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PEOPLE'S INVOLVEMENT IN MEDICINAL PLANT CONSERVATION AREAS

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Abstract

Few places on earth match the biological diversity of Arunachal Pradesh which contains 4800 species of flora out of which many are endemic to Arunachal Pradesh. The inter-connected benefit of conservation has implications for the economic wellbeing, political stability and the survival of diverse cultures in the region. The goods and services provided by the natural resources are immeasurable and the livelihoods of people of Arunachal Pradesh are dependent on the conservation and sustainable use of these resources including medicinal and aromatic plants **(**MAP).

INTRODUCTION

Arunachal Pradesh has been known as a treasure house of Medicinal Plants. Over 500 species are reported from the state which is distributed in the wide ranging agro-climatic zones. Exploring natural pocket that contain high biodiversity, especially of medicinal values is one of the major concern at present. Many medicinal plants have huge market potential but due to over exploitation, anthropogenic and environmental factors are now restricted to either inaccessible areas or to the protected habitats.

A WAY FORWARD

Recently, a National programme funded by UNDP-GEF-GoI on "Mainstreaming *Conservation and sustainable use of medicinal plant diversity in three Indian states"* was implemented in Arunachal Pradesh. The project mainly aims to mainstream long term conservation, sustainable and equitable use of India's medicinal plant diversity into forest management policy and practice at National, State and Local level in three Indian states as mentioned above. There is a perceptible depletion in the resource and habitats warranting conservation initiatives.

The most important activity to achieve this target is to create network of *Medicinal Plant Conservation Area* (MPCAs)/Forest Gene Bank (FGBs) to conserve the population and natural habitat of the medicinal flora especially the Globally Significant Medicinal Plant species (GSMP). Seven MPCAs comprising of a core zone of 200 hac and a buffer zone of 1300 hac each will be established and manage by the state forest departments in collaboration with local communities in the relatively in virgin forests with rich plant diversity, across vegetation types and altitudinal ranges will serve as *in-situ* gene bank of the state so as to capture the maximum species diversity and also for developing sustainable harvest methods. These MPCAs may fall within the Reserve/ Protected Forest or Community owned Forest. Broadly, the MPCAs are established in six Forest divisions of the state (table 1).

WORKING HAND TO HAND

Since many of the MPCAs fall within community own forest, the role of each community actively working in the field of MAP sector enhances survival of viable population of medicinal flora and their

Table 1: MPCAs and their location

SN	Name of the MPCA	GPS Coordinate points	District	Agro-climatic zone	Forest Division	Forest Types	Altitude (m)
1.	Hake-Tari	27º30'27.36" N to 93º51'20.16" E	Lower Subansiri	Sub-tropical	Hapoli	Mixed broad leaved	1200
2.	Laa	94º33'56.16" E to 27º52'29.28" N	Upper Subansiri	Sub-tropical	Daporijo	Mixed broad leaved	1200
3.	Salari	27º16'46" to 27º16'93" N & 95º25'74" to 95º25'67" E	Bomdila	Temperate	Bomdila	Temperate	2800
4.	Wanu	26º56'87" to 26º57'36" N & 95º15'93" to 95º16'53" E	Tirap	Mid-tropical plain	Longding	Tropical wet evergreen	250-380
5.	Parsuramkund	27º53'22" to 27º53'47" N & 96º22'27" to 96º22'91" E	Lohit	Tropical	Tezu	Tropical evergreen	400-700
6.	Mayodia	28º14'62" to 28º15'07" N & 95º55'46" to 95º56'28" E	Lower Dibang Valley	Temperate	Roing	Temperate	2500-3000

sustainable harvest for livelihood and health care system. Biodiversity Act, 2002 plays a crucial role in participatory mode to manage and to conserve the MPCA. For instance, Hake-Tari MPCA under Hapoli FD is frequently visited by tourist where local communities (BMC) charge a minimal tariff for entry into the MPCA and using of still/video camera inside the MPCA.

Tradition is especially important in the case of medicinal plants. Any strategy to preserve such species will have to take people's need & perceptions into account. Local users/community often has a good understanding of how sustainable harvesting should be practiced. Nevertheless, participation in itself provides no guarantee of success. The outcome of participatory processes often depends on additional factors such as institutional or legal frame works, and the education or interests of local people and other stakeholders. Yet again, self-interest participation by the people supportively bridges the gap. 2 (Two) such sustainable harvest site at 1. Joram, Hapoli FD 2. Morshing, Shergaon FD is doing a commendable work.

Medicinal plants occupy an important position in the socio-cultural, spiritual and medicinal arena of rural people of India, especially involvement of women gender. Women play a vital role in collecting and cultivating medicinal plants as well as in dispensing medicines to the family. Their knowledge and their input into decision making process should be sought from the beginning. Various NGOs and local groups involving women have well spearheaded the conservation and use of medicinal plants.

CONCLUSION

Sustainable management and good harvesting practices can enrich biodiversity conservation, sustain human and environmental health, generate employment and enhance export earnings.

Presently, the biggest challenge to medicinal plants biodiversity conservation program is the lack of coordination among various bodies involved in such activities. There is a need to develop the coordinated effort at each stage (for example, research, cultivation, collection, storage, processing, manufacturing and marketing) which needs to be supported by an appropriate policy framework.

The ability to learn will depend on how open people are to new ideas. A sense of history helps in understanding the biases contained in knowledge systems, allowing clearer views of their strengths as well as limitations.

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