Promoting Herbal Gardens in Schools: Broadening Support for the initiative in Nepal

Background
Nepal is rich in varieties of medicinal plants. Among 7000 species of medicinal plants recognized all over the world, more than 900 types of precious medicinal plants are said to be found in Nepal (Manandhar, 2000). The medicinal and aromatic plants of the Himalayan Mountains are invaluable biological resources, closely associated with health care, traditions, and culture. Since antiquity, mankind has been using plants to diseases and some of these traditional medicines still included as part of the habitual treatment of various malady. The medicine is made available via ancient, natural health care practices such as tribal lore, home herbal remedy, and the Baidhya, Ayurveda and Amchi systems. These plants have been grown or collected for thousands of years, and the traditional knowledge about the plants and their uses have been handed down by word of mouth from generation to generation. According to world health organization (WHO), more than 80% of the world’s population relies on traditional medicines for their primary health care needs.

Nepal has been relying on locally available medicinal plants and in some remote area of Nepal still there is few option for modern allopathic treatment. Due to increasing export demand, dependence of the local people on the herbal flora and their implicit faith in the old tradition of Ayurvedic medicine would go a long way in exploiting the wild plants for commercial return and in expanding research activities to gain productive results. Hence Overharvesting, loss of habitat, increasing urbanization and shrinking forest resource base have been causing irreversible loss of medicinal plant population in the wild habitat, resulting in decline in the volume of raw materials. Plants of medicinal significance such as Yarsagumba, Jatamashi, Nirmashi, Chiraito, Bikha, including others, are exported illegally.

A significant part of knowledge and tradition is currently being eroded due to modernization, acculturation and availability of alternatives. Therefore, it is urgent to inculcate young minds to realize the fascinating knowledge and tradition associated with these resources, and help them understand the immense potentials the Himalayan medicinal plants possess for the future.

The International Centre for Integrated Mountain Development (ICIMOD) with a regional mandate of working in the eight Hindu Kush-Himalayan countries realizes the conservation and management of medicinal plants in the region as being crucial to the environment and human livelihoods. It also recognizes the global and regional concerns for the loss of medicinal plant widespread erosion diversity, their reduced availability, and widespread erosion of traditional
knowledge associated with such plants as well as the need for research and development efforts on medicinal plants.

The “Promoting Herbal Gardens in Schools” has been a fun-filled learning activity for the children where they got the opportunity to learn about the medicinal plants by actually planting the medicinal herbs and watching them grow in their gardens, and by exploring information about them from various sources. The task of making the garden itself has been enriching in terms of making children realize the importance of team work such as detailed planning, and allocation of tasks within a team. For the teachers, herbal garden project has been useful in terms of ease with which they could integrate the concept with other subject matter activities, such as writing essays, poems and stories, making posters, drawing and painting, making herbariums, and even preparing food recipe using some of the culinary herbs students have planted in their gardens.

From 2012, ECCA is taking the lead initiatives in Nepal with an objective to strengthen the “Herbal Gardens in Schools’ initiative, by helping establish herbal gardens in as many schools as possible across the nation, and to raise awareness on the use of medicinal and aromatic plants among students, teachers, families and across communities.

Objectives

• To encourage and promote ‘Herbal Garden in schools’ concept to schools and provide them an opportunity to work closely with herbal plants.
• To inculcate a sense of familiarity from childhood with surrounding biodiversity and its conservation, especially herbal plants
• To educate schoolchildren in identifying different types of herbs and their uses including growing them in a gardens.
• To encourage students to use herbs in food and
• To popularize the usefulness of commonly available and frequently used herbal plants and to conserve the associated traditional knowledge for future generations, in a fun and practical way

Methodology

The schools will be encouraged to set up herbal gardens within their school complexes. The networks maintained by ECCA will be used to reach out to the schools. Students lead by the science teachers will be mobilized to design and decorate the gardens.
Plant profile for medicinal and culinary herbal plants will be prepared by the students.

The students will be also encouraged to write poems and stories, posters and recipes out of herbs. For the continuity of the program the school should integrate the concept into the school curriculum. In this way the herbal garden concept can be spread within Kathmandu, across country, and further throughout the countries of the Himalayan region, and of children, teachers, parents families, homes, communities, and societies, across the region revitalizing the traditions associated with herbs and their uses.

**Training Packages**

- Improving School Environment
- Promotion of Herbal Garden in schools
- Management and conservation of herbal plants
- Life skill Program
- Visioning
- Activity for Herbal Garden Construction
- Action plan for Herbal Garden Construction
- Formation of Nature Club
- Nature Club Management & Sustainability
- Climate Learning Education

**Activity**

I  **Herbal Garden construction**

II  **Local Herbs Collection**

III  **Herbal Garden Management**

IV  **Seasonal Calendar**

V  **Resource Mapping**

**Herbal garden station**

- ICIMOD demonstrate site
- Environmental Camps for Conservation Awareness (ECCA)
- Forest Department
- Local community
**Conclusion**

A herbal garden reflects the long-standing tradition of conserving and using plants products for health care and cooking. Some 80% of the world’s people use herbs as the main form of medical plants from the Himalayas in the global herbal market. But while herbal plants are in demand, the traditions and culture associated with them are fading. Making a herbal garden is an opportunity to grow hers for use, while spreading knowledge of their importance and traditional uses, and saving plants that are threatened. So why not make school’s own little garden full of herbs around all over Nepal.

Also home gardening based on herbs contributes to household food security by providing direct access to food and herbal medicine as well that can be harvested, prepared and fed to family members, can be used for medicinal purposes. Even very poor, landless or near landless people practice herbal gardening on small patches of homestead land, vacant lots, roadsides or edges of a field, or in containers. Gardening may be done with virtually no economic resources, using locally available planting materials, green manures, "live" fencing and indigenous methods of pest control. Thus, gardening at some level is a production system that the poor can easily enter and also contributes to the **food security**.

ECCA is taking ahead the initiatives in Nepal with replicating the concept in three schools of Morang and playing support role for the mentor and mentee schools until June 2012. On the occasion of the World Environment Day 5th June 2012, ICIMOD and ECCA will celebrate an achievement by awarding the best herbal garden from 21 schools and the champion mentor schools.