ABSTRACT

In today’s world many have realized the study of the native cultures which inhabit these regions can provide enormously valuable clues in the search for improved health. The medicine men of Dangs possess rich knowledge of medicinal use of various parts of plants and it should be preserved.

Therapeutic and ethnobotanical investigation carried out in South Gujarat reveal the richness of Dang forest and how people depend on plants for various ailments. Dangs is a mountainous area where most of the people live away from hospitals or medical care centres. People depend on plants for food, shelter and medicine. Each village has one or two medicine men to take care of the health aspects of the villagers.

The deciduous forests of Dang are having a wide variety of plants. Medicine men of this area most of the time use fresh plant parts for preparing medicine. But during summer certain herbs are not available, so the medicine men store these plants in dry form. The medicine men observe nature and connect the shape of a particular plants leaves, flower, fruit etc to the shape of human organ.

This study reveals that there are some plants repeatedly referred by many medicine men for a particular disease. Like Sterculia villosa is referred by many medicine men for bone fracture. Like wise many other plants used for many ailments are documented here.

With the help of reliable and known personals the investigator met 42 well known medicine persons from 25 villages scattered in different parts of Dangs (See Figure1). Though initially they were reluctant to share their knowledge, slowly and gradually they shared their Ethnic knowledge on gaining trust and confidence. They have shared their ethno therapeutic knowledge and also helped to identify the plants.

In this study of Therapeutic and Ethan botanical investigations in Dang Dt. Gujarat, India brought a detailed study of various diseases that are treated by the medicine men of Dangs. The therapeutic investigation is presented into 21 titles with its sub titles. The therapeutic practice under the title of aches and pains has 15 sub titles such as stomach ache, left side stomach pain,
headache, migraine, toothache, body pain, backache, arthritis (joint pain), burns, cuts, wounds, fractures, sprains, massage oil for all kinds of pains & fractures, for all kinds of ailments. Under the title of Urinary problems’ subtitles are painful micturition, burning during micturition, urine: excessive yellow colouring, urine: colour turning from red to yellow, kidney stone. The title Blood related problems’ subtitles are lohi tutavu, low blood count, blood clots, diabetes. The title Heart and Chest Problems’ subtitles are heart attack, uneasiness in the chest, chest pain, cough, congested chest, asthma, tuberculosis. The title Common Ailments’ subtitles are dysentery, acidity, gas trouble, constipation, vomiting, cholera and certain other contagious diseases, worms in stomach, worms in the wound, rainy season itching on the feet (chikali), pain on the nail of the toes or fingers, sleeplessness, sun stroke. The title Eye and E.N.T. Problems’ subtitles are eye problems watering in the eye, blurred vision, and white dots in the eyes, sore eyes, sties on the eyelids, ear pain, cold, and throat. The title Various types of fevers subtitles are Common fever chicken pox, measles, cholera & prevention from contagious diseases, falling sick after going to the forest. The title Skin diseases’ subtitles are Eczema allergy, scabies, burns, leprosy, leucoderma. The title Swellings blisters boils, subtitles are ulcer, blister in the mouth big boils on the body, boils on the head, big boils on the neck, boils in the stomach, boils under the arm (pata rog), pimples, mumps. The title Women’s problems subtitles are excess bleeding and irregular menstruation, white discharge, pain during menstruation, enhancing lactation, breast abscess, lumps on the uterus, problems after delivery (backache stomach ache heaviness and bleeding etc), back problem of pregnant women. The title Men’s problems subtitles are Impotency (mega rog), sterility, swelling, boils. The title Infants’ problems subtitles are jalanther rog (hand and leg thin with big stomach), patta rog (hand leg very small), rahvas rog (small leg hand and big stomach), lagut rog (stomach swelling in small children), cold and cough, fever, trisuva rog (eyes going upward and crying), indigestion, breathlessness, dabha rog, abnormal behaviour. The title Bites & stings subtitles are Dog bite, snake bite: common snake bite, cobra bite, podsi bite, asariya snake bite, maner snake bite, scorpion sting.

Animals are part and parcel of the people of Dangs. They are very much concerned about their health and have their own herbal remedies for its problems. The title Animal health, cattle’s subtitles are enhancing lactation, lack of proper appetite, fracture, wounds, and boil on the body, sterility and chick medicine.
Other titles are the medicinal practices for *Sterility in men* & *in women, Piles, Lumps* (Lumps on the neck or ear (chokipui)), *Paralysis, Epilepsy (khech), Jaundice, and Cancer* are also given in separate titles.

Under each title and subtitle there are various cures for different sicknesses which are referred by different medicine men. We can locate the medicine men by referring the number given at the end of the information. They are marked with a star, along with the names of the plants. Besides this I have also specified in this paper how to prepare the medicine and its application.

Treatments for various ailments that are dealt in the thesis is given along with its page numbers in **Table 2 in discussion chapter.**

Besides the therapeutic practices ethnobotanical information for 195 plants that are referred by the medicine men are also identified and documented in **Table 1** with *Botanical names, Family* which they belong to, *local names, habit, uses and the useful parts for each species.* The 195 identified plants include, 80 trees, 45 herbs, 32 shrubs, 28 Climber, six Grasses, two Orchids and two Parasites.

These 195 identified plants belong to 67 different families. The list of the medicinal plant families and their corresponding number of species for medicinal uses are recorded in **Appendix I.** Here the family *Fabaceae* outstands for its medicinal uses, even without including its subfamilies Mimosaceae and Cesalpinaceae. Fabaceae alone has seventeen species. The other dominant families are its sub family, Mimosaceae and Caesalpiniaeae with six species each. The families Poaceae, Euphorbiaceae, Apocynaceae, are also with six species. Then the families like Verbinaceae, Rhamnaceae, Moraceae, Malvaceae etc. are used in high rate.

The documented plant’s root, rhizome, bulb, tubers stem, bark, leaves, flowers, fruits, seeds, gum, latex, gun etc are used to remedy most of their common and serious problems, are shown in **Appendix II** with the botanical names, family, local names habitat of the plant and the parts of a particular plant is used.

It is very important to identify the plants with its botanical name because same plant having different names on the other side there were two different plants having the same name. In most parts of Dangs *Bryophyllum calycinum* is known as *Dham pan.* It is also having the names like
Lagpan, Panputti, Elcho etc. When the same Bryophyllum was shown to the popular healer one (Thukarambhai Ramubhai Chauhan) in Shamghan village and other one (Sukriyabhai Janibhai Chaudhar) in Dhumkal village they did not agree that Dhampan is Brayophylum. Both of them reported Dhampan is an aquatic plant which occurs only in pure water. However, neither of them could show the specimen as it was not available during the investigation. White flowered Keusa (Polas), Butea sp. and Saver, Bombax sp. are also used as medicine. But they are not a common plant here.

The parasitic plants like Dendropthoe falcata and Viscum articulatum are also highly used in their therapeutic practices. It is also important, on which tree these parasitic plant grow. The details about this are mentioned in therapeutic methods in chapter IV and in Table 1.

The plants which are used for many kinds of ailments are Butea monosperma, Pterocarpus marsupium, Aegle marmelos, Sterculia villosa, Lagerstroemia lanceolata, Ailanthus excelsa, Hibiscus esculentus, Most of these are trees. Most of the medicine men referred these plants for many ailments.

Trees like Sterculia villosa, Pterocarpus marsupium are endangered plants. Sterculia villosa's roots are used for many kinds of ailments, many of the medicine men referred this plant for bone fracture. Since this plant’s roots are used very much this plant is endangered. And hardly one can find a big tree of sterculia.

Pterocarpus marsupium is another plant where its bark and gum is used for medicinal purpose. Since bark is cut down constantly the plant gets affected very much and hence their growth is either often stunt or results in the death of the plant itself.

It is a felt a need to conserve these medicinal plants through Germplasm or increase its propagation rate though tissue culture methods or any other Bio Technological method. There are a few nurseries in Dangs where the medicinally useful plants’ seedlings are conserved and maintained.

It’s also important to preserve the therapeutic knowledge gathered from the medicine men should be further investigated and its usefulness can be applied for the common people who are affected by various illnesses or preserve this dying knowledge for future generations.
The medicine men who have contributed the therapeutic and ethnobotanical information are shown in Appendix IV. Their names, village names and reference page number are also given. Most of the medicine persons are men and are above the age of 45. This shows that this nature given wealth is declining as the young people are not interested in gathering or documenting this kind of dying information.

And now a days people are looking for more and more natural and herbal products. Many pharmacists have realised this and are exploring on various plants to derive drugs for various ailments. The deciduous forests of Dangs, south Gujarat has an astonishing variety of medicinal plants. This place is considered a wealth wood of Gujarat for a wide variety of medicinal plants.

Thus this study urges the need to conserve the ethnobotanical knowledge of Dang Dt., To propagate and preserve the medicinal plants of this forest and to screen for its active principals and the efficacy of the plants which are mentioned by many medicine men for various disease.