

## OTHER INFORMATION

### People & plants initiative and HKH ethnobotany programme

#### The Hindu Kush-Himalayan Ethnobotany Project

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The Hindu Kush-Himalayan (HKH) region has unique importance by way of its diverse bio-physical environment and an extremely rich cultural milieu of its inhabitants belonging to hundreds of ethnic groups and indigenous communities. The International Centre for Integrated Mountain Development (ICIMOD) has a strong commitment to sustainable development in this region and has strong links with the Government as well as Non Governmental Institutions in the regional member countries: Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal and Pakistan. UNESCO and ICIMOD, with financial assistance from DANIDA, have launched this three year programme to develop the field of ethnobotany applied in the management and conservation of plant resources through capacity building, supporting research and promoting action oriented field projects. In short, called the HKH Ethnobotany Project, the complete title of this project is 'promotion of sustainable and equitable use of plant resources in the Hindu Kush region through the application of ethnobotany'.

#### The programme concept

Wild plant resources provide a variety of basic needs to rural and urban communities: building materials, fuel, food supplements, materials for crafts, medicines and are a source of income. Depletion of favoured plant resources results in loss of

self sufficiency and economic opportunities for local people. It can also lead to resource management problems in conservation areas as they become focal points for harvesting selected species, resulting in the loss of diversity and growing conflict between resource users and resource managers.

The traditional utilisation of biologically diverse resources in the mountain region of the not only reflects a diverse resource use pattern, but also the way of maintaining biological diversity in mountain ecosystem by the mountain people. Natural resources management systems are localised systems which form the basis for decision making for rural people. Since the majority of land-based production systems in the region operate under indigenous knowledge systems, they are not only of value to cultures from which they evolve, but also for scientists and planners striving to improve conditions in rural societies. However, there is tremendous pressure of socio-economic change and with this the ecological knowledge and cultural traditions which have been continuously developed and transferred from generation to generation are beginning to be lost.

Participatory, community based work to document, apply and build on local knowledge of botanical resources and their management can be a part of the process of coping with such changes without losing valuable local knowledge and

biodiversity: hence the importance of ethnobotany applied in conservation and community development. Understanding the indigenous knowledge of mountain people in relation to biodiversity resource management is one of the key issues for development of the HKH region today.

### **The programme approach**

In the backdrop of the concept the programme seeks to assimilate the following public policy issues and principles in the approach.

- \* The principle that all development projects addressing issues related to agriculture, livestock and pasture, agroforestry, forestry, land use planning, watershed management and other natural resources management fields should take into account the traditional wisdom and expertise of the local inhabitants;
- \* The principle that the interface between people and nature must be addressed in conservation projects that propose setting aside productive lands as protected areas for the conservation of biodiversity. They should take into account the perceptions, uses and traditional methods of management of natural resources by the local inhabitants;
- \* The principle that the intellectual property rights of people with indigenous knowledge including, special ethnobotanical knowledge, should be respected and publication of methodological manuals;
- \* Support for review, publication and diffusion of ethical guidelines for researchers on indigenous knowledge and particularly ethnobotanists; and
- \* Facilitate networking of individuals and institutions working in the field of indigenous knowledge systems and assist in development of systematic database for ethnobotany.

### **Basic inputs on ethnobotany for partner institutions and specialists for effective collaboration in organisation of field training workshops and research studies**

Ethnobotany by nature is an interdisciplinary field, encompassing inputs from various subject areas such as: Botany, Anthropology, Ecology, Economics and Linguistics. In addition, ethnobotanical studies specifically oriented towards traditional health care systems and medicinal plants utilise. Ethno-pharmacology as a major field. Within these disciplines there are four interrelated endeavours in ethnobotany. They are:

- \* basic documentation of traditional botanical knowledge including ethnobotanical inventory;
- \* quantitative evaluation of the use and management of botanical resources and impact on the environment;
- \* experimental assessment of the human interactions with the plants and its environment;
- \* applied projects that seek to maximise the value that local people attain from their ecological knowledge and resources. The first three elements may be referred to as Basic, Applied and Quantitative Ethnobotany.

The interactive discussions on methodology and conceptual framework drawing inputs from above mentioned major disciplines and fields of study could be concentrated on the following aspects.

**Field techniques:** Choosing the appropriate methodology, quantitative and qualitative approaches; database and statistical techniques; applied ecological approaches; voucher specimens collection; and field recording/inventories.

**Systematic approach:** how to replace ethnobotanical assessment within the resource use patterns (Calendar, food

habits, etc.); production systems (farming, hunting, etc.); and world view systems of thought.

**Institutional approach:** land tenure - local control of resources, laws regarding resource appropriation and right of access - decision making.

**Participatory approach:** participatory research appraisal techniques including participatory biodiversity appraisal.

**Ethics and socially responsible research:** local communities follow a co-operative innovation system and every project and study should assist in furthering the advancement of indigenous knowledge, maximising the benefits to the communities out of their knowledge systems and safeguarding their intellectual property rights.

### Thematic focus

Ethnobotanical studies could be focused on various themes.

- \* *cultural context of natural and environmental resource management:* cultural beliefs which underlie resource management and conservation of biological diversity, symbolic significance of plant uses.
- \* *forests:* forests are managed as a multiple use system to meet the needs of the mountain people, ranging from timber, fuel wood, food, fodder, medicinal plants, aromatics and dying material to many others. Old traditions of indigenous practices for maintaining forests as a sustainable resource system which is characterised by the non-wood forest products management system.
- \* The principle that experts in different disciplines of ethnobotany in the HKH regional member countries who are interested in conservation and

community development should be supported. Emphasis will be placed on supporting young ethnobotanists working at the interface of conservation and development using a participatory approach.

### The programme activities

In recognition of the programme approach that pays emphasis on the application of ethnobotany in community development and conservation many interrelated activities have been identified as important. In order to derive greater programmatic focus and identify partner institutions in the HKH regional member countries, a planning meeting was organised. Specialists from six countries: Bangladesh, Bhutan, China, India, Nepal and Pakistan; and experts from UNESCO and the People and Plants Initiative participated in the planning meeting and evolved the following programme activities:

- \* Organisation of field training workshops on ethnobotany and sustainable use of plant resources at the national and the sub-regional level.
- \* Provision of small grants to small grants to deserving ethnobotanists and research institutions to facilitate their involvement in the community development programmes.
- \* Provision of small grants for field research on ethnobotany and sustainable use of plant resources.
- \* Support to facilitate greater professional interaction and exchange by way of travel grants.
- \* *Agroforestry:* with increasing demographic pressure, more and more natural plant resources need to be integrated into sustainable cultivation systems - focus on the links between traditional knowledge and agroforestry management.

- \* *Swidden and settled agriculture*: swidden cultivation is a reflection of man - environment relationship in the tropical mountain regions. Indigenous agricultural practices are based on very specific knowledge of plants, conservation practices and land use systems. Sustainable agriculture is one of the most important components of rural development and environmental management in the HKH Region.
- \* *Protected areas, biosphere reserve and buffer zone management*: options that lay out the strengths of indigenous knowledge in conservation of biological diversity. Historically, many mountain communities have formulated and established their own traditional conservation methods including protection of plants, animals and ecosystems based on the societies cultural traditions and indigenous knowledge systems.
- \* *Ethnobotanical inventories*: this include plant uses, folk classification, plants use patterns in relation with social organisation, ecosystems, seasons, taboos, rituals etc. Focus is to be put on knowledge transmission: how do societies transmit knowledge, variety of knowledge, who knows what, means of transmission, from parents to children/from specialists to non specialists, in participatory projects between researchers, conservation managers and farmers who educates who and how?

### Field training workshops

Five field training workshops have been planned, to be held at the national and sub-regional level. The average duration of each workshop is 7-8 days dividing nearly equal time in the classroom teaching sessions and hands on experience in the field. A mix of nearly 20 participants could be drawn from a host of institutions

such as the village and community organisations, Governmental and non-governmental agency staff from projects and schemes relating to sustainable and equitable use of plant resources- agriculture, horticulture, agroforestry, forestry, livestock and pasture, watershed management, land use planning etc. and educational and research institutions building capacity to undertake ethnobotanical work; depending on local priorities and the strengths of the organising institution. In addition, 4-5 resource persons should be invited. It has been found useful to intersperse periods of practical work in the field and classroom session sessions; and therefore it is considered important that the resource persons participate for the whole duration of the workshop.

### Study grants

Indigenous knowledge about plants; and the processes together with the technologies evolved and practised for better utilisation of the floral resources constitute ethnobotanical studies of applied nature. In the HKH Ethnobotany Project emphasis is placed on studies that contribute to promotion of sustainable and equitable use of plants either at the level of strengthening the policy framework or providing assistance to conservation and community development field projects. Every proposal should contain, besides the name of the project originator and his/her institutional affiliation, specific objectives of the proposed project (stating clearly the importance of the project with respect to the sustainable management of resources and community involvement); detailed description of the proposed activities (including justification and background, description of the area in which activities are to be carried out and methods); expected outputs; work plan and time table of activities over the study period (taking into account the required submission of a product for each instalment); and the budget.

## Closing and plenary session

On the final day, December 22, one participant from each group presented their findings from the field. There were discussions on each presentations. Ultimately issues were identified and recommendations came from each group. After group discussion the workshop activities and performance were evaluated both by participants and resource persons. Almost all the participants expressed their views as the workshop was very fruitful and useful. Some opined for more extensive field studies and also to include plant identification techniques for target areas. They also expressed their views to include project and report preparation on ethnobotany in future training programmes.

### Issues

After 3-days in-house brain storming and 2-days field exercise the participants identified many important issues.

The following are worthy to be mentioned:

- \* Tribal people still mostly depend on *jhum* and home gardens.
- \* Ethnobotanical knowledge still exists on utilization, conservation and management of bio-resources.
- \* Some of the knowledge are gendered.
- \* There is a transition between traditional systems and modern mechanised system.

### Recommendations

The workshop came to an end with the following recommendations:

- \* To conduct detailed ethnobotanical studies in CHTs.
- \* To study the diversities of traditional *jhums*, and to study changes from traditional *jhums* to tree farming by many farmers.
- \* To study the attitude and perception of farmers towards home garden trees and management.
- \* Institutionalise rural credit and develop market facilities for the products.
- \* Development of communication and infrastructure, restoration of ethnic culture and values.
- \* Institutionalisation of ethnobotanical programmes by different research, academic and development organisations.
- \* National and regional networking.

The programme came to an end with closing remarks from participants, ICIMOD staff members, workshop co-ordinator and BFRI Director. Finally participants were awarded certificates.