#### In-situ Conservation

*In-situ* conservation deals with the on-site conservation of the wild genetic resources/genetic diversity in natural habitat. In India, the conservation of forest areas preserve through Protected Areas like National Parks, Wildlife sanctuaries and Biosphere reserve. Promotions of *in-situ* conservation of Medicinal Plants are also important to the AYUSH due to its dependants on Medicinal Plant. It involves survey, inventorisation and documentation of important medicinal plants in their natural habitat. Further *in-situ* conservation activities have been carried out through Medicinal Plants Conservation and Development areas (MPCDA's) and *in-situ* Resource Augmentation.

### A. Medicinal Plants Conservation and Development Area's (MPCDA's):

*In-situ* conservation of endangered medicinal plants in their natural habitats by establishment of Medicinal Plants Conservation and Development Area's (MPCDA's). Also, provide strength / up gradation of already existing MPCDA's by means of survey inventory, documentation, protection and main streaming in habitat management approaches.

#### **Activities**

- **a.** Setting up Medicinal Plants Conservation and Development Areas(MPCDAs) through survey, documentation of existing natural population of medicinal and aromatic plants, geo referencing. This would include:
  - Ascertaining threat status of various medicinal plant species traditionally obtained from the wild.
  - Identifying major causes of threat to the populations of threatened species and possible remedy.
  - Drawing up of action plan for conservation and sustainable utilization of important medicinal plant species.
  - Stakeholders capacity building, documentation (including a good quality pictorial directory), hosting on website, conducting pilot research studies etc. for sustainable utilization, engaging services of qualified taxonomists and other necessary professionals for the purpose by the concerned State Agency/SMPB, preparation of case studies, promoting conservation values/ sustainability.
- **b.** Revisiting / Reviewing / documentation in respect of previously designated MPCAs (established more than three years back under different schemes) for further development like up gradation, improving protection, documentation, communication/dissemination linking with area management plan, geo-referencing, engaging professionals on short term basis,

capacity Building, Community mobilization, hosting on website, piloting studies on utilization/ sustainability issues etc.

**c**. Mainstreaming medicinal plant conservation in management approaches based on sound silvicultural /management principles, conducting systematic survey of local medicinal and aromatics plants with medicinal value, and incorporating sound scientific principles for their management in the Working / Management Plans and its effective communication to Stakeholders. These management plans should also include details of MPCDAs, where they are constituted.

# **Eligibility**

State Forest/Wildlife Department/Forest Development Corporation/Federations/ National and State level Research Organization / Universities.

Non-Government / Voluntary Organizations with expertise in the field (subject to the recommendation of concerned forest department).

## Coverage

On an average an MPCDA should extend over an area of 200 ha. through smaller areas of important medicinal plants bio-diversity including sacred groves can also be considered for MPCDA.

### **Norms of Assistance**

- To set up MPCDA's, 100% central assistance @ 20,000/- per hectare will be provided.
- For up-gradation / reviewing / strengthening of previously designated Medicinal Plants Conservation Area (MPCA) which were established more than three years ago under NMPB or other schemes in various states, assistance @ 5,000/- per ha will be provided.
- For main streaming medicinal plant conservation in management approaches based on sound management / silvicultural principles, a lump sum support of up to Rs.1.5 Lakhs will be provided per Forest Division to the concerned Forest/ Wildlife Division.

## **Submission of Proposals**

The proposals from the State Forest/Wild Life Department in this respect will be submitted to NMPB in the relevant proforma as at Annexure - III. In case proposal is submitted by Forest Division/Circle a copy of the same should invariably be marked to PCCF/Chief Wild Life Warden as well which will help in implementation and monitoring the project.

## **Project Supported**

So far from 2006-07 to 2015-16 NMPB have sanction around 40 projects to establish87 MPCDA's (earlier MPCAs) covering an area about 18347.30 ha in 16 states of the country. Some important endangered species of Medicinal Plants are conserved viz.

Commiphora wightti, Aconitum heterophyllum, Abies spectabilis, Podophyllum hexandrum, Malaxis acuminata, Gentiiana kurrooa, Dactylor hizahatagirea, Picrorhiza kurrooa, Saraca asoca, Pterocarpus marsupium, Aquillaria agallocha, Oroxylum indicum, Rauwolfia serpentina, Panax pseudo-gingseng, Narostaschyis jatamansi etc.

### B. In-situ Resource Augmentation:

# **Objectives**

Assisted natural regeneration or artificial re-generation of local populations of medicinal and aromatic plant species for conservation of genetic diversity of medicinal plants, thereby complementing the other biodiversity preservation and climate change mitigation interventions being implemented by the country as part of its international obligations.

### **Activities**

*In-situ* resource augmentation of medicinal species through assisted natural regeneration. Artificial re-generation of local populations of medicinal and aromatic plant species in particularly important in case of species where wild populations have dwindled on account of habitat degradation, and unsustainable harvest. Active interest and engagement of rural communities in such a conservation program is instrumental to address sustainability of the medicinal plant sector as a whole, hence financial support will also be provided for community mobilization through entry point activities.

# **Eligibility**

State Forest / Wild Life Departments/Forest Development Corporation. Public Sector Corporations / Federations having the mandate to carry out such activities, Voluntary agencies / Non-Government Organisations with experience in the field (only for technical

support and capacity building ). National and State level Research Organisation/Universities with the agreement of Forest Department.

### Norms of assistance

Cost norms for *in-situ* resource augmentation and plantation of medicinal trees, shrubs, herbs, climbers and perennials are given in Annexure-I.

# **Submission of Proposals**

The proposal from the State Forest / Wild Life Department will be submitted to NMPB in the relevant proforma as at Annexure - III. In case proposal is submitted by Forest Division / Circle a copy of the same should invariably be marked to PCCF / Chief Wild Life Warden which will help in monitoring the project during its implementation.