

## THE STATUS OF ETHNO-MEDICINAL PLANTS AMONG THE OROMO'S OF SOUTH-WESTERN ETHIOPIA: ISSUES, CHALLENGES AND OPPORTUNITIES

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### ABSTRACT

*THIS ETHNOGRAPHIC PAPER DEALS THE OPPORTUNITIES AND CHALLENGES OF ETHNO MEDICINAL PLANTS IN SOUTHWESTERN ETHIOPIA WITH PARTICULAR REFERENCE TO JIMMA ZONE. ETHNO MEDICINAL PLANT SPECIES AND THEIR PRODUCTS HAVE BASE ROCK PART OF THE INVENTORY OF MEDICINAL INGREDIENTS USED IN VARIOUS CULTURES SINCE ANCIENT TIMES. THE STUDY WAS CONDUCTED TO COLLECT, EXPLORE, AND IDENTIFY AND ANALYSIS ETHNO MEDICINAL PLANTS. ACCORDINGLY, DATA WERE GATHERED FROM COMMUNITIES VIA KEY INFORMANT INTERVIEW, FGDS AND NONE PARTICIPANT OBSERVATION. THE SENSE OF CONTROL IS THE PRINCIPAL FACTOR; WHEN PROFESSIONAL CARE IS NOT IMMEDIATELY AVAILABLE, INCONVENIENT, COSTLY AND TIME-CONSUMING PATIENTS BELIEVE THAT BIOMEDICINE HAS FAILED SO THAT THEY USE HOME REMEDIES FOR ACUTE CONDITIONS SUCH AS COLDS, STAINS, PAINS, ACHES AND ETC. SOMEETHNO MEDICINAL PLANTS SPECIES ARE DOCUMENTED AND DESCRIBED. IN ADDITION, ETHNO MEDICINAL PLANTS ARE DOCUMENTED WITH THEIR CORRESPONDING LOCAL AND SCIENTIFIC NAMES IN THIS PAPER. THE RESULTS OF THE ANALYSIS REVEALED THAT THE UTILIZATION OF ETHNO MEDICINAL PLANTS AMONG THE OROMO'S OF JIMMA ZONE IS CHALLENGED AND DISTORTED BECAUSE OF OUTSIDE AND INTERIORFACTORS. THUS, SPECIAL CARE SHOULD BE GIVEN FOR THE PRESERVATION OF THESE ETHNO MEDICINAL PLANTS.*

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**KEYWORDS:** ETHNOGRAPHIC, ETHNO MEDICINE, FOLKLORIC, FOLK HEALER, FOLK MEDICINAL PLANTS, INDIGENOUSKNOWLEDGE.

### 1. INTRODUCTION

As literatures show, utilization of ethno medicine predates human history. Well recorded and standardized ethno medicine usage in India and China attest to this assertion. In India, Ayurveda has been in use since 2500 B.C. and in china until the advent of western biomedicine in the 16<sup>th</sup> century people had entirely been using ethno medicine. Large portions of ethno medicine are often extracted from plants because plants are arsenal of the chemicals. In India, for instance,

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around 20,000 ethno medicinal plants have been recorded though indigenous communities are using only 7,000-7,500 plants for curing different diseases<sup>2</sup>.

Consequently, major pharmaceutical industries depend on the plant products for preparation of *Ayurvedic* medicine. Due to its integration in the pharmaceutical industries, the *Ayurvedic* system of medicine nowadays is widely accepted and practiced both in India and in the developed countries such as Europe, United States and Japan. Overall, plant derived remedies have been the first line of defense in maintaining health and combating diseases.

In Ethiopia too, medicinal plants have been used as indigenous medicine to treat different illness by the local healers from distant past<sup>3</sup>. Traditional medicinal plants in the country have sustained credit mainly for historical, ecological and cultural reasons<sup>4</sup>. Yet, in relation to other countries such as India and China, appropriate documentation and legislation of ethno medicinal plants utilization is more likely absent in Ethiopia. Fassil<sup>5</sup>, argue that ethno medicinal plants in Ethiopia are estimated to be 700 species. And most of ethno medicinal plant species in Ethiopia are confined to the southwestern regions of the country<sup>6</sup>. But this part of the country has received less research attention than it should be had deserved.

In fact, Haile and Dilnesaw<sup>7</sup>, have conducted a research on the ethno medicinal plant knowledge and use by local healers in the Sekoru district of Jimma Zone and documented 27 plant species of medicinal importance. Notwithstanding, their study has primarily focused on indigenous healers rather than documentation of ethno medicinal plants. Haile and Delenasew recommended that awareness creation should be made among the healers to avoid erosion of the indigenous knowledge and to ensure its sustainable use and conservation as indigenous knowledge transferring was oral and some healers were not transferring it all. They also suggested physiochemical and biological activity studies on the investigated medicinal plant species to utilize them in drug development.

Therefore, there is knowledge gap in relation to broader ethnographic documentation, challenges and opportunities folk medicinal plants utilization in southwestern Ethiopia were bulk of ethno medicinal plant species in the country exist. The present ethnographic study aims to reflect on this gap. The study intended to investigate inventory of ethno medicinal plants alongside identifying opportunities and challenges of development.

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<sup>2</sup> Samy, R.P., P. Gopalakrishnakone, H. Bow and V.T.K. Chow (2008). Purification, characterization and bactericidal activities of basic phospholipase A2 from the venom of *Agkistrodonhalys* (Chinese pallas). *Biochimie*, 90: 1372-1388, 100

<sup>3</sup> Kebede Deribe, Alemayehu Amberbir, Binyam Getachew and Yunis Mussema (2006). A historical overview of traditional medicine practices and policy in Ethiopia. *Ethiop. J. Health Dev.* 20(2):127-134

<sup>4</sup> Kebede et al., *A historical overview of traditional medicine...*; Lemessa Mergo, et.al.(2013). *Ethno medicinal Exploration of Haanqu Fruit among the Oromo of Ethiopia*. *International Journal of Research in Sociology and Social Anthropology*. Vol.1 No.1; Abiyot Berhanu (2002). Use and Conservation of Human Traditional Medicinal Plants in Jabitehaan Wereda, West Gojam. M.Sc. Thesis (Unpublished), Addis Ababa University.

<sup>5</sup> Fassil Kibebew, 2001. The Status and Availability of Oral and Written Knowledge on Traditional Health Care in Ethiopia. In: Conservation and Sustainable Use of Medicinal Plants in Ethiopia, Proceeding of The National Work Shop on Biodiversity and Sustainable Use of Medicinal Plants in Ethiopia, 28 April-01 May 1998, pp 168-175. (Medhin Zewdu and Abebe Demisseieds.), IBCR, Addis Ababa.

<sup>6</sup> Abbikn, J. (1995). Medicinal and Ritual Plants of the Ethiopian South West An account of

<sup>7</sup> Haile Yineger and Dilnesaw Yewhalaw, 2007. Traditional medicinal plant knowledge and use by local healers in Sekoru District, Jimma Zone, Southwestern Ethiopia, *Journal of Ethnobiology and Ethnomedicine*, 3: 1-7.

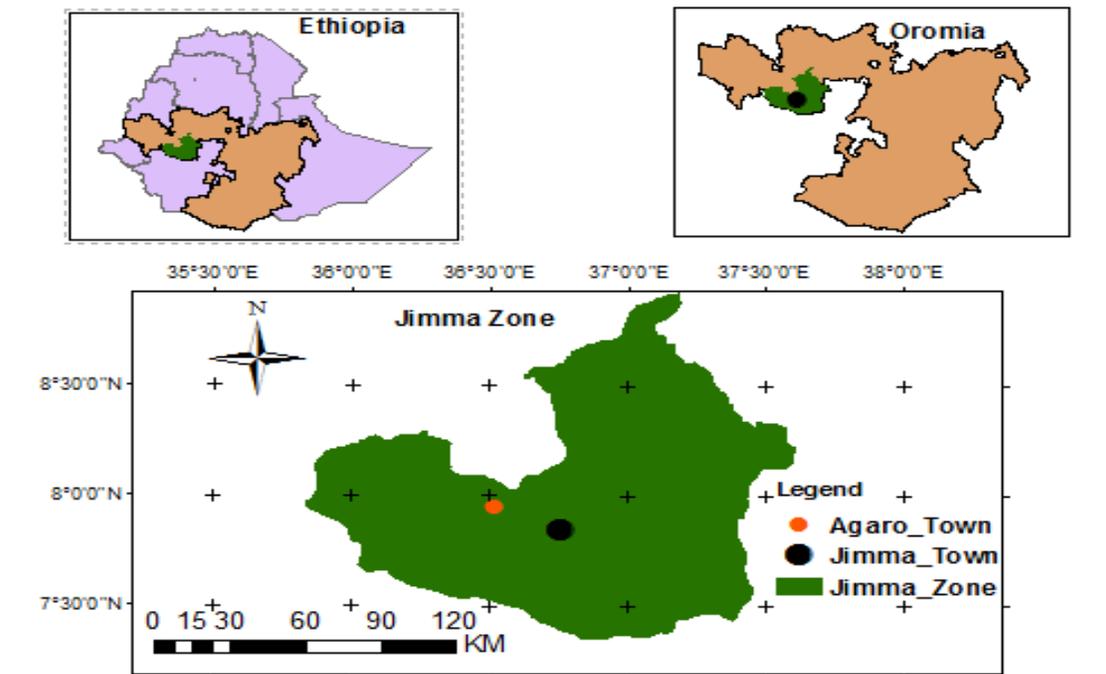
## 2. RESEARCH OBJECTIVES

- To conduct an inventory study on the ethno medicinal plants being used by local communities in the southwestern Ethiopia;
- To identify possible opportunities that can be emulated for larger impact from local communities custom of ethno medicinal plants utilization;
- To spot out challenges (if any) threatening sustainable use of ethno medicinal plants and
- To find out mechanism for further development of ethno medicinal plants use.

## 3. RESEARCH METHODS

Qualitative research approach and ethnographic research design were employed. And Jimma Zone was selected judgmentally due to its most immediacy to Jimma university's reasonable research radius and its core location in the most forested region of Ethiopia in general and southwestern Ethiopia specifically. To find out possible variations and responsible factors rendering the variations both urban and rural contexts were considered. Through purposive sampling, Jimma and Agaro towns were selected to understand scenario in the urban context. As well as Dedo and Shebe Sombo districts (located in Belete Gera forest Eco zone) were selected to explore the rural setting of the study area. Besides, none participant observation, Focus group discussion, key informant interview and document analysis were used to generate data. In addition, tables, plates, thematic categorization and quoting field narrations were used to data analysis.

Figure 1: Map of the study area



Source: Municipal Administration of Jimma Zone

## 4. RESULTS AND DISCUSSION

### 4.1 Inventory of ethno medicinal plants

The result of none participant observation, interview and document analysis has shown 80 different types of ethno medicinal plant species utilized in health care system (Table 1) ,nearly two-fifth (43%- or 23 plant species) leaf part used to treat different sickness. Both rural and urban areas use these ethno medicinal plants and 10 of them are used in both. Furthermore, in urban areas relatively established folk healers/herbalists provide health care service. Rural people are more reluctant to provide information ethno medicinal plant species than the urban ones.

*Table 1: Some ethno medicinal plants in Jimma Zone*

Local name	Botanical name	Parts used	Disease under treatment	Plant type, cultivated/wild
<i>Abusuuda</i>	Black cumin	Seed	Headache	Domestic
<i>Abbayyii</i>	Maesalanceolata	Stem	Diabetic	Wild
<i>Atuchii</i>	Verbena Officilis	Root	Asma	Wild
<i>Hadhooftu</i>	Aloe Calidophylla	Leaf	Swelling, itching	Wild
<i>Mommooqqoo</i>	Rumexabyssinicus	Root	Blood pressure	Wild
<i>Waleensuu</i>	Erythrina	Leaf	Anti-pain for wounded body	Wild & Domestic
<i>Bisaannaa</i>	OleaHothSetteri	Leaf	Curing hazard wound	Wild
<i>Dimbilaala</i>	Foeniculumvulgare	Leaf	Diabetes and blood pressure	Domestic
<i>Banjii</i>	Stereospermumkunthianum	Root	Teeth illness	Wild
<i>HiddaReeffaa</i>	Zehneriascabra	Root	Delivery activator	Wild

According to data gathered via focus group discussion among ethno medicinal plants which found in study areas 12 are for their roots,4 for their fruits, 6 for their seeds,2 for their flowers,1 for its bark,1 for its stem and 5 for their leafs are utilized as ethno medicine. In other

hand, some ethno medicinal plants' names have not been mentioned for the sake of confidentiality and patent right issues involved in this regard those folk healers are serious concerned about them. But, photographs of some of these ethno medicinal plants used for treating human and livestock ailments have been taken and described.



*Fig 3: Ethno- medicinal plants and healing practices*

#### ***4.2 Opportunities Identified***

Diversity of plants used in ethno medicinal care is identified as primary opportunity to tackle different human and livestock ailments. There also lies the potential for syncretism of ethno medicine and biomedicine and/or opportunities for medical innovation. Folk healers obtain their drugs mainly from natural substances implying that there is medicine at hand for natural

dependent diverse cultures. The persistent use of ethno medicinal plants seen as medical opportunity in study area. Ethnographic evidences show that patients continuously use herbal therapies for several reasons.

First, the sense of control is the principal factor; when professional care is not immediately available, inconvenient, costly and time-consuming patients believe that biomedicine has failed them so they use home remedies for acute conditions colds, stains, pains, aches and etc. In the rural area vast sections of the rural population have no access to modern medicine. Second, cultural factors encourage the use of ethno medicinal plants due to lifelong tested environment and culture relationship. Accordingly, the products of natural plants are perceived to be healthier than manufactured ones due their organic content. Furthermore, the fact those physicians often give notice to herb as harmless placebos<sup>8</sup>.

The data obtained from key informant interview revealed that interest in ethno medicine cannot merely be attributed to the lack of access to the modern medical services but more importantly to cultural acceptability of the healers, the esteem they have and their easy accessibility to patients. Further, the healing process is made in shared confidence and payment is different from the payment of system formal health services but more important as healers receive payment based on their earlier healing experience and socio-cultural bond (often in goods in rural areas). Even in Jimma zone where modern health care services are more accessible many people continue to go to folk healers.

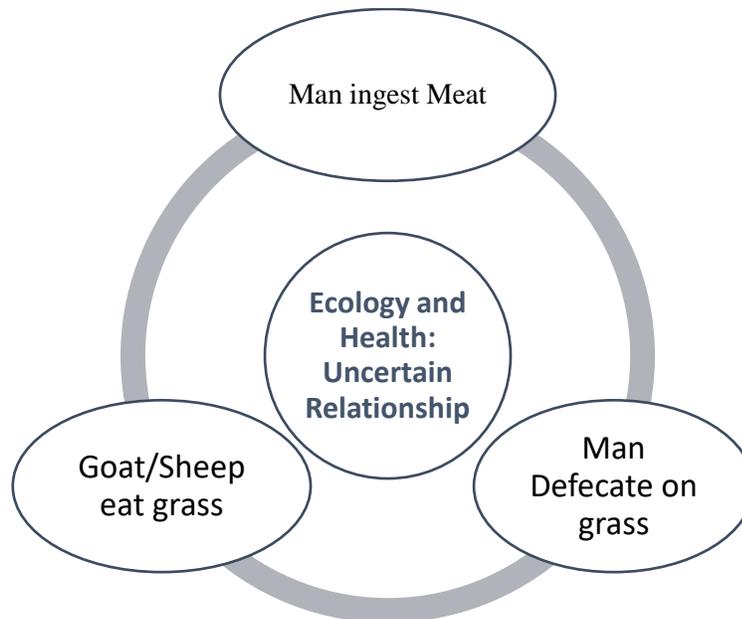
#### ***4.3 Challenges***

It has been found that the introduction of modern education accompanied by the wide spread use of bio medicine, religious factors ( western religion), spirit of urbanization (rising demand for house ,fire woods and construction) have been leading to extreme deforestation and contributed to reduction of ethno medicinal plants and their utilization in study area. In other way, ecology and health always have uncertain relationship posing challenges in maintaining health. The formal preoccupation with modernization ravaging indigenous knowledge. Lack of warranted mechanism of knowledge transfer and equivalent English terms for local names of ethno medicinal plants impinge on desirable development of ethno medicine.

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<sup>8</sup> Lisa Corbin Winslow, David J. Kroll (1998). Herbs as Medicines. Arch Intern Med. 158(20):2192-2199. doi:10.1001/archinte.158.20.2192; J. Wang and X. J. Xiong (2012). "Control strategy on hypertension in Chinese medicine," Evidence-Based Complementary and Alternative Medicine, vol.4.

Figure 2: Ecology and Health: Uncertain Relationship



There are a numerous challenges against ethno medicine such as increasing decline in natural resource base, lack of integration of ethno medicine in national health care system, lack of standardized audit and regulation mechanism (e.g. registered warranty for benefit sharing, absence of evidence- based and culturally relevant policy to guide conservation and lack of formal mechanism for systematic documentation and the resultant perpetual dependence on highly concealed oral means of ethno medicinal plants and its indigenous knowledge system transmission. These can be redressed by giving critical focus to marmalade ethno medicinal plants use and their integration in national health care system through feasible policy, proclamation and program by the public and relevant stakeholders.

#### 4. CONCLUSION

According to data that generated from FGDs, although ethno medicinal plants have been used to treat diverse ailments in both rural and urban areas the bulk of species exist wild. As one opportunity, this shows that there is medicine at hand for nature dependent local communities. The system provides essential opportunity, especially in fulfilling needs unmet by bio medicinal system (providing opportunities for complementary development). Further, there are also other opportunities; pharmaceutical and medical Anthropological studies can be carried out, institutionalized research and training can be carried out on ethno medicinal plants in order to integrate them with bio medicine for holistic development of health system.

#### SUGGESTIONS FOR FURTHER DEVELOPMENT

To appropriately draw benefits from the development of ethno medicine; there should be promotion of the utilization and development of ethno medication system through ethno medicinal education, training (long and short term), ethnographic research (trans-disciplinary), skills

development, services and therapies. Thus, to successful do this ethno medicine should be integrated in curricula and healthcare system (integration of biomedicine with ethno medicine for holistic healthcare services). Not only this but, experience sharing is commendable from success stories such as the states of India and China. Informed use of WHO's strategies on ethno medicine is necessary, e.g. the strategic directions set for six year (2014- 2020). Based on research finding policy- relevant trans-disciplinary thematic research is required. Workable policy and translation of the same into easily executed proclamation and program for effective implementation is also essential. Finally, suitable university-industry linkage is needed.

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#### **CONFLICT OF INTERESTS**

I declare that there are no financial, professional or personal competing interests that might have influenced the performance or presentation of the work described in this manuscript.

## REFERENCES

1. **Abbikn, J.** (1995). Medicinal and Ritual Plants of the Ethiopian South West An account of
2. **Abiyot Berhanu** (2002). Use and Conservation of Human Traditional Medicinal Plants in Jabitehaan Wereda, West Gojam. M.Sc. Thesis (Unpublished), Addis Ababa University.
3. **Fassil Kibebew**, 2001. The Status and Availability of Oral and Written Knowledge on Traditional Health Care in Ethiopia. In: Conservation and Sustainable Use of Medicinal Plants in Ethiopia, Proceeding of The National Work Shop on Biodiversity and Sustainable Use of Medicinal Plants in Ethiopia, 28 April-01 May 1998, pp 168-175. (Medhin Zewdu and Abebe Demisseieds.), IBCR, Addis Ababa.
4. **Haile Yineger and Dilnesaw Yewhalaw**, 2007. Traditional medicinal plant knowledge and use by local healers in Sekoru District, Jimma Zone, Southwestern Ethiopia, Journal of Ethnobiology and Ethnomedicine, 3: 1-7.
5. **J. Wang and X. J. Xiong** (2012). "Control strategy on hypertension in Chinese medicine," Evidence-Based Complementary and Alternative Medicine, vol.4.
6. **Kebede Deribe, Alemayehu Amberbir, Binyam Getachew and Yunis Mussema** (2006). A historical overview of traditional medicine practices and policy in Ethiopia. *Ethiop. J. Health Dev.* 20(2):127-134
7. **Lemessa Mergo, et.al.**(2013). *Ethno medicinal Exploration of Haanqu Fruit among the Oromo of Ethiopia*. International Journal of Research in Sociology and Social Anthropology. Vol.1 No.1
8. **Lisa Corbin Winslow, David J. Kroll** (1998). Herbs as Medicines. *Arch Intern Med.* 158(20):2192-2199. doi:10.1001/archinte.158.20.2192
9. Recent Research. *Indigenous Knowledge and Development Monitor.* 3(2): 6-8.
10. **Samy, R.P., P. Gopalakrishnakone, H. Bow and V.T.K. Chow**(2008). Purification, characterization and bactericidal activities of basic phospholipase A2 from the venom of *Agkistrodonhalys* (Chinese pallas). *Biochimie*, 90: 1372-1388.
11. World Health Organization Global Tuberculosis Report. Geneva: Annual Report; 2014.
12. **Zemedet Asfaw** (2001). The Role of Home Garden in Production and Conservation of Medicinal plants. In: (Medhin Zewdu and Abebe Demisseieds.). Conservation and Sustainable Use of Medicinal plants in Ethiopia. Proceeding of the National workshop on Biodiversity Conservation and Sustainable use of medicinal plants in Ethiopia, 28 April- 01 May 1998, pp. 76-91. IBCR, Addis Ababa.