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TRAFFIC seminar on Medicinal and Aromatic Plants

# Presentation

## 発表資料

Saving Plants that Save Lives

地球の薬箱を救え！

Presenter: Andrew Nainene Lelekoitien(KENYA)

## Introduction

The Yaaku live around the Mukogodo forest near Doldol centre in North Central Kenya, in Laikipia north District. The Yaaku form a relatively small group of hunter-gatherer numbering about 5000 people.

Their language is a subject of study by UNESCO as an endangered language on the verge of extinction, only a handful of people speak Yaaku and all Yaaku Speak Maasai as their first language with only five elderly persons still able to speak their language.

The Yaaku community of Kenya, are an indigenous hunter-gatherers group that derives its livelihood from the forest around them everything from; food, shelter and medicine. Their unique skills and expertise in interacting with indigenous environments and nature in broader terms has enabled them to survive the ongoing cultural explosions fuelled by the effects of globalization.

The efforts indigenous people of Yaaku community is making to protect, manage, strengthen and promote conservation and sustainable use of wild medicinal and aromatic plants.

The Yaaku traditional knowledge and the traditional cultural expressions are inseparable. It is a resource within our natural environment and us. It is also our indigenous knowledge on the varieties of species of herbs in our forests and administration skills of such medicines for both human and livestock treatment. Certain plants are also used for special ceremonies and rituals.

### Some medicinal plants how and for what they are used in both human and livestock treatment.

Spps	Local name	Part used	Preparation	Disease/conditions
<i>Carissa edulis</i>	O Lamuriai	Leaves and roots	Chewing, hot/cold decoction	Malaria, TB and venereal diseases, heart water Theileriosis, rheumatism
<i>Clerodendrum myricoides</i>	O Lmakutikuti	Root Powdering	hot decoction, chewing	Lumbago, eaten rarely by livestock, malaria, cold, polio, gonorrhoea, boil root and drink, Strength, crush root and boil in soup, Bone pain, crush root in cold water, drink, Pneumonia, boil root in milk, drink,

<i>Olea africana</i>	O Igeriyoi	Stem bark Pounding	hot decoction	Asthma, Rheumatism, Lumbago
<i>Rhamnus stado</i>	O Lkukulai	leaves,roots	hot decoction	Malaria, fevers Lumbago
<i>Warburgia ugandensis</i>	O Sokonoi	Stem bark, leaves	Hot decoction	Upper respiratory tract infection, Ectoparasites, Trypanosomosis,ECF
<i>Croton dichogamus</i>	Lakirding'ai	Roots, bark		Malaria, boil root in water, drink, Stomach, boil root, drink, Chest problems, boil root, drink,



A healthy mature *Olea africana* tree (o Igeriyoi)  
Growing in the wild,



.A *Carisa edulis* plant (o lamuriai) growing in the wild, the roots and leaves of the plant are used for medicinal purposes.



A community sustainable herbal harvesting volunteer Scout with a healthy wild *Clerodendrum myricoides* (O Imakutikuti) plant which is increasingly rare because it is highly sought after by the local herbalists



The healer sits next to a ( ntarakwai e kop)plant



The traditional healer displays a (ntarakwai e kop) plant that is used to flavour Tea and is used to relieve joint ailments



A healthy *Rhamnus stado* (o lkukulai) plant, the roots and leaves of the plant are used for medicinal purpose



*warbugia ugandensis*(O sokonoi)plant the bark and leaves of the plant are used for medicinal purpose



One of the most revered Yaaku herbalist harvesting *carisa edulis* (*O lamuriai*) in a sustainable way one root per plant or depending on the number of roots which the plant has.



with the root enough for the patient intended for to avoid wastage and enhance sustainability of these increasingly rare herbs.



Covering the remaining roots of the plant by so doing the elder ensures that there will be some for another day and also ensures that the medicinal tree survives



Preparing the roots for boiling to form a decoction for drinking by the patient.





Croton dichogamus another one of the popular medicinal herb tree



A herbalist explains the use of a herb to a client, his array of medicinal and aromatic herbs to potential customers who frequent his herbs corner.

The continued indiscriminate unsustainable harvesting of such medicinal and aromatic plants on a commercial scale is putting pressure on the few existing sources of the herbs.

The traditional knowledge of this community is mostly with the old people (**elders**) and

The younger generation is reluctant in the learning about this knowledge.

### **Importance of sustainable collection and use of medicinal aromatic plants for the Yaaku people.**

The practice of exploiting perennial plant parts in Mukogodo forest, such as roots of relatively slow growing woody species, can result in a decline in both, the size and distributions of populations of the exploited species, and ultimately result in the local extinction of these populations.

Traditional system of medicine among the Yaaku continue to be widely practiced on many accounts. Population rise, lack of health facilities, inadequate supply of drugs, prohibitive cost of treatments, side effects of several drugs and development of resistance to currently used drugs for infectious diseases have led to increased emphasis on the use of plant materials as a source of medicines for a wide variety of human ailments.

The continued reliance of Yaaku on traditional medicines is also due to economic circumstances and is attributable to the widespread belief in the effectiveness of many traditional therapies.

Majority of local Yaaku healers preferred to collect medicinal plants solely to preserve their secrecy sometimes accompanied by a chosen family member. The ethno botanical

knowledge is normally transferred to that trustworthy family member by word of mouth. The majority of medicinal plants in Mukogodo forest are declining due to deforestation for construction, tools, firewood, fodder, agricultural expansion and ceremonial purposes, drought, overgrazing, bush fires had reportedly affected a significant number of medicinal plant species.

### **Importance of wild medicinal and aromatic plants in Mukogodo community**

With the pressure on the demand on medicinal plants on the rise, due to commercialization and globalization of herbal wealth, their availability in nature has subsequently gone down. Important species of medicinal plants in many parts of the Mukogodo forest, as a result, have become endangered due to their premature and over harvesting by collectors and traders for commercial purposes. There has been a trend towards ignoring the need for biodiversity conservation, of traditional knowledge systems and abilities of traditional herbalist. In the Kenya, especially among the Yaaku, about 80% of human population and 90% of livestock rely on traditional medicine. The traditional health care practice is mainly dependent on medicinal plants collected from the wild.

### **Threats and challenges facing wild medicinal and aromatic plants in Mukogodo:**

Unsustainable harvesting practices by herb gatherers, often for commercial Purposes, has resulted in the depletion of many medicinal species in mukogodo forests. This shift from subsistence to a commercial focus in harvesting is also accompanied by a lengthy marketing chain that offers very low rates of return to gatherers. Gatherers of the bark of *Prunus africana* in Mukogodo, for example, are paid negligible rates compared to the rates received by middlemen in the trade chain, also collectors receive a smaller percentage of the consumer price for medicinal and aromatic plants like sandalwood. (*Osyris africana*) as a result the gatherers are forced to harvest large volumes of the same in order to increase the levels of income generated, this has resulted in the near extinction of the species in question.

Low prices also discourage cultivation as, with less effort, plants can be gathered for the wild and sold at the same rate, but some efforts are being made at the community level to educate them on the emerging economic opportunities in the medicinal and aromatic plants.

Trial sites for MAPs on a small scale due to financial constraints have been commenced by Yaaku people organization to act as demonstration plots to the surrounding communities, with the intention of replicating the domestication and hopefully commercially exploiting MAPs on their cultivated land. There is now broad consensus that cultivation offers the best prospect for conserving many medicinal plants currently found in the wild. In addition to maintaining or expanding supply, cultivation is seen as facilitating enhanced species identification and improved quality control, as well as species improvements.