

Project Update: July 2012

Location: We trekked up to 4065 m elevation and we recorded all the observed MAPs species throughout the trail from 2800 m up to the principal site, where the vital species were anticipated to be found. The final destination was Syangjen Kharka in the Langtang region. This pastureland lies right on the borderline between Tibet and Nepal.

Major observations:

1. The local people of the study area maintain sedentary agriculture and semi-nomadic pastoralism. They also collect high value medicinal plants for earning incomes. But it was observed that they collected them in an unscientific manner, where there is no possibility of natural regeneration in the future. Therefore it was noticed that vital species (*Aconitum spicatum* (bikhma), *Nardostachys jatamansi* (jatamansi) and *Panchaule*) are limiting themselves to very high altitudes and inaccessible areas such as cliffs only whereas *Aconitum ferox* (Bikh) and *Niramansi* were found in comparatively accessible places. This statement was reiterated by the members of the Herders Group and the MAPs groups. Therefore, there certainly is a need for awareness among people about not only promotion as well we sustainable harvest of such medicinal plants, which would prevent them from possible extinction from these areas.
2. Climate change definitely has a role to play for the shift in the habitat of these high value MAPs as the local communities have felt rise in temperature and thus the vertical shift of these species. The rise in temperature was also evident from examples of Yaks and chauri (mountain cows) facing difficulties in the sheds.
3. Apart from the vital species, a number of other species were also observed and recorded them throughout the trail up to the principle site including: *Rheum australe*, *Rubia manjith*, *Swertia chiraita*, *Daphne bholua*, *Taxus baccatta*, *Taxus wallichiana*, *Picrorhiza scrophulariflora*, *Juniperus indica*, *Xanthoxylum armatum*, *Rhododendron arboretum*, *Delphinium himalayi*, *Vitex negundo*, *Berberis aristata*, *Artemesia indica* and *Rhododendron anthopogan* .
4. *Swertia chiraita* has been commercially cultivated on walls of the agricultural terraces and produce and export about 2-3 tons per year.
5. *Rubia manjith*, *Daphne bholua*, *Rheum australe*, *Delphinium himalayi* and *Rhododendron anthopogan* are the major species which are being harvested from their natural state at large quantities and sold to Kathmandu and India. The amount being extracted varies from 2-19 tons per year from the study area alone. It was also noticed that there has not been any community, donor funded or government initiatives in community awareness for conservation and sustainable management of these species.
6. Modern medicines have definitely replaced the traditional uses of these medicinal plants to certain extent. People are largely interested in MAPs just for earning incomes. However, local healers (vaidyas) and jhakris (shamans) are still using them. It was also very surprising to hear that people did not know the use of many MAPs except for a very few prominent ones that they have been using traditionally.

