



National Workshop on Agrotechnology, trade and Profit-Enhancing Marketing Strategy for Medicinal Plants

2-3 June, 2016

Venue : Doon University, Dehradun

A two-day National Workshop on agrotechnology, trade and industry dealing with medicinal plants of the Himalayan region (Jammu & Kashmir, Himachal Pradesh, Uttarakhand and Sikkim) was held at the Doon University Campus on 2-3 June, 2016. The event was organised by the National Medicinal Plants Board (NMPB), New Delhi and Society for Conservation and Resource Development of Medicinal Plants (SMP), New Delhi, jointly with the Doon University (a State University) and H.N.B. Garhwal University, Srinagar, Garhwal (a Central University). The National Workshop was fully sponsored by NMPB.

The National Workshop attracted the participation of as many as 82 medicinal plant farmers/growers from J&K, H.P. and Uttarakhand. Experts on Agrotechnology of medicinal plants from those three states were also invited to speak and demonstrate the scientific methodologies developed by their institutes/universities for cultivation, protection, harvest and storage of medicinal plants. The lists of farmers and experts who attended the National Workshop are attached as Appendix I and Appendix II. Traders from Dehradun and Kullu also actively participated in the workshop. The industry was represented by Dabur and Emami.

The deliberations of the National Workshop were in Hindi.

The National Workshop focussed on 15 medicinal plants which are more commonly grown in the Himalayan region and are of commercial importance (list attached as Appendix III). The programme of the National Workshop is attached as Appendix IV.

Inaugural Function

In a brief inaugural session, Shrimati Shomita Biswas, CEO, NMPB highlighted the role and various programmes of NMPB to promote cultivation of

medicinal plants. She discussed the problems being faced by farmers, and stressed on the importance of farmer-trader-industry linkages. She encouraged the farmers to form self-help groups and take to scientific methods for sustainable productivity. Primary processing and some value addition in their own fields could enhance profitability. Dr. Shashi Kumar, Director, IGNFA, Dehradun shared his experience of cultivation of medicinal plants and their utility in cure of diseases at domestic and community levels. Dr. Ashwani Kumar, Director General, ICFRE cited several examples of development of herbal drugs based on ethnobotanical knowledge and emphasized that the hill ecology requires crop diversification and medicinal plants can be eco-friendly and more valuable source of income for the farmers. Dr. G.S. Goraya, DDG (Research) ICFRE and Shri T.S. Pawar, CEO, SMPB, Uttarakhand also graced the Dias and encouraged the farmers. Prof. A.K. Bhatnagar, President SMP welcomed the delegates and Prof. A.R. Nautiyal Vice-President SMP and Convenor of the National Workshop proposed a vote of thanks.

Publications on cultivation practices of 15 medicinal plants brought out by NMPB, in Hindi and English, were released at the function. These were later distributed to the farmers.

Plenary Session

The Plenary Session was chaired by Shrimati Shomita Biswas, CEO, NMPB, with Dr. Pawan Kumar, Scientist-III, NMPB as Reporteur. In this Session, Prof. M.C. Nautiyal, HAPPRC, HNBGU, spoke on the "Important issues associated with cultivation of high altitude medicinal plants", and Dr. A.K. Sharma, Head, NWFP, FRI addressed the gathering on the topic "Agrotechnology of Medicinal Plants : Limitation and Way-forward". The discussion that followed in the Plenary Session focussed on problems and their



Inaugural Function of the National Workshop

Shrimati Shomita Biswas, CEO, NMPB highlighting the role and various programmes of NMPB. Dr. Shashi Kumar, Director, IGNFA, Dehradun, Dr. Ashwani Kumar, Director General, ICFRE, Dr. G.S. Goraya, DDG (Research) ICFRE and Shri T.S. Pawar, CEO, SMPB, Uttarakhand sharing their experiences and graced the Dias along with Prof. A.K. Bhatnagar, President SMP and Prof. A.R. Nautiyal Vice-President SMP and Convenor of the National Workshop.



Plenary and Technical Session

Shrimati Shomita Biswas, CEO, NMPB, with Dr. Pawan Kumar, Scientist-III, NMPB. Dr. A.K. Sharma, Head, NWFP, FRI addressing the gathering. Dr. Lalit Narayan, Deputy Director, NMPB with Dr. Shahid UL Khair, NMPB. Farmers from different states speaking about their produce, prices and contact details. Farmers seen taking interest in informative material distributed by NMPB, New Delhi

solutions in profitable cultivation of medicinal plants in the Western and Central Himalayan states.

Technical Session - I

The first technical session was devoted to Agrotechnology of selected Medicinal Plants. The session was chaired by Dr. Lalit Narayan, Deputy Director, NMPB with Dr. Shahid UL Khair, NMPB as Rapporteur. In this session, the invited scientists/experts spoke and demonstrated the agrotechnologies developed by them for successful cultivation of selected medicinal plants. Each scientist gave a demonstration of nursery development, crop management, harvest and some initial processing of the raw material. Prof. Ravinder Raina of YSP University of Horticulture and Forestry, Solan (H.P.) spoke on agropractices of *Valeriana jatamansi*, Dr. S.S. Samant, GBP Institute of Himalayan Environment and Development (GBPIHEAD), Kullu, spoke on *Inula racemosa*; Prof. B.P. Nautiyal, VCSGUUHF, Bharsar spoke on *Picrorhiza kurroa*, Dr. I.D. Bhatt, GBPIHEAD, Almora on *Hodochium spicatum*; Dr. V.K. Purohit, HNBSGU on *Narodostachys grandiflora*; Dr. R.S. Chauhan, VCSGUUHF on *Podophyllum hexandrum*; Dr. J.S. Butola, VCSGU Univ., Ranichauri, Tehri Garhwal (a scientist as well as grower/trader of medicinal herbs) on *Sausurea costus* and *S. lappa*; Dr. R.K. Vashistha, Patanjali Ayurved on *Angelica glauca*.

The lectures/demonstrations were followed by chairperson's remarks and an Open House. The farmers displayed lively interest in presentations of medicinal herbs that they cultivated.

Technical Session - II

This session, also devoted to agrotechnologies of selected medicinal plants, was chaired by Prof. M.C. Nautiyal HNBSGU and Dr. G.P. Rao, IARI, New Delhi with Dr. Lalit Tiwari, NMPB and Dr. H. Andola, Doon University as Rapporteurs. In this session, Dr. V.P. Bhatt, HRDI, Gopeshwar gave a demonstration on agrotechnology of *Hippophae* spp; Prof. M.C. Nautiyal presented on *Aconitum heterophyllum* and *A. balfourii*.

The Technical Session-II continued till late evening, with presentations and discussions on topics of deep concern to all growers and traders of medicinal plants. Dr. J.S. Butola, Human India gave an analysis of "Marketing trends of high altitude medicinal plants". Some resource persons, on farmer's demand discussed the "Agrotechnology issues of *Prunus cerasoides* and *Dactylorhiza hatagirea*". Farmers concerns on cultivation and marketing of medicinal herbs and raw products were highlighted by farmers and representatives of some self-help groups of H.P. and Uttarakhand.

Buyer-Seller Meet

The second day of the National Workshop was devoted exclusively to a Buyer-Seller meet. The session was chaired by Shri Raj Krisham Pruthi, IAS, Director, Ayurveda, Government of Himachal Pradesh and Dr. Lalit Narayan, Dy. Director (MP), NMPB. Prof. A.R. Nautiyal served as Moderator and Dr. V.K. Purohit as Rapporteur.

The session was first addressed by Dr. Joshi from Dabur, Sahibabad who spoke extensively on how Dabur procured and produced medicinal herbs for its products. He listed out their requirements and asked farmers to form self-help groups to offer their produce in quantity and quality. Dr. Ramesh Uniyal of Emami, Kolkata also spoke on their requirements, procurement policies and direct contact with farmers. Other industry representatives also likewise gave presentations of their medicinal plant requirements, and how farmers could contact them. The companies already have representatives in H.P. and Uttarakhand who could be contacted for the purpose.

Farmers from the three states were asked to speak about their produce, prices and contact details. Traders also participated in the discussion. An Open House was nicely conducted by Dr. Lalit Narayan, NMPB, in which farmers came forward and expressed their individual needs and problems. The farmers were concerned by how to get a fair price of their produce.

Speaking at the session, Shri Pruthi highlighted the need for strong forward and backward linkages to help farmers realize a fair price for their produce. Infrastructure for storage, packaging, analysis, primary processing, transportation and value addition was needed at cluster village level. Dr. Lalit Narayan outlined the steps taken by NMPB for efficient and profitable cultivation of medicinal plants. It was felt that there is a need for effective information, disseminations, system to inform the farmers about industry requirements and prevailing prices so that they can get the best price for their farm produce.

In the end, Prof. A.R. Nautiyal once again thanked all participants. NMPB for sponsoring and organising National Workshop and active participation of the NMPB officials, Doon University for providing the venue, and State Medicinal Plant Boards for nominating farmers to attend the workshop. Prof. Nautiyal expressed deep appreciation for the scientists from various organisations who demonstrated the agro-practices for successful cultivation and high yield of medicinal plants. Prof. Nautiyal specially thanked Dr. Pavan Kumar Yadav and other senior officers of NMPB for their help in drawing up the programme of the National Workshop.

