

**GOVERNMENT OF INDIA  
MINISTRY OF SCIENCE AND TECHNOLOGY  
DEPARTMENT OF SCIENTIFIC AND INDUSTRIAL RESEARCH  
LOK SABHA  
UNSTARRED QUESTION NO.1644  
(TO BE ANSWERED ON 04.05.2016)  
AVAILABILITY OF HERBS IN HILLY AREAS**

**1644. SHRI ASHOK MAHADEORAO NETE :**

**Will the Minister of SCIENCE AND TECHNOLOGY be pleased to state:**

- (a) whether the Government has conducted or proposes to conduct any survey of forest and hilly areas of the country to find out the availability of herbs;**
- (b) if so, the details thereof and if not, the reasons therefor;**
- (c) whether the Central Institute of Medicinal and Aromatic Plants has made any efforts to cater to the increasing demand of herbs in the international market and earn foreign exchange; and**
- (d) if so, the details thereof?**

**ANSWER**

**MINISTER OF STATE FOR SCIENCE AND TECHNOLOGY AND EARTH SCIENCES  
(SHRI Y.S. CHOWDARY)**

**(a)&(b) Yes, Madam. The constituent institutes of CSIR, Ministry of Environment, Forest and Climate Change (MoEFCC) and ICAR-Indian Institute of Horticultural Research (ICAR-IIHR), Bengaluru have implemented projects involving survey of different regions of the country including forests and hilly areas for mapping the availability of herbs.**

**The CSIR constituent institutes, namely CSIR-Central Institute of Medicinal & Aromatic Plants (CSIR-CIMAP), Lucknow; CSIR-Central Drug Research Institute (CSIR-CDRI), Lucknow; CSIR-Indian Institute of Integrative Medicine (CSIR-IIIM), Jammu; CSIR-Institute of Himalayan Bio-resource Technology (CSIR-IHBT), Palampur; CSIR-National Botanical Research Institute (CSIR-NBRI); and CSIR-North East Institute of Science & Technology (CSIR-NEIST), Jorhat from time to time, pursue bio-resource mapping, survey and inventorization as well as collection of herbs, especially medicinal and aromatic plants across different parts of the country including from the forests and hilly areas.**

**CSIR-CIMAP had conducted survey of the forest and hilly areas of the country for the assessment of availability of indigenous medicinal herbs.**

**Bio-resource mapping and ethno-botanical survey is being conducted in Kumaun Himalayas, particularly at Dhakudi forest of Bageshwar district, Uttarakhand by CSIR-CDRI. Since 2012, around 25 ethnobotanically important plants have been documented from this area for different diseases and**



ailments like healing of bone fracture and the treatment of malaria, cancer, diabetes, etc.

In western Himalayas, primarily Himachal Pradesh, CSIR-IHBT is conducting floristic surveys for collection of plant specimens, identification, inventorization (digitization), and preservation of the specimens in herbarium (PLP) and has successfully completed development of the database on medicinal plants of Indian Himalayan region.

During last four years (2012-2016), CSIR-NBRI has conducted nine surveys and made collections from the Govind Wild Life Sanctuary (GWLS), Uttarkashi district of Uttarakhand. The institute has collected about 5000 specimens of plants, which have been categorized into 154 species of algae, 38 species of Lichens, 350 species of Bryophytes and 637 species of angiosperms, respectively from GWLS.

CSIR-IIIM has also conducted survey of hilly areas to find out the availability of herbs in Ladakh, Gurez valley, Kashmir and Uttar Vehni & Parmandal, Jammu region. Around 500 herbarium specimens of trees, shrubs and herbs from Ladakh and 212 species from Gurez valley have been documented so far. From Uttar Vehni & Parmandal, Jammu region, the institute has documented 82 species so far.

CSIR-NEIST is actively pursuing survey of medicinal and herbs in the forest and hilly areas of North-East India mainly for the purpose of documenting traditional knowledge, validation of medicinal uses and conservation etc. The laboratory has also developed a database on medicinal plants of the Indian Himalayan region. Further, the institute has implemented projects on diversity and ecology of the useful flora of Dibru-Saikhowa biosphere reserve.

The G.B. Pant Institute of Himalayan Environment and Development, Almora under MoEFCC has conducted survey in different states of Indian Himalayan region to find out the availability of herbs. A compilation made by Institute has reported over 1748 species of herbs (medicinal and aromatic plants) occurring in Indian Himalayan region.

The ICAR-Indian Institute of Horticultural Research (ICAR-IIHR), Bengaluru has surveyed the hills and forest regions of Western and Eastern Ghats for rare and endangered species of herbs and collected about 100 herbs. The areas surveyed are Vishakhapatnam & Aarkkuvalley (Andhra Pradesh), Agumbe & adjoining areas, Dharwad, Belgaum & Uttar Kannada, Ootty & adjoining areas, Savanadurga, Bannerughatta, Sravanabelagola, Wayanad, Chikkamagalur, Kollur Shiradi Ghat, Charmadi Ghat etc. (South Canara), Bannerghatta, Savanadurga, Devarayanadurga & Chithradurga and Coorg.

**(c)&(d) CSIR-CIMAP has developed improved varieties of a number of medicinal and aromatic plants and made the planting material available to farmers and industry for commercial cultivation. The institute is promoting cultivation of high yielding varieties of medicinal and aromatic plants in the country through training, demonstration, awareness camps, farmers' meet, etc. at regular intervals. Due to such efforts, several commodities such as mentha oil, lemongrass oil, senna, etc. are being produced in the country for meeting domestic requirement as well as for export purposes.**

**CSIR-CIMAP has also made efforts for international collaboration to help increase the country's share in the global market. As the medicinal plants focal point for India, the institute organized the second meeting of medicinal plants focal points of Indian Ocean Rim Association Regional Centre for Science & Technology Transfer (IORA RCSTT) at Lucknow during 18-19 March, 2015 in which delegates from the member countries including Bangladesh, South Africa, Egypt, Indonesia, Iran, Madagascar, Malaysia, Sultanate of Oman, Republic of Seychelles, Sri Lanka, Tanzania, Thailand, Iran and India participated. CSIR-CIMAP has been unanimously selected by the members as the coordination centre for the medicinal and aromatic plants activities of IORA to promote technical know-how, technology transfer and commercialization of medicinal plants and their products among IORA Member States.**

**Further, CSIR-CIMAP has also held a meeting recently on 24<sup>th</sup> April, 2016 with foreign buyers during the Asian Aroma Ingredients Congress & Expo (AAIC-2016) in Delhi for promotion of export business of Indian essential oils/aroma chemicals.**

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