመሰው ውሃ /wof yalk'ämmäsäw wəha/ ‘fresh water fetched early in the morning before birds touch it’ are highly recommended for the successful application of traditional medicine. The healer is prohibited from having sexual intercourse the night before. Other disciplinary measures include refraining from urination, spitting, meeting a mother in the postpartum period and seeing corpse (Mesfin, 2014). Whether or not herbal practitioners strictly adhere to all these restrictions needs to be well-explored. In few instances, traditional healers are forced to grow plants of small size in their homestead so that they collect their parts from nearby. In most cases, they travel for days to extract ethnomedicinal plants. This round-trip search taking several days of stocking without applying any preservative may reduce the plant parts’ potency.

Deforestation and other plant utilities

As mentioned in Vivero (2001), deforestation affects timber products that are extremely essential for house building, making furniture and agricultural tools and as an energy source in many parts of Ethiopia. Apparently, the high demand for timber has put some of the big trees at high risk of extinction. This includes, for instance, ትላልቅ ዛፎች /təllalək' zafəʃʃ/ 'big trees' which are used as food source, shade, and medicine as well as for beehive hanging. The local people mentioned ዋርካ /warka/ 'Ficus vasta', ዋንዛ /wanza/ 'Cordia africana', ጥድ /t'əd/ 'pine', ዝግባ /zəgba/ 'Podocarpus falctus', ሸላ /ʃola/ 'Ficus sycomorus', ሸነት /ʃənät/ 'Myricasalicifolia', ዛና /zana/ 'Stereospermum kunthianum', ጨባ /ʃ'äbba/ 'Acacia abyssinica', ሰሳ /säsa/ 'Albizia gummifera', ምሳና /mäsanna/ 'Croton macrostachyus', ቁልቁል /k'ulk^wal/ 'Euphorbia candelabrum', ማርቆ /mark'o/ 'Hyphaene thebaika', ውልክፋ /wulkəffa/ 'Dombia tarrida', ብርብራ /bərbərra/ 'Milletia ferruginia', አንፋር /anfar/ 'Buddleja polystachya', ግራር /gərar/ 'Acacia polyachantha', አጣጥ /at'at/ 'Maytenus arbutifolia', ፍየላ ፈጅ /fəyyälä fädzdz/ 'Clutia lanceolata' and many more types of trees and shrubs which were once abundant in the research site but are now rapidly disappearing. The tree known as ብርብራ /bərbərra/ 'Milletia ferruginea', whose fruit was widely used for traditional fishing, is not available at present and hence fishing in such a way has ceased. Thanks to the monasteries and churches, old school compounds and a few protected forests, these endangered trees are to some extent available. Borunda (2019) writes that church forests in Ethiopia are incredible oases of trees with the collaborative efforts of priests and local communities to save less than five percent of forests in the country.

The scarcity of trees has given rise for traditional honey collectors who are forced either to hang multiple beehives in one tree or if possible to use modern beehives. Such unfavorable conditions lead to a decrease in honey production and an increase in price. Moreover, the knowledge of constructing beehives, fumigating, and hanging them, following up the beehive activities, and finally collecting the honey are all fading away among the youth, who by and large, have detached themselves from the IK systems. The serious decline of tall indigenous trees has also made the production of the traditional household materials such as የሙቀጫ ልጅ /yämuk'ätʃʃa lədʒ/ 'pestle', ሙቀጫ /muk'ätʃʃa/ 'mortar', ሳንዱቅ /sanduk/ 'cloth box' and ገንዳ /gända/ 'trough' rare at home and hence alien to the youth. At the same time, skilled carpenters who make these tools are no longer engaged in the art due to the rarity of timber.

According to Zemedede and Mesfin (2001), there are about 203 species of edible plants in Ethiopia. From these, 37% are herbs, 32% shrubs and 31% trees. They write that, except the domesticated ones, many of these species (including famine foods) are endangered because of erosion and expansion of settlements. In the research area, the edible fruits such as ሸላ /ʃola/ ‘Ficus sycomorus’, በዴሳ/ዶቅማ /bäddessa/dok'ma/ ‘Syzygium guineense’, ሸህ /ʃäh/ ‘Mimusops kummel’, እንኮይ/ሆል /ənkoj/hol/ ‘Ximenia americana’, አጋም /agam/ ‘conkerberry’, አሽቃም /aʃk'ammo/, እንጆሪ /əndzori/, ቀጋ /k'äga/ ‘Rosa abyssinica’, etc. were well-known. Enjoying the taste of የወፍ ቆሎ /yäwof k'olo/ ‘Lantana camara’, የእረኛ ቆሎ /yärräጃna k'olo/ ‘Lantana trifolia’, የወፍ ማር /yäwof mar’ lit. ‘bird’s honey’ and sacking the various cylindrical flowers such as አስተናግር /astänagər/ ‘Datura stramonium’ (also used to treat fungal diseases on the head) and playing with dried ball-shaped mushroom locally called የአቡሃይ ፈስ /yabbuhay fäs/, have become nostalgic experiences. The weighty reason is deforestation which makes trees and shrubs scarce. The production of ሎሚ /lomi/ ‘lemon’, ሙዝ /muz/ ‘banana’ and ኮከ /kok/ ‘peach’ is heavily decreasing. ትርንጎ /tərəngo/ ‘citrus fruit with a thick rind’, which was one of the most abundant fruits in and around Finote-Selam, turns out to be on its last legs and labeled by the community as ለሞት መዳኒት ነው ቢባል እንኳን አይገኝም /lämot mädanit näw bibbal ənkw^wan ayəggäጃጃmm/ ‘It cannot be accessed even if it could save one from death’.

There were several grass types such as ሰርዶ /särdö/ ‘Cynodon dactylon’, ዋራት /warat/, አክርማ /akrəmma/ ‘Eleusine’, ጉድይ /gudəyy/, በርቤንዝ /bärbenz/, ፊላ /fila/ ‘narrow-leaved bulrush or cat’s tail’, ቁጠማ /k'et'äma/, ሙጃ /mudzɔza/, ዘባ /zäba/ ‘Hyparrhenia rufa’, ጀጅባ /dzädzɔzäba/, ጎድር /godər/, ሰበዝ /säbäz/, እንግጫ /əngətʃ'a/, and so on which were used as fodder, floor rug, weaving and roofing. They are not found abundantly nowadays by the mere fact that most of the places covered with savannah grasslands have become agricultural fields or settlements (Tinsae et al., 2012). Like trees and shrubs, the young generation knows only the generic name ሳር /sar/ ‘grass’. This implicates their reduced vocabulary of plants and animals very much associated with IK practices.

As elsewhere, local communities in Gojjam are dependent on plant products for house construction (see also section 3). Peel is one of the key items to tie things together as well as to make ropes and whip. The well-known peel types in the research area are: የናጫ ልጥ /(yä)natʃtʃ'a lət/ ‘peel from natʃtʃ'a’, የውልከፋ ልጥ /(yä)wulkəffa lət/ ‘peel from Dombia

tarrida', የለንቋጣ ልጥ /(yä)länk^watt'a/ lät' 'peel from *Grewia ferruginea*', የዋንዛ ልጥ /(yä)wanza lät'/ 'peel from *Cordia africana*', የሽገት ልጥ /(yä)ጃጃጃጅ lät'/ 'peel from ጃጃጃጅ' and many other kinds of peels. Due to lack of forests, whereas adults and elderly know the different types of peels, the young generation knows only the generic name ልጥ /lät'/ 'plant-extracted peel'. The knowledge of rope and whip making has become obsolete as plastic ropes are available at every corner. When there was abundant vegetation, people used to obtain gums, incense, resins, spices, honey and wax for family consumption and income diversification of rural communities (Vivero 2001). Among these, ጥንጁት /t'ändzutt/ 'Otostegia integrifolia', አደስ /adäs/ 'Myrtus communis' and ጠጅ ሳር /t'ädzä sar/ 'a type of grass with good odor', for instance, are known for their good odor by smoldering them on the traditional charcoal stove, therapeutic value, and as insect repellent widely used in both urban and rural areas. They are however superseded by incenses bought from shops. Before people start using ፋኖስ /fanos/ 'lamp' and nowadays electric bulbs (not in all places), there was the tradition of using ጫቅማ /tʃak'ma/ 'castor bean', ጧፍ /t^waf/ 'candle made from wax' and ኩራዝ /kuraz/ 'kerosene lamp'. Whereas the second and the third items are no longer used due to the inadequacy of castor beans and wax, the fourth is still being used in rural areas. ጧፍ /t^waf/ is used almost exclusively in churches.

Deforestation and animal life

Deforestation affects not only the plant life, but also the animal life including those useful animals mainly for their medicinal value and food source. According to Manaye et al. (2021), a total of 26 animal species were identified and recorded as a source of medicine which can treat 33 types of diseases in parts of Gojjam. The research result shows that from well-recognized insects, የጣዘማ ንብ /(yä)t'azma nəb/ 'stringless bee' and ንብ /nəb/ 'honey bee'; from fish ነጭ አሳ /nä'tʃ' asa/ 'white fish'; from game birds, ቆቅ /k'ok'/ 'partridge'; from domestic animals, ፍየል /fəyyäl/ 'goat' and ዶሮ /doro/ 'chicken'; from wild animals ጅብ /dʒəb/ 'hyena', ከርከሮ /kärkärrö/ 'warthog', አሳማ /asama/ 'bush pig', ጃርት /dʒart/ 'porcupine' and እሽኮኩላ /əʃkokulla/ 'woodchuck'; and from flying mammals የሌሊት ወፍ /yälelit wof/ 'bat' are the most often visited animals for their medicinal value. የጥርኝ ዝባድ /yät'ərəjɲ zəbad/ 'musky scent of civet' is extremely scarce as the animal itself has disappeared at present. Honey and meat followed by butter, milk, liver, fatty meat, and cheese were identified as the most frequently used animal products to treat illnesses such as dry cough, malaria, abdominal pain, swelling, wound,

hepatitis and arthritis, rabies, epilepsy, and asthma. Animal by-products such as hooves, skins, bones, feathers, and tusks were also used by traditional healers to treat illnesses. Manaye et al. (2021) mention that የትንኝ ማር /yätənəŋŋ mar/ ‘Liotrigona spp. honey’ and የጣዝማ ማር /yät'azma mar/ ‘Trigona spp. honey’ were most popular and effective medicines to cure malaria (also known as ንዳድ /nədəd/), one of the deadliest diseases in the research area. Unfavorably, these useful insects are not easily accessible at present which means that the special skills of collecting their honey and processing it are almost unfamiliar. Informants believe that traditional healing practices using animal body parts and products are disappearing rapidly largely due to the disappearance of the animals from the research area and the introduction of modern medicine.

Elderly people remember that their surroundings were covered with forests which were used to shelter wildlife of all sorts traditionally classified as ቅዱስ /k'əddus/ ‘holy/edible’ and ርኩስ /ərku:s/ ‘taboo/inedible’ but sadly fading away nowadays. The Amhara National Regional State Environment and Forest Protection Authority, in its 2021 issued report, reiterated its grave concern that animals such as አንበሳ /anbässa/ ‘lion’, ነብር /näbər/ ‘leopard’, አነር /anär/ ‘wild cat’, ጎሽ /goʃʃ/ ‘buffalo’, ቡኸር /buhär/ ‘reedbuck’, ከርከር /kärkärro/ ‘warthog’, ደፋሳ /däfasa/ ‘wild beast’, አሳማ /asama/ ‘pig’, ፌቆ /fek'o/ ‘oribi’, የቆላ አጋዘን /yäk'olla agazän/ ‘greater kudu’, ቀበሮ /k'äbäro/ ‘jackal’, ደኩላ /däkkulla/ ‘bushbuck’, ሚዳቆ /midak^{wa}/ ‘bush duiker’, ዝንጅሮ /zəndzäro/ ‘Anubis baboon’, ላም ላጌ /lam lagi/ ‘genet’, አውጭ /awtʃ/ ‘aardvark’, ጥርኝ /t'ərəŋŋ/ ‘African civet’, ጃርት /dzart/ ‘porcupine’, ሞጨጭላ /motʃ'ätʃ'əlla/ ‘marten’, እሽኮኩላ /əʃkokulla/ ‘rock hyrax/agouti’, etc. have disappeared or their number decreased significantly. The ever-depleting forest reserve has also disturbed the ecology of big birds such as እርኩም /ərku:m/ ‘stork’, ጥንብ አንሳ /t'ənɐb ansa/ or ጆፌ /dʒoffe/ ‘vulture’, ጭሊሊት /tʃ'əlilit/ ‘kite’, ጋንጋት /gəngat/ ‘thick-billed raven’, etc. that inhabited the forests, towering tree tops and swampy areas. In the same way, small birds like ግንደ ቆርቆር /gəndä k'ork'ur/ ‘Abyssinian woodpecker’, ማማት /mamat/ ‘starling’, ደርጭት /dərʃit/ ‘common quail’, etc. are seen rarely due to the ecological imbalance. All these animals are hence unfamiliar particularly to the young generation who know the bulk of them in (text) books and on television. The dwindling forests have considerably reduced the number of ጉራዝ /gureza/ ‘colobus monkey’, ጦጣ /t'ot'a/ ‘vervet monkey’ and ዝንጅሮ /zəndzäro/ ‘olive baboon’ though these animals adopt a relatively new habitat on eucalyptus trees in villages and even towns. The young generation has neither experienced the galliform birds ቆቅ /k'ok'/

‘partridge’ and ጅግራ /dʒəgra/ ‘guinea hen’ nor tasted their edible meat. Such animals were present in huge numbers in the once dense forests of Gojjam, for the most part, they have now disappeared from the vicinity. Participants of the group discussion mentioned deforestation, overhunting, expansion of settlements and grazing and agricultural areas and climate change as major causes for the disappearance of wild animal species (see also Abiyot et al., 2006; Fiseha, 2011 E.C.).

In earlier times, it was part of the cultural identity that war heroes and hunters were decorated using animal products such as ያንበሳ ጎፊር/ጋማ /yanbässa gofär/gamma/ ‘lion mane’ and የነብር ቆዳ /yänäbər k’oda/ ‘leopard skin’. Except the old ones preserved until today, there are no such items freshly produced because of change of culture and the disappearance of these animals in the area. That was a sign of brevity, good hunting skills and glory for good hunters to pile up hides of wild animals even if their flesh is not edible. Today, people use fake lion furs and leopard skins from synthetic products to satisfy their passions during festivities. Obviously, the hunting skills and tradition could not be supported basically because most of the wildlife slowly disappeared together with the depleting forests. It goes without saying that the skillful people who process the fur, hide, and skin are no longer available.

Swimming and traditional fishing

As also mentioned in the preceding sections, the inexorable deforestation has affected the size of rivers and lakes and hence dry areas override wetlands. The change in the environment has brought about a disastrous effect not only to plant and animal species, but on rivers, ponds and lakes as well. All-season rivers and lakes have now become rivers and lakes of the rainy season inflicting adverse effect on the skill of ዋና /wana/ ‘swimming’ and the tradition of fishing. Though the young generation knows the word ዋና /wana/ ‘swimming’, the overwhelming majority do not know how to swim and do not comprehend words and concepts such as ጥልቂያ /t’älk’iya/ ‘drowning’, እጅ መጣል /ədʒdʒ mät'al/ ‘art of swimming’, ጠሊቅ /t’älik/ ‘deep water’, ጎጭ /gotʃ/ ‘shallow water’, ደምበሌ /dämbäle/ ‘water cascade’, የንግላል ዋና /yängälal wana/ ‘back position swimming’, የቁም ዋና /yäk'um wana/ ‘upright position swimming’ and አዙሪት /azurit/, ‘river cyclone’. The tradition of ቅል አዘላ /k’äl azäla/ which refers to carrying gourd at the back to float by new trainees is not known today either. In the same way, due to the drying up of rivers, the fishing tradition has diminished which could bring about protein deficiencies in the community. Moreover, the making of fishing

instruments called መቃጥን /mäk'at'ən/ (also called መንጠቆ /mänt'äkk'o/), መረብ /märäb/ 'fish-net' and መንቋራሎ /mänk'^wafillo/ 'hook' as well as the local skill to make them are dying out all together. The decreasing water volume of rivers has caused the declining of aquatic animals like የውሃ እናት /yävəha ənnat/ lit. 'mother of water' 'a type of duck', ካይንት /kayənt/ 'duck', አርጃኖ /ardzəno/ 'type of alligator', አለቅት /aläkt/ 'leech', ጉርጥ /gurt/ 'frog', etc.

Plastic and indigenous knowledge

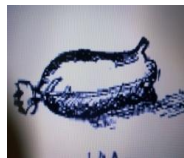
Under normal circumstances, IK is acknowledged in the developed world as a romantic notion which enables indigenous peoples live in harmony with nature (Mistry, 2009). Hence, change by indigenous people on the material culture could affect the continued existence of the valuable IK practices. Massively produced plastic products are first on the list of harmful industry products causing unprecedented environmental disasters and threatening local knowledge and local products. According to Amref (2018), the ever-changing lifestyle of people has brought about an increased demand for non-decomposable plastic products that harm the environment and challenge the initiative to meaningfully reduce their use especially in towns and cities. With continuing disastrous effects of plastic products, meeting the motto of the 2018 World Environment Day: 'Beat Plastic Pollution' remains to be a nightmare in Ethiopia. Nevertheless, though much work remains to reach places outside Addis Ababa, there are encouraging efforts to recycle plastics and produce useful products like plastic conduits.

Liquid and solid containers are among the most affected local products. Whereas the words and concepts that express local products are losing ground, the word ፌስታል /festal/ 'plastic bag' is viral all over the country irrespective of linguistic and cultural differences. Locally made containers such as ቀረጢት /k'ärät'it/ 'small sack made of textile', አኮፊዳ /akofada/ 'bag made of palm tree leaves used by students of church education to contain crumbs of food', ኮረጃ /korädzo/ 'traditional bag to carry food stuff and exercise books', ዘንቢል /zänbil/ 'traditional bag made of palm leaves used to contain different items' are all being replaced by synthetic bags entirely made from inorganic polymers. Grain containers made of hides such as አቆማዳ /ak'omada/ 'big sack made of cattle skin', ስልቻ /səlləʃʃa/ 'sack medium in size made of goat skin' and ቀርቢታ /k'ärbätta/ 'small sack made of goat skin' and ኪሻ /keʃa/ 'sack made of natural fiber' are no longer in use. These products from hides and skins are fully replaced by the plastic-made sack called ማዳበሪያ /madabär^ya/,

the term which originally means ‘fertilizer’ and extended its meaning to the imported plastic-made fertilizer bag. Along urban areas, rural areas are also being profaned by such plastic containers. The locally handmade food basket called አገልግል /agälgäl/ made of special grasses called አክርማ /akrämma/ and ሰበዝ /säbäz/ with different colors for decoration, sometimes laminated with leather for its durability, is not widely used currently. አጎዛ /agoza/ ‘sheep skin with its fur used to sit on’ has become rare due to easy access to fabrics that can serve the purpose. ሙዳይ /muday/ is a small agälgäl used by women to keep/store their precious items. Whereas all the weaving and decorative activities are done by women, laminating was done by leather experts, namely ቆዳ ሰራተኛ /k'oda särratäñña/ lit. ‘skin worker’. All these local materials are now produced in very small quantities due to over-produced polymers.



ቀርባታ /kärbätta/



ቀረጠት /k'ärät'it/



ከሻ/kefa/

Liquid containers such as ዋርማ /warma/ (made of gourd to drink with water and traditional beer), ፋጋ /faga/ (made of gourd to contain water and dough), ቅምጫና /k'əmq'ana/ (made of gourd to contain water, mostly ጠበል /t'äbäl/ ‘holy water’), ቡሃቃ /buhak'a/ (made of gourd to contain dough); ዋንጫ /want'a/ (made of cattle horn to drink water or traditional beer) and ጥዋ /t'əwwa/ ‘made of clay soil to drink milk or traditional beer’ are now used rarely and their production has considerably decreased. Nowadays, the market is full of ጣሳ /t'asa/ ‘drinking vessel made from tin’, ኒኬል /nikel/ ‘drinking vessel made of metal’, ብርጭቆ /bərɥ'ək'o/ ‘glass’ and more abundantly የላስቲክ መጠጫ /yälástik mät'ät'f'a/ ‘drinking vessel made of plastic’, which implies that the local capacity is being hampered. Formerly, traditional beer was served in a well-prepared gourd and then in a /mank'ork'or^ya/ ‘tin-made pitcher’ but today, they use a plastic pitcher known as ጆግ /dzog/.



ዋርማ /warma/



ዋንጎል /wanj'a/



ጥዋ /t'əwwa/

All the data and information reveal that almost all local products of drinking vessels and containers are being replaced by plastic and synthetic products such as የላስቲክ ጅግ /yälastik dzog/ ‘plastic jar’, የላስቲክ ሰሃን /yälastik sähan/ ‘plastic plate’ and የላስቲክ ማንኪያ /yälastik mankiya/ ‘plastic spoon’. የላስቲክ ምንጣፍ /yälastik mənt'af/ ‘plastic rug’ is replacing ሰሌን /sälen/ ‘local mat made of palm tree leaves’ and ዳውጃ /dawədzə/ ‘local mat made of special grass’. The growing interest in artificial plants and flowers to decorate houses in the presence of natural flowers prevails the change of the material culture in people who are now attracted more by plastic products for their low-price and durability. When it was abundant in the wilderness, flours of various types of food, milk and milk products, chili pepper and various types of spices were stored in gourd containers well-carved into different sizes. Until locally made household items were all replaced by plastic-made devices, a gourd-made utensil called ማዘሪያ /mazoriya/ was used to pour dough on the hot baking pan made of clay to bake እንጅራ /əndzära/ (a pancake-like thin flat bread); ቡሃቃ /buhak'a/ was used to store dough; ቅምጫና /k'əmɿ'ana/ was used to contain water, mostly ጠበል /t'äbäl/ ‘holy water’; ቅምብቻ /k'əmbəɿɿʃa/ (also woven) was used to contain powder of peas and beans as well as pepper; ጉቸማ /guɿɿɿəmma/ was used to contain butter and mashed pepper; ግሬራ /gərəra/ (with cover on top and sometimes laminated with leather), was used to contain milk.¹⁰



ቡሃቃ ቅል /buhak'a k'al/



ቅምጫና /k'əmɿ'ana/



ግሬራ /gərəra/



ማዘሪያ /mazor'ya/

All these traditional containers are speedily being replaced by plastic containers of various sizes mostly for two reasons: easy access to the latter and inaccessibility of raw materials for the former. Whereas the

¹⁰ I couldn't have easy access to ቅምብቻ /k'əmbəɿɿʃa/ and ጉቸማ /guɿɿɿəmma/ to take pictures which is self-telling of the magnitude of attrition of local household items.

knowledge and skill to make all these instruments is fading away, the number of small-scale factories producing plastic bags and containers is increasing with no control mechanism in place.

There is a deep-rooted tradition of using home-made instruments made of big grass and straw to store, sort out and measure grains. These include ቁና /k'unna/, ቀለምሻሽ /kälämsfaʃ/, ወስከምቢያ /woskämb^ya/, ሰፌድ /säfed/, ላዳን /ladan/, ወራንታ /woranta/ and ወንፊት /wonfit/ made of straw and string; ቀረጢት /k'ärät'it/ made of fabric; ስልቻ /sällätʃfa/, ቀርቦታ /k'ärbätta/ and አቆማዳ /ak'omada/ made of hides; ቅምባ /k'əmba/, ቅርጫት /k'ərtʃat/ and ኮለል /koläl/ made of reed and bamboo; ጎታ /gota/ and ጉሽጉሽ /guʃguʃʃ/ made of mud and straw. Young girls were trained by their mothers how to make these and a variety of other containers and food baskets and how to spin to produce cotton clothes for the family. All these traditional storing and measuring devices have now been replaced by plastic products like ጆግ /dʒog/ and ማዳበሪያ /madabär^ya/ 'fertilizer bags'. Plastic containers, be it in small or big sizes, have replaced both the containers and measuring equipment.

The art of making small-sized drum known as አታሞ /atamo/, medium-sized ታምቡር /tambur/ and large-sized ክብር /käbäro/, all made of leather in a special art, have now disappeared. Except for church services, all these drums can be substituted by other ordinary materials for other festivities and their visibility is fading out. As mentioned in section 3, the other local knowledge that has rapidly disappeared is the making of rain protector called ገሳ /gäsa/ made of big grass types known by the local names ቁጠማ /k'et'äma/, በርቤንዝ /bärbenz/ or ፊላ /fila/. Naturally, these grasses grow in swampy areas now hardly found which makes the making of ገሳ /gäsa/ difficult. As a result, it is being substituted by የማዳበሪያ ላስቲክ /yämadabär^ya lastik/ lit. 'fertilizer bag'. Like all other local items, regrettably, the number of knowledgeable individuals who can make ገሳ /gäsa/ at present is almost nil. It is common to see damaged roofs of houses covered using plastic sheets instead of grass or tin. The use of ጎታ /gota/ 'big grain container made of mud, dung and straw' with partitions called ደልገን /dälgän/ especially designed to store grain has dwindled mostly because people do not possess surplus grains to be stored for long. They rather prefer to keep their grain in ማዳበሪያ /madabär^ya/ 'fertilizer sack' even for short duration. Hence, the knowledge of gota-making which was frequently used in rural areas has now diminished. Hand-made wooden photo frames, shelves, cupboards, etc. are all being made from plastics. People adhere to cheap plastic products due to shortage and sometimes unaffordable high prices of local

products made of natural objects. Unfortunately, just like other big cities, the young generation is becoming unfamiliar with traditional practices and products, in particular handmade local products. With the abundance of plastic products, farmers would not be encouraged to grow plants such as gourd, reed, bamboo, etc. and make local products from them. Similarly, potters would not be enticed to develop their pottery skills and make pots of varying sizes. Tanners are being discouraged to do leather products. Such skills are disappearing, and these IK may be lost forever. So are the weaving, iron ore smelting, and carpentry skills.

Other endangered indigenous knowledge practices

It is axiomatic that IK is central in the indigenous identity and culture of indigenous people, and its transmission from one to the next generation must be encouraged (Wendel, 2005; Briggs & Sharp, 2004). UNESCO also underscores that indigenous people should be keen to maintain their IK and transfer it to the next generation through their language, traditional knowledge, beliefs, values, ritual, folklore, crafts, and biodiversity as part of their cultural heritage. As there exists strong ties between language, culture and environment; the change in one affects the others as well-described as early as Sapir (1921) and Whorf (1956). As mentioned in section (1) above, the rapidly changing environment and culture affects the ecology of language which signifies the complex web of relationships that exist between languages, their speakers, and the environment. Environmental and cultural changes are reflected in the loss of words and concepts that are strongly tied with endangered IK practices. This phenomenon is demonstrated particularly in the language of the youth (Moloi, 2013).

The varieties of Amharic, including the Gojjam variety, are losing their grounds because of dialect convergence which is caused for the most part by dialect contact as well as due to the expansion of urban way of life, modern education, mass media and infrastructure (Zealelem, 2021). In this case, a good number of words and concepts attached to IK practices are disappearing due to environmental and cultural changes. This is clearly observed in the language of the youth in contrast to adults. The result of the study shows that the young generation of speakers of the Gojjam dialect knows and uses more generic words than specific words. For instance, most (if not all) specific names of birds are reduced to the generic name ወፍ /wof/ 'bird', most (if not all) specific names of big birds are reduced to አሞራ /amora/ 'big bird'. In the same way, all specific types of trees and grasses are known by the generic names ዛፍ /zaf/ and ሳር /sar/, respectively. In the Gojjam dialect, ጸባል

/däbbol/ refers to a cub, ውርንጭላ /wərənɣʷəlla/ refers to ‘foal’ and ኪቲላ /kitilla/ refers to ‘puppy’. Informants are aware that most youth reduce all the above specific terms for little animals to the word ግልገል /gəlɣäl/ ‘little animal’. Whereas adults make a distinction between እምቦሳ /əmbossa/ ‘baby calf’ and ጥጃ /t’ədʒdʒa/ ‘calf’, the youth neutralize this distinction and use only the latter. Similarly, the words ወይፈን /woyfän/ ‘bull calf’ vs. ቤሬ /bäre/ ‘ox’, ጊደር /gidär/ ‘heifer’ vs. ላም /lam/ ‘cow’, ባዝራ /bazra/ ‘mare’ vs. ደንጉላ /dəngula/ ‘stallion’, ቁብ ዶሮ /k’eb doro/ ‘pullet’ vs. እናት ዶሮ /ənnat doro/ ‘hen’ are known and used distinctly by adults and elders who dwell in rural areas. The classification of animals based on their edibility as እርኩስ /ərkus/ ‘non-edible/taboo’ and ቅዱስ /kəddus/ ‘edible/holy’ is hardly known by the youth. A pregnant cow, goat, or sheep is known as ክበድ /kəbäd/, and that of donkey or mare ጥጉብ /t’əgub/ in the Gojjam dialect. At present, most people, particularly the youth, use the term እርጉዝ /ərguz/ which was used exclusively for pregnant women. All these examples show that the young generation of speakers use reduction and simplification as compensatory strategies for the loss of distinctive vocabulary.

That the effect of deforestation and culture change erodes the vocabulary of speakers and influences their linguistic behavior is true among the young generation in Gojjam. As a result, young speakers, who have not experienced the variety of plant and animal life, have not had the chance to create the corresponding images of ውልከፋ /wulkəffa/ ‘*Dombia tarrida*’, ዛና /zana/ ‘*Stereospermum kunthianum*’ and many more from plants and ጎሽ /goʃʃ/ ‘buffalo’ and ክርክሮ /kärkärro/ ‘warthog’ and many more from wild animals. In this situation, they have an incomplete knowledge of the vocabulary of the language they natively speak and the concepts in the real world. When there was abundant forest, the term ካንቻ /kantʃa/ was used to refer to the clearing of vegetation for agricultural purposes. As there are few forests to be cleared, the term is now retained by elderly people who themselves were involved in the clearing activity.

The disappearance of open spaces affects the vocabulary of young speakers. The words ሸሃታ /ʃəhatta/, መስክ /mäsk/ and ስዳጅ /səddadz/, all referring to open spaces of varying sizes where cattle graze, are reduced to the word ሜዳ /meda/ which simply means ‘field’. The words አማጋ /amaga/, ታዛ /taza/ and ተጋን /tägan/, spaces close to the house are simplified to one word, namely ጻሮ /g^waro/. Since the number of cattle owned by individuals is diminishing, the use of ቤረት /bärät/ or ደገሌ /dəgäle/ ‘cattle pen’ has become inessential. The tradition of keeping

cattle in the fields was meant basically to keep soil fertile and to increase yields. According to Shibru (1986 E.C.), at present, all dried dung called ኩብት /kubät/, አገዳ /agäda/ ‘stalk’, ገለባ /gäläba/ ‘straw’, etc., which should have been left in the field as fertilizers, are being used as firewood or brought to the market and sold. Failure to use natural fertilizers, forces the farmer to purchase expensive inorganic fertilizers making their lives even more miserable. Informants mentioned that farmers complain that their farmland has burnt due to excessive use of artificial fertilizers and the so-called ምርጥ ዘር /mört' zär/. People were well-aware of the deadly strikes of ሙብረቅ /mäbräk'/ ‘lightning’ and when it hits, they used to apply their IK to save the life of the struck person by placing the victim into a mud or dung. This knowledge is not being transferred to next generations. The scarcity of cultivable land along with the booming population growth has hampered the communal activities called ደቦ /däbo/ or ወንፈል /wonfäl/, which were crucial to promote group work spirit during harvesting and post-harvest times. Together with the endangered communal activities, accompanying songs and historically old rituals are also endangered. The words and concepts very much connected to the traditional house and its partitions such as ጋጥ /gat'/ ‘stall largely for calves’, ጉልላት /gulləlat/ ‘traditional Dom’, ወጋግራ /wogagra/ ‘side pillar’, ጭጎት /tʃäggot/ ‘kind of pigeon hall’, ሰቀላ /säk'äla/ ‘type of shape of a house’, ቆጥ /k'ot/ ‘kind of perch’ and ጅብ አፍ /dʒəb af/ lit. ‘hyena mouth’ referring to the angle of a traditional house’ are absent from the lexicon of the young generation following the shift from the traditional grass-thatched houses to the modern. The effect of drying waters is being reflected in the loss of words and concepts such as ሊጠን /lit'an/ ‘wide river crossing’; ቸክ /tʃak/, ወልቅ /wolk'/, ጨቀጨቅ /tʃäk'ätʃäk'/, ገቅገቅ /zäk'zäkk'/ and አረንቋ /aränk^wa/, which all refer to swampy and grassy wetlands, well-remembered only by adults and the elderly. አቆልቋይ /ak'olk^way/ or ሌማት /lemat/ were among the useful traditions of sharing the burden of wedding expenditures among neighbors and relatives which could be one of the venues of strengthening social bonds. The participants of the FDG say that such joint social ventures have seriously declined over the years because people cannot commit to splendid wedding ceremonies due to the unaffordable costly expenses. This situation also affects the vocabulary of the youth who have no exposure to such traditions.

The younger generation of speakers of the Gojjam dialect knows very little about human diseases such as እንወተቴ /ännäwötäte/ and አንከሊስ /ankälis/, ከማን አንሽ /kämänn anəʃʃe/ lit. ‘Who am I inferior to?’

(euphemistic term for elephantiasis), ትልቁ በሽታ /təllək'u bəjjəta/ (euphemistic term for ቁምጥና /k'umt'ənnə/ and ከፋ ገላ /kəfu gəla/ 'leprosy'), and ቁርባ /k'urrəba/ 'anthrax' are not widely-known either. ቡግንጅ /bugəndz/, ጎርምጥ /gormət'/ and ችፍ /ʃəfe/ are the various types of foot wound now known as simply ቁስል /k'usəl/ 'wound' by the generic name. ጓጓት /g^wag^wat/ and ቋቋት /k^wak^wat/ which are both fungal diseases of the head are known as ፎረፎር /foräfor/ 'dandruff'. In the old days, women had a special way of keeping fire of the hearth for the next day through a process called እሳት ማዳፈን /əsət maddafän/ so that neighbors share ambers every morning which enable them to call on each other briefly in the morning. Such social contacts have diminished since the introduction of matchsticks and electric stove making the young ignorant of the vocabulary associated with fire-making. There is mounting evidence that whereas the young generation has more words and concepts connected to technological innovations such as computers, internet, mobile phones, etc., the words and concepts connected to IK systems are wiped out which can be an indicator of a missing link between the traditional and the modern. Furthermore, informants complain about the education and training policy which gives less attention to the IK systems in the curriculum.

Concluding remarks

This paper tries to assess the IK practices that were once popular but are now on the verge of extinction. The rapid environmental and cultural changes as well as the massive production of inorganic polymers are the major culprits for the endangerment of the IK systems which took centuries to accumulate. The expansion of urban centers, modern education and mass media which give little attention to IK systems also contribute to the weakening of IK practices. Deforestation exacerbates the scarcity of raw materials obtained from plants and animal life to produce local products. In this situation, local experts began to abandon producing local items and hence could not transfer their knowledge to the next generation. Apart from the worst effects of deforestation, small-scale factories often produce mass plastic products that threaten local products of all sorts. Whereas several African countries including Kenya and Rwanda have banned or restricted the production and use of plastic products, it is infuriatingly increasing in Ethiopia. Besides their environmental impacts, the mass production of plastic has made handicraft makers like potters, basket makers, blacksmiths, tanners, weavers, and craftsmen go out of business. While there is still high

demand for dexterously made local products, most of them have become very expensive souvenir items. The lack of well-designed mechanisms to preserve and protect the irreplaceable IK practices sadly cause the loss of these systems without being documented. The efforts by the young generation to learn the IK practices is extremely minimal. These situations make further studies on the disappearing IKs extremely vital. There have been magical practices such as አንደርብ /andärəbb/, መስተፋቅር /mästäfak'ər/, የፈስ መድገም /yäsfas mädgäm/, ዓይነ ጥላ /aynä t'əla/, የትምርት መዳኒት /yätəmört mädanit/, etc., but mocked and considered fictitious by the young generation. Such disparities must be seriously explored. An African proverb states that, when a knowledgeable elder dies, a library burns to the ground. Hence, the valuable IK practices in Gojjam will die out following the passing of traditional experts who are unable to transfer their knowledge to the next generation.

In Gojjam, like other regions in Ethiopia, people still widely use traditional medicine to treat ailments. The fact of the matter is that traditional medicine is heavily criticized for lack of proper sanitation and preservation and inaccuracies on dosages. These problems can be alleviated by way of building the capacity of traditional healers through sustainable training, by assisting them form strong associations and by granting them material and financial support. The rapid changes in people's way of life and the flooding of meretricious industry products have influenced our identity in terms of the indigenous material culture. Conversely, it remains extremely perplexing that the use of oxen ploughing, though thousands of years old, is still in practice in Gojjam and elsewhere in the country.

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