

Practices and Challenges in the Use of Forest Resources in Indigenous Health Care Systems among the Oromo, Ethiopia

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Abstract

This study explored the importance of forest resources in indigenous health care systems and examined the challenges to the forest resources among the Oromo. For indigenous peoples, studies have shown that forest is the source of medication for the local people, through which the health of humans and livestock have been maintained for generations. However, studies about the relationship between forest and the human health with respect to the values of forest resources in indigenous health care for the extraction of drug have been owed little or no attention in the scientific arena. Yet, though it has double edge importance in health care systems, the link between forest and human health has been overlooked for long. In spite of the role of forest resources in indigenous health care systems and consequences of continuous forest depletion, only few studies have been conducted on the role of forest resources in indigenous health care systems. Hence, the study aims to contribute to the ongoing issues about forest depletion, loss of indigenous wisdom of maintaining health by concentrating on the relationships between forests and human health. The study employed qualitative research methods. Both primary and secondary data sources were used to compile data for the study. The researcher used purposive sampling to select informants from among five administrative units of the study area. Data used for the study were gathered through techniques including in-depth interviews, focus group discussions, and observation. The researcher used contextual and thematic analysis. The finding indicates that the community has been using the traditional drug extracted from the forest resources found in their environs by the technical healers for generations since time immemorial. Forests and the indigenous health care practices are threatened by factors such as continuous deforestation, conversion of forest lands by alternative land uses, especially, the replacement of forested land for commercial crops like coffee plantation, weakening and even disappearing of traditional values and indigenous knowledge in the use of forest resources are few to mention.

Keywords: Indigenous Health care systems; Forest resources; Traditional healers; Oromo

Introduction

Forest resources have numerous values in the entire lives of human beings. Over eras, societies around the world have learned how to use plants to fight illness and maintain health. These freely available and culturally important traditional medicines form the basis of an accessible and affordable health-care system and are an important source of socio-cultural and economic livelihood for indigenous peoples around the world. In short, forests are the repository of medicinal plants. Long before the introduction of modern medicines, indigenous peoples were entirely dependent on herbal medicines for health care for both human and livestock. The World Health Organization estimated that 80% of the populations of developing countries rely on traditional medicines, mostly plant drugs, for their primary health care needs [1]. Approximately 80% of Ethiopia's population relies on traditional medicine to cure ailments [2]. Studies shown that tropical forests are the source of bounty drug which, thus applicable in modern health care systems. However, FAO indicated that demand for medicinal plants is increasing in both developing and developed countries, and surprisingly, the bulk of the material traded is still from wild harvested sources on forest lands and only a very small number of species are cultivated [1]. The expanding trade in medicinal plants has serious implications on the survival of several plant species, with many under serious threat to become extinct.

As Workineh points out, local people have developed the knowledge of an indigenous pharmacopoeia, and has been improved this knowledge through continuous non-formal experiments and gradual accretion of naturalistic observations of the physiological effects and medicinal properties of bioactive plants over time [3]. He further noticed that they also collect, grow, and test the power of various herbs to control new

diseases (2005: 11). This is also true among the Oromo of the study area, in which they have possessed the indigenous knowledge of maintaining health that have been developed through generations of intact lives in a particular environment. This knowledge has been passed to the generations through informal learning and technical practices of the learner to develop important skills to get social approval.

This study explored the importance of forest resources in indigenous health care systems of the Oromo of West Wollega. It analyzes the challenges to ethno-medical knowledge and to the forest composition of the area from different perspectives. Thus, it explored the type of plant species which have medicinal values among the plant species available in their environs in which they live. This study sees health as a social phenomenon, embedded in every aspect of the society, ecology [environment], economy, political, spiritual, and other cultural practices and beliefs of the society. The study indicated that forest resources are the source of drug used by the indigenous people of the area in maintaining the health of human and the livestock.

Currently, there have been worldwide movements for revival of indigenous knowledge in general and traditional health care systems in

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particular, by some governments and multilateral organizations globally. Partly, the revival of traditional medicine has global phenomena, since most of the countries nowadays incorporating the policy that supports traditional medicine to their dominant health policy. The World Health Organization stated that more countries have gradually come to accept the contribution that traditional medicine can make to the health and well-being of individuals and to the comprehensiveness of their health-care systems. Thus, governments and consumers are interested in more than herbal medicines, and are now beginning to consider aspects of traditional medicine practices and practitioners and whether they should be integrated into health service delivery [4]. Moreover, traditional medicine is an important and often underestimated part of health services; international organizations and different countries have been recognizing the importance of traditional medicinal practices and forest resources.

Traditional medicine has a long history of use in health maintenance, disease prevention and treatment, particularly for chronic disease. Different societies have various conceptions of health, disease, and illness. The standards people sets for health vary from culture to culture [4]. Different ethnic groups recognized different illnesses, symptoms, and causes and have developed different health care systems and treatment strategies [5]. This study, thus, employs ethno-medical approach as pertinent approach to study insider's view 'emic perspective' on the subject matter. As Quinlan described ethno-medicine is the area of Anthropology that studies different societies' notions of health and illness, including how people think and act about well-being and healing. Medicine, like language, music, and politics is a subset of culture, which is situated locally [6].

Cultural factors are central issues in the health problems that confront the world today. The traditional medicine derived from cross-cultural health practices, exhibited in the alternative and complementary medicine used by people around the world, contributes new possibilities for physicians by expanding perspectives on health resources. The healing traditions found in every culture, have shown that traditional healing practices have effects on physiological, psychological, emotional, symbolic, and social levels, through its many healing mechanisms [7]. Asserts that the importance of traditional medicine for the humans as well as animals in Africa both now and in the past, is enormous. UNEP further argued that even though African traditional medicine involves some aspects of mind-body interventions and use of animal-based products, it is largely plant-based. Many of the plants used were collected from the wild, as there were few instances of domestication of the significant medicinal plants.

Traditional medical practices can make important contributions to future health care, just as herbs contributed to the development of the biomedical pharmacopoeia [8]. Besides being environment friendly and sustainable it upholds the soci cultural development of the society [2]. Traditional medicinal knowledge maintained by specific Cultural [social] group is also essential for addressing public health needs to assess communities' health needs, develop appropriate health policies and programs, and ensure adequate and culturally competent health services [2]. The health needs of communities vary widely, requiring an understanding of each community's perceptions of health and illness to develop appropriate services. Public health initiatives require knowledge of culture to change the behaviors and lifestyles associated with an increased incidence of disease. Addressing the effects of culture on health is an important issue for everyone, not just physicians, because disease in any group affects society as a whole. However, studies about the relationship between forest and the human health with respect to the values of forest resources in indigenous health

care for the extraction of drug have been owed little or noattention in the scientific arena. Thus, traditional medicine and the associated knowledge maintained by the indigenous peoples found elsewhere have laid the base for modern medical practices; it has been neglected for long time. Even, the health policy of various countries is exclusive or monopolistic, which only allow the practices of modern biomedical practices as lawful. Hence, this study aimed at filling these gaps by studying the role of forest resources in indigenous health care systems; and the challenges in the use of forest resources in traditional health care systems by providing few insights about the importance of forest resources in traditional health care systems for human and livestock ailment among the Oromo¹.

Materials and Methods

This study employed qualitative research methods. Both primary and secondary data sources were used to compile data for the study. Interviews, focus group discussions, and document analysis (published) were the instruments used to obtain reliable data for the study. Non-probability sampling methods: Purposive sampling and snow ball sampling methods were used. Two types of informants: key informant and specialized informants were selected for the study. The study explored the opinions and subjective accounts and interpretations of participants. Hence, it relies on qualitative analysis of data, with contextual description and thematic analysis.

Two forms of interviews- unstructured interviews and semi-structured [in-depth] interviews were held with different key informants purposively selected from among community members. Both interviews, parallel with other techniques, were conducted in January, April, and May 2016. Other major findings are part of my previous work, conducted in 2013/14, used as a reference and stockroom of data for my current work. Unstructured interviews [informal discussions] were held with members of the local community, including individuals of different backgrounds like sex, age, social status, religious faiths, occupation, and literacy backgrounds. Three focus group discussions [FGD's] were held with Local elders, youths, government officials, farmers, merchants, students, and teachers of different levels. The groups were heterogeneous and participants have been purposively selected for the purpose of the study. Unstructured interviews were held in any places and time available without reservation, in different times.

In-depth interviews were held with key informants selected on purposive base by the researcher based on their prior Knowledge in relation with the objective of this study. The topics raised under unstructured interviews were assessed in detailed with this method.

In-depth interviews were conducted in five unit Administrations among twenty-seven unit administrations of the Nole² District, namely HarooCorqaa, Arbuu AbbaaGadaa, SiibaaKoobii, DaakkibooBururii, and QilxuuXobbee. The researcher on purposive base selected these areas.

Results and Discussion

The data obtained reveal that people of the study area have been

¹The Oromo who constitute probably a good half of the population of Ethiopia are the single largest national group in the Horn of Africa. They are also one of the major African peoples (Mohammad, 1994: 77). The Oromo are an Eastern Cushitic populations living in the Horn of Africa (Fayisa, 1997: 155). It has been said and rightly that the Oromo are one of the most indigenous peoples of Ethiopia.

²The Nole Oromo are one of the lineages of Western Maccaa Oromo of Wallagga. They have lived in West Wallagga Administrative Zone, NoleKabaDistrict. The elders of the Nole Oromo claim their genealogy, as they were descended from Maccaa Oromo. To understand the genealogy of Nole of Western Maccaa Oromo, it is better to locate their genealogy in Maccaa Oromo.

aware of the importance of forest resources in their entire socio-cultural, economic, and ecological lives. There are plant species which are the source of traditional medicine for the treatment of both human and livestock in the area. The people have been practicing these forest medicines since time immemorial, and they believed as the knowledge of traditional medicine have inherited from fore fathers. They believe that forest have multiple importance in their live, without which live would not possible. The findings reveal that forest resources are source of shelters, source of food for humans and animals, source of traditional medicine, and source of firewood.

For the Oromo, forest resources have sociocultural and ecological values. The socio-cultural importance of forest resources are manifested in their daily shores, and facilitate their socio-cultural and spiritual life, including cultural material objects and related significance [9]. The findings shown that forest resources, is thus the source of traditional drug, used to treat both human and livestock diseases. In the area, the drug branded as traditional medicine have been extracted from forest of the surrounding area by the traditional experts called healers. Traditional healers are the practitioners of traditional health care systems among the community. They have two broad categories, spiritual healers (*Beekaa*) and technical healers (*Ogeessa*), based on their knowledge of health and illnesses among the community.

Both spiritual and technical healers have been specialists of indigenous health care systems of the community, and patients have been referred to them according to their specialization and the types of ailments they dealt with. The spirituals healers are more affiliated to religious and their expertise are embedded in the spiritual practices. Some spiritual healers are leaders and practitioners of major [alien] religious sects in the area, including Christianity and Islam. These types of healers do not utilize forest resources in conducting the healing processes. Still there are spiritual healers considered as shamans among the community, who are believed to have possessed magical and super natural power. Even though, they are called as spiritual healers, they have enjoyed differences and even distant in their practices and in social position. Some have pure super natural power, while still some of them possessed black magic power to manipulate some extraordinary power to make a miracle.

Ethnopharmacological survey in the study area indicated that among the categories of healers, technical healers have affiliation with forest resources, in which the surrounding forest is considered as the ultimate and the only source of traditional drug for their practice. Technical healers are further sub-divided into two areas of specializations, called herbalists and bonesetters. Herbalists use different plant species and various leaves in preparing drug for the patient. They also cure livestock ailments, and thus, they prepare drug from forest plant species. They have the knowledge of anatomical and physiological function of the human and animal body, and preparing traditional medicines from different parts of medicinal plant species. They possess the knowledge of types of ailments, based on the symptoms of the illness of both human beings and animals, and thus, they use traditional medicine prepared from plant species in healing the sickness. The other type of healer under this category is bonesetter. They are technical healers, and have specialized knowledge of human and animal anatomical structures and physiological functions of the normal body. With their knowledge, they can easily detect the type of ailment, and treat accordingly. Moreover, they use materials extracted from forest, especially, some type of plant species for tying the broken bone. They stick and tie the broken part with other parts of the body, and thus, a plant stick used in this process is believed to have medicinal importance in healing the broken bone. According to Mahomoodally, in many parts of rural Africa, traditional

healers prescribing medicinal plants are the most easily accessible and affordable health resource available to the local community and at times the only therapy that subsists [10].

The community has been used the traditional drug that have been extracted by the technical healers from the forest found in their environs for generations since time immemorial. After the introduction of biomedical or modern health care systems, the society became pluralist, by being kept using their indigenous means of maintaining the health of both human and livestock. The synchronic existences of both traditional and modern health care systems are evident in the area nowadays. According to Raitio, local people often use both traditional and modern health care systems, the traditional health care systems being especially important in tropical Asia, Africa, and Latin America [11]. The market for traditional medicines is large and expanding worldwide.

The practices of indigenous health care systems among the Oromo of the study area are institutionalized in their cultural tradition and could not be seen in isolation from other aspects of the society. Hence, the entire aspects of the society are related functionally and the dynamics of relationship is magnificent that could help in the protection of the forest composition of the area for generations. As medical ecology contends, society, health, and environment have strong interactions in the area, in which forests have practical role in extraction of forest drug.

The concept and practices of indigenous health care systems in the area

According to World Health Organization [12], "Traditional medicine refers to health practices, approaches, knowledge and beliefs incorporating plant, animal and mineral based medicines, spiritual therapies, manual techniques and exercises, applied singularly or in combination to treat, diagnose and prevent illnesses or maintain well-being." Further the term complementary and alternative medicine and sometimes also non-conventional or parallel) are used to refer to a broad set of healthcare practices that are not part of country's own tradition, or not integrated into the dominant healthcare system. The data obtained from in-depth interview with key informant [traditional healer] of the area reveal that God created human beings with all necessary things in the natural environments. He further said,

"If we know and aware about how the natural environments are precious for our survival, even other social problems will be curbed. However, we exploit the nature unlawfully and wrongly and then we have been suffering from various problems, including disease and starvation of human and livestock."

The findings have shown that the natural resources of the area have been challenged by human interferences, which have adverse impact to natural resources composition of the area. Thus, the cause of much of the environmental problem in the area is said to be anthropogenic in its nature. However, majority of the Oromo in the study are have maintained the knowledge of plant species which have medicinal importance found in the natural forest of the area. It is this resource and the knowledge of extracting medicine from this resource that have been maintained the health of human and livestock of the community for generation, even before and after the introduction of modern health care system to the area for both human and livestock ailments, which is the recent history of the people of the study area.

According to the studies of some scholars, the most common traditional medicine in common practice across the African continent is the use of medicinal plants. In many parts of Africa, medicinal

plants are the most easily accessible health resource available to the community. In addition, they are most often the preferred option for the patients. For most of these people, traditional healers offer information, counseling, and treatment to patients and their families in a personal manner as well as having an understanding of their patient's environment [9]. Traditional medicine, practitioners, and the practices of maintaining health among the rural people of the study area has been valued and owed respect from the member of the community. By being practitioner of traditional medicine, however, later they have been losing their previous position and labeled to the lowest social position. This label of low status has been related with the introduction and expansions of major [alien] religions in the area, which condemns the practices of traditional medicine, relating it to witches and black magic, which is considered as anti-social. Relating it to conjuring practices, the new [align] religion have been successful in dismantling this old practice of the society from the socio-cultural lives of the people. The other challenge to the practices has been continuous deforestation, expansion of agricultural land, population pressure; the expansion of modern health delivery systems, which promotes the use of modern medicine; the expansion of modern media system, and modern system contributes for the problem.

The replacement of forest land by alternative agriculture, which fits to the ever-increasing market demand, is also the other contributing factor for the shrinkage of the traditional system. The findings shown that the previous natural forest compositions of the area have been subjected to deforestation caused mainly by the expansion of coffee (*Coffea arabica*) and chat (*Cattanaadulis*) plantation, which are believed to fulfill the ever-increasing market demand for the nearby and national market. The previous agricultural lands have been replaced by one or both of the aforementioned plantations, which are high in the zone, and hence, it is inevitable to expand and search for the new territory for the existing agricultural practices. Majority of the community member continues to use traditional health care systems, despite the massive internal and external pressure. Thus, good part of the current generation [nowadays] loose expertise of their ancestor. This has negative impacts on both the well-being and the knowledge base of the society, and the forest resources composition [coverage] of the area.

Though, the forest resources of the area have been protected for its medicinal and other multiple values the community attached to the forest composition of the area, several factors are deteriorating the forest composition of the area. Moreover, despite the slackness that has been encountered, good parts of the society have kept using the medicine extracted from the forest resource that has been inherited from their ancestor. What is important is that the introduction of alien cultural elements and new religion to the area could not alter the long existing tradition of the people, and the people still practicing the traditional healing systems with slight decrease and modification for maintaining the health of human and livestock.

Ethno-pharmacology of medicinal plants of the study area

Ethno-pharmacology is the system of knowledge of medicines (their preparation, uses and therapeutic effects) in a cultural system [13]. Ethno-pharmacological survey of the study area has shown that plant species that have medicinal importance, for both human and livestock ailments in the study area includes Eebicha (*Vernoniaamydalina*), used to treat ascariasis and filariasis in humans. Ceekaa (*Calpurniaaurea*), used to treat headache and stomachache in humans and skin disease in livestock; Ulmaayii (*lausenaanisata*), used to treat toothache in humans; Bakkannisa (*Croton macrostachyus*), used to treat hookworm, tiniacorpis (*roobbii*), and wound in humans; Laaftoo (*Acacia*

brevispica), used to treat stomachache and snakebite. These are to give but a few examples of the medicinal plants in common use among the Oromo of the study area.

The summary of plant pharmacopeia, their habitat, the plant part used for preparing medicine, the types of disease treated by each, and for whom (humans or livestock) it is used are presented in the following Table 1.

Similarly, other medicinal plant species, parts of the plant, such as leaf, latex, and seeds are used to prepare drug to cure both humans and livestock ailment. Indeed, in the case of shrubs, there are instances in which the entire parts of the plant species use for treating the patient. Thus, for herbs like *Qabarichoo* (*Echinopskebericho*) the root is used to smoke by the patient to treat patients with evil eye and another spiritual ailment. The majority of species are found to have herbal growth forms, shrubs and trees. Leaves followed by roots are the dominant plant parts used for preparation of most traditional drugs.

A glimpse of the ethiopian health policy on traditional health care systems

The current health policy was drafted following the change of government in 1991, and considered as a first national health policy, which was followed by the formulation of four consecutive phases of comprehensive Health Sector Development Plans, starting from 1996/97. According to Ethiopian ministry of health [14], at the core of the health policy are democratization and decentralization of the health care system; developing preventive, promotive and curative components of health care; assurance of accessibility of health care for all parts of the population; and encouraging private and None Government Organizations. As it is obvious from its start, the Ethiopian health policy did not integrate the long existing indigenous health care systems of the indigenous Ethiopian peoples. Hence, the health policy of Ethiopia has to promote and integrate traditional health care systems of different indigenous peoples in Ethiopia, which are believed to have indigenous health maintenance systems.

According to World Health Organization, in many parts of the world, policy-makers, health professionals and the public are struggling with issues regarding the safety, effectiveness, quality, availability, preservation and regulation of traditional and complementary medicine [15]. However, it seems that this is true in Ethiopian health care sector. From the experiences of different countries, it is clear that the failure in integrating community perception and worldview in any development scheme would happen in total project failure. Community's participation in any scheme is important for the ease of implementations. The problem of neglecting the long existing traditional health care system of the people will yield in the failure in the modern health policy. It is modern, as to me, if it integrates the society's knowledge, the value systems, the community's knowhow of health, cultural ways and perceptions for the cause of disease and illnesses, the social and the cultural model of curative method or alternatives have to be considered in drafting and implementing the health policy of one country. The community's knowledge of indigenous health related issues are generally embedded in and dictated by their ethno-medical knowledge. Without the knowledge of the Ethno-medical systems of a particular group, the bio-medical systems would have no positive implication in any means. Integrating the societies health relative beliefs and knowledge, and their socio-cultural practices are important to have integrated policy systems.

The Ethiopian health sector policy has been exclusivist, in which traditional health care systems have been excluded from the grand health

No	Local Name	Plant Species			Uses For			
		Scientific Name	Habit Type	Plant Part used for Medicine	Human	Used to treat	Live stock	Used to Treat
1	Laaftoo	Acacia brevispica	Tree	Root and Bark	Stomach ache and Snake bite		Unidentified yet	
2	Muka-arbaa	Albiziaschimperiana	Tree	Bark	Stomachache		Unidentified yet	
3	Bakkannisa	Croton macrostachyus	Tree	Leaf and latex	Hookworm Tiniacorpis (roobbii) and wound		Unidentified yet	
4	Laaftoo	Acacia brevispica	Tree	Bark	Snake bite		Unidentified yet	
		Acacia abyssinica	Tree	Bark	Snake bite		Unidentified yet	
		Acacia torties	Tree	Bark	Snake bite		Unidentified yet	
5		Ficusvasta	Tree	Latex and leaf	Snake bite		Unidentified yet	
6	Afarfattuu	Dracaenastudneri	Shrub	Entire part	Protect evil spirit from family	prevent lightening from animals and animal cage		
7	Botoroo	Stereospermumkunthianum	Tree	Latex, Bark	Toothache and prevent a man from evil eye and man-made poison		Unidentified yet	
8	Qomonyo	Bruciaantidysenterica	Shrub	Whole plant	Different skin disease, and evil eye, dearhia		Unidentified yet	
9	Adaamii	Euphorbiacandelabrum	Tree	Latex	Ascariasis and gonorrhoea		Unidentified yet	
10	Qabaricho	Echinopskebericho	Herb	Root	Protect and heal from evil spirit		Unidentified yet	
11	Beeftii	Warburgiaugandensis	Tree	Leaf	Leaf		Trypanosomiasis	
12	Ceekaa	Calpurniaaurea	Shrub	Leaf	Headache and stomach-ache		Skin disease	
13	Eebicha ^[3]	Vernoniaamydalina	Shrub	Leaf	Ascariasis and Filariasis		Unidentified yet	
14	Agamsa	Carissaspinarum	Shrub	Leaf and fruit	Ascariasis and Evil eye		Unidentified yet	
15	Andoodee	Phytolaccadodecandra	Shrub	Leaf and fruit	Scabies and herpes zoster		Unidentified yet	
16	Tambo	Nicotinatabacum	Shrub	Leaf and seed	Snake bite		Leech infestation	
17	Pappayaa	Caricapapaya	Shrub	Fruit	Skin disease		Unidentified yet	
18	Hadaa	Guizotiascabra	Herb	Leaf and flower	Snake bite		Unidentified yet	
19	Kusaayee	Lippiejavanica	Herb	Whole part	Snake bite		Unidentified yet	
20	Coqorsa	Cynodondactylon	Herb	Whole part	Wound		Unidentified yet	
21	Reejii	Vernonicaauriculifera	Shrub	Leaf	Wound		Unidentified yet	
		Caylusaabyssinica	Shrub	Leaf	Getting rid of impotency		Unidentified yet	
22	Buna	CoffeeArabica	Shrub	Seed	Headache, stomach-ache,		Unidentified yet	
23	Dhummuggaa	Justiciaschimperiana	Shrub	Leaf	Used by the healer to remove Evil spirit from the patient.		Unidentified yet	
24	Geeshoo	Rhamnusprinoides	Shrub	Leaf	Tonsillitis		Unidentified yet	
25	Harangama	Caesaldecapetala	Shrub	Root	Cough and headache		Unidentified yet	
26	Raamsoo	Cassiapetersiana	Shrub	Leaf	Skin disease		Unidentified yet	
27	Ulmaayii	lausenaanisata	Shrub	Leaf	Toothache		Unidentified yet	
28	QorichaBowwu	Cynoglossumamplifolium	Herb	Leaf	Headache		Unidentified yet	
29	Ejersa	Oleaeuropaea	Tree	Leaf	Stomach-ache, evil spirit		Unidentified yet	
30	Andodee	Phytolaccadodecandra	Shrub	Fruit	To protect external parasites		Unidentified yet	
31	Birbisa	Podocarpusfalcatus	Tree	Bark	Snake bite		Unidentified yet	
32	Ambaltaa	Entadaabyssinica	Tree		Keep away or remove evil spirit		Unidentified yet	
33	Heexoo		Tree	Fruit	Tape worm, amoebae, ascariasis, Giarrdia		Unidentified yet	
34	Haanquu		Shrub	Fruit	Tape worm, ascariasis, intestinal parasites		Unidentified yet	

The local name of the medicinal plant species were gathered from the study area. All are collected from different informants participated in the study, and the particular use of each medicinal plant, plant part used, and the preparation are collected from technical healers of the study area. The scientific name of each plant species has been critically attached to each with the help of biology scholars of Addis Ababa University.

Table 1: Ethno pharmacology of medicinal plant species among the oromo of the study area.

policy of the country. It is directed and controlled by the government, in which the policy is directed towards the formal developments of the health sector, which neglects the participation of the community

at large. For example, the rationale for drafting the health sector or health policy of Ethiopia were based on critical reviews of prevailing national health problems and a broader awareness of newly emerging

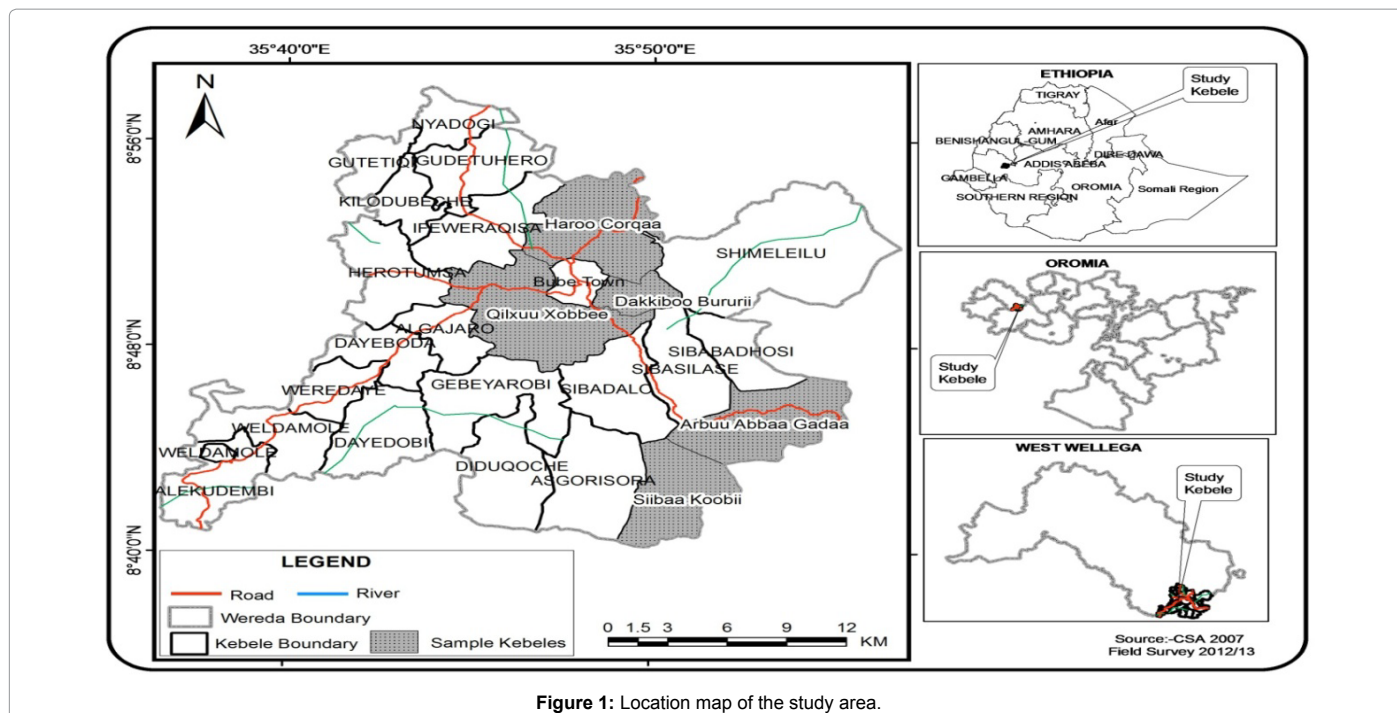


Figure 1: Location map of the study area.

health problems in the country. In this case, the traditional health care systems of the community have been deteriorated and the knowledge of the community with this respect have exhausted (Figure 1).

Failing to engage community in such a national policy to promote the health sector of one country is difficult for the development of health sector. Hence, the people will suffer from epidemic diseases which are easily controlled if integrated with the social values and practices. The communities always have something to add to the policy pertaining to their issue. Moreover, the health policy of Ethiopia should consider the socio-cultural facts of health, incorporating the important social and cultural models, such as health related beliefs and value systems of the society.

The state of dynamism: critical analysis

Different medicinal plants were in use as early as 5000 to 4000 BC in China, and 1600 BC by Syrians, Babylonians, Hebrews and Egyptians [16]. This time, the chemical and genetic constituents of plants are being increasingly exploited for human benefit [17]. Studies indicated that 25% of the modern drugs are derived from the extracts of medicinal plants [18]. Forests can mitigate climate change and may help in regulating infectious diseases. Woodlands and trees have a positive impact on air quality through deposition of pollutants to the vegetation canopy, reduction of summertime air temperatures, and decrease of ultraviolet radiation. Forests also provide recreational, cultural, spiritual, and aesthetic services. However, ecosystem services and goods that forests provide are threatened by deforestation, pollution, biodiversity degradation, and climate change [10]. Change in indigenous health care systems and the use of forest resources in health maintenance systems are evident in the study area.

The study indicated that traditional medicinal practices found among the Oromo of the study area have been challenged by different internal and external factors. The data gathered from informal discussions with some informant's show that despite its socio-cultural, ecological, and economic importance in the livelihoods of

the society, traditional practices of maintaining health have been attributed to magical and evil deeds. Even though, by whom and when these attributions made are not clear, the introduction of major [alien] religions to the area is believed by many as a factor. Thus, other factors are also mentioned and indicated by key informants, the fore mentioned factor is widely accepted by the majority of the people in the study area. Hence, this institution and the knowledge property of the people are deteriorated from time to time. There are factors which contributed for this dynamism. These factors could be categorized into two major groupings with their own socio-cultural and economic facts. The first could be categorized under external factors. These includes, but not limited to the variables of globalization and modernization, as the people have been fixed relations and interactions with peoples of different socio-cultural and ideological background. The introduction and expansion of modern health care systems, forced or willingly acceptance of alien system and religion, and a government policy are some of the major factors. Each has its own positive and negative implications and contributions for the dynamism.

The other factor could be the society's internal coping strategies against the growing external pressures and the people's internal motives for change. It is human nature to seek change in the entire aspects of one's life. Hence, humans strive to search the new horizon beyond the territory, by breaking the block of nature. Thus, new horizon could be sought, change could be happened, and new adjustment could be possible and inevitable. In this regard, the people are adjusting themselves and their productions to the growing market demand of the local and the national market. Coffee plantation in the zone, according to the data obtained from the Zone administration office, in which annual plantation land cover in hectare has been more than Ninety Thousand (90, 000 hec) is expanded to meet the growing market demand of coffee at both local and national market. The study indicated that the expansion of coffee plantation has been conducted on the previous grain farming land. To substitute the farm land covered by coffee plantation, it is obvious that the surrounding forests have been cleared for the expansion of the farm land.

The forest of the area has been degraded without due consideration for forest resources and the reciprocal values of conserving forest by focus on a timely drive of market need, to fulfill temporary need. This action is more sponsored by the government policy that supports the market economy. The development and economic rise is sustainable, only with ecological sustainability. In the long run, the good part of forest resources in West Wollega will decline in expense of coffee plantation. Ecological sustainability has to be considered in order to bringing about green development, which is environmentally sustainable and sounding.

According to the study conducted by some scholars on the importance of preserving forest resources, preservation of forests and woodlands is extremely important for the supply of forest food. If rural populations in developing countries lose their access to forest food and medicine, e.g., due to deforestation or ecosystem degradation, this may lead to food insecurity, malnutrition, and disease. Forests also serve as important genetic reservoirs for plants and animals that have potential use for food and medicine. The traditional knowledge of indigenous people and local communities in gathering medicinal forest plant species should be paid more attention to African flora as potential sources of medicinal plants [10].

However, the medicinal importance of forest resources and the role of traditional health care system for forest resources conservation have been overlooked by the local formal administrators. The system that supports the existence of traditional systems in the area has been deteriorated and lacked focus for its revival. In this move, the people will lost their expertise in the field, the knowledge and commitment to conserve the resources of the area and the values of any resources will be eroded, since long existed environmental values have been started to be commercialized with monetary standards.

I believe that when we lost social values, we start to adopt the new values to which we belong, and started to use the synthetic values of every relation in our life. In doing so, we go nowhere having blind outlook by adopting the one which made us bared. Better is cultivating what we have at hand, adopting the newly emerging readjustments from the society's internal drive to change, to make happen socially embedded grassroots development. Moreover, the society's long existed knowledge and environmental intimacy had happened for a purpose. Neglecting such social values, social practices, and the indigenous systems and wisdom of the society have negative consequences to all systems. Hence, it is better to hook with the people on any matter to solve the prevailing social problem is vital.

The relationships between human health and well-being, biodiversity, healthy ecosystems, and climate change have in recent years received increasing attention in international discussion and policy processes [10]. Human interaction with the environment remains one of the most widespread aspects of modern society. However, the study indicated that there have been changes in the social system and structural readjustments, especially, in the socio-cultural, economic, and attitude of the society in their entire relations with the natural resources. Hence, forests and the indigenous health care practices are threatened by factors such as continuous deforestation, conversion of forest lands by alternative land uses, especially, the replacement of forested land for commercial crops like coffee, weakening and even disappearing of traditional values and indigenous knowledge in the use of forest resources. Thus, the continued population growth, the government health policy, and the expansions of modern health care systems in the area contributed for its change.

Conclusions

Since time immemorial, plants were used for multiple socio-cultural and economic purposes. Medicinal use is one of the services that plants provide for human welfare. The practice of traditional medicine is common in Ethiopia. Though, forest is not the only mere source of medicine in the history of human being; for indigenous peoples it is beyond that bounty, embedded in the entire aspects of their lives that makes life meaningful. In general, the study reveals that among the Oromo of the study area, forest resources have medicinal value. Cutoff such plant species and their seedling are strictly prohibited in the culture of the people. Thus, an individual member of the community acts whom violet the rule accused and punished by the elders of the community for his/her wrong deed.

This study explored the importance of forest resources in indigenous health care systems of the Oromo of West Wollega. It analyzes the challenges to ethno-medical knowledge and to the forest composition of the area from different perspectives. Thus, it focuses on describing the type of plant that has medicinal values among the plant species available in their environs in which they live. This study sees health as a social phenomenon, embedded in every aspect of the society, ecology [environment], economy, political, spiritual, and other cultural practices and beliefs of the society. Hence, medical ecological perspective has been found pertinent to this study, which focuses on the interactions of community, environment, and health. The study indicated that forest resources are the source of drug used by the indigenous people of the area in maintaining health of the human and the livestock.

The forest resources that are unique to the country are diminishing due to continuous exploitation and pressure on the limited resources. The study indicated that deforestation, agricultural land expansion, alternative market fed agriculture by clearing forested area, and lack of proper policy level protection are the challenge to medicinal plants species and the surrounding forest resources, and to its associated knowledge. Moreover, as the societies elsewhere in the world are naturally dynamic, change in any systems of the society is naturally and inevitable. Thus, change should be emanated from the grassroots society level. Eliminating indigenous values and knowledge in the name of change and development could yield in cultural genocide. Hence, better is bringing change with slight modification by adopting selectively what is good and bad for one society.

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