

# Strengthening and Mainstreaming Value Chains for Medicinal and Aromatic Plants

## A Strategy for Adaptation to Climate Change

FOR MOUNTAINS AND PEOPLE

- The Himalayan region has its own unique vegetation.
- There are 7000 indigenous medicinal plants in the Himalayas.
- The region is an important source of plants widely used in Ayurveda, Unani, Siddha, Tibetan, and Traditional Chinese Medicine.
- Their harvest provides valuable income to largely isolated rural communities.



### Impacts of climate change

- Climate change is causing noticeable effects on the life cycles of wild medicinal and aromatic plants (MAPs).
- Evidence of climate change has been affecting vegetation patterns such as phenology (IPCC 2007).
- MAPs endemic to mountains are particularly vulnerable to climate change.
- Climate change can disrupt synchronised phenologies of interdependent species, allow invasives, and initiate migratory challenges.
- There can be shifts in species occurrence and distribution.



### MAPs value chains

- Dealing with MAP value chains requires a strong understanding of species ecology to develop local management strategies, including cultivation.
- Research needs to focus on build-on and adding value to traditional knowledge while integrating modern scientific practices.
- Analyses of women's and men's differing roles in protection, propagation, management and harvesting of in situ and ex situ MAPs need to be incorporated in community-based MAP resource management practices.



### Capacity building of stakeholders becomes relevant in the changing context

- Dynamics of change in populations
- Sustainable harvesting
- Monitoring species behaviour, plant growth and phenology
- Monitoring the active ingredients for maintaining efficacy of traditional medicines

### Involving communities and strengthening institutions

- Need to integrate local institutions and communities to engage in the management of MAPs
- Design strategies that not only enhance conservation but also provide options to adapt livelihoods
- Knowledge-based management of MAPs in the context of a changing climate