## Project Update: October 2014

## Field explorations and ethno-botanical survey

Field explorations on medicinal plants were extended to Kishtwar district during September and October 2014. Although the district is placed in temperate part of Jammu and Kashmir, the floral composition ranges from subtropical species like Withania somnifera to temperate species like Aconitum heterophyllum. Beside the herb men, district remains under huge pressure of nomads like Gaddi, Guzzer, and Bakerwal tribe during summer months. Towards north of the district there is a big wall of Great Himalayan mountains covered with ice sheets and glaciers and act as a geographical barrier for the movement of nomads and tends a pressure on the vegetation of the district. During September and October, these nomads come to low elevation because of the chilled climatic conditions from October to March. Therefore, these nomads were encountered during the study months where 53 Gaddi noamds were interviewed for indigenous knowledge on medicinal plants using semi structured questionnaire. 57 medicinal plant species growing in Kishtwar district are used by these nomads for curing various ailments. The local herbmen also collect species for curing many common ailments like cold, fever, gastric problems, skin infections, kidney stone and injuries. But the main threat to medicinal wealth is from the illegal collection by local people and nomads. Therefore, the collected data on the medicinal wealth was used to educate the local community and helped in creation of a sense of belongingness through personal contact method. When the explorations will not be possible because of the winter weather conditions in the area further awareness will be created using Powerpoint among the common masses of the district.

## Important findings:

- 1. Flora ranges from subtropical to temperate species in Kishtwar.
- 2. Alongwith the local collectors the nomads also play important role in unscientific collection of herbs.
- 3. The area is very rich in medicinal plants, 57 medicinal plants of high value grow in this region.

# Cultivation of medicinal plants – a novel idea

According to Kuth Act of Jammu and Kashmir, the collection, cultivation and business is banned on medicinal plants, however, Gaddi, Guzzers and Bakerwal tribes can collect the wild species for personal use only. But the illegal collection of medicinal plants is very common in the state, this is because the poverty in the hilly areas. Therefore, need of alternative opportunities to generate the economy among the community people was felt. This step can also reduce the collection pressure on the wild species and the native species in wild will regenerate. Keeping this concept in mind, the hilly people were sensitized for cultivation of low volume high benefit species like artemisia, lavender and rose scented geranium about four months back. These species are accepted by the hilly farmers, because of their commercial values.

## Important findings:

- 1. The people on hilly terrain are very poor.
- 2. The herb collection is the easy way of economy generation.
- 3. Cultivation of industrial important species is easy then day tiring collection from the wild.
- 4. Cultivation started about four months old is ready for harvest and demonstration.

#### Awareness programs

Cultivation trials of artemisia, lavender and rose scented geranium in the lands of the native hilly farmers is done and the trail field are kept open for the famer's visit time to time to observe the progress in specified time. Students are made aware about the medicinal plants by organizing their visit to herbal garden and botanical garden.

## Important findings:

- 1. People of Bhaderwah tehsil in district Doda are visiting the cultivation trial fields.
- 2. Awareness visit of students to the herbal garden and botanical garden was organised.



Hilly terrain to reach the Kishtwar district (Chenab river in gorge )



Villages on the hilly slope of Kishtwar



Migration of nomads form high elevations



Approach road to Kishtwar district



Tegetus minuta in Kishtwar



Cultivated rose scented geranium in Doda

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Cultivated Artemisia annua in Doda



A settled village in Kishtwar