



Plantlife International – Interim Technical Report March 2006 – September 2006

Summary

In September 2005, Plantlife International granted Nomad RSI an Allachy Award for the “**Development of a methodology on medicinal plant conservation to strengthen Tibetan medicine in Ladakh**” project. This project represents a component of the broader “Revitalization of Tibetan medicine” programme that Nomad RSI has been running since 1998, in partnership with a local NGO “Ladakh Society for Traditional Medicines” (LSTM). The Plantlife supported project aims to develop integrated conservation and healthcare initiatives which will improve access to essential medicinal and aromatic plants (MAPs) for local healers and assist the concerned communities to take a more active stand in the management of collection sites.

Activities supported by Plantlife International:

1. Awareness campaigns on Medicinal Plants issues and collection of information on plants (September 2005 onwards)

These campaigns aim to raise local awareness of the importance of medicinal plants for *amchi* medicine and draw attention to their increasing scarcity and also to empower communities to better manage their natural resources. Increased commercial harvesting in Ladakh is causing certain species to become rare, threatening to damage the unique ecosystem of the area and make access to essential raw materials problematic for *amchi*. LSTM works with *amchi* and local populations towards the common goal of controlling harvesting and protecting the abundance and diversity of medicinal plants, thus ensuring sustainability of the *amchi* medical system and the environment.

Since the beginning of March, the project team has visited two villages in the Markha Valley (Chalak and Hankar) and two villages in the Changthang area (Kharnak Zara and Rochen).

Campaigns in those areas focused on:

- Consultation techniques to identify threat status of particular medicinal plants.
- Encouraging greater respect for *amchi* medicine among the local population.
- The interrelation between medicinal plants and *amchi* medicine (a medical camp accompanies conservation campaigns)
- The market trends for medicinal plants.
- Seeking appropriate methods for protection of medicinal plants for specific areas.
- Importance of conservation of Medicinal Plants.

In the Rushpu region, campaigns were conducted among pastoral nomads in Kharnak Zara and Rochen. The LSTM project team requested the nomads to divide into four groups to conduct a regional plant inventory. Each group assisted an LSTM staff member in sketching



a rough map of the immediate grazing area and to list all identifiable plants within the area, including habitat, distribution, density, location, use, trade value, and commercial harvesting. The *amchis* of the area identified which plants were medicinal plants and those which were threatened with over-harvesting. The Kharnak Zara nomads were not aware of any commercial harvesting in the immediate area.

2. Training “ Data generation, prioritisation and conservation of natural resources including medicinal plants of the Indian Himalaya” - May 2006

The training took place at the Govind Ballabh Pant Institute of Himalayan Environment and Development. G. B. Pant Institute of Himalayan Environment and Development was established in August 1988, at Kosi-Katarmal, Almora, as an autonomous institute of the Ministry of Environment and Forests, Government of India. The Institute is identified as a focal agency, to advance scientific knowledge, to evolve integrated management strategies, demonstrate their efficacy for conservation of natural resources and to ensure environmentally sound development in the entire Indian Himalayan Region (IHR).

Vision and area of operation of the institute are:

- To undertake in-depth research and development studies on environmental problems of the Indian Himalayan Region.
- To identify and strengthen the local knowledge of the environment and contribute towards strengthening researches of regional relevance in the scientific Institutions, Universities/NGOs and Voluntary agencies working in the Himalayan region, through interactive networking.
- To evolve and demonstrate suitable technological packages and delivery systems for sustainable development of the region in harmony with local perceptions.

The training was attended by: Thupstan Choszang, Konchok Tsering and Tsewang Gonbo from Ladakh Society for Traditional Medicine and Mohammed Abbas, Forest Range officer from the forest department and a key project partner. They were introduced to many global issues related to environment and ecology, including lectures on:

- Bio-diversity and conservation: an over view
- Medicinal Plants diversity, prioritization and conservation
- Use of Participatory Rural Appraisal (PRA) for information generation and conservation
- Agro-techniques of some of the high value medicinal plants of Himalaya
- Appropriate technologies for the conservation of natural resources in Indian Himalayan Region
- Bio-composting through solid waste management and application in medicinal plants cultivation
- Vermi-composting; propagation and cultivation of medicinal plants

The training was designed in two major modes of field visits and classroom teachings, combined with time dedicated to queries and interaction. The Institute’s research scholars from different universities attended the training, allowing to trigger massive cross interaction.

Dr. Samant, the scientist in charge of the Institute (Kullu branch) conducted most of the lectures and also conducted a practical session on Participatory Rural Appraisal (PRA), in Dhora Nalla village (Himachal Pradesh).



3. Training of Sapi Medicinal Plants Conservation Committee (MPCC) - July 2006

The village of Sapi is located in Kargil district, the extreme North Western district of Ladakh, which is very close to the Pakistani border. It is a remote village, with a mixed Muslim/Buddhist population of 250 residents. It was connected by a new road to the highway

last year, and this has resulted in an increase in *amchi* and others seeking to harvest medicinal plants. Ladakh Society for Traditional Medicines, in cooperation with Sapi villagers, assisted in the establishment of a Medicinal Plants Conservation Committee in summer 2005 to oversee the sustainable harvesting of the abundant diversity of medicinal plants in the Sapi region.

The LSTM project team accompanied by *amchi* Tsering Paljor and LSTM volunteer Marguerite Swift conducted a Medicinal Plants Conservation Committee Training and Awareness Campaign for the Sapi MPCC and villagers from July 20th to 24th. The three-day long training session included awareness and discussions around the following subjects:

- *Amchi* Medicine and the importance of Medicinal Plants conservation
- Increasing worldwide popularity of phytotherapies
- Sustainable harvesting techniques as specified in the *Gyud Zhi*
- Sustainable harvesting practice according to international standards

The last training session was dedicated to the functioning of the committee:

- Election of officers and nomination of members for the Sapi MPCC.
- Collection of fees from outsiders harvesting MPs (through receipt book)

The session ended with a general public meeting, where LSTM addressed the 70 plus villagers in attendance regarding its goal to revitalize the *amchi* tradition, the importance of the conservation of medicinal plants and the critical role of the MPCC in ensuring the sustainability of the ecology of the region. MPCC members and the Sarpanch (head of the village) also spoke on the need to oversee sustainable harvesting.

4. Publication of the Trans Himalayan Amchi Medcial Education (THAME) newsletter- September 2006.

A special issue of the THAME newsletter¹ gathers together articles and reports on medicinal plant related issues written by expert *amchi* and other key partners of the project, which are selected and edited by a scientific committee.

The issue of THAME published in September includes the following articles in classical Tibetan:

- Editorial by *amchi* Tsering Phuntsog (Chief *amchi*, Health Department).

¹ In January 2000, Nomad RSI and LSTM launched THAME newsletter. Its large-scale diffusion in India, Bhutan, Tibet and Nepal was possible due to partnerships with local associations of Tibetan practitioners in each area of distribution.



- “The Himalayan Medicinal Plants” by *amchi* Thinles Yangjor, President of LSTM. This article emphasizes the central place of medicinal plants in *amchi* medicine.
- “Plants of Ladakh” by Mohammed Abbas, Forest Range Officer. This article focuses on the main dangers facing medicinal plants (i.e. over harvesting, unsustainable collection practices, overgrazing)
- “Presentation of the Meen Tsee Khang” by Kunchok Tsering, Astrologer at the Tibetan Cultural Centre, Leh.
- “Changes in *Sowa Rigpa* practices” by Rigzin Lamo, *Sowa Rigpa* Research Centre, Leh. This article deals with the evolution of the fabrication of medicines in the *amchi* system.
- “Report on LSTM activities for the medicinal plants project” by *amchi* Karma Chodon, medical coordinator of LSTM.

It also includes four articles in English:

- “LSTM’s vision.”
- “LSTM diary: Rupshu, Kharnak, Zara and Roehen.”
- “Sapi medicinal plants conservation committee training.”
- “Medicinal Plants and *amchi* medicine in contemporary Ladakh.”

5. Production of posters- September 2006

Five hundred posters, with photos of plants and information about them in Ladakhi, were designed and produced in September 2006. These posters will be distributed to key partners in the project (i.e *amchis*) and others (such as schools) during awareness campaigns. These will aid in the identification of plants and in raising awareness and building capacity for the conservation, cultivation and management of MAPs.

Outcomes, constraints and successes

➤ Constraints

One of the main constraints encountered by the project team concerns management and presentation of data relating to MAPs collected in the field. Throughout the project, the team has collected lots of crucial information on medicinal and aromatic plants. However, these data have thus far been compiled in Excel, which is proving inadequate for the purpose of its management. In particular, it does not allow for a range of search functions (e.g. keyword or species-focused searches), is unable to effectively cross-reference information, and thus does not enable the effective use of data, or for others outside the project team to access and benefit from the wealth of information it contains.

For this reason, the special issue of the THAME newsletter dedicated to medicinal plants did not contain the anticipated amount of information from this database (i.e. plant status in different areas and overall priority species). To overcome this constraint, the team intends to locate more appropriate software for the purposes of this database and then to transfer the relevant data into this more useful format.



The training of the Sapi Medicinal Plants Conservation Committee (MPCC) was a successful three-day training session. However, LSTM members noted that the Sapi MPCC needs additional training in medicinal plant conservation to ensure sustainability in the region. Annual monitoring of the Sapi MPCC's activities is necessary to ensure that all harvesting of medicinal plants in the area is controlled by the MPCC, and individual trading for profit in medicinal plants by villagers has ceased.

➤ **Outcomes and successes**

The training at the GB Pant Institute of Himalayan Environment and Development was a very successful and fruitful training for the LSTM project team, which was exposed to such an environment for the first time and have benefited both directly through the training and also through contact with a range of experts in a stimulating context.

There is no doubt that the academic component as well as the practical field components of the training have enhanced the participating team members knowledge and skills in implementing the various activities of LSTM.

The various awareness campaigns have provided opportunities for the LSTM project team to further expand their field skills and build strong relationships with local *amchi* and the rural population. Campaigns create a sense of responsibility amongst villagers, encouraging them to work together to protect the plants as important and valuable natural resources.

Campaigns also allowed the team to establish an overview for each area regarding harvesting levels. For example, in the Markha Valley, the project team thinks that the plant wealth is in danger, as this is one of the busiest places in Ladakh with tourists in summer. Approximately 30 horses cross the valley every day and this puts heavy pressure on general plant life, including medicinal plants. This could lead to considerable challenges for MP populations and ultimately for the local *amchis* in the future.

After two years without publication of the THAME newsletter (six issues were already published on various subjects around *amchi* medicine between 2000 and 2004), the publication of this special issue on medicinal plants has been welcomed with great enthusiasm by key project partners and by the *amchi* of Ladakh, as it provides valuable medical education and is one of the rare publications in Tibetan in this region.

Work programme for the next reporting period (1st October to 28th February)

1. Distribution of THAME and Posters - October

The THAME newsletter will be distributed across Ladakh and to *amchi* across the Himalayan Region (i.e. Spiti *amchi* Sangh, Himalayan *amchi* Association in Nepal, *amchi* associations in Tibet...) as well as stakeholders in India and worldwide (Buddhist centres, New Yuthok Institute of Milano....). The posters will be distributed locally and will be a useful tool in the conduction of awareness campaign on Medicinal Plants.



2. Village visits and data collection – October

In October, the LSTM team is planning a ten-day visit in Zanskar area (3 villages) in order to conduct awareness campaigns and to continue to collect crucial data on MAPs by interviewing *amchi* and villagers. Zanskar is considered as a “hot spot” in terms of medicinal plant wealth, especially the Rangdum and Ralaking areas. Last year, the project team

visited Zanskar in order to conduct *amchi* medicine awareness campaign and to establish *amchi* clinics.

3. Capacity building session for LSTM- October-December 2006

Nomad RSI Programme Director will be in Ladakh during 3 months, working with the project team in order to provide advice and technical support, improving the capacities of LSTM team in project design and management and developing the plans for the next phases of the programme.

4. Evaluation of the project- October to December 2006

Evaluation of the project will conjointly be conducted with the project team, Nomad RSI members and key project partners.

Objectives and outputs will be evaluated through different techniques including:

- Interviews with key stakeholders and project partners.
- Interviews and evaluation with the project team.
- Questionnaires to be distributed to villagers (*amchis* and non *amchis*) in three villages, where awareness campaigns took place, in order to evaluate the impact of the campaign.

This evaluation will allow the capitalisation of lessons learned, will emphasize successes, constraints and unachieved goals and will be a key tool in designing the next phases of the programme.

5. Preparation of the final report December to January 2007

The final report will gather together information from the project on approaches and methods (toolkit information), which could be of use to people working elsewhere on medicinal plants. The final report will also include an evaluation of the project based on monitoring visits and the final evaluation (see above).

6. Dissemination of the final report- February 2007

The final report will be disseminated to all relevant organisations within Ladakh and in other Himalayan regions. It will also be made available for placing on the Plantlife website.