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**Non-wood forest products in Lesotho**

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*This paper has been minimally edited for clarity and style*

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## **1. State of NWFP Statistics in the Country**

The statistics relating to the NWFP at national level in Lesotho is not properly kept despite the crucial role which some of them play for the rural communities.

Scenic beauty of the country is a major asset for tourism. The country is rich in historic relics ranging from Stone Age cultures through the era of the Bushmen with their cave paintings, to the founding of the Nation over 160 years ago. These historic reminders remain, though threatened through neglect and vandalism. The country's wildlife, which was once abundant in numbers and species, has dwindled to a poor remnant today.

Floral diversity is being progressively reduced, primarily by overgrazing and indiscriminate burning and cutting of grass for the production of the famous Basotho hats. Thatching of the hats, production of the brooms which are unique to Lesotho and the unprecedented collection of medical herbs and various endangered grass species also contributes to the reduction of this floral diversity.

No studies have been carried out to quantify the rate at which the products are diminishing and indeed, the role, which they play to the nation either culturally, socially or economically.

## **2. Non wood goods and services**

### **2.1. Overview of the main NWFP**

#### **2.1.1. Grasses**

Mohiomo: Common Lesotho name

Thatching grass: Common English name

*Hyparrhenia hirta*: Scientific name

Robust, tall and very erect perennial leaf blades usually expanded and tapering to a point; the general colour glaucous green turning reddish with age. This grass is found both in the rangeland and in forestlands. According to the 1981- 88 rangelands inventory, this species covers an area of about 350,190 ha (about 40% of the total area of Lesotho).

Moseha: Common Lesotho name

Small oat grass: Common English name

*Merxmuellera macowanii*: Scientific name

Moseha leaves are hard and fibrous, the blades usually rolled and linear. They are confined to the high altitude areas normally above 1 800m above sea level. They thrive very well on deep, moist soils and sheltered valleys. They are spread over an area of about 106, 356 ha (29.22%).

### 2.1.2. Medicinal plants

The Basotho tribal people were once great believers in witchcraft, and those who still are, are firmly convinced that most of their ailments are due to the evil influence of some persons. To avert such evil influences or to break their spells, the Basotho employ medicine and charms. These are administered in various ways, such as decoctions, lotions and powder or whole plants are kept or smoked in the hut or in the courtyard. Very unfortunately not many people are interested in medicinal plants and herbalists never bother to write down all they know on paper. Consequently, the knowledge of the medicinal value of plants is slowly fading away. The medicinal plants themselves also tend to disappear as pressure is put on land by the increasing population

Hiokoana la tsela: Common Lesotho name  
Dianthus basuticus: Scientific name

Traditional healers adore this plant for ritual practice. It is sold in most herbal stalls at high prices. Physiologically it acts as a carminative and expels gases from the bowels. This herb promotes cleansing and detoxification of the blood stream.

Khapumpu: Common Lesotho name  
Eucomis autumnus: Scientific name

It is actually a nice plant to grow and looks beautiful when it flowers. This plant has many properties as a cleaner. In the olden days, in some regions it was used as soap to wash clothes or animal skins. An infusion made from this herb is good for healing sexually transmitted diseases. The plant is also good for piles but if made too strong it leaves a burning sensation. This species is endangered in Lesotho. It brings a lot of income to sellers at street market.

### 2.1.3. Sandstone

According to Ambrose D. (1993) cited by E.S. Sekaleli (1997), Lesotho consists of a series of nearly horizontal layers of rock, mainly laid down some 180 million years ago. Valleys and gorges are not covered by layers the soil and thus exposing geology for everyone to see.

If you stand almost anywhere in the valleys you can see at a glance much of the country geological story. Clearest of all is the horizontal boundary between the white sandstone and the darker basalt rock of the Maluti.

According to ZMCK consulting Engineers, 1997 the geology of the District of Maseru shows that the district comprises sand stone. Mudstone and siltstone of the Elliot formation. An approximately one hundred and fifty metres thick rock formation of the stomborg group of the Karoo super group, which is estimated to be about two hundred million years old. Fine grained to medium grained sandstone comprise a large proportion of this group and it is generally alternated with the mudstone and siltstones. It is from this sandstone that the stones are cut into rectangular blocks of varying sizes which stone masons use for construction purposes.

#### 2.1.4. Honey

Honey has always played a very important role to Basotho as a nation both culturally and medicinally. The honey-harvesting manner still cast doubt to-date as to whether there was any consideration given to the future supply. The harvesting manner was that the colony if sighted would be smoked and burned until most bees were killed and the colony was defenceless. They would then extract honey and any brood present would be thrown away, but, they were intelligent enough to recognise that in winter bees reduced brood production and instead stock/keep a lot of honey. Consequently, harvesting was done in winter so that good quality honey could be collected.

With regards to cultural believes, if a colony of bees nested around or within one's premises, that colony would not be disturbed because it was believed to be a sign of good luck. In the case of traditional healers, it was believed to be a sign of more people who would come for services. Cattle rearers believed that they would get lots of cattle if a colony nested on or close to their cattle posts or kraals.

### 2.2. Non Wood Services

#### 2.2.1. Grazing

According to the Forest Act of 1998, it is an offence to graze animals in a forest reserve without a license. Any grazing license should contain the description of the livestock and the number allowed to graze and the period during which they are so allowed. Trespassing livestock may be driven out or seized and impounded and the person responsible fined and made liable for the costs for watering, impounding, feeding of the stock and damages caused.

#### 2.2.2. Cutting of grass for thatching

Cutting of thatching grass *Hyparrhenia hirta* for roofing is done in winter when the grass is dry. In the forest reserve, a license is required for cutting the grass. The license will also specify the number of days in which an individual will be allowed to spend in the reserve.

#### 2.2.3. Digging and gathering of medicinal plants

According to the Proclamation of Monuments, Relics, Fauna and Flora under the Legal Notice No. 36 of 1969 and according to the Forest Regulation under the Legal Notice of 1980 no person shall remove any forest produce from a forest reserve unless the produce has been marked for removal and unless such a person has a license to do so.

#### 2.2.4. Hunting

By law, no hunting is allowed in the Forest Reserves at any time. In the communal forests however, hunting is not strictly prohibited. However, according to the Historical Monuments,

Relics, Fauna and Flora Act of 1967 there are some specified threatened birds and mammals, which may not be hunted at any time. An example of these protected birds and mammals is the bald ibis (*Geronticus calves*), cape vulture (*Gyps coprotheris*), bearded vulture (*Gypaetus barbatus*).

### **3. Utilisation, management, access, harvesting and destination of NWFP**

#### **3.1. Thatching grass**

This grass is very important to every Lesotho both economically and culturally. (90% of the houses in the rural areas are thatched with this grass. Hence, the common name calls thatching grass. The construction of a rondavel requires a Lesotho to have the combined skills of stone mason, builder, carpenter and thatcher in the final stages, his wife will help as the bundles of the thatching grass are literally sewn into place over the layer of reeds to make a water-tight roof.

In the early Spring (August — September) the area where this grass flourishes either inside or outside the forest is set aside as “leboella” (an area set aside for the natural propagation of grass) for the propagation of this grass. In winter when the seed of this grass is ripe, the area is divided into small blocks according to the number of the families, which would have submitted their applications to the Village Development Council. After the seed has been thrashed by hitting the head against a small stone or any hard ground, the animals will then be allowed to graze for a specified period. By law, when such an area has been declared leboella no animals are allowed to graze and nobody is allowed to cut or remove anything from such a site.

#### **3.2. Moseha (*Meixmuellera macowanii*)**

Products are made out of this grass such as brooms, mats containers, ropes for thatched - house roofing and huts the most famous of which is the symbolic Basotho hat. Products from this grass play an important role in the lives of the Basotho nation, and have become an inherent part of their culture. Products made from Moseha are export commodities that bring regular income to the people.

Lesotho is famed for its conical hats, and they have become so much a Lesotho emblem that a hat appears on the National flag and even the postage stamps are printed on paper water marked with a repeating pattern of Basotho hats.

The grass broom (leflelo) is another traditional article made from moseha, it is believed by many to be a much more effective way of removing dust from difficult corners than modern type brooms. The grass is gathered into small bundles, which in turn are bound tightly into a spiral with black strands of plaited horsehair. Basket of all shapes and sizes are also made from moseha. These brooms are produced for export mainly to Australia.

### 3.3. Sandstone

Most of new government buildings have been constructed with this material. The local people have organised themselves into groups and have started a flourishing business of stone cutting. A stone of about 60-cm by 20 cm sells for about 4 Maluti (local currency) which is equivalent 80cents US. There is a good market for these stones also in the Republic of South Africa. Almost all houses in the lowlands have been built from this stone while in the highlands houses are built from the basalt stone.

Source: M. Letsipa

### 3.4. Berkheya setifera

This is one of the most useful medical plants in Lesotho. An infusion of the roots acts as blood detoxification agent. It also cleans kidney problems and can remedy arthritis. It can even be grown in the gardens. It is mainly used locally by traditional healers. The local people who trade in traditional medicines also collect it and sell it locally in the stalls, which are commonly found in almost all the towns within the country.

### 3.5. Honey

Medicinally honey has traditionally been known to cure colds while bees wax was used to drive evil spirit away when burnt. The recent studies have shown that through modern technology bee keeping can affect positively to the economy of Lesotho. The Apiculture section within the Ministry of Agriculture Youth and Land Reclamation in the Department of Conservation, Forestry and Land Use Planning.

At present, there are 32 individuals who keep bees in their own backyards. In 1996, a total of 343.2 kg of honey was produced from the bees, which are reared commercially. In 1997/98, the yield had increased to 448.4 kg. Honey produced/harvested in Lesotho is marketed locally to individuals at the cost of Ml 7.00 per kg. Honey that is sold by the pharmacists is sold at M32.00 per kg. To date, the total number of people with hives, some of whom have not started rearing bees is 52.

Prospects are very good with regard to employment opportunities and income generation in that all the equipment used in bee keeping such as hives, beeveils and smokers are produced locally.

## **4. Conclusion**

### 4.1. The current trends, potential and problems

#### 4.1.1. Medicinal plants

The association of traditional healers was established in the late 1980s. This organisation comprises all local traditional healers. By law, all traditional healers are supposed to have a certificate that they obtain after a rigorous test conducted by the qualified traditional healers. Legally, therefore, any person who is found collecting medicinal plants without a license is in breach of the law and may be prosecuted.

The potential for traditional medicines in these country is very promising indeed because even the Ministry of Health now recognises the traditional healers to a point where in some cases people are referred to these some established healers even they do not seem to respond to modern medicines.

The major problem with this practice is that although the people who do not have the certificates are not allowed to collect, sell or be in any way involved in the traditional healing practice, there is no strict law enforcement. Consequently, many plants are threatened due to over exploitation

#### 4.1.2. Thatching grass

Traditionally, thatching grass was used by the rural people for roofing their houses. In recent years however, most city dwellers prefer this grass for roofing instead of corrugated iron. The demand for this grass has therefore, increased dramatically. The increased bovine population has also resulted in the need for more grazing land. This has resulted in serious problems regarding the proper management of this grass in order to ensure abundance and continuous supply.

#### 4.1.3. Mosera

The pressure on thatching grass on one hand has led to most people resorting to this grass for roofing their houses while on the other hand the demand for both brooms and hats has also increased. If this trend continues, this grass will soon be threatened.

#### 4.1.4. Honey

The potential for honey is very good indeed. In recent years, it is not easy to find a colony of bees in the wild while the demand for honey is still very high. As it has been explained that the number of individual with hives has increased from 32 to 52 within a period of two years



(i.e. from 1996 to 1998). In the country like Lesotho, where employment opportunities are very low there is no doubt that bee keeping as business has very good prospects.

#### 4.2. Statistical data collection

It is not easy to make any sound management decisions if there is not enough raw data that can be refined into useful information. The problem, however, is that most countries do not have that capacity to do this on the regular basis. Even in cases where there is some statistics available, it is not easy for some organisations to release it for public consumption.

Perhaps a possible solution to this problem could be to establish a unit within SADC member states that would in conjunction with individual member states identify individuals, who would be responsible for collecting, storing disseminating data on a regular basis.

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