

**GOVERNMENT OF INDIA  
ENVIRONMENT, FORESTS AND CLIMATE CHANGE  
LOK SABHA**

UNSTARRED QUESTION NO:4946

ANSWERED ON:23.12.2014

DOCUMENTATION OF MEDICINAL PLANTS

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**Will the Minister of ENVIRONMENT, FORESTS AND CLIMATE CHANGE be pleased to state:**

- (a) whether the Government has any authentic data of the medicinal plants that are vulnerable and critically endangered in the country;
- (b) if so, the names of such plants and if not, the reasons therefor;
- (c) the steps taken/being taken by the Government to protect the critically endangered medicinal plants;
- (d) the current demand and supply of the medicinal plants in the country; and
- (e) whether the Government is planning to set up more herbal and botanical gardens in the country and if so, the details thereof, State-wise?

**Answer**

MINISTER OF STATE (INDEPENDENT CHARGE) FOR ENVIRONMENT, FORESTS AND CLIMATE CHANGE (SHRI PRAKASH JAVADEKAR)

(a) Botanical Survey of India (BSI), with its mandate of floristic survey, documentation and status assessment of all plant species, has also been conducting surveys for threat (anthropogenic/ natural) assessment and inventorying of threatened species including medicinal plants. Based on studies of vast herbarium repository of dried plant material maintained by the department and verified by field survey tours, BSI has already published four volumes of Red Data Book of Indian Plants, (Editors Jain & Rao, 1984; Nayar & Sastry 1987 – 1990) and Red List of Threatened Vascular Plant Species in India (Rao et al. 2003), which provides information on 1236 threatened plant taxa in the country, including medicinal plants.

(b) According to BSI the 53 threatened medicinal plants are: *Aconitum balfourii*, *A. chasmanthum*, *A. deinorrhizum*, *A. falconeri* var. *latilobum*, *A. ferox*, *A. heterophyllum*, *Acorus gramineus*, *Allium stracheyi*, *Angelica glauca*, *Anogeissus sericea* var. *numularia*, *Aquillaria mallaccensis*, *Aristolochia bracteolata*, *A. indica*, *Arnebia benthamii*, *Atropa acuminata*, *Berberis affinis*, *B. apiculata*, *B. aristata*, *Bergenia stracheyi*, *Capparis pachyphylla*, *Carum villosum*, *Colchicum luteum*, *Coptis teeta*, *Coscinium fenestratum*, *Dactylorhiza hatagirea*, *Dioscorea deltoidea*, *Elaeocarpus prunifolius*, *Ephedra gerardiana*, *Gentiana kurooa*, *Gloriosa superba*, *Hedychium spicatum*, *Hyoscyamus niger*, *Hydnocarpus macrocarpa*, *Iphigenia indica*, *I. pallida*, *I. stellata*, *Calanchoe roseus*, *Madhuca insignis*, *Nardostachys grandiflora*, *Panax pseudoginseng*, *Picrorhiza kurrooa*, *Podophyllum hexandrum*, *Pterocarpus santalinus*, *Rauvolfia serpentina*, *Rheum emodi*, *Saussurea bracteata*, *S. costus*, *S. gnaphalodes*, *Swertia chirayita*, *Taxus wallichiana*, *Taxocarpus kurzii*, *Urginea indica* and *U. maritima*.

(c) For conservation and management of flora and fauna of the country, including medicinal plants, the Government has established a network of 670 protected areas (102 National Parks, 517 Wild Life Sanctuaries, 4 Community Reserves and 47 Conservation Reserves) in different bio-geographic regions of the country. Further, 18 Biosphere Reserves have also been established for landscape conservation. Conservation and protection of medicinal plants are done through enforcement of the Indian Forest Act, 1927; Wildlife (protection) Act, 1972; Forest (Conservation) Act, 1980; Environment (Protection) Act, 1986; Biological Diversity Act, 2002 and the rules under these Acts. A Wildlife Crime Control Bureau has since been established to check illegal trade and smuggling in wildlife, including medicinal plants.

Keeping in view the need of conservation and sustainable utilization of medicinal plants required for preparation of medicines of traditional systems, the Government has set up a National Medicinal Plants Board (NMPB) vide Resolution notified on 24th November, 2000 under Department of AYUSH, Ministry of Health & Family Welfare. At the State/UT level, State Medicinal Plants Boards have also been constituted by the States to coordinate related matters at State level related to conservation of medicinal plants.

Further, NMPB is implementing Central Sector Scheme for "Conservation, Development and Sustainable Management of Medicinal Plants" since 11th Plan, which envisages providing assistance for various promotional activities including in-situ/ex-situ conservation/ resource augmentation of rare, endangered and threatened medicinal plant species.

Under the provisions of Section 38 of Biological Diversity Act 2002, the threatened species, including medicinal plants have been

notified in respect of one Union Territory namely Andaman & Nicobar Islands and 16 states namely Himachal Pradesh, Kerala, Uttar Pradesh, Uttarakhand, Mizoram, Orissa, Meghalaya, Goa, Karnataka, Madhya Pradesh, Manipur, Punjab, West Bengal, Bihar, Tamil Nadu and Tripura.

(d) As per the information supplied by NMPB the annual demand of medicinal plants in the country has been estimated at 3,19,500 metric Tonnes (dry weight) per year. In all, 960 medicinal plant species are traded, out of which 178 have annual consumption of more than 100 Metric Tonnes.

(e) According to NMPB, herbal gardens have been set up in different States under central sector scheme on "Conservation, Development and Sustainable Management of Medicinal Plants".

Further, under its grant-in-aid central sector scheme entitled "Assistance to Botanic Gardens" the Ministry provides one time financial assistance to governmental and non-governmental organizations in various States of the country for maintaining existing Botanical Gardens and for strengthening the infrastructural facilities required for conservation and propagation of threatened and endemic plant species of the region including medicinal plants. All proposals are examined as per prescribed guidelines for the scheme, and keeping in view the budgetary allocation.