



**UNIVERSITY OF NAMIBIA**

**MULTIDISCIPLINARY RESEARCH CENTRE (MRC)**

**Science, Technology and Innovation Division**

**Social Science Division**

**Field Trip Report**

**Study on Indigenous Medicinal Knowledge in Caprivi Region**

**28 Nov – 12 Dec 2010**

Prepared by: Ms. Iwanette Du Preez  
Mr. Emmanuel Nepolo  
Ms. Rina Siyengwa  
Mr. Martin Shapi  
Dr. Ahmad Cheikhyoussef  
Dr. Davis Mumbengegwi

**31/01/2011**

## DECLARATION

The authors of this technical report declare that this report contains raw data which have not yet been published and the main purpose of producing this report to add a piece of art to the knowledge body of Namibian Indigenous Knowledge System. This report may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

**To cite this report:** Iwanette Du Preez, Emmanuel Nepolo, Rina Siyengwa, Martin Shapi, Ahmad Cheikhyoussef, Davis Mumbengegwi, 2011. Study on Indigenous Medicinal Knowledge in Caprivi Region; Field Trip Report. Multidisciplinary Research Centre (MRC), University of Namibia, Windhoek, Namibia.

## **INTRODUCTION**

Indigenous knowledge is defined as the unique knowledge in a given culture, which is passed on orally from generation to generation (Mapaure & Hatuikulipi, 2007; Dan et al., 2010). This indigenous knowledge is regarded as valuable and considered as the local people's capital (Mapaure and Hatuikulipi, 2008; Cheikhyoussef et al, 2011), and if not preserved, it may be lost forever to society. The study on Indigenous Medicinal Knowledge in Caprivi region was done in collaboration with the Directorate of Research Science and Technology (DRST) of the Ministry of Education, and was done as a continuing research work for the national survey on Traditional Healing in Namibia.

The traditional medical systems are generally based on the uses of natural and local products which are commonly related to the people's perspective on the world and life (Toledo et al. 2009). Traditional African medicine is 'the sum total of practices, measures, ingredients and procedures of all kinds whether material or not, which from time immemorial has enabled the African to guard against diseases, to alleviate his/her suffering and to cure him/herself' (Busia, 2005). The traditional healing practices in Namibia have been studied by a number of researchers (Shapi et al, 2009; Dan et al, 2010).

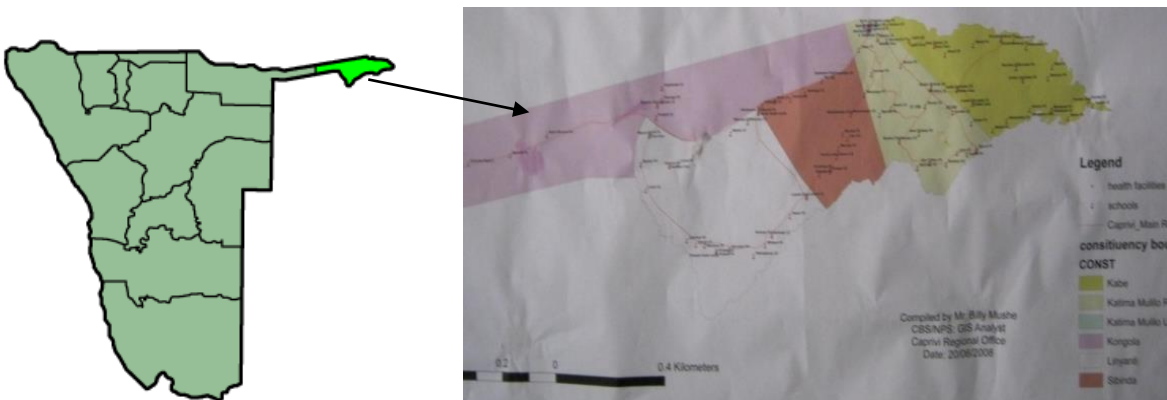
The aim of this national survey will be to create a database based on the indigenous knowledge of medicinal plants used by traditional healers and/or knowledge holders to treat a variety of ailments and diseases, as well as for cultural beliefs and practices. As such, the overall aim of this fieldtrip was to interview traditional healers in the Caprivi region and retrieve as much information as possible with regarding to the uses of medicinal plants, and to collect voucher specimens to be deposited with the National Botanical Research Institute (NBRI), Windhoek, Namibia.

## METHODS

### STUDY AREA

The study was carried out in the Caprivi region (Fig. 1). Caprivi is one of the Namibian 13 political regions, its name came from the Caprivi Strip. Popularly known as the ‘arm’ of Namibia, the Caprivi is a semi-tropical region that lies north-east of the country. It is a major transit point that borders Angola, Botswana, Zambia, and Zimbabwe. In the northwest, it borders the Cuando Cubango province of Angola. In the north, it borders the western province of Zambia, while in the south it borders Botswana. Therefore, the Caprivi is almost entirely surrounded by foreign countries. Its only domestic border is a short connection to the west with the Kavango region of Namibia (Chinsembu and Hedimbi, 2010). The Caprivi area experiences high temperatures and is the wettest region of Namibia. The Caprivi receives heavy rains during the rainy season from December to March, and has high temperatures throughout the year, while winter nights are cold.

Its terrain is well vegetated, mostly made up of swamps, floodplains, wetlands, and deciduous woodlands dominated by trees such as the Zambezi teak (Chinsembu and Hedimbi, 2010). According to National Population and Housing Census projections of 2001, the Caprivi region has a total population of 87,058 people. The relative socioeconomic situation in the region compares poorly to other parts of the country (Government of the Republic of Namibia, 2009).



**Fig. 1 Map of the study area showing Namibia and Caprivi region**

## DATA COLLECTION

The research team was divided into two teams; teams A and B to cover the six constituencies of Caprivi region. Team A covered Katima Mulilo Rural, Katima Mulilo Urban and Kabe constituencies. Team B covered Sibinda, Linyanti and Kongola constituencies. Before research activities were initiated, both research teams visited the regional council to inform them. The regional council was requested to publish the teams' presence through Lozi Radio.

It was quite interesting to know that, there was a body that governs traditional healers and protects the interest of the traditional healers in the region. Therefore, any research that pertains to the traditional healers in the region has to obtain authorization from the traditional healer's authority before commencing with the research. The traditional healer's authority has an organizational structure, which includes the chairman, deputy chairman and a treasurer to mention but a few.

For the collection of data, snowball sampling was done with the assistance of Dr Reagan Kamwengo Kamwengo; the deputy chairman of the Traditional Healers' Association/Council, who assisted team B in identifying the traditional healers to be interviewed. The deputy chairman with the research assistance from UNAM also did make an effort to air-broadcast the presence of the research team from UNAM and MoE in the region to the traditional healers through a local national radio broadcast station on 29/11/2010 at 6:00 pm, the program cover areas of traditional healing system in Namibia and Importance of Government Policy to regulate this practice at National level. This activity had a significant impact towards the completion of the field work as most of the healers heard of our presence in the area, and hence our objective.

It was noted that even though there were a significant number of traditional healers in the region, not all of them were Namibian. Some of them were of Zambian origin; hence they were not interviewed during the process. This was the case because, the research merely focused on interviewing Namibian traditional healers. This observation obliged the research teams to devise an approach that enabled them to determine his/her nationality before interviewing him/her. However, it was also noted that tension does exist between local traditional healers and the ones that originate from Zambia. This was observed by the way locals promptly identified the

nationality of Zambian traditional healers, when asked if they know any other traditional healers nearby.

A structured questionnaire was used for interviews. Interviews were conducted in the local language, Lozi. Only a few were done in English, in the case of traditional healers that could both understand and speak English. Interviews were done 2-3 at a time depending on the number of traditional healers that were present at one location during the same period. GPS coordinates of the villages where interviews were held were recorded as well. Plant specimens were collected and preserved in a plant press as voucher specimens to be sent to the NBRI for scientific identification. Each of the plants received a voucher specimen number and, voucher specimen/collection forms were completed for the plants that were collected, photos were also taken.

## **RESULTS AND DISCUSSION**

A total of 100 interviews were conducted and 146 plant specimens were collected by the two teams (Table 1 and 2). No incentives were given to these healers, however, some requested incentives in return for their assistance. The majority of traditional healers were more cooperative and willing to share their vast knowledge and skills on the use of medicinal plants and they were more keen to show us the plant species they use, which part of the plant they use, dosages, ailment they treat and time it takes to treat the ailment. However, it was observed that some of the respondents were not so forthcoming in sharing their knowledge as some only gave the name of one plant or two at the most, or they gave the names provided by other healers. This was regarded as a disadvantage as a wide variety of plant species/names could not be collected; which may have been caused as a result of fear that if this knowledge might become known to all, these healers would make a loss as practitioners. In addition, the healers may have feared that researchers might exploit them and their resources. This may be mitigated by providing incentives such as money, food or beverages before the interviews.

The majority of the traditional healers/knowledge holders were men aged between 40 and 90, the youngest being 32 and the oldest 90. Most of the traditional healers started practicing by ancestral call and that in most cases this knowledge is not passed on to the younger generation as

the young people believe that the healing knowledge is associated with witchcraft and hence the loss of interest. Many also reported that they started practicing after being treated by a traditional healer themselves. In the case where knowledge is passed on, it was found that it's only passed to the healer's family members, mostly to the sons and daughters.

The majority of the traditional healers interviewed treat a wide range of ailments and diseases using mainly plant, leaves, roots or barks. It was scrutinized that a considerable number of traditional healers from different areas within the region uses the same plant species to treat either the same or similar ailments. Most of the plant species used by the traditional healers are available in the region, and no sign of over exploitation has been observed, only a few species were documented as threatened namely Situnduwanga. However, the traditional healers also do compliment their medicinal plant materials collections with plant materials collected from nearby countries such as Zambia. It was also worth noting, that some local traditional healers do extend their healing services into nearby countries such as Botswana and Zambia.

Most of the traditional healers depend on the traditional healing as a profession to earn their income. The findings from the questionnaire suggests that some traditional healers do make enough money from the practice to support their family, and to compliment these earnings is either their monthly pension grants from the government or income from their agricultural production. Due to their farming activities it was a bit difficult to interview the traditional healers in the morning, thus most of the interviews took place in the afternoon.

Table 1 summarizes the plants that were collected by team B and their uses. The data shows that one plant may be used for more than one treatment. The data also reveals that several traditional healers use the same plants either for different treatments or for the same treatment in different combinations.

Table 1 medicinal plant in Caprivi region collected by Team A

Local Name	Voucher specimen no.
Muzauli	UNME201
Mubuyu	UNME202
Muvovo/ Tjivovo	UNME216
Musikandjili	UNME205
Mukanangwe	UNME206
Muposo	UNME214
Minashakati	UNME210
Katevu	UNME208
Munganga	UNME211
Mukenge	UNME207
Muhuluhulu	UNME204
Muzwili	UNME203
Mundundu	UNME230
Munyele-nyele	UNME229
Mupondo-pondo	UNME228
Kalutenta	UNME221
Buomba	UNME222
Umpoko	UNME223
Mubula Hansi	UNME220
Muhwana	UNME212
Mutente	UNME213
Musaamba	UNME209
Mupetakwali	UNME234
Musati-sati	UNME240
Lungwatanga	UNME233
Sitombolwa	UNME232
Mukumati	UNME231
Mulongo	UNME254
Mutoya	UNME255
Lutaka	UNME256
Sangani	UNME257
Musheshe	UNME227
Muhoto	UNME226
Muzinzila	UNME225
Sunde /Isunde	UNME224
Mukayi-kayi	UNME236



Musheka-shela	UNME237
Musilu	UNME218
Musula	UNME217
Muvuko	UNME246
Muchoko	UNME247
Munga	UNME248
Nasilele	UNME249
Luambo	UNME245
Mukena	UNME215
Mulombe	UNME250
Muhamani	UNME251
Mukunku	UNME244
Sihanda	UNME243
Seto	UNME242
Mulolo	UNME241
Mubumbu	UNME238
Mututu	UNME239
Mupuminangombe	UNME235
Mutuhwatuhwa	UNME252
Muchete	UNME253

**Table 2** medicinal plant in Caprivi region collected by Team B

Local name	Voucher specimen no.
Musikeli	UNME001
Muzauli	UNME002
Musilu	UNME003/013
Isunde/Esunde	UNME004
Mbowana	UNME005
Mukanangwe	UNME006
Mushakashela	UNME007/038
Musheshe	UNME008
Katemabakulu	UNME009
Mubobo/Mububu	UNME010
Muhonono	UNME011
Mukabe	UNME012
Pichu	UNME014
Mopani	UNME015

---

Namwenba	UNME016
Mulutuluwa	UNME017
Muchalo	UNME018
Muzweli	UNME019
Mutakula	UNME020
Munziuzila	UNME021
Mutwawa	UNME022
Mukusi	UNME023
Mulolo	UNME024
Mumbu	UNME025
Mukumo (Mkunu)	UNME026
Musikilasikila	UNME027
Katende	UNME028
Licobe-labalisani	UNME029
Liwanduwandu (aloe)	UNME030
Seto	UNME031/080
Sikaname	UNME032
Kalumba	UNME033
Molinga	UNME034
Mungongo	UNME035
Katepu	UNME036
Muchatapi	UNME037
Tutwa	UNME039
Mubabama	UNME040
Mulya/Muliya	UNME041
Situnduwanga	UNME042
Mwinda	UNME043
Munyelenyele	UNME044
Mulombe	UNME045
Mutente	UNME046/061
Muwawa	UNME047
Muhamani	UNME048
Muhuluhulu	UNME049
Litungambezi	UNME050
Mununga	UNME051
Nachileke	UNME052
Ndunga/Ndonga	UNME053
Ntulwantulwa	UNME054
Mulula	UNME055

---

---

Kabulabula	UNME056
Mupondopondo	UNME057
Kabubo	UNME058
Munjongolo	UNME059
Lwanda	UNME060
Sinbomo	UNME062
Liwanduwandu (cactus)	UNME063
Mubuyu (boabab)	UNME064
Musikili	UNME065
Mupundu	UNME066
Mukena	UNME068
Muwuwa	UNME069
Mulutulua	UNME070
Sibobo	UNME071
Mufumbo	UNME072
Mupolota	UNME073
Mulilima	UNME074
Mubononobono	UNME075
Mweeye-mafwe	UNME076
Musamba	UNME077
Viroso/virosa (latin)	UNME078
Paw-paw	UNME079
Lwambo	UNME081
Muchaba	UNME082

---

Mushakashela (Figure 1), Sikaname (Figure 2) and Situnduwanga (Figure 3) are the most popular plants used by several traditional healers to treat a variety of diseases in a variety of combination treatments. As such, many of these plants are used in combination treatments. Traditional healers confirmed if two or more plants are used, treatment is more effective.

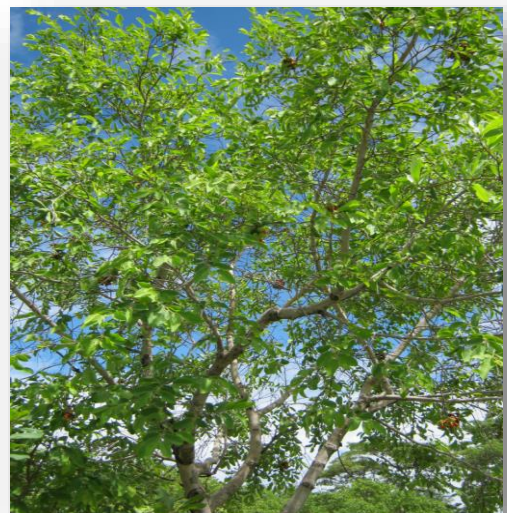
Figure 1. Mushakashela (UNME007/038) is used to treat madness; court cases; nzila; mushitu; sihumba; liver disease (not specified); tobolo yakaliloze; muchalela.



**Figure 2.** Sikaname (UNME032) is used to treat bola; muchalela; wanted divorce.



**Figure 3.** Situnduwanga (UNME 042) is used to treat madness; mushitu; bahimu; tobolo yakaliloze; demons; nzila; liver disease; silumba; mulowa; luck; muchalela.



## Difficulties encountered

Some of the traditional healers were not willing to be interviewed due to either their past experience they had with similar kind of research and some due to their traditional belief. For instance, it was difficult to interview a certain traditional healer and to get even a single name of plant species she uses to treat different ailments. This was due to the fact that, a similar interview was conducted with her by unknown researcher who promised to go research her medicinal plants further and turn them into medicines, and give her commission upon selling of the medicines which never materialized. This makes her hesitant in sharing her traditional healing practice with us. Another healer, refused to be interviewed based on her traditional belief, citing that her spirits/ancestors did not welcome us, hence stopping her from sharing her knowledge and skills with us. It was also a bit challenging to interview certain healers, because they have an impression or they expected us to compensate them for their information and time. Some areas where some traditional healers reside are so remote with poor road and harsh terrains making it difficult to access them. This could also be ascribed to the season in the region, it was the beginning of the rainy season in the region and it was difficult driving on muddy and some gravel roads.



**Figure 4.** One of the challenges encountered due to rain and poor roads

## **Recommendations**

The following recommendations are needed to be considered:

- Detailed research studies have to be conducted in this region in the future because of the rich flora in Caprivi and these trips rather to be done during the dry season to ensure the accessibility of almost every traditional healer with ease. It is always easy and safer to drive on gravel roads when it's dry (fig. 4).
- Interviewers from the region who speak the local language are needed as most traditional healers tend to express themselves better when being interviewed in their local languages.
- Proper protocols to approach the Traditional Healers' Association are needed to be developed by the Directorate of Research, Science and Technology in the Ministry of Education and the Multidisciplinary Research Centre at the University of Namibia.
- Incentive based protocols are encouraged for further collaboration between the traditional healers and scientific institutions to develop medicinal drugs from medicinal plants.
- Involve traditional healers in collaborative research work and scientific activities which will enable them to contribute more in sharing the indigenous knowledge on medicinal plants and their uses in the traditional healing system.

## **CONCLUSIONS**

A total of 146 plants and their medicinal uses by traditional healers in the Caprivi region were recorded, and voucher specimens were collected for scientific identification and further investigations. A significant number of these plants were used for spiritual purposes/ healing and to treat infectious diseases. However, the responses of the traditional healers gave the impression that they did not share all their information; hence there remains undocumented information about medicinal plants and their uses in the Caprivi. Providing incentives would encourage increased cooperation from the traditional healers, in that they might feel that they have benefited from their knowledge. The establishment of a database for indigenous medicinal knowledge would reduce the chances of this valuable information to get lost, whilst also contributing to the awareness of the conservation of this plants. Sharing IK within and across

communities will also help enhancing cross-cultural understanding and promote the cultural dimension of development.

## REFERENCES

- Busia, K., 2005. Medical provision in Africa – Past and present. *Phytotherapy Research*, 19:919-923.
- Cheikhoussef, A., Mapaure, I., and Shapi, M., 2011. The Use of some Indigenous Plants for Medicinal and other Purposes by Local Communities in Namibia with Emphasis on Oshikoto Region: A Review. *Research Journal of Medicinal Plant* 5 (4): 406-419.
- Chinsembu, K.C., and Hedimbi, M., 2010. An ethnobotanical survey of plants used to manage HIV/AIDS opportunistic infections in Katima Mulilo, Caprivi region, Namibia. *Journal of Ethnobiology and Ethnomedicine*, 6:25.
- Dan, V., Mchombu, K., and Mosimane, A., 2010. Indigenous medicinal knowledge of the San people: the case of Farm Six, Northern Namibia. *Information Development*, 26: 129-140.
- Government of the Republic of Namibia: Caprivi region livelihood baseline profile- lowland maize and livestock zone. Office of the Prime Minister-Directorate Emergency Management: Windhoek, Namibia 2009.
- Mapaure, I. and Hatuikulipi, T., 2007. Namibia's Indigenous Knowledge System: IKS Literature Review Report on the Use of Plants for Medicinal and Other Purposes by Local Communities in Namibia, University of Namibia, Windhoek, Namibia.
- Shapi, M., Matengu, K., Mu Ashekele, H., 2009. Indigenous Knowledge System Pilot Study – Oshikoto Region. Multidisciplinary Research Centre, University of Namibia, Windhoek, Namibia.
- Toledo, B.A., Galetto, L., and Colantonio, S., 2009. Ethnobotanical knowledge in rural communities of Cordoba (Argentina): the importance of cultural and biogeographical factors. *Journal of Ethnobiology and Ethnomedicine* 2009,5:40-47.