

Project Update: January 2015

Resource mapping

With the help of local communities, potential areas of distribution of medicinal plants were roughly sketched. Some of these locations were validated by direct field survey and GPS coordinates were recorded. Based on the information from local people as well as field studies, the major areas of distribution of medicinal plants are *Guphapokhari*, *Lampokhari*, *Jaljale*, *Nundhaki*, *Bhalukhop*, *Umling*, *Sabhapokhari*, *Tinjure* and *Chauki*. The geographical coordinates of these areas are outlined below.

Localities	Latitude	Longitude	Elevation
<i>Bhalukhop</i>	27°10'35.26"N	87°38'23.75"E	2150m
<i>Chauki</i>	27°12'19.25"N	87°28'1.56"E	2700m
<i>Guphapokhari</i>	27°17'5"N	87°30'25.46"E	2890m
<i>Jaljale</i>	27°28'9.82"N	87°27'47.45"E	4190m
<i>Lampokhari</i>	27°15'49.77"N	87°29'19.04"E	2930m
<i>Nundhaki</i>	27°18'18.58"N	87°28'5.55"E	2800m
<i>Sabhapokhari</i>	27°29'54.51"N	87°27'26.36"E	4200m
<i>Tinjure</i>	27°10'N	87°25'E	2400m
<i>Umling</i>	27°13'27.91"N	87°25'12.10"E	1800m

1) Informal discussion/meetings with local people

Informal meetings and interviews were conducted with key persons of diverse ethnic groups at *Guphapokhari*, *Sukebazar*, *Jorpokhari*, *Chauki*, *Mangalbare*, *Tinjurephedi*, *Paanchpokhari* and *Ghurbise*. The purpose of the discussion/interview was to brief the scope of the present work as well as evaluate perspectives of local people towards resource conservation, sustainable utilization and cultivation of important medicinal plants. Based on the information provided by them, the major threat to medicinal plants was due to unsustainable harvesting methods (uprooting whole plant and collecting before flowering season). Furthermore, the people addressed the need for cultivation which is in preliminary phase at present. A resident of *Guphapokhari* **Mr. Santa Kumar Limbu**, aged 70 has currently cultivated few medicinal plants in his farmlands. However, his farming is in the experimentation stage and he feels that he still needs further technical assistance. **Mr. Jung Bahadur Limbu** who is peon in a local school has recently started cultivation of *Swertia chirayita* on his own and so has **Mr. Buddhi Man Tamang** of *Sukebazar*. The interests in medicinal plants cultivation is seen to be growing and therefore, by providing proper technical assistance, the farmers could be helped to cultivate highly demanded and threatened medicinal plants.

2) Documentation of ethnobotanical information and identification of priority species

With the help of local school teacher **Mr. Jwala Pokharel**, field coordinator **Mr. Saugat Shrestha**, a member of Rhododendron Conservation Committee **Ms. Hima Khanal** and other field assistants; over fifty knowledgeable key persons between age groups 30-75 were interviewed to collect information on medicinal plants utilization. The documented information provided valuable information on how local people have been utilizing medicinal plants in treating various human ailments. Some of these are previously undocumented use,

and therefore the finding of present work is expected to facilitate novel drug discovery. The data also provided information on which plants are the most preferred in the area and which has the highest demand. Informal interviews and semi structured questionnaire survey were used to collect this information. Altogether, 42 species of medicinal plants were found to be widely utilized in local therapeutics with roots being the most utilized parts. The species with high use values were *Swertia chirayita*, *Paris polyphylla*, *Aconitum ferox*, *Aconitum spicatum*, *Neopricrorhiza scrophulariflora* and *Bergenia ciliata*. Based on the data from District Forest Office as well as national level trade data, these species have the highest trade demand. Therefore, they have been selected as priority species for further research in our study.

SOME PHOTOS FROM THE FIELD



Local healer showing his medicinal garden



Interaction with local school teachers



Medicinal plants cultivation in Guphapokhari



Interviewing local people



Paris polyphylla



Aconitum spicatum