## Medicinal Plants – Highlighted in Rajya Sabha from 2005 to till date (Monsoon Session, 2013)

<table>
<thead>
<tr>
<th>Q.No.</th>
<th>Q.Type</th>
<th>Date</th>
<th>Ministry</th>
<th>Member</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>2041</td>
<td>Unstarred</td>
<td>29.08.2013</td>
<td>Environment And Forests</td>
<td>Dr. T. Subbarami Reddy</td>
<td>Msp To Produce Medicinal Plants</td>
</tr>
<tr>
<td>489</td>
<td>Unstarred</td>
<td>08.08.2013</td>
<td>Environment And Forests</td>
<td>Shri Ishwarlal Shankarlal Jain</td>
<td>Identification Of Forest Medicinal Plants</td>
</tr>
<tr>
<td>3110</td>
<td>Unstarred</td>
<td>23.04.2013</td>
<td>Environment And Forests</td>
<td>Shri Raghunandan Sharma</td>
<td>Conservation Of Ancient And Traditional Medicinal Plants</td>
</tr>
<tr>
<td>408</td>
<td>Starred</td>
<td>23.04.2013</td>
<td>Health And Family Welfare</td>
<td>Shri Tarun Vijay</td>
<td>Cultivation Of Medicinal Plants</td>
</tr>
<tr>
<td>1877</td>
<td>Unstarred</td>
<td>29.08.2012</td>
<td>Commerce And Industry</td>
<td>Dr. V. Maitreyan</td>
<td>Grant Of Patents For Indigenous Medicinal Plants To Foreign Companies</td>
</tr>
<tr>
<td>2273</td>
<td>Unstarred</td>
<td>23.08.2011</td>
<td>Health And Family Welfare</td>
<td>Shri Kailraj Mishra</td>
<td>Cultivation Of Medicinal Plants</td>
</tr>
<tr>
<td>2077</td>
<td>Unstarred</td>
<td>15.03.2011</td>
<td>Health And Family Welfare</td>
<td>Shri Nand Kumar Sai</td>
<td>Schemes For Promoting Medicinal Plants</td>
</tr>
<tr>
<td>1337</td>
<td>Unstarred</td>
<td>08.03.2011</td>
<td>Health And Family Welfare</td>
<td>Shrimati Bimla Kashyap Sood</td>
<td>Encouragement To Cultivation Of Herbal And Medicinal Plants</td>
</tr>
<tr>
<td>719</td>
<td>Unstarred</td>
<td>01.03.2011</td>
<td>Health And Family Welfare</td>
<td>Shri B.S. Gnanadesikan</td>
<td>Promotion Of Cultivation Of Medicinal Plants In The Country</td>
</tr>
<tr>
<td>2239</td>
<td>Unstarred</td>
<td>30.11.2010</td>
<td>Health And Family Welfare</td>
<td>Shrimati Mohsina Kidwai</td>
<td>Conservation Development And Management Of Medicinal Plants</td>
</tr>
<tr>
<td>179</td>
<td>Starred</td>
<td>09.03.2010</td>
<td>Health And Family Welfare</td>
<td>Shri Ravi Shankar Prasad</td>
<td>Decline In Production Of Medicinal Plants</td>
</tr>
<tr>
<td>1324</td>
<td>Unstarred</td>
<td>01.12.2009</td>
<td>Health And Family Welfare</td>
<td>Dr. Gyan Prakash Pilania</td>
<td>Cultivation And Production Of Medicinal Plants</td>
</tr>
<tr>
<td>504</td>
<td>Unstarred</td>
<td>24.11.2009</td>
<td>Health And Family Welfare</td>
<td>Shri Shreegopal Vyas</td>
<td>Testing Of Medicinal Plants</td>
</tr>
<tr>
<td>2331</td>
<td>Unstarred</td>
<td>24.07.2009</td>
<td>Health And Family Welfare</td>
<td>Shri N.K. Singh</td>
<td>Clusters For Promotion Of Medicinal Plants</td>
</tr>
<tr>
<td>2330</td>
<td>Unstarred</td>
<td>24.07.2009</td>
<td>Health And Family Welfare</td>
<td>Shri Vijay Jawaharlal Darda</td>
<td>Patent Of Medicinal Plants</td>
</tr>
<tr>
<td>82</td>
<td>Starred</td>
<td>20.02.2009</td>
<td>Health And Family Welfare</td>
<td>Prof. Alka Balram Kshatriya</td>
<td>National Mission On Medicinal Plants</td>
</tr>
<tr>
<td>1844</td>
<td>Unstarred</td>
<td>06.12.2007</td>
<td>Environment And Forests</td>
<td>Shri Kamal Akhtar</td>
<td>Conservation Of Medicinal Plants</td>
</tr>
<tr>
<td>1051</td>
<td>Unstarred</td>
<td>29.11.2007</td>
<td>Environment And Forests</td>
<td>Shri Gireesh Kumar Sanghi</td>
<td>Conservation Of Medicinal Plants And Traditional Knowledge</td>
</tr>
<tr>
<td>102</td>
<td>Starred</td>
<td>22.11.2007</td>
<td>Environment And Forests</td>
<td>Shri Santosh Bagrodia</td>
<td>Conservation Of Medicinal Plants And Traditional Knowledge</td>
</tr>
<tr>
<td>10</td>
<td>Starred</td>
<td>15.11.2007</td>
<td>Environment And Forests</td>
<td>Shri Kamal Akhtar</td>
<td>Medicinal Plants</td>
</tr>
<tr>
<td>No.</td>
<td>Starred</td>
<td>Date</td>
<td>Ministry / Sector</td>
<td>Name</td>
<td>Subject</td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td>------------</td>
<td>------------------------------------</td>
<td>-----------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1458</td>
<td>Unstarred</td>
<td>24.08.2007</td>
<td>Health And Family Welfare</td>
<td>Shri Saman Pathak</td>
<td>Medicinal Plants In The Country</td>
</tr>
<tr>
<td>1259</td>
<td>Unstarred</td>
<td>04.08.2006</td>
<td>Health And Family Welfare</td>
<td>Shri Prasanta Chatterjee</td>
<td>Cultivation Of Medicinal Plants In Bengal Region</td>
</tr>
<tr>
<td>189</td>
<td>Unstarred</td>
<td>26.07.2006</td>
<td>Commerce And Industry</td>
<td>Dr. M.A.M. Ramaswamy</td>
<td>Export Of Herbal Medicinal Plants</td>
</tr>
<tr>
<td>407</td>
<td>Starred</td>
<td>12.05.2006</td>
<td>Health And Family Welfare</td>
<td>Dr. Gyan Prakash Pilania</td>
<td>Cultivation Of Medicinal Plants In Rajasthan</td>
</tr>
<tr>
<td>2965</td>
<td>Unstarred</td>
<td>12.05.2006</td>
<td>Health And Family Welfare</td>
<td>Shrimati Maya Singh</td>
<td>Plantation Of Medicinal Plants In Madhya Pradesh</td>
</tr>
<tr>
<td>2581</td>
<td>Unstarred</td>
<td>16.12.2005</td>
<td>Agriculture</td>
<td>Shri Balavant Alias Bal Apte</td>
<td>Scheme For Cultivation Of Medicinal Plants</td>
</tr>
<tr>
<td>1135</td>
<td>Unstarred</td>
<td>02.12.2005</td>
<td>Health And Family Welfare</td>
<td>Shri Kripal Parmar</td>
<td>Production Of Medicinal Plants And Herbs</td>
</tr>
<tr>
<td>1931</td>
<td>Unstarred</td>
<td>18.03.2005</td>
<td>Health And Family Welfare</td>
<td>Shri Balavant Alias Bal Apte</td>
<td>Protecting Medicinal Plants</td>
</tr>
<tr>
<td>1094</td>
<td>Unstarred</td>
<td>11.03.2005</td>
<td>Agriculture</td>
<td>Shrimati Ambika Soni</td>
<td>Promoting Medicinal Plants Through Organic Production</td>
</tr>
<tr>
<td>1548</td>
<td>Unstarred</td>
<td>16.12.2004</td>
<td>Science And Technology</td>
<td>Shri Nandi Yellaiah</td>
<td>Drugs From Medicinal Plants</td>
</tr>
<tr>
<td>1549</td>
<td>Unstarred</td>
<td>16.12.2004</td>
<td>Science And Technology</td>
<td>Prof. Saif-Ud-Din Soz</td>
<td>Medicinal Plants In Jammu And Kashmir</td>
</tr>
<tr>
<td>3173</td>
<td>Unstarred</td>
<td>22.08.2003</td>
<td>Agriculture</td>
<td>Shri S.S. Ahluwalia</td>
<td>Potential Of Jharkhand For Cultivation Of Medicinal Plants Energy Plantations</td>
</tr>
<tr>
<td>2740</td>
<td>Unstarred</td>
<td>18.08.2003</td>
<td>Health And Family Welfare</td>
<td>Shrimati Jamana Devi Barupal</td>
<td>Medicinal Plants</td>
</tr>
<tr>
<td>2100</td>
<td>Unstarred</td>
<td>08.08.2003</td>
<td>Agriculture</td>
<td>Shri R. Kamaraj</td>
<td>Mission For Medicinal Plants</td>
</tr>
<tr>
<td>101</td>
<td>Starred</td>
<td>28.07.2003</td>
<td>Commerce And Industry</td>
<td>Miss Mabel Rebello</td>
<td>Export Of Herbal And Medicinal Plants</td>
</tr>
<tr>
<td>5131</td>
<td>Unstarred</td>
<td>09.05.2003</td>
<td>Agriculture</td>
<td>Ms. Pramila Bohidar</td>
<td>Promotion Of Herbal And Medicinal Plants</td>
</tr>
<tr>
<td>4346</td>
<td>Unstarred</td>
<td>02.05.2003</td>
<td>Agriculture</td>
<td>Shri Khan (Durru) Aimaduddin Ahmad</td>
<td>Cultivation Of Medicinal Plants In Rajasthan</td>
</tr>
<tr>
<td>2550</td>
<td>Unstarred</td>
<td>07.04.2003</td>
<td>Health And Family Welfare</td>
<td>Prof. M. Sankaralingam</td>
<td>Setting Up Of Export Zones For Medicinal Plants</td>
</tr>
<tr>
<td>1869</td>
<td>Unstarred</td>
<td>10.03.2003</td>
<td>Commerce And Industry</td>
<td>Shri Kripal Parmar</td>
<td>Patenting Of Indian Herbs And Medicinal Plants By Mncs</td>
</tr>
<tr>
<td>1760</td>
<td>Unstarred</td>
<td>07.03.2003</td>
<td>Environment And Forests</td>
<td>Shri H.K.Javare Gowda</td>
<td>Conservation Of Medicinal Plants</td>
</tr>
<tr>
<td>63</td>
<td>Starred</td>
<td>22.11.2002</td>
<td>Agriculture</td>
<td>Shrimati N.P. Durga</td>
<td>Export Of Medicinal Plants</td>
</tr>
<tr>
<td>2696</td>
<td>Unstarred</td>
<td>12.08.2002</td>
<td>Health And Family Welfare</td>
<td>Shri Nandi Yellaiah</td>
<td>Conservation And Sustainable Use Of Medicinal Plants</td>
</tr>
<tr>
<td>4846</td>
<td>Unstarred</td>
<td>13.05.2002</td>
<td>Health And Family Welfare</td>
<td>Shri Narendra Mohan</td>
<td>Use Of Medicinal Plants</td>
</tr>
<tr>
<td>1520</td>
<td>Unstarred</td>
<td>18.03.2002</td>
<td>Health And Family Welfare</td>
<td>Shri Rama Muni Reddy Sirigireddy</td>
<td>Protection Of Medicinal Plants</td>
</tr>
<tr>
<td>No.</td>
<td>Starred</td>
<td>Date</td>
<td>Sector</td>
<td>Name</td>
<td>Subject</td>
</tr>
<tr>
<td>------</td>
<td>----------</td>
<td>----------</td>
<td>-------------------------</td>
<td>-------------------------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>2747</td>
<td>Unstarred</td>
<td>14.12.2001</td>
<td>Agriculture</td>
<td>Shrimati Chandra Kala Pandey</td>
<td>Central Schemes For Medicinal And Aromatic Plants Etc.</td>
</tr>
<tr>
<td>2859</td>
<td>Unstarred</td>
<td>22.03.2001</td>
<td>Agriculture</td>
<td>Shri Ravi Shankar Prasad</td>
<td>Growing Of Medicinal Plants By Utilising Bio Technology</td>
</tr>
<tr>
<td>2086</td>
<td>Unstarred</td>
<td>15.03.2001</td>
<td>Agriculture</td>
<td>Shrimati Saroj Dubey</td>
<td>Promotion Of Medicinal Plants</td>
</tr>
<tr>
<td>207</td>
<td>Starred</td>
<td>09.03.2001</td>
<td>Health And Family Welfare</td>
<td>Shri K. Rama Mohana Rao</td>
<td>Protection Of Medicinal Plants</td>
</tr>
<tr>
<td>102</td>
<td>Unstarred</td>
<td>22.02.2001</td>
<td>Agriculture</td>
<td>Dr. Dasari Narayana Rao</td>
<td>Developing Medicinal And Aromatic Plants</td>
</tr>
<tr>
<td>1425</td>
<td>Unstarred</td>
<td>01.12.2000</td>
<td>Science And Technology</td>
<td>Shri Ananta Sethi</td>
<td>Areas Growing Medicinal Plants</td>
</tr>
<tr>
<td>576</td>
<td>Unstarred</td>
<td>24.11.2000</td>
<td>Health And Family Welfare</td>
<td>Shri K. M. Khan</td>
<td>Extinction Of Medicinal Plants</td>
</tr>
<tr>
<td>1468</td>
<td>Unstarred</td>
<td>04.08.2000</td>
<td>Health And Family Welfare</td>
<td>Shri R.S. Gavai</td>
<td>Awareness For Cultivating Medicinal Plants</td>
</tr>
<tr>
<td>1442</td>
<td>Unstarred</td>
<td>04.08.2000</td>
<td>Health And Family Welfare</td>
<td>Shri V.V. Raghavan</td>
<td>National Board For Medicinal Plants</td>
</tr>
<tr>
<td>664</td>
<td>Unstarred</td>
<td>28.07.2000</td>
<td>Environment And Forests</td>
<td>Shri K. Rahman Khan</td>
<td>Extinction Of Medicinal Plants</td>
</tr>
<tr>
<td>4123</td>
<td>Unstarred</td>
<td>04.05.2000</td>
<td>Agriculture</td>
<td>Shri Ramachandra Khuntia</td>
<td>Preservation Of Plants And Seeds Of Medicinal Value</td>
</tr>
<tr>
<td>2945</td>
<td>Unstarred</td>
<td>16.04.1999</td>
<td>Science And Technology</td>
<td>Shri Raghavji</td>
<td>Central Assistance For Medicinal And Aromatic Plants Obidullahaganj</td>
</tr>
<tr>
<td>244</td>
<td>Starred</td>
<td>12.03.1999</td>
<td>Health And Family Welfare</td>
<td>Shri Balwant Singh Ramoowalia</td>
<td>National Board On Medicinal Plants</td>
</tr>
<tr>
<td>245</td>
<td>Starred</td>
<td>12.03.1999</td>
<td>Health And Family Welfare</td>
<td>Shri Brahmakumar Bhatt</td>
<td>Information About Medicinal Plants For Treatment</td>
</tr>
<tr>
<td>1928</td>
<td>Unstarred</td>
<td>12.03.1999</td>
<td>Health And Family Welfare</td>
<td>Shri Prafull Goradia</td>
<td>Patent For Medicinal Plants Of Dangs Forest</td>
</tr>
<tr>
<td>2226</td>
<td>Unstarred</td>
<td>18.12.1998</td>
<td>Health And Family Welfare</td>
<td>Shri Dawa Lama</td>
<td>Medicinal Plants In Darjeeling Kurseong And Kalimpon</td>
</tr>
<tr>
<td>70</td>
<td>Unstarred</td>
<td>30.11.1998</td>
<td>Industry</td>
<td>Prof. Ram Gopal Yadav</td>
<td>Patenting Of Medicinal Plants</td>
</tr>
<tr>
<td>1145</td>
<td>Unstarred</td>
<td>28.11.1997</td>
<td>Environment And Forests</td>
<td>Prof Ram Kapse</td>
<td>Ayurvedic Medicinal Plants</td>
</tr>
<tr>
<td>2540</td>
<td>Unstarred</td>
<td>14.08.1997</td>
<td>Health And Family Welfare</td>
<td>Shri Solipeta Ramachandra Reddy</td>
<td>Cultivation Of Medicinal Plants</td>
</tr>
<tr>
<td>584</td>
<td>Unstarred</td>
<td>28.07.1997</td>
<td>Science And Technology</td>
<td>Shri Surinder Kumar Singla</td>
<td>Biotechnology For Medicinal And Aromatic Plants</td>
</tr>
<tr>
<td>2128</td>
<td>Unstarred</td>
<td>26.08.1996</td>
<td>Industry</td>
<td>Shri Nagendra Nath Ojha</td>
<td>Patenting Of Plants Having Medicinal Properties</td>
</tr>
<tr>
<td>1894</td>
<td>Unstarred</td>
<td>01.08.1996</td>
<td>Rural Areas And Employment</td>
<td>Miss Saroj Khaparde</td>
<td>Promotion Of Agro Forestry And Medicinal Plants In</td>
</tr>
</tbody>
</table>
GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT AND FORESTS
RAJYA SABHA
UNSTARRED QUESTION NO-2041
ANSWERED ON-29.08.2013
MSP to produce medicinal plants
2041 . DR. T. SUBBARAMI REDDY

(a) whether Government proposes to assure Minimum Support Price (MSP) to minor forest produce including medicinal plants so as to encourage farmers to take up cultivation of such plants on a large scale; if so, the details thereof;

(b) whether State Governments have urged Union Government for procurement of medicinal plants through Government’s Medicinal Plant Farms and Herbal Medicine Corporation Limited in the event of prices in open market going below MSP; and

(c) if so, the details thereof and the steps taken by Union Government in this regard?

ANSWER
MINISTER OF STATE (INDEPENDENT CHARGE) FOR ENVIRONMENT AND FORESTS

(SHRIMATI JAYANTHI NATARAJAN)

(a) The National Medicinal Plant Board under Department of AYUSH (Ayurveda Yoga & Naturopathy Unani, Siddha and Homeopathy), Ministry of Health and Family Welfare, is implementing a Centrally Sponsored Scheme of “National Mission on Medicinal Plants” since 2008-09 to encourage farmers to take up cultivation of medicinal plants through Growers, Farmers, Cultivators, Growers Associations, Federations, Self Help Groups, Corporates and Growers Co-operatives while promoting the backward and forward linkages. The subsidy provided to the cultivators is routed through State Mission Directors. The rates of subsidy for different medicinal plants species are 75%, 50% and 20% of the cost of cultivation of these medicinal plants, depending upon the threat status to their long term sustainability, gestation period and need for support etc.

The Government has recently approved a Centrally Sponsored Scheme of ‘Mechanism for Marketing of Minor Forest Produce (MFP) through Minimum Support Price (MSP) and Development of Value Chain for MFP’. The Ministry of Tribal Affairs is the Nodal Ministry for implementation of the Scheme. This Scheme which will initially cover eight States namely, Andhra Pradesh, Maharashtra, Odisha, Chhattisgarh, Madhya Pradesh, Jharkhand, Rajasthan and Gujarat for twelve (12) MFPs namely, Tendu, Bamboo, Mahuwa Seed, Sal Leaf, Sal Seed, Lac, Chironjee, Wild Honey, Myrobalan, Tamarind, Gums (Gum Karaya) and Karanj which are not nationalised by the State Government concerned. The scheme seeks to establish a system to ensure fair monetary returns by fixing Minimum Support Price.

(b) & (c) No such proposal has been received in the Ministry of Environment & Forests from State/ UT Governments. However, the Ministry is providing assistance to various States/ UTs under the Centrally Sponsored Scheme of National Afforestation Programme for taking up afforestation including plantation of medicinal plants.

******

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT AND FORESTS

Compiled by ENVIS Centre, WWF-India
11/8/2013
RAJYA SABHA
UNSTARRED QUESTION NO-489
ANSWERED ON-08.08.2013
Identification of Forest Medicinal Plants
489 . SHRI ISHWARLAL SHANKARLAL JAIN

(a) whether Government has explored/identified all the forest medicinal plants which grow/found on hills, and in forests and jungles of the country;
(b) if so, the location-wise, hilly area-wise, forest-wise details of all those herbs and medicinal plants found therein;
(c) whether there are some poisonous plants in some hilly areas and forests whose touch may faint human beings and animals; if so, the details thereof; and
(d) whether such poisonous plants have been identified and the details of the places where all such hills and forests having such plants are located and the steps taken by Government for protection from them?

ANSWER
MINISTER OF STATE (INDEPENDENT CHARGE) FOR ENVIRONMENT AND FORESTS
(SHRIMATI JAYANTHI NATARAJAN)

(a) and (b): Botanical Survey of India (BSI) has the mandate of surveying the plant diversity, including medicinal plants of the country. According to BSI, it has so far explored almost 70% of the geographic area in the country. However, many species of plants are yet to be explored, identified and described. Further, it is estimated that around 8000 species of medicinal and herbal plants are found in the country, which grow on hills and in forests/jungles of India which are used as herbal remedies for a variety of ailments under different systems of medicine.

The diverse species of Indian medicinal plants occur in 10 different bio-geographic zones, as given in the table below

TABLE : MEDICINAL PLANT DIVERSITY IN DIFFERENT BIOGEOGRAPHIC ZONES OF INDIA

<table>
<thead>
<tr>
<th>Biogeographic Zones</th>
<th>Approximate number of medicinal plantspecies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trans Himalaya</td>
<td>700</td>
</tr>
<tr>
<td>Himalaya</td>
<td>2500</td>
</tr>
<tr>
<td>Desert</td>
<td>500</td>
</tr>
<tr>
<td>Semi-Arid</td>
<td>1000</td>
</tr>
<tr>
<td>Western Ghats</td>
<td>2000</td>
</tr>
<tr>
<td>Deccan Peninsula</td>
<td>3000</td>
</tr>
<tr>
<td>Gangetic Plain</td>
<td>1000</td>
</tr>
<tr>
<td>North-East</td>
<td>2000</td>
</tr>
<tr>
<td>Islands</td>
<td>1000</td>
</tr>
<tr>
<td>Coasts</td>
<td>500</td>
</tr>
</tbody>
</table>

Source: Foundation for Revitalisation of Local Health Traditions, Bengaluru

(c) and (d): According to BSI, as such there are no poisonous plants on record, whose touch may faint human beings and animals. Further, to spread awareness on poisonous medicinal plants, BSI in 1985, published a book entitled ‘Selected Poisonous Plants from the Tribal Areas of India’.

***

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT AND FORESTS
RAJYA SABHA
UNSTARRED QUESTION NO-3110
ANSWERED ON-23.04.2013
Conservation of ancient and traditional medicinal plants
3110. SHRI RAGHUNANDAN SHARMA

(a) the details of the action taken by the Central Government in consultation with the State Governments for conservation of ancient and traditional medicinal plants and birds in forest areas, State-wise;

(b) the funds allocated in this regard during the last three years; and

(c) whether any programme or plan has been implemented in Madhya Pradesh in this regard?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) FOR ENVIRONMENT AND FORESTS (SHRIMATI JAYANTHI NATARAJAN)

(a) & (b): With a purpose of conserving and promoting medicinal plants utilized in the traditional systems of medicines, the Government has set up a National Medicinal Plants Board vide resolution notified on 24th November, 2000 under Department of AYUSH, Ministry of Health & Family Welfare. Important functions of the Board include co-ordination with Ministries/Departments/Organizations/States/ Union Territories (UTs) for the development of the medicinal plant sector. At the State/UT level, State Medicinal Plants Boards (SMPBs) have also been constituted by the States to coordinate conservation and management of medicinal plants.

As per the information furnished by the National Medicinal Plants Board, the following schemes have been implemented by it:-

• Central Sector Scheme for “Conservation, Development and Sustainable Management of Medicinal Plants”:

The Central Sector Scheme for “Conservation, Development and Sustainable Management of Medicinal Plants” was approved by the Government of India on 26th June, 2008 to provide support for Survey, Inventorization, in-situ conservation, ex-situ conservation/herbal gardens, linkage with Joint Forest Management Committees, Research and Development etc. Information regarding quantum of funds allocated year-wise under this scheme to various States/UTs during the last three years is provided in Annexure-I.

• Centrally Sponsored Scheme of “National Mission on Medicinal Plants”:

Centrally Sponsored Scheme of “National Mission on Medicinal Plants” was approved during 2008-09. The scheme is primarily aimed at supporting market driven cultivation of medicinal plants on private land with backward linkages for establishment of nurseries for supply of quality planting material etc. and forward linkages for post-harvest management, marketing infrastructure, certification etc. in a mission mode. Information regarding quantum of funds allocated year wise under this scheme during the last three years is provided in Annexure-II.

In addition to the above, the Ministry of Environment and Forests (MoEF) has established a Centre of Excellence on Medicinal Plants and Traditional Knowledge at Foundation for Revitalisation of Local Health Traditions, Bengaluru since October 2002. The MoEF has so far provided approximately ₹800.00 lakh to the Centre to generate and disseminate knowledge related to conservation of medicinal plants and traditional knowledge.

Regarding conservation and protection of birds and their habitats, the Ministry provides financial and technical assistance to the State/UT Governments, including the State Government of Madhya Pradesh, for Protected Areas and outside Protected Areas under the Centrally Sponsored Scheme ‘Integrated Development of Wildlife Habitats’.

Further, the important steps taken by the Ministry for protecting birds are given below:

(i) Rare and endangered birds are included in Schedule–I of the Wildlife (Protection) Act, 1972, thereby, according them highest degree of protection.
(ii) Stringent punishments have been provided for in the Wildlife (Protection) Act, 1972 for violation of the provisions of the Act.
(iii) Important habitats of birds, including endangered and migratory birds have been notified as Protected Areas under the Wildlife (Protection) Act, 1972 for better conservation and the protection of birds and their habitats.

(iv) Wildlife Crime Control Bureau has been established for control of illegal trade in wildlife, including various species of birds, and their parts and products.

(v) India is a signatory to all major international conventions relating to conservation and management of wildlife, including bird species. These are the Convention on Biological Diversity, Convention on International Trade in Endangered Species of Wild Fauna and Flora, and Ramsar Convention on Wetlands of International Importance.

(vi) The Sub-committee, constituted under the National Board for Wildlife, has developed Guidelines for ‘Threatened Species Recovery Plan’ and identified Great Indian Bustard, Jerdon’s Courser and Nicobar Megapode as threatened bird species, for conservation and better management of their habitats on priority basis.

(c): As per the information furnished by the National Medicinal Plants Board with respect to the State of Madhya Pradesh: Funds amounting to ?323.34 lakh, ?899.37 lakh and ?222.3 lakh during the years 2010-11, 2011-12 and 2012-13 respectively, have so far been released for implementation of Central Sector Scheme for “Conservation, Development and Sustainable Management of Medicinal Plants”. Project of “Amla Campaign” was also sanctioned for the State of Madhya Pradesh which involved a total outlay of ?274.00 lakh, out of which ?164.00 lakh was released in 2009-10 and ?50.00 lakh was released in 2011-12. The project is being implemented by M.P. State Minor Forest Produce (T&D) Co-operative Federation Limited. In addition, funds amounting to ?737.58 lakh, ?302.93 lakh and ?474.58 lakh during the year 2010-11, 2011-12 and 2012-13 respectively, have so far been released in favour of Mission Director, Madhya Pradesh State for implementation of the Centrally Sponsored Scheme of “National Mission on Medicinal Plants”.

Further, the State-wise details of funds, released during the last three years under the Centrally Sponsored Scheme ‘Integrated Development of Wildlife Habitats’ for conservation and protection of wildlife including birds are given in Annexure - III. This includes funds released to the State of Madhya Pradesh.

ANNEXURE-I REFERRED TO IN ANSWER TO PARTS (A AND B) OF THE STATEMENT IN RESPECT OF RAYJA SABHA UNSTARRED QUESTION NO. 3110 DUE FOR ANSWER ON 23.04.2013 REGARDING ‘CONSERVATION OF ANCIENT AND TRADITIONAL MEDICINAL PLANTS’.

Details of release of funds under the Central Sector Scheme “Conservation, Development and Sustainable Management of Medicinal Plants” during last three years (in lakhs)

<table>
<thead>
<tr>
<th>S. No.</th>
<th>State</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Andhra Pradesh</td>
<td>84.92</td>
<td>233.11</td>
<td>44.58</td>
</tr>
<tr>
<td>2.</td>
<td>Arunachal Pradesh</td>
<td>68.19</td>
<td>48.33</td>
<td>0</td>
</tr>
<tr>
<td>3.</td>
<td>Assam</td>
<td>56.65</td>
<td>7.44</td>
<td>4.33</td>
</tr>
<tr>
<td>4.</td>
<td>Bihar</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5.</td>
<td>Chhattisgarh</td>
<td>2.00</td>
<td>124.98</td>
<td>178.6</td>
</tr>
<tr>
<td>6.</td>
<td>Delhi</td>
<td>182.55</td>
<td>111.97</td>
<td>38.8</td>
</tr>
<tr>
<td>7.</td>
<td>Goa</td>
<td>5.00</td>
<td>4.78</td>
<td>0</td>
</tr>
<tr>
<td>8.</td>
<td>Gujarat</td>
<td>886.89</td>
<td>188.55</td>
<td>609.91</td>
</tr>
<tr>
<td>9.</td>
<td>Haryana</td>
<td>223.12</td>
<td>47.25</td>
<td>0</td>
</tr>
<tr>
<td>10.</td>
<td>Himachal Pradesh</td>
<td>550.75</td>
<td>326.98</td>
<td>11.24</td>
</tr>
<tr>
<td>11.</td>
<td>Jammu &amp; Kashmir</td>
<td>59.90</td>
<td>15.75</td>
<td>33.38</td>
</tr>
<tr>
<td>13.</td>
<td>Karnataka</td>
<td>136.38</td>
<td>116.33</td>
<td>191.86</td>
</tr>
<tr>
<td>14.</td>
<td>Kerala</td>
<td>372.86</td>
<td>507.49</td>
<td>50.54</td>
</tr>
<tr>
<td>15.</td>
<td>Madhya Pradesh</td>
<td><strong>323.34</strong></td>
<td><strong>899.37</strong></td>
<td><strong>222.3</strong></td>
</tr>
<tr>
<td>16.</td>
<td>Maharashtra</td>
<td>93.16</td>
<td>519.39</td>
<td>890.95</td>
</tr>
<tr>
<td>17.</td>
<td>Manipur</td>
<td>17.63</td>
<td>20.65</td>
<td>16.0</td>
</tr>
<tr>
<td>18.</td>
<td>Meghalaya</td>
<td>55.00</td>
<td>5.00</td>
<td>0</td>
</tr>
<tr>
<td>19.</td>
<td>Mizoram</td>
<td>25.00</td>
<td>4.99</td>
<td>265.35</td>
</tr>
<tr>
<td></td>
<td>State</td>
<td>Medicinal Plants</td>
<td>Other Plants</td>
<td>Total</td>
</tr>
<tr>
<td>---</td>
<td>----------------</td>
<td>------------------</td>
<td>--------------</td>
<td>--------</td>
</tr>
<tr>
<td>20.</td>
<td>Nagaland</td>
<td>251.68</td>
<td>139.92</td>
<td>74.22</td>
</tr>
<tr>
<td>21.</td>
<td>Orissa</td>
<td>37.50</td>
<td>179.62</td>
<td>2.79</td>
</tr>
<tr>
<td>22.</td>
<td>Punjab</td>
<td>13.50</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>23.</td>
<td>Rajasthan</td>
<td>577.64</td>
<td>454.65</td>
<td>597.94</td>
</tr>
<tr>
<td>24.</td>
<td>Sikkim</td>
<td>87.19</td>
<td>322.17</td>
<td>177.01</td>
</tr>
<tr>
<td>25.</td>
<td>Tamil Nadu</td>
<td>167.02</td>
<td>25.35</td>
<td>16.9</td>
</tr>
<tr>
<td>26.</td>
<td>Tripura</td>
<td>121.00</td>
<td>51.50</td>
<td>89.56</td>
</tr>
<tr>
<td>27.</td>
<td>Uttar Pradesh</td>
<td>425.30</td>
<td>200.31</td>
<td>4.29</td>
</tr>
<tr>
<td>28.</td>
<td>Uttarakhand</td>
<td>88.23</td>
<td>179.03</td>
<td>20.64</td>
</tr>
<tr>
<td>29.</td>
<td>West Bengal</td>
<td>30.00</td>
<td>3.00</td>
<td>75.48</td>
</tr>
<tr>
<td>30.</td>
<td>Andaman &amp; Nicobar</td>
<td>52.71</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>31.</td>
<td>Chandigarh</td>
<td>5.00</td>
<td>0</td>
<td>17.12</td>
</tr>
<tr>
<td>32.</td>
<td>Pudduchery</td>
<td>6.42</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>5043.3</td>
<td>4837.58</td>
<td>3772.76</td>
</tr>
</tbody>
</table>
ANNEXURE-II REFERRED TO IN ANSWER TO PARTS (A AND B) OF THE STATEMENT IN RESPECT OF RAYJA SABHA UNSTARRED QUESTION NO. 3110 DUE FOR ANSWER ON 23.04.2013 REGARDING ‘CONSERVATION OF ANCIENT AND TRADITIONAL MEDICINAL PLANTS’.

Details of release of funds under the Centrally Sponsored Scheme “National Mission on Medicinal Plants” during last three years

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>State</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Andhra Pradesh</td>
<td>700.00</td>
<td>518.43</td>
<td>834.32</td>
</tr>
<tr>
<td>2</td>
<td>Arunachal Pradesh</td>
<td>58.85</td>
<td>285.14</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>Assam</td>
<td>332.80</td>
<td>114.52</td>
<td>162.81</td>
</tr>
<tr>
<td>5</td>
<td>Chhattisgarh</td>
<td>0</td>
<td>186.96</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>Gujarat</td>
<td>0</td>
<td>47.35</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>Haryana</td>
<td>0</td>
<td>85.46</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>Himachal Pradesh</td>
<td>106.11</td>
<td>84.30</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>Jharkhand</td>
<td>165.18</td>
<td>257.61</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>Karnataka</td>
<td>372.22</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>Kerala</td>
<td>96.14</td>
<td>223.17</td>
<td>210.41</td>
</tr>
<tr>
<td>13</td>
<td>Madhya Pradesh</td>
<td>737.58</td>
<td>302.93</td>
<td>474.58</td>
</tr>
<tr>
<td>14</td>
<td>Maharashtra</td>
<td>243.49</td>
<td>327.08</td>
<td>0</td>
</tr>
<tr>
<td>15</td>
<td>Manipur</td>
<td>0</td>
<td>138.54</td>
<td>57.6</td>
</tr>
<tr>
<td>16</td>
<td>Meghalaya</td>
<td>68.50</td>
<td>91.62</td>
<td>0</td>
</tr>
<tr>
<td>17</td>
<td>Mizoram</td>
<td>124.05</td>
<td>160.12</td>
<td>8.91</td>
</tr>
<tr>
<td>18</td>
<td>Nagaland</td>
<td>181.63</td>
<td>181.12</td>
<td>188.47</td>
</tr>
<tr>
<td>19</td>
<td>Orissa</td>
<td>166.69</td>
<td>475.58</td>
<td>111</td>
</tr>
<tr>
<td>20</td>
<td>Punjab</td>
<td>96.00</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>21</td>
<td>Rajasthan</td>
<td>100.00</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>22</td>
<td>Sikkim</td>
<td>4.17</td>
<td>91.10</td>
<td>161.94</td>
</tr>
<tr>
<td>23</td>
<td>Tamil Nadu</td>
<td>834.70</td>
<td>961.39</td>
<td>741.5</td>
</tr>
<tr>
<td>24</td>
<td>Tripura</td>
<td>0.00</td>
<td>84.00</td>
<td>0</td>
</tr>
<tr>
<td>25</td>
<td>Uttar Pradesh</td>
<td>0.00</td>
<td>0</td>
<td>834.54</td>
</tr>
<tr>
<td>26</td>
<td>Uttarakhand</td>
<td>280.98</td>
<td>262.73</td>
<td>0</td>
</tr>
<tr>
<td>27</td>
<td>West Bengal</td>
<td>107.54</td>
<td>0.00</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>4776.63</td>
<td>4879.15</td>
<td>3786.08</td>
</tr>
</tbody>
</table>
ANNEXURE-III REFERRED TO IN ANSWER TO PARTS (C) OF THE STATEMENT IN RESPECT OF RAJYA SABHA UNSTARRED QUESTION NO. 3110 DUE FOR ANSWER ON 23.04.2013 REGARDING ‘CONSERVATION OF ANCIENT AND TRADITIONAL MEDICINAL PLANTS’.

Details of release of funds under the Centrally Sponsored Scheme “Integrated Development of Wildlife Habitats” during last three years

( in lakhs)

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of the State/UTs</th>
<th>2010-11</th>
<th>2011-12</th>
<th>2012-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>A&amp; N Islands</td>
<td>87.872</td>
<td>127.06</td>
<td>109.50</td>
</tr>
<tr>
<td>2.</td>
<td>Andhra Pradesh</td>
<td>64.341</td>
<td>71.50</td>
<td>180.335</td>
</tr>
<tr>
<td>3.</td>
<td>Arunachal Pradesh</td>
<td>213.197</td>
<td>168.11</td>
<td>162.375</td>
</tr>
<tr>
<td>4.</td>
<td>Assam</td>
<td>186.63</td>
<td>234.17</td>
<td>146.00</td>
</tr>
<tr>
<td>5.</td>
<td>Bihar</td>
<td>19.889</td>
<td>00</td>
<td>64.685</td>
</tr>
<tr>
<td>6.</td>
<td>Chhattisgarh</td>
<td>281.966</td>
<td>241.783</td>
<td>449.565</td>
</tr>
<tr>
<td>7.</td>
<td>Chandigarh</td>
<td>12.29</td>
<td>19.98</td>
<td>00</td>
</tr>
<tr>
<td>8.</td>
<td>Dadra &amp; Nagar Haveli</td>
<td>00</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>10.</td>
<td>Gujarat</td>
<td>1106.749</td>
<td>1126.589</td>
<td>517.926</td>
</tr>
<tr>
<td>11.</td>
<td>Haryana</td>
<td>15.114</td>
<td>28.70</td>
<td>52.00</td>
</tr>
<tr>
<td>12.</td>
<td>Himachal Pradesh</td>
<td>253.80</td>
<td>242.1104</td>
<td>318.966</td>
</tr>
<tr>
<td>14.</td>
<td>Jharkhand</td>
<td>63.64</td>
<td>64.2615</td>
<td>81.6195</td>
</tr>
<tr>
<td>15.</td>
<td>Karnataka</td>
<td>412.252</td>
<td>335.851</td>
<td>434.5018</td>
</tr>
<tr>
<td>16.</td>
<td>Kerala</td>
<td>366.786</td>
<td>941.79</td>
<td>1210.08</td>
</tr>
<tr>
<td>17.</td>
<td>Madhya Pradesh</td>
<td>635.366</td>
<td>506.164</td>
<td>467.707</td>
</tr>
<tr>
<td>18.</td>
<td>Maharashtra</td>
<td>343.32</td>
<td>322.391</td>
<td>425.883</td>
</tr>
<tr>
<td>19.</td>
<td>Manipur</td>
<td>88.316</td>
<td>86.65</td>
<td>73.925</td>
</tr>
<tr>
<td>20.</td>
<td>Meghalaya</td>
<td>58.03</td>
<td>43.80</td>
<td>22.08</td>
</tr>
<tr>
<td>21.</td>
<td>Mizoram</td>
<td>707.763</td>
<td>153.445</td>
<td>96.392</td>
</tr>
<tr>
<td>22.</td>
<td>Nagaland</td>
<td>33.595</td>
<td>30.333</td>
<td>25.855</td>
</tr>
<tr>
<td>23.</td>
<td>Odisha</td>
<td>315.331</td>
<td>331.2651</td>
<td>368.2084</td>
</tr>
<tr>
<td>24.</td>
<td>Punjab</td>
<td>25.12</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>25.</td>
<td>Rajasathan</td>
<td>348.068</td>
<td>291.387</td>
<td>478.249</td>
</tr>
<tr>
<td>26.</td>
<td>Sikkim</td>
<td>183.78</td>
<td>131.793</td>
<td>177.579</td>
</tr>
<tr>
<td>27.</td>
<td>Tamil Nadu</td>
<td>334.449</td>
<td>256.027</td>
<td>258.479</td>
</tr>
<tr>
<td>28.</td>
<td>Tripura</td>
<td>2.84</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>29.</td>
<td>Uttar Pradesh</td>
<td>296.179</td>
<td>204.371</td>
<td>319.09</td>
</tr>
<tr>
<td>30.</td>
<td>Uttarakhand</td>
<td>134.90</td>
<td>201.144</td>
<td>220.27</td>
</tr>
<tr>
<td>31.</td>
<td>West Bengal</td>
<td>276.385</td>
<td>246.425</td>
<td>164.135</td>
</tr>
<tr>
<td>32.</td>
<td>Delhi</td>
<td>00</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td>33.</td>
<td>Daman &amp; Diu</td>
<td>00</td>
<td>00</td>
<td>00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>7438.183</td>
<td>6873.643</td>
<td>7489.4845</td>
</tr>
</tbody>
</table>

****

GOVERNMENT OF INDIA
MINISTRY OF COMMERCE AND INDUSTRY
RAJYA SABHA
UNSTARRED QUESTION NO-1877
ANSWERED ON-29.08.2012
Grant of patents for indigenous medicinal plants to foreign companies

10 Compiled by ENVIS Centre, WWF-India 11/8/2013
1877. DR. V. MAITREYAN

(a) whether Government has granted patents to certain foreign companies for the indigenous medicinal plants and their products;
(b) if so, the number of such companies which have been provided the patents and the names of the drugs for which it has been granted;
(c) the likely impact of this decision on the conservation of the medicinal plants and their products in the country;
(d) whether the Government has held any discussion with the State Governments before taking such decisions;
(e) if so, the details thereof; and
(f) if not, the reasons therefor?

ANSWER
THE MINISTER OF STATE IN THE MINISTRY OF COMMERCE AND INDUSTRY
(SHRI JYOTIRADITYA M. SCINDIA)

(a) to (f): A statement is laid on the Table of the House.

*****

STATEMENT REFERED TO IN REPLY TO RAJYA SABHA UNSTARRED QUESTION NO. 1877 REGARDING GRANT OF PATENTS FOR INDIGENOUS MEDICINAL PLANTS TO FOREIGN COMPANIES FOR ANSWER ON 29.08.2012.

(a) & (b): Medicinal plants as well as the products derived from Medicinal Plants which is traditional knowledge or which is an aggregation or duplication of known properties of traditionally known component or components are not patentable under Section 3(j) and Section 3(p) of the Patents Act, 1970 respectively. However, substantial improvement in products derived from medicinal plants, which fulfils the criteria prescribed for patentability in the Patent Act, 1970, can be granted patents. So far, twenty one (21) such patents have been granted to foreign companies. The details of the patents granted are enclosed at Annexure.

(c) to (f): The Biodiversity Act, 2002 takes into account the impact of awarding an intellectual property to a product derived from medicinal plants, on the conservation of the medicinal plant. This process is carried out in consultation with state level biodiversity authorities. Section 6(i) of the Biological Diversity Act which states that “No person shall apply for any intellectual property right by whatever name called, in or outside India for any invention based on any research or information on a biological resource obtained from India without obtaining the previous approval of the National Biodiversity Authority before making such application”. However, this provision is subject to Section 40 of the Biodiversity Act, 2002 which states that the Central Government may, in consultation with the National Biodiversity Authority, by notification in the Official Gazette, declare that the provisions of this Act shall not apply to any items, including biological resources normally traded as commodities. Ministry of Environment & Forests vide their Notification dated 26th October 2009, has declared that the provisions of the Act would not apply on 190 biological resources which are normally traded as commodities.

*****

ANNEXURE REFERED TO IN REPLY TO RAJYA SABHA UNSTARRED QUESTION NO. 1877 REGARDING GRANT OF PATENTS FOR INDIGENOUS MEDICINAL PLANTS TO FOREIGN COMPANIES FOR ANSWER ON 29.08.2012.
<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Patent No</th>
<th>Title</th>
<th>Patentee</th>
<th>Nationality</th>
<th>Indian Medicinal plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>248562</td>
<td>AN ANTIOXIDANT-PROMOTING COMPOSITION</td>
<td>LIFELINE NUTRACEUTICALS CORPORATION</td>
<td>U.S.A.</td>
<td>This medicinal composition contains plant extract of turmeric plant, which is of Indian origin.</td>
</tr>
<tr>
<td>2</td>
<td>231692</td>
<td>COMPOSITIONS FOR PREVENTING OR TREATING POLLENOSIS, ALLERGIC NEPHRITIS, ATOPIC DERMATITIS, ASTHMA OR URTICARIA.</td>
<td>MATSUURA YAKUGYO CO., LTD.</td>
<td>Japan</td>
<td>The first plant used in this composition is Cucurbita moschata is basically originating from either Central America or northern South America, but is also widely cultivated in India. The second plant used in the composition is Carthamus tinctorius, which is grown/ cultivated in India.</td>
</tr>
<tr>
<td>3</td>
<td>213308</td>
<td>A NUTRITIONAL SUPPLEMENT</td>
<td>THE QUIGLEY CORPORATION</td>
<td>U.S.A.</td>
<td>This composition contains extract of turmeric plant, which is of Indian origin.</td>
</tr>
<tr>
<td>4</td>
<td>190850</td>
<td>PROCESS FOR THE PREPARATION OF HERBAL PHARMACEUTICAL COMPOSITION FOR THE MANAGEMENT OF MENOPAUSAL SYNDROME</td>
<td>UNITED GLOBAL VENTURES LIMITED</td>
<td>Hongkong (China)</td>
<td>The medicinal plant used in this composition is Tinospora cordifolia, which is known by the common name Guduchi, is an herbaceous vine of the family Menispermaceae indigenous to the tropical areas of India.</td>
</tr>
<tr>
<td>5</td>
<td>243564</td>
<td>A PROCESS FOR THE PREPARATION OF A HERBAL COMPOSITION FOR THE TREATMENT OF VIRAL INFECTIONS</td>
<td>SAGE R&amp;D</td>
<td>U.S.A.</td>
<td>Compositions derived from Chinese herbal medicines. Aeginetia indica is the active ingredient found in India too.</td>
</tr>
<tr>
<td>6</td>
<td>211690</td>
<td>PROCESS FOR PREPARATION OF A COMPOSITION FOR BOTH HUMAN AND VETERINARY APPLICATION</td>
<td>ROPAPHARM B.V.</td>
<td>Netherland s</td>
<td>The first plant material used in the claimed composition is Origanum vulgare, which is a common species of Origanum, a genus of the mint family (Lamiaceae). It is native to warm-temperate western and southwestern Eurasia and the Mediterranean region.</td>
</tr>
<tr>
<td>7</td>
<td>242831</td>
<td>AN ANTI-MICROBIAL COMPOSITION</td>
<td>THE QUIGLEY CORPORATION</td>
<td>U.S.A.</td>
<td>The first ingredient used in this composition is ginger powder extract, which consumed as a delicacy, medicine, or spice. Ginger cultivation began in South Asia and has since spread to East Africa and the Caribbean.</td>
</tr>
<tr>
<td>8</td>
<td>219874</td>
<td>A COMPOSITION USEFUL FOR THE TREATMENT OF VIRAL INFECTIONS IN AN ANIMAL</td>
<td>SAGE R &amp; D</td>
<td>U.S.A.</td>
<td>This composition is derived from Chinese herbal medicines, medicinal plants and extracts thereof. Aeginetia indica is the active ingredient found in India too.</td>
</tr>
<tr>
<td>9</td>
<td>221614</td>
<td>A HERBAL INJECTION AND A METHOD TO PRODUCE THE SAME</td>
<td>MAOXIANG WANG</td>
<td>China</td>
<td>The plant material used in this composition is from genus Ixeris, which is flowering plants in the daisy family. The active ingredient of this plant is used in Chinese traditional medicine. Ixeris Sonchifolia found in India too.</td>
</tr>
<tr>
<td>No.</td>
<td>Number</td>
<td>Title</td>
<td>Applicant/Inventor/Company</td>
<td>Country</td>
<td>Details</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>----------------------------------------------------------------------</td>
<td>----------------------------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>10</td>
<td>200879</td>
<td>COMPOSITION FOR HEART DISEASE, METHOD TO PREAPARE SAME</td>
<td>TIANJIN TASLY PHARMACEUTICA L CO., LTD.</td>
<td>China</td>
<td>The plant material used in this composition is Salvia miltiorrhiza, which is also known as red sage, Chinese sage, tan shen, or danshen. It is a perennial plant in the genus Salvia, highly valued for its roots in traditional Chinese medicine. Native to China and Japan.</td>
</tr>
<tr>
<td>11</td>
<td>209391</td>
<td>NEGATIVELY CHARGED POLYSACCHARIDE DERIVABLE FROM ALOE VERA AND A PROCESS FOR PREPARING THE SAME</td>
<td>2QR RESEARCH BV</td>
<td>Netherland s</td>
<td>The medicinal plant used in this product is Aloe vera. The large scale agricultural production of Aloe vera is undertaken in Pakistan, Australia, Bangladesh, Cuba, the Dominican Republic, China, Mexico, India, Jamaica, Kenya, South Africa and USA.</td>
</tr>
<tr>
<td>12</td>
<td>214166</td>
<td>HERBAL COMPOSITION FOR ANGINA PECTORIS, METHOD TO PREPARE SAME AND USES THEREOF</td>
<td>TIANJIN TASLY PHARMACEUTICA L CO., LTD.</td>
<td>China</td>
<td>The medicinal plant used in the said compositions is native to Japan and China</td>
</tr>
<tr>
<td>13</td>
<td>219566</td>
<td>NUTRACEUTICAL FOR THE PREVENTION AND TREATMENT OF CANCERS AND DISEASES AFFECTING THE LIVER</td>
<td>BUI, CUONG, Q.</td>
<td>USA</td>
<td>The product contains the compositions from the medicinal plants Aloe Vera and Brassica oleracea, which are grown in other countries alongwith India widely.</td>
</tr>
<tr>
<td>14</td>
<td>238006</td>
<td>A PHARMACEUTICAL COMPOSITION FOR THE TREATMENT OF PROSTATIC HYPERPLASIA AND PROSTATITIS</td>
<td>BRIGHT FUTURE PHARMACEUTICA L LABORATORIES LIMITED</td>
<td>Hong Kong</td>
<td>The medicinal plants used in the said composition are endemic to southern China, with further outposts in Europe, and central, southern and eastern Asia.</td>
</tr>
<tr>
<td>15</td>
<td>221711</td>
<td>A PROCESS FOR PREPARING A NOVEL MEDICAMENT MIXTURE</td>
<td>SULEIMAN DADO</td>
<td>Austria</td>
<td>The process involves mixing honey, olive oil and optionally one or more of: beeswax, propolis, camomile, sage, Aloe vera, thyme, lavender and/or various oils.</td>
</tr>
<tr>
<td>16</td>
<td>244699</td>
<td>AN IMPROVED COMPOSITION OF A DRUG</td>
<td>MALIREDDY S. REDDY</td>
<td>USA</td>
<td>The drug is selected from the group consisting of herbal drugs, allopathic drugs, periodontal drugs, and combinations thereof.</td>
</tr>
<tr>
<td>17</td>
<td>206049</td>
<td>A METHOD OF PRODUCING A HERBAL COMPOSITION FOR ANGINA PECTORIS METHOD TO PREPARE SAME AND USES THEREOF</td>
<td>TIANJIN TASLY PHARMACEUTICA L CO., LTD.</td>
<td>China</td>
<td>The medicinal plant used in the said compositions is native to Japan and China</td>
</tr>
<tr>
<td>18</td>
<td>216577</td>
<td>HERBAL COMPOSITION FOR</td>
<td>TIANJIN TASLY PHARMACEUTICA</td>
<td>China</td>
<td>The medicinal plant used in the said compositions is native to Japan and China</td>
</tr>
<tr>
<td>No.</td>
<td>Code</td>
<td>Description</td>
<td>Country</td>
<td>Details</td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>------</td>
<td>----------------------------------------------------------------------------</td>
<td>-------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>252990</td>
<td><strong>NOVEL ANALGESIC COMPOUNDS, EXTRACTS CONTAINING SAME AND METHODS OF PREPARATION</strong></td>
<td>Griffith University, Australia</td>
<td>Various compounds useful as analgesic compounds are obtained from plants of the Barringtonia species which is a species native to mangrove habitats on the tropical coasts and islands of the Indian Ocean and western Pacific Ocean from Zanzibar east to Taiwan, the Philippines, Fiji, New Caledonia, the Cook Islands, Wallis and Futuna and French Polynesia. This species is grown along streets for decorative and shade purposes in some parts of India, for instance in some towns on southeastern shore.</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>248562</td>
<td><strong>AN ANTIOXIDANT-PROMOTING COMPOSITION</strong></td>
<td>Lifeline Nutraceuticals Corporation, U.S.A.</td>
<td>An antioxidant-promoting composition that increase antioxidant defense potential in a subject is disclosed comprising Bacopa monniera extract; milk thistle extract, ashwagandha powder, green tea extract, Gotu cola powder, Ginko biloba leaf extract; Aloe vera powder; turmeric extract. These species are grown in India.</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>252509</td>
<td><strong>PHARMACEUTICAL, THERAPEUTIC, AND DIETARY COMPOSITIONS DERIVED FROM LEAVES OF LAGERSTROEMIA SPECIOSAL I. PLANT</strong></td>
<td>Renaissance Herbs, Inc., U.S.A.</td>
<td>The present invention relates to pharmaceutical, therapeutic, and dietary compositions derived from leaf of the Lagerstroemia species. Such compounds show combined effects that are both additive and synergistic regarding improved glucose cellular uptake, reduction in blood glucose, insulin efficiency and the simultaneous reduction in assimilation of sugars and starches, and weight loss. It is grown in South East Asia, Philippines and India.</td>
<td></td>
</tr>
</tbody>
</table>

*****

GOVERNMENT OF INDIA  
MINISTRY OF HEALTH AND FAMILY WELFARE  
RAJYA SABHA  
UNSTARRED QUESTION NO-2273  
ANSWERED ON-23.08.2011  
CULTIVATION OF MEDICINAL PLANTS.  
2273. SHRI KALRAJ MISHRA
Medicinal Plants – Highlighted in Rajya Sabha from 2005 to till date (Monsoon Session, 2013)

(a) whether cultivation of medicinal plants has been a great source of medicines for treatment of many serious diseases;

(b) if so, the steps taken by Government to encourage the plantation of such plants during the last three years; and

(c) the growth recorded in cultivation of such plants during this period?

ANSWER

THE MINISTER OF HEALTH & FAMILY WELFARE

(SHRI GHULAM NABI AZAD)

(a) Yes. Medicinal plants has been the great source of medicines for treatment of many diseases in traditional systems of medicine. The medicinal plants material are obtained through cultivation and collection.

(b) & (c) : Government has set up the National Medicinal Plants Board (NMPB) to coordinate matters related to overall development of medicinal plants sector. The NMPB is implementing Centrally Sponsored Scheme of “National Mission on Medicinal Plants”. Under the scheme cultivation of prioritized medicinal plants is supported and farmers are given subsidy for the cultivation of these plants in cluster mode. For the implementation of the scheme financial assistance has been provided by the National Medicinal Plants Board to 26 states viz. Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Himachal Pradesh, Haryana, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Uttar Pradesh, Uttarakhand and West Bengal. The NMPB has provided assistance for cultivation of medicinal plants over 7769 ha., 20349.05 ha., and 24249.5 ha. In 2008-09, 2009-10 and 2010-11 respectively.

---------

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
UNSTARRED QUESTION NO-2077
ANSWERED ON-15.03.2011
SCHEMES FOR PROMOTING MEDICINAL PLANTS .
2077 . SHRI NAND KUMAR SAI

(a) whether India is one of the 17 mega bio-diversity rich countries which have 7 per cent of the world’s bio-
diversity;

(b) if so, whether Government have any schemes for promotion of medicinal plants in the country;

(c) if so, the details in this regard;

(d) the names of the States in which each of the schemes are being implemented by various agencies; and

(e) the details and the nature of assistance provided by Government under each of such schemes during 2009-10 and 2010-11 to various States?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE

(SHRI GHULAM NABI AZAD)
(a): Yes. According to Ministry of Environment & Forests, India is one of the 17 recognized mega-diverse countries rich in biological diversity. India accounts for about 7-8% of the world’s recorded species.

(b) to (e): Yes. Government has set-up the National Medicinal Plants Board (NMPB) to coordinate with Ministries / Departments / Organizations / States / UT Governments for development of medicinal plants. The NMPB has been implementing schemes viz. Central Sector Scheme for “Conservation, Development and Sustainable Management of Medicinal Plants” and Centrally Sponsored Scheme of “National Mission on Medicinal Plants” during the 11th Plan w.e.f. year 2008-09. Under Central Sector Scheme financial assistance is provided on project basis for in-situ / ex-situ conservation, Research & Development, Survey / inventorization / documentation to various organizations in Government / Semi Government / Non Government Sector. Funds amounting to Rs. 36.56 crores during the year 2009-10 and Rs. 45.4 crores during the year 2010-11 (as on 28-02-2011) were released for projects of various agencies in states viz. Andaman & Nicobar, Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Delhi, Goa, Gujarat, Haryana, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttarakhand, Uttar Pradesh and West Bengal under the scheme.

The scheme of National Mission on Medicinal Plants aims at supporting market driven cultivation of prioritized medicinal plants and is being implemented in a mission mode for cultivation of identified medicinal plants through growers, farmers, cultivators, Growers Associations, Federations, Self Help Groups, Corporates and Growers Cooperatives with backward and forward linkages. Under the scheme financial support is provided for nursery, cultivation, post harvest management, processing and value addition and management support. Funds amounting to Rs. 69.25 crores during the year 2009-10 and Rs. 46.4183 crores during the year 2010-11 (as on 28-02-2011) were released to States under the scheme as detailed in the Annexure.

National Afforestation and Eco-Development Board (NAEB), Ministry of Environment & Forests is providing funds to the States under Centrally Sponsored Scheme of National Afforestation Programme (NAP) Scheme for regeneration of degraded forests and adjoining areas in the country. Under NAP Scheme, the funds are provided to States for plantation under seven models of which two models viz. “Mixed plantation of trees having Minor Forest Produce (MFP) and medicinal value” and “Regeneration of perennial herbs and shrubs of medicinal value” are aimed at regenerating medicinal plants also. An amount of Rs. 318 crores was released for National Afforestation Programme during year 2009-10 and Rs. 255 crores during year 2010-11 (as on 28-02-2011).

The Department of Bio-technology is implementing a Research & Development scheme on Biotechnology for Medicinal and Aromatic Plants on the application of biotechnology tools and techniques for conservation, characterization, propagation, isolation and characterization of novel bioactives with therapeutic potential and developing standardized herbal products. Under this scheme, projects have been supported at different institutions located in various states in the country. The states include Nagaland, Assam, Karnataka, Maharashtra, Jammu & Kashmir, West Bengal, Kerala, Himachal Pradesh, Madhya Pradesh, Uttar Pradesh, Manipur and Delhi. An
amount of Rs. 216.70 lakhs was spent for the above scheme during 2009-10 and Rs. 378.40 lakhs spent so far during the current financial year 2010-11 for the above scheme.

---------

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
UNSTARRED QUESTION NO-1337
ANSWERED ON-08.03.2011
ENCOURAGEMENT TO CULTIVATION OF HERBAL AND MEDICINAL PLANTS.
1337. SHRIMATI BIMLA KASHYAP SOOD

(a) the details of production of herbal and medicinal plants across the country especially in Himachal Pradesh, Uttarakhand and North Eastern States during the last three years, State-wise; and

(b) the assistance provided for encouraging the cultivation of herbal and medicinal plants during the last three years and the current year?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE

(SHRI GHULAM NABI AZAD)

(a): According to a study conducted by the National Medicinal Plants Boards through the Foundation for Revitalization of Local Health Tradition (FRLHT), Bangalore, the total production of medicinal plants in the country was estimated to be about 3.19 lakhs metric tones for the year 2005-06. Most of the medicinal plants are sourced from the forests and wastelands. In all 960 medicinal plants are traded, out of which 178 species have annual consumption of more than 100 metric tones (MTs). However, specific information is not available on the state-wise production of herbal and medicinal plants.

(b): The National Medicinal Plants Board (NMPB), Department of AYUSH has been implementing a Centrally Sponsored Scheme of “National Mission on Medicinal Plants” during the 11th Plan w.e.f. 2008-09. The scheme aims at supporting market driven cultivation of prioritized medicinal plants and is being implemented in a mission mode for cultivation through growers, farmers, cultivators, Growers Associations, Federations, Self Help Groups, Corporates and Growers Co-operatives with backward and forward linkages. Under the scheme financial support is provided for nursery, cultivation, post harvest management, processing and value addition and management support. Under the scheme following assistance was provided:

Year Amount of assistance (Rs. in lakhs)
2007-08 2935.16
2008-09 6925.08
2009-10 6925.08
2010-11 4641.83

(till 28-02-2011) 4641.83
The Board had also previously supported Contractual Farming under Central Sector Scheme since 2002-03 under which financial assistance was provided to farmers / growers for cultivation of identified medicinal plants @ 30% of total expenditure to a maximum of Rs. 9.00 lakhs for cultivation of prioritized medicinal plants. The Department of Agriculture & Cooperation also launched a Centrally Sponsored Scheme on National Horticulture Mission (NHM) in the country, during the 10th Plan with effect from 2005-06 for holistic development of horticulture sector duly ensuring forward and backward linkages with the active participation of all the stakeholders. All the States and Union Territories were covered under the Mission except the eight North Eastern States including Sikkim and the States of Jammu & Kashmir, Himachal Pradesh and Uttarakhand which had been covered under the Horticulture Mission for North East and Himalayan States (HMNEHS).

The promotion of Medicinal Plants was included as one of the component under NHM since 2007-08. Funds were provided for cultivation of Medicinal Plants @ 75% of the total cost subject to a maximum of Rs. 11,250/- per ha. limited to 4 ha. per beneficiary. In view of implementation of National Mission on Medicinal Plants by NMPB the development of medicinal plants has been excluded from National Horticulture Mission Scheme since 2009-10. Financial Assistance was provided under the scheme as follows: Year Amount of assistance (Rs. in lakhs)

- 2007-08 435.47
- 2008-09 413.00

......

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
UNSTARRED QUESTION NO-719
ANSWERED ON-01.03.2011

PROMOTION OF CULTIVATION OF MEDICINAL PLANTS IN THE COUNTRY

719. SHRI B.S. GNANADESIKAN

(a) whether it is a fact that many medicinal plants are under the danger of diminishing in the country;
(b) if so, the details thereof; and
(c) the details of steps taken by Government to identify and promote the cultivation of medicinal plants in the country?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE

(SHRI GHULAM NABI AZAD)

(a) & (b) According to Botanical Survey of India many medicinal plants in the country are threatened and vulnerable. Following are the threatened and vulnerable medicinal plants of India:-


2. Red List of Threatened Vascular Plant Species in India (Rao et al. 2003)

(c) The National Medicinal Plants Board (NMPB), Department of AYUSH has been implementing a Centrally Sponsored Scheme of “National Mission on Medicinal Plants” with a total outlay of Rs. 630 crores during the 11th Plan. The scheme aims at supporting market driven cultivation of prioritized medicinal plants and is being implemented in a mission mode for cultivation through growers, farmers, cultivators, Growers Associations, Federations, Self Help Groups, Corporates and Growers Co-operatives with backward and forward linkages. The scheme is being implemented since 2008-09. Under the scheme financial support is provided for nursery, cultivation, post harvest management, processing and value addition and management support. For the implementation of the scheme financial assistance has been provided to 26 States viz. Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Himachal Pradesh, Haryana, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Uttar Pradesh, Uttarakhand and West Bengal by National Medicinal Plants Board amounting to total Rs. 2935.15 lacs, Rs. 6925.00 lacs and Rs. 4641.83 lacs during 2008-09, 2009-10 and 2010-11 (till 31st January, 2011) respectively.

The Board had also previously supported Contractual Farming under Central Sector scheme since 2002-03 under which financial assistance was provided to farmers / growers for cultivation of identified medicinal plants @ 30% of total expenditure to a maximum of Rs. 9.00 lakhs for cultivation of prioritized medicinal plants.

The Department of Agriculture & Cooperation also launched a Centrally Sponsored Scheme on National Horticulture Mission (NHM) in the country, during the 10th Plan with effect from 2005-06 for holistic development of horticulture sector duly ensuring forward and backward linkages with the active participation of all the stakeholders. All the States and Union Territories were covered under the Mission except the eight North Eastern States including Sikkim and the States of Jammu & Kashmir, Himachal Pradesh and Uttarakhand which had been covered under the Horticulture Mission for North East and Himalayan States (HMNEHS). The promotion of Medicinal Plants was included as one of the component under NHM since 2007-08. Funds were provided for cultivation of Medicinal Plants @ 75% of the total cost subject to a maximum of Rs. 11,250/- per ha. limited to 4 ha. per beneficiary. In view of implementation of National Mission on Medicinal Plants by NMPB the development of medicinal plants has been excluded from National Horticulture Mission Scheme since 2009-10.

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
DEPARTMENT OF AYURVEDA, YOGA & NATUROPATHY
UNANI, SIDDHA AND HOMOEOPATHY

RAJYA SABHA
UNSTARRED QUESTION NO.719
TO BE ANSWERED ON 1ST MARCH, 2011
PROMOTION OF CULTIVATION OF MEDICINAL PLANTS IN THE COUNTRY

719. SHRI B.S. GNANADESIKAN:

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

(a) whether it is a fact that many medicinal plants are under the danger of diminishing in the country;

(b) if so, the details thereof; and

(c) the details of steps taken by Government to identify and promote the cultivation of medicinal plants in the country?
ANSWER
THE MINISTER OF HEALTH AND FAMILY WELFARE
(SHRI GHULAM NABI AZAD)

(a) & (b) According to Botanical Survey of India many medicinal plants in the country are threatened and vulnerable. Following are the threatened and vulnerable medicinal plants of India:-


2. Red List of Threatened Vascular Plant Species in India (Rao et al. 2003)

(c) The National Medicinal Plants Board (NMPB), Department of AYUSH has been implementing a Centrally Sponsored Scheme of “National Mission on Medicinal Plants” with a total outlay of Rs. 630 crores during the 11th Plan. The scheme aims at supporting market driven cultivation of prioritized medicinal plants and is being implemented in a mission mode for cultivation through growers, farmers, cultivators, Growers Associations, Federations, Self Help Groups, Corporates and Growers Co-operatives with backward and forward linkages. The scheme is being implemented since 2008-09. Under the scheme financial support is provided for nursery, cultivation, post harvest management, processing and value addition and management support. For the implementation of the scheme financial assistance has been provided to 26 States viz. Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Himachal Pradesh, Haryana, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Uttar Pradesh, Uttarakhand and West Bengal by National Medicinal Plants Board amounting to total Rs. 2935.15 lacs, Rs. 6925.00 lacs and Rs. 4641.83 lacs during 2008-09, 2009-10 and 2010-11 (till 31st January, 2011) respectively.

The Board had also previously supported Contractual Farming under Central Sector scheme since 2002-03 under which financial assistance was provided to farmers / growers for cultivation of identified medicinal plants @ 30% of total expenditure to a maximum of Rs. 9.00 lakhs for cultivation of prioritized medicinal plants.

The Department of Agriculture & Cooperation also launched a Centrally Sponsored Scheme on National Horticulture Mission (NHM) in the country, during the 10th Plan with effect from 2005-06 for holistic development of horticulture sector duly ensuring forward and backward linkages with the active participation of all the stakeholders. All the States and Union Territories were covered under the Mission except the eight North Eastern States including Sikkim and the States of Jammu & Kashmir, Himachal Pradesh and Uttarakhand which had been covered under the Horticulture Mission for North East and Himalayan States (HMNEHS). The promotion of Medicinal Plants was included as one of the component under NHM since 2007-08. Funds were provided for cultivation of Medicinal Plants @ 75% of the total cost subject to a maximum of Rs. 11,250/- per ha. limited to 4 ha. per beneficiary. In view of implementation of National Mission on Medicinal Plants by NMPB the development of medicinal plants has been excluded from National Horticulture Mission Scheme since 2009-10.

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
UNSTARRED QUESTION NO-2239
ANSWERED ON-30.11.2010
CONSERVATION DEVELOPMENT AND MANAGEMENT OF MEDICINAL PLANTS.
(a) whether a large number of medicinal plants in the country are on the verge of extinction;

(b) if so, the details thereof; and

(c) the steps taken by Government for the conservation, development and sustainable management of medicinal plants in the country along with the achievements made as a result thereof?

ANSWER

THE MINISTER OF STATE FOR HEALTH & FAMILY WELFARE

(SHRI S. GANDHISELVAN)

(a) & (b) According to the Botanical Survey of India, it is feared that 18948 vascular plants including a number of medicinal plants are prone to extinction due to various anthropogenic activities. The threatened medicinal plants are: Aconitum balfouri, A. chasmantium, 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, Cuscium fenestrum, Dactylorhiza hatagirea, Dioscorea deltoidea, Elaeocarpus prunifolius, Ephedra gerardiana, Gentiana kurooa, Gloriosa superba, Hedychium spicatum, Hyoscyamus niger, Hydnocarpus macrocarpa, Iphigenia indica, I. pallida, I. stellata, Kolanchoe roseus, Madhuca insignis, Nardostachys grandiflora, Panax pseudoginseng, Picrorhiza kurrooa, Podophyllum hexandrum, Pterocarpus santalinus, Rauwolfia serpentina, Rheum emodi, Saussurea bracteata, S. costus, S. gnaphalodes, Swertia chirayita, Taxus wallichiana, Taxocaupus kurzii, Urginea indica and U. maritima.

Under section 38 of Biological Diversity Act 2002, Central Government in consultation with concerned States Government may from time to time notify any species, which is on the verge of extinction or likely to become extinct in near future as a threatened species and prohibit or regulate collection thereof for any purpose and take appropriate steps to rehabilitate and preserve those species. Under the said provision of the Act, Ministry of Environment & Forest, Government of India has notified some plants which are on the verge of extinction in the States of Himachal Pradesh, Kerala, Uttar Pradesh, Uttarakhand, Mizoram, Orissa, Meghalaya, West Bengal, Goa, Madhya Pradesh and Karnataka. These plants also include few medicinal plants.

(c) Government has set up National Medicinal Plants Board (NMPB) to coordinate matters related to overall development of medicinal plants sector vide resolution dated 24th November, 2000. The Board implemented a Central Sector Scheme for overall development of medicinal plants sector during the 10th Five Year Plan. This scheme was revised and renamed as “Central Sector Scheme for Conservation, Development and Sustainable Management of Medicinal Plants” and implemented since the year 2008-09 during the 11th five year plan. Under the scheme resource augmentation of medicinal plants have been carried out over about 7167 hectare in forest areas in different States. Many Herbal Gardens, School Herbal Gardens, Home Herbal Gardens and Medicinal Plants Conservation Areas have also been established in different states under the scheme. National Medicinal Plants Board (NMPB) has also sanctioned several research projects on intercropping, quality planting material, seed standards, analysis of active ingredient, DNA fingerprinting, sustainable harvesting etc on various medicinal plants, including rare and threatened species. NMPB is also implementing Centrally Sponsored Scheme of National Mission on Medicinal Plants. The scheme aims at supporting market driven cultivation of prioritized medicinal plants. For the implementation of the scheme financial assistance has been provided by National Medicinal Plants Board to 26 States viz. Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Himachal Pradesh, Haryana, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Uttar Pradesh, Uttarakhand and West Bengal. Ministry of Environment & Forests is also supporting a number of projects on conservation of some specific medicinal plants as well as Medicinal Plants Conservation Areas (MPCAs) that are primarily forested areas. The Department of Bio Technology (DBT) had set up three national gene banks on medicinal and aromatic plants at the Central
Institute of Medicinal & Aromatic Plants (CIMAP), Lucknow; National Bureau of Plant Genetic Resources (NBPGR), New Delhi and Tropical Botanic Garden & Research Institute (TBGRI), Thiruvananthapuram for the collection, conservation and characterization of the precious wealth of medicinal & aromatic herbs which are rare/threatened/endangered or are being used in traditional systems, or those which are commercially exploited. The fourth gene bank was also established at the Regional Research Laboratory (RRL), Jammu to cover the North-Western Himalayan region. More than 5,000 accessions of important medicinal & aromatic plant species are being maintained as live material in field gene banks, in the form of seed, in vitro material and DNA. For long-term conservation the accessions are stored under cryogenic conditions. After the DBT support is over, these gene-banks are now being maintained by the concerned institutions.

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
STARRED QUESTION NO-179
ANSWERED ON-09.03.2010
DECLINE IN PRODUCTION OF MEDICINAL PLANTS
179 . SHRI RAVI SHANKAR PRASAD

(a) whether it is a fact that the yield of several rare medicinal plants is going down in the country;

(b) if so, the details thereof;

(c) the names of the rare medicinal plants being found during the last decade;

(d) whether it is also a fact that Government has formulated a scheme to enhance the production of herbal plants in the country; and

(e) if so, the States where this scheme has been implemented at present and the value of annual production of such plants there?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE

(SHRI GHULAM NABI AZAD)

(a) to (e): A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO RAJYA SABHA STARRED QUESTION NO. 179 FOR 9TH MARCH, 2010

Medicinal plant resources in the country are threatened by over exploitation to meet the demand of herbal industries. As per the information received from the Ministry of Environment and Forests, about 95% of medicinal plants used by the herbal industries are harvested from the wild primarily from forests.

The total annual demand of botanical raw drugs in the country for the year 2005-06 has been estimated as 3,19,500 MT with corresponding trade value of Rs. 1,069 crores as per the collaborative study conducted by the Department of AYUSH with the assistance of the Foundation for Revitalization of Local Health Traditions (FRLHT). In addition to above, rapid threat assessment exercises for the wild medicinal plants species occurring in different states have also been taken up. These assessments have involved conducting Conservation Assessment and Management Prioritization using International Union for Conservation of Nature and Natural Resources (IUCN) Red List Categories. These exercises have
involved undertaking assessments for a total of 359 prioritized wild medicinal plant species. Out of the 359 species taken up for assessment, 335 have been assigned Red List status ranging from Critically Endangered, Endangered, Vulnerable to Near Threatened. In addition, a total number of 15 medicinal plants species recorded in trade have been found threatened.

Some of the rare medicinal plants reported to be threatened have been relocated during the last decade including Utleria salicifolia and Hydnocarpus pentandra in Western Ghats, Gymnocladus assamicus and Begonia tessaricarpa from Arunachal Pradesh and Agapetes smithiana in Sikkim as reported by the Botanical Survey of India.

National Medicinal Plants Board which was constituted on 24th November, 2000 has been implementing a Central Sector scheme for development and cultivation of medicinal plants since the year 2000-01. This scheme was revised and renamed as “Central Sector Scheme for Conservation, Development and Sustainable Management of Medicinal Plants” during 2008-09. The States Forest Departments have been granted assistance for protection and propagation of endangered species of medicinal plants, especially used by the herbal industries. Projects for setting up of 29 Medicinal Plants Conservation Areas (MPCAs) have also been implemented in the states covering mainly the medicinal plants viz. Asoka, Guggal and Dashmool varieties. The scheme is being implemented with an outlay of Rs. 321.30 crores during the 11th Plan.

In addition to above, a new “Centrally Sponsored Scheme of National Mission on Medicinal Plants” with a total outlay of Rs. 630 crores is being implemented since 2008-09 by the National Medicinal Plants Board. A total number of 24 states viz. Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Rajasthan, Sikkim, Tamil Nadu, Uttar Pradesh, Uttar Pradesh and West Bengal have been covered so far under the scheme. Since the implementation of the Mission started only in the year 2008-09, it is too early to make any impact assessment.

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
UNSTARRED QUESTION NO-2239
ANSWERED ON-30.11.2010
CONSERVATION DEVELOPMENT AND MANAGEMENT OF MEDICINAL PLANTS.
2239. SHRIMATI MOHSINA KIDWAI

(a) whether a large number of medicinal plants in the country are on the verge of extinction;

(b) if so, the details thereof; and

(c) the steps taken by Government for the conservation, development and sustainable management of medicinal plants in the country along with the achievements made as a result thereof?

ANSWER
THE MINISTER OF STATE FOR HEALTH & FAMILY WELFARE

(SHRI S. GANDHISELVAN)

(a) & (b) According to the Botanical Survey of India, it is feared that 18948 vascular plants including a number of medicinal plants are prone to extinction due to various anthropogenic activities. The threatened medicinal plants are: Aconitum balfouri, 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

Under section 38 of Biological Diversity Act 2002, Central Government in consultation with concerned States Government may from time to time notify any species, which is on the verge of extinction or likely to become extinct in near future as a threatened species and prohibit or regulate collection thereof for any purpose and take appropriate steps to rehabilitate and preserve those species. Under the said provision of the Act, Ministry of Environment & Forest, Government of India has notified some plants which are on the verge of extinction in the States of Himachal Pradesh, Kerala, Uttar Pradesh, Uttarakhand, Mizoram, Orissa, Meghalaya, West Bengal, Goa, Madhya Pradesh and Karnataka. These plants also include few medicinal plants.

(c) Government has set up National Medicinal Plants Board (NMPB) to coordinate matters related to overall development of medicinal plants sector vide resolution dated 24th November, 2000. The Board implemented a Central Sector Scheme for overall development of medicinal plants sector during the 10th Five Year Plan. This scheme was revised and renamed as “Central Sector Scheme for Conservation, Development and Sustainable Management of Medicinal Plants” and implemented since the year 2008-09 during the 11th five year plan. Under the scheme resource augmentation of medicinal plants have been carried out over about 7167 hectare in forest areas in different States. Many Herbal Gardens, School Herbal Gardens, Home Herbal Gardens and Medicinal Plants Conservation Areas have also been established in different states under the scheme. National Medicinal Plants Board (NMPB) has also sanctioned several research projects on intercropping, quality planting material, seed standards, analysis of active ingredient, DNA fingerprinting, sustainable harvesting etc on various medicinal plants, including rare and threatened species. NMPB is also implementing Centrally Sponsored Scheme of National Mission on Medicinal Plants. The scheme aims at supporting market driven cultivation of prioritized medicinal plants. For the implementation of the scheme financial assistance has been provided by National Medicinal Plants Board to 26 States viz. Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Himachal Pradesh, Haryana, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Uttar Pradesh, Uttarakhand and West Bengal. Ministry of Environment & Forests is also supporting a number of projects on conservation of some specific medicinal plants as well as Medicinal Plants Conservation Areas (MPCAs) that are primarily forested areas. The Department of Bio Technology (DBT) had set up three national gene banks on medicinal and aromatic plants at the Central Institute of Medicinal & Aromatic Plants (CIMAP), Lucknow; National Bureau of Plant Genetic Resources (NBPRG), New Delhi and Tropical Botanic Garden & Research Institute (TBGRI), Thiruvananthapuram for the collection, conservation and characterization of the precious wealth of medicinal & aromatic herbs which are rare/threatened/endoangered or are being used in traditional systems, or those which are commercially exploited. The fourth gene bank was also established at the Regional Research Laboratory (RRL), Jammu to cover the North-Western Himalayan region. More than 5,000 accessions of important medicinal & aromatic plant species are being maintained as live material in field gene banks, in the form of seed, in vitro material and DNA. For long-term conservation the accessions are stored under cryogenic conditions. After the DBT support is over, these gene-banks are now being maintained by the concerned institutions.

-------------

GOVERNMENT OF INDIA  
MINISTRY OF HEALTH AND FAMILY WELFARE  
RAJYA SABHA  
STARRED QUESTION NO-179
DECLINE IN PRODUCTION OF MEDICINAL PLANTS.

179. Shri Ravi Shankar Prasad

(a) whether it is a fact that the yield of several rare medicinal plants is going down in the country;
(b) if so, the details thereof;
(c) the names of the rare medicinal plants being found during the last decade;
(d) whether it is also a fact that Government has formulated a scheme to enhance the production of herbal plants in the country; and
(e) if so, the States where this scheme has been implemented at present and the value of annual production of such plants there?

ANSWER

THE MINISTER OF HEALTH AND FAMILY WELFARE

(Shri Ghulam Nabi Azad)

(a) to (e): A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO RAJYA SABHA STARRED QUESTION NO. 179 FOR 9TH MARCH, 2010

Medicinal plant resources in the country are threatened by over exploitation to meet the demand of herbal industries. As per the information received from the Ministry of Environment and Forests, about 95% of medicinal plants used by the herbal industries are harvested from the wild primarily from forests.

The total annual demand of botanical raw drugs in the country for the year 2005-06 has been estimated as 3,19,500 MT with corresponding trade value of Rs. 1,069 crores as per the collaborative study conducted by the Department of AYUSH with the assistance of the Foundation for Revitalization of Local Health Traditions (FRLHT). In addition to above, rapid threat assessment exercises for the wild medicinal plants species occurring in different states have also been taken up. These assessments have involved conducting Conservation Assessment and Management Prioritization using International Union for Conservation of Nature and Natural Resources (IUCN) Red List Categories. These exercises have involved undertaking assessments for a total of 359 prioritized wild medicinal plant species. Out of the 359 species taken up for assessment, 335 have been assigned Red List status ranging from Critically Endangered, Endangered, Vulnerable to Near Threatened. In addition, a total number of 15 medicinal plants species recorded in trade have been found threatened.

Some of the rare medicinal plants reported to be threatened have been relocated during the last decade including Utleria salicifolia and Hydnocarpus pentandra in Western Ghats, Gymnocladus assamicus and Begonia tessaricarpa from Arunachal Pradesh and Agapetes smithiana in Sikkim as reported by the Botanical Survey of India.

National Medicinal Plants Board which was constituted on 24th November, 2000 has been implementing a Central Sector scheme for development and cultivation of medicinal plants since the year 2000-01. This scheme was revised and renamed as “Central Sector Scheme for Conservation, Development and Sustainable Management of Medicinal Plants” during 2008-09. The States Forest Departments have been granted assistance for protection and propagation of endangered species of medicinal plants, especially used by the herbal industries. Projects for setting up of 29 Medicinal Plants Conservation Areas (MPCAs) have also been implemented in the states covering mainly the medicinal plants viz.
Asoka, Guggal and Dashmool varieties. The scheme is being implemented with an outlay of Rs. 321.30 crores during the 11th Plan.

In addition to above, a new “Centrally Sponsored Scheme of National Mission on Medicinal Plants” with a total outlay of Rs. 630 crores is being implemented since 2008-09 by the National Medicinal Plants Board. A total number of 24 states viz. Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, Gujarat, Haryana, Jammu & Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Rajasthan, Sikkim, Tamil Nadu, Uttar Pradesh, Uttarakhand and West Bengal have been covered so far under the scheme. Since the implementation of the Mission started only in the year 2008-09, it is too early to make any impact assessment.

(a) the statistics of cultivation and production of medicinal plants; particularly Senna (Sonmukhi), Isabgol, Ashwagandha and Amla, in Rajasthan, during the last three years;

(b) the average yield per hectare of each crop, in Rajasthan year-wise, and how does it compare with best yield performance in the country;

(c) whether there is abnormal fluctuation in yield, and the reasons therefor;

(d) the average income to the farmer, per hectare, year-wise, for each crop and whether it could be termed ‘remunerative’;

(e) whether it is not desirable to fix Minimum Support Price (MSP) to boost their production; and

(f) the steps Government is contemplating to address the availability of Quality Planting Material and Marketing of the produce, which are the main problem areas for the farmer?
TO BE ANSWERED ON 1ST DECEMBER, 2009

CULTIVATION AND PRODUCTION OF MEDICINAL PLANTS

1324. DR. GYAN PRAKASH PILANIA:  
SHRI LALIT KISHORE CHATURVEDI:

Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:

(a) the statistics of cultivation and production of medicinal plants; particularly Senna (Sonmukhi), Isabgol, Ashwgandha and Amla, in Rajasthan, during the last three years;

(b) the average yield per hectare of each crop, in Rajasthan year-wise, and how does it compare with best yield performance in the country;

(c) whether there is abnormal fluctuation in yield, and the reasons therefor;

(d) the average income to the farmer, per hectare, year-wise, for each crop and whether it could be termed 'remunerative';

(e) whether it is not desirable to fix Minimum Support Price (MSP) to boost their production; and

(f) the steps Government is contemplating to address the availability of Quality Planting Material and Marketing of the produce, which are the main problem areas for the farmer?

ANSWER

THE MINISTER OF STATE FOR HEALTH & FAMILY WELFARE  
(Shri S. Gandhiselvan)

(a) The statistics of cultivation and production of medicinal plants particularly Senna, Isabgol, Ashwagandha and Amla in Rajasthan, during last three years as informed by the State Government is reproduced below:-

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Senna (Sonmukhi)</td>
<td>5729</td>
<td>3043</td>
<td>8356</td>
<td>1564</td>
<td>10518</td>
<td>2589</td>
</tr>
</tbody>
</table>
(b) As per available reports the average yield of the above mentioned crops per hectare and per year in Rajasthan is as follows:-

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of medicinal plant</th>
<th>Year 2006-07</th>
<th>Year 2007-08</th>
<th>Year 2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Senna (Sonmukhi)</td>
<td>531</td>
<td>187</td>
<td>246</td>
</tr>
<tr>
<td>2.</td>
<td>Isabgol</td>
<td>272</td>
<td>361</td>
<td>429</td>
</tr>
<tr>
<td>3.</td>
<td>Ashwagandha</td>
<td>87</td>
<td>755</td>
<td>590</td>
</tr>
<tr>
<td>4.</td>
<td>Amla</td>
<td>7988</td>
<td>7673</td>
<td>12500</td>
</tr>
</tbody>
</table>

Since cultivation of medicinal plants is a new activity, national level comparison is not possible at the moment. However, agro climatic conditions of Rajasthan are considered suitable for better yield of Isabgol and Senna. Madhya Pradesh, Chhattisgarh and Uttar Pradesh are considered suitable for cultivation of Ashwagandha and Amla yield-wise.

(c) No. However, there are fluctuations in the average production of all crops including medicinal plants due to different climatic reasons such as erratic rain fall, winter frost, draught and non availability of sufficient ground water etc.

(d) The average income to the farmer per hectare / year wise for the referred crop is as follows:-

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Name of medicinal plant</th>
<th>Year 2006-07</th>
<th>Year 2007-08</th>
<th>Year 2008-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Senna (Sonmukhi)</td>
<td>6547</td>
<td>2300</td>
<td>4354</td>
</tr>
<tr>
<td>2.</td>
<td>Isabgol</td>
<td>7423</td>
<td>13783</td>
<td>19888</td>
</tr>
<tr>
<td>3.</td>
<td>Ashwagandha</td>
<td>7830</td>
<td>134956</td>
<td>123163</td>
</tr>
</tbody>
</table>
The average income of the farmer varies in different agro climatic zones. Present cost benefit ratio for the medicinal plants referred to above is favorable, though erratic monsoonic rainfall etc. sometimes makes the cultivation unremunerative.

(e) Fixing of Minimum Support Price (MSP) for these plants is not under consideration at this stage.

(f) Government is implementing a “Centrally Sponsored Scheme of National Mission on Medicinal Plants” with a total outlay of Rs. 630 crores during the 11th plan. The scheme seeks to promote cultivation of medicinal plants in clusters by organizing growers into Self Help Group, Cooperatives with linkages to nurseries for quality planting material, post harvest management, quality certification and marketing.

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
UNSTARRED QUESTION NO-504
ANSWERED ON-24.11.2009
TESTING OF MEDICINAL PLANTS .
504 . SHRI SHREEGOPAL VYAS
BALAVANT ALIAS BAL APTE
RUDRA NARAYAN PANY

(a) whether it is a fact that Rupees 100 crores have been provided to be spent for the testing of medicinal plants;

(b) if so, the names of the companies, to whom this project has been assigned; And

(c) the States, where these schemes are operational?

ANSWER
THE MINISTER OF STATE FOR HEALTH AND FAMILY WELFARE

(SHRI S. GANDHISELVAN)

(a) to (c): No. However, there is an outlay of Rs. 100 crores during the 11th Plan for the development of common facilities, including setting up of laboratories for testing of medicinal plants and products under the Central Sector Scheme of Ayush industry clusters.
So far, the following 9 companies have been assigned the work for establishment of AYUSH industry cluster under the scheme.

(Rs. in Crore)

<table>
<thead>
<tr>
<th>Name of the Cluster</th>
<th>Grant Sanctioned</th>
<th>Grant-in-aid released</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Care Keralam Ltd., Thrissur, Kerala</td>
<td>10.00</td>
<td>2.00</td>
</tr>
<tr>
<td>2. Herbal Health Research Consortium, Pvt. Ltd., Amritsar, Punjab</td>
<td>10.00</td>
<td>2.00</td>
</tr>
<tr>
<td>3. Konkan Ayur Pharma Ltd., Sangameshwar, Maharashtra</td>
<td>7.48</td>
<td>1.50</td>
</tr>
<tr>
<td>4. Maharashtra AYUSH Cluster Pvt. Ltd., Pune, Maharashtra</td>
<td>9.49</td>
<td>2.00</td>
</tr>
<tr>
<td>5. Ayurpark Healthcare Ltd., Bangalore, Karnataka</td>
<td>10.00</td>
<td>2.00</td>
</tr>
<tr>
<td>6. Traditional AYUSH Cluster of Tamilnadu Pvt. Ltd., (TACT), Chennai (TN)</td>
<td>9.65</td>
<td>2.00</td>
</tr>
<tr>
<td>7. Rushikulya Ayurvedic Cluster Pvt., Ltd., Ganjam, Orissa</td>
<td>In-principle approved</td>
<td>--</td>
</tr>
<tr>
<td>8. Spark Herbotch Pvt., Ltd., Hyderabad, Andhra Pradesh</td>
<td>-do-</td>
<td>--</td>
</tr>
<tr>
<td>9. Maha AYUSH Ltd., Nask, Maharashtra</td>
<td>-do-</td>
<td>--</td>
</tr>
</tbody>
</table>

(a) whether it is a fact that we lost more than 15,000 patents of our medicinal plants to the West;
(b) if so, how many such patents were opposed during the last five years;

(c) the number where our claims were upheld; and

(d) whether the Traditional Knowledge Digital Library, containing documentation of over two lakh medical formulations will safeguard our interests in future?

ANSWER

THE MINISTER OF HEALTH & FAMILY WELFARE

(SHRI GHULAM NABI AZAD)

(a) to (c) In a study carried out in the year 2000 by the Traditional Knowledge Digital Library (TKDL) Task Force appointed by the Government, 4896 patent references were found on the medicinal plants at the international level which increased to 15,000 in the year 2003. However, in a study carried out in the year 2005, the number of patents found on medicinal plants at a global level were 35,587. After successfully fighting the wrong patents granted at United States Patents and Trademarks Office (USPTO) on turmeric and basmati, and at European Patent Office (EPO) on neem, traditional Knowledge Digital Library database has been created, since fighting the wrong patents at International Patent Offices is expensive and time consuming. TKDL establishes prior art for approximately 2.04 lakh formulations transcribed in five international languages, namely, English, French, German, Spanish and Japanese and prevents the grant of wrong patents, if claimed at the International Patent Offices.

The access to TKDL database has been given to the European Patent Office in February 2009 for its use in search and examination process so that wrong patents are not granted. Efforts are being made to give access to the TKDL database to other major patent offices also so as to prevent the grant of wrong patents in these offices also.

(d): Yes.

-------------

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
UNSTARRED QUESTION NO-2331
ANSWERED ON-24.07.2009
CLUSTERS FOR PROMOTION OF MEDICINAL PLANTS.
2331 .SHRI N.K. SINGH

(a) whether his Ministry has decided to develop ‘clusters’ across the country on the lines of Special Economic Zones (SEZs) to promote medicinal and herbal plants;

(b) if so, the details thereof;

(c) whether the locations have been identified where such clusters would be developed and State Governments agreed to provide necessary infrastructure, etc.; and

(d) if so, to what extent the growth of medicinal and herbal plants is expected during the next few years?

ANSWER

THE MINISTER OF HEALTH & FAMILY WELFARE

(SHRI GHULAM NABI AZAD)

(a) & (b): Government has approved a Central Sector Scheme viz “Scheme for Development of AYUSH Clusters.” Objectives of the scheme are:
i. To fill in the critical gaps in the sector especially related to standardization, quality assurance and control, productivity, marketing, infrastructure and capacity building through a cluster based approach. ii. To encourage the level of organization in the sector thereby creating social capital for sustainability of collective initiatives.

Financial assistance upto a maximum of Rs. 10 crores is admissible to each cluster for setting up quality testing laboratory and common processing facilities and thereby impart quality and standardization in the AYUSH sector. Government has also approved a scheme viz “Centrally Sponsored Scheme of National Mission on Medicinal Plants” being implemented by National Medicinal Plants Board, Department of Ayush. The Scheme seeks to support cultivation of prioritized medicinal plants in clusters through farmers/growers organized into self-help groups, cooperatives etc. alongwith pre and post harvest infrastructure for processing and marketing.

(c) & (d): Government has approved setting up 10 clusters during the 11th Plan. So far, 6 (six) clusters have been approved in the States of Kerala, Punjab,
Maharashtra, Tamil Nadu, Karnataka. These clusters are being developed on PPP (Public Private Partnership) basis and State Governments are not required to provide infrastructure.

Under the Scheme of National Mission on Medicinal Plants, financial assistance is being provided for setting up of nurseries, cultivation, Post Harvest Management and marketing. Government has sanctioned action plans of the State of Andhra Pradesh, Uttarakhand, Sikkim, Rajasthan, West Bengal, Orissa, Arunachal Pradesh, Haryana, Kerala, Mizoram, Tamil Nadu, Nagaland, Madhya Pradesh, Bihar and Jharkhand at a total outlay of Rs. 80.34 crores during the year 2009-10. An area of 80,000-1,00,000 hac. is anticipated to be covered under cultivation of medicinal plants during the 11th Plan which is expected to translate into an additional production of 2.5 lacs tons of raw material for the AYUSH industry.

---------

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
STARRED QUESTION NO-82
ANSWERED ON-20.02.2009
NATIONAL MISSION ON MEDICINAL PLANTS.
82. PROF. ALKA BALRAM KSHATRIYA
SHOBHANA BHARTIA

(a) whether Government has recently approved a Centrally sponsored National Mission on Medicinal Plants;

(b) if so, the details thereof;

(c) whether most of the medicinal plants are on the verge of extinction and herbal industry has been affected adversely; and

(d) if so, the facts thereof and the steps taken by Government to encourage farmers to grow more medicinal plants to protect the herbal industry?

ANSWER
THE MINISTER OF HEALTH AND FAMILY WELFARE

(DR. ANBUMANI RAMADOSS)
(a) to (d): A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO RAJYA SABHA STARRED QUESTION NO. 82 FOR 20TH FEBRUARY, 2009

(a) to (d) The Government has recently approved a new Centrally Sponsored Scheme of National Mission on Medicinal Plants with a total outlay of Rs. 630 crores for implementation during the 11th Plan by National Medicinal Plants Board. The scheme aims at supporting market driven cultivation of medicinal plants prioritized on the basis of their demand in the AYUSH and Herbal industry and will be implemented in a mission mode in selected clusters through growers’ cooperatives, self help groups, producer companies, etc. with backward and forward linkages for nurseries, post-harvest management, marketing and certification. The activities for which financial assistance is available under the scheme are the following:

- Nurseries in public and private sector for quality planting material
- Cultivation of species that are in demand in AYUSH and Herbal industry
- Support Post Harvest Management infrastructure like warehouses, processing units, setting up/ upgradation of herbal mandies
- Market intelligence
- Marketing Support
- Organic Certification
- Quality Testing
- Crop Insurance
- Management Support

Under the Scheme, the State Governments are required to formulate Action Plans with approval of State level Steering Committee before these are considered for approval by the Central Government. During the 11th Five Year Plan, it is proposed to provide financial assistance for coverage of 80,000 – 1,00,000 hect. of area under medicinal plants in the clusters to be identified by the State Governments. The scheme also aims at increasing the share of value added items in the export of medicinal plants and products besides creating 6 crore mandays of employment.

The medicinal plants, like other group of plants and animals, are threatened largely due to degradation of forests owing to various anthropogenic factors. There have been reports received from some industries also regarding non-availability of some
medicinal plants in required quantities. There is, however, no information about the medicinal plants being on the verge of extinction.

The National Medicinal Plant Board is also implementing a Central Sector Scheme for Rs. 320/- crores under the 11th Five Year Plan under which support is provided to the state governments for conservation and plantation of medicinal plants in forest areas so as to augment availability of medicinal plants which are of conservation concerns and are otherwise in high demand by the herbal industry. The Board has so far sanctioned projects for conservation and plantations covering about 39983 hectare land in forest area and other public lands. In addition, projects have been sanctioned to about 6800 farmers covering approximately 40,000 hectare land for cultivation of identified medicinal plants and thereby augment their availability for the herbal industry.

---------

GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT AND FORESTS  
RAJYA SABHA  
UNSTARRED QUESTION NO-1844  
ANSWERED ON-06.12.2007  
CONSERVATION OF MEDICINAL PLANTS  
1844 .SHRI KAMAL AKHTAR

(a) the details of the programme run by his Ministry for Conservation of Medicinal Plants in the country;

(b) the amount spent on conservation of medicinal plants in the country since last three years, state-wise, year-wise and project-wise; and

(c) the budget allocated to his Ministry for Conservation of Medicinal Plants in the country during the Eleventh Five Year Plan?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT AND FORESTS

(SHRI NAMO NARAIN MEENA)
(a) The Ministry of Environment and Forests has taken a number of steps for conservation and protection of medicinal plants, which inter-alia include, the following:

(i) Operationalizing the United Nations Development Programme (UNDP) Project entitled ‘National Programme on Promoting Conservation of Medicinal Plants and Traditional Knowledge for Enhancing Health and Livelihood Security’ which is to be implemented in nine States, namely, Karnataka, Kerala, Tamil Nadu, Maharashtra, Andhra Pradesh, Rajasthan, Orissa, West Bengal and Madhya Pradesh. The project is being coordinated by Foundation for Revitalization of Local Health Traditions (FRLHT), Bangalore.

(ii) Recognizing and supporting a Centre of Excellence on ‘Medicinal Plants & Traditional Knowledge’ at FRLHT, Bangalore in October, 2002.

(iii) Implementing the National Afforestation Programme (NAP) Scheme which include models such as ‘Mixed Plantation of Trees having Minor Forest Produce and Medicinal Value’ and ‘Regeneration of Perennial Herbs and Shrubs of Medicinal Value’ that relate to promotion of medicinal plants through afforestation and regeneration.


(v) Under the scheme of Development of National Parks and Sanctuaries financial assistance is also provided to States for protection of Wildlife which also includes medicinal plants.

In addition to Ministry of Environment and Forests other Ministries are also undertaking steps for conservation and promotion of medicinal plants.

(i) Medicinal Plants Board has been set up under Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoeopathy (AYUSH) vide Resolution notified on 24th November, 2000. The objectives of establishing the Board is to establish an agency which would be responsible for co-ordination of all matters relating to medicinal plants, including drawing up policies and strategies for conservation, proper harvesting, cost-effective cultivation, research and
development, processing marketing of raw material in order to protect sustain and
develop this sector. The Board has been implementing schemes for various
promotional activities including survey, inventorisation, documentation, in / ex-situ
conservation, extension activities for increasing awareness, training of growers and
collectors, research & development etc. in the field of medicinal plants.

(ii) Department of Science and Technology and Department of Bio- Technology
also undertake measures for conservation and promotion of medicinal plants.

(b) Under the NAP scheme, during the last 3 years (2004-05 to 2006-07), a total
sum of Rs.773.87 crores was released to ongoing Forest Development Agencies in
different States, for afforestation activities including promotion of medicinal plants
among other things. The State-wise details of funds released is given in Annexure -
I
The details of projects sanctioned by the National Medicinal Plants Board to
government and non-government organizations during the last three years 2004-
05, 2005-06 and 2006-07 is enclosed at Annexure-II.

(c) Under the NAP Scheme a tentative allocation of Rs. 20 00 crores has been
proposed for the 11th Five Year Plan which also includes plantation models
relating to medicinal plants.
An allocation of Rs. 5 crores has been proposed for Centre of Excellence on
Medicinal Plants and Traditional Knowledge at FRLHT, Bangalore during the 11th
Five Year Plan.
Under the National Medicinal Plants Board, an allocation of Rs. 360.07 crores is
proposed for 11th Five Year Plan for programmes under existing Centre Sector
Schemes, which also include conservation of medicinal plants.
Annexure –I

RAJYA SABHA Unstarred Question No. 1844
TO BE ANSWERED ON 05.12.2007

State-wise Details under National Afforestation Programme Scheme (NAP) for the last three
years (2004-05 to 2006-07)

<table>
<thead>
<tr>
<th>State</th>
<th>Number of FDA</th>
<th>Number of VFC's</th>
<th>Total Area (in Ha.)</th>
<th>Amount Released (Rs. in crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>8</td>
<td>461</td>
<td>10470</td>
<td>32.35</td>
</tr>
<tr>
<td>Chhattisgarh</td>
<td>6</td>
<td>156</td>
<td>5025</td>
<td>48.18</td>
</tr>
<tr>
<td>Gujarat</td>
<td>9</td>
<td>430</td>
<td>9930</td>
<td>38.34</td>
</tr>
<tr>
<td>Haryana</td>
<td>3</td>
<td>187</td>
<td>2050</td>
<td>21.01</td>
</tr>
<tr>
<td>State/Year</td>
<td>S.No.</td>
<td>Project No.</td>
<td>Title of the Project</td>
<td>Name &amp; Address of the Organizations</td>
</tr>
<tr>
<td>------------</td>
<td>-------</td>
<td>-------------</td>
<td>----------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>GO/JK - 04/2005</td>
<td>Raising of quality planting material and in-situ, ex-situ conservation of MPs</td>
<td>Sh. Jaggit Singh IISr, SPO, Leh Forest Division Fort Road Leh-Ladakh</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>GO/OR - 06/2005</td>
<td>In-situ and Ex-situ Conservation for restricted sustainable harvest.</td>
<td>DFO, Forest Development Agency, Ghumser North Division, Ar Po Bhanjanagar, Dr. Ganjam – 761126</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>GO/TN - 07/2005</td>
<td>Conservation of Medicinal Plants in the Reserved</td>
<td>DFO/Wildlife Warden, Tamil Nadu Forest</td>
</tr>
<tr>
<td>No.</td>
<td>GO/UP -05/2005</td>
<td>Medicinal Plants – Promotional Activity</td>
<td>Sh. A.B.Singh, DFO, South Kheri Forest Division, Lakhimpur – Kheri – 262701</td>
<td>10</td>
</tr>
<tr>
<td>-----</td>
<td>----------------</td>
<td>----------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>----</td>
</tr>
<tr>
<td>2005-2006</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>GO/AP - 01/2006</td>
<td>Central Scheme for conservation and cultivation of medicinal plants in TTD Areas</td>
<td>Shri V.V. Hari Prasad, DFO, Tirumala Tirupati Devasthanams, Tirupati</td>
<td>30</td>
</tr>
<tr>
<td>7</td>
<td>GO/AR -01/2006</td>
<td>Ex-situ conservation, production &amp; extension</td>
<td>Shri Ch. Muralidhar Rao, Chairman, Forest Development Agency, Deomali, dt. Tirap – 786 629</td>
<td>20</td>
</tr>
<tr>
<td>8</td>
<td>GO/AR -03/2006</td>
<td>Project for promotion of medicinal plants through FIA, Khonsa</td>
<td>Sh. C. Muralidhar Rao, Chairman, Forest Development Agency, Khonsa, Dr. Tirap – 786 629</td>
<td>20</td>
</tr>
<tr>
<td>9</td>
<td>GO/AR -04/2006</td>
<td>A project for mass production of propagules/in-situ conservation and creation of awareness NAMPONG</td>
<td>Sh. C. Muralidhar Rao, Chairman, Forest Development Agency, Nampong, Dr. Changlang – 786 629</td>
<td>20</td>
</tr>
<tr>
<td>10</td>
<td>GO/HP -01/2006</td>
<td>Development, Conservation &amp; awareness of medicinal plants in Kaza Wild Life Forest Range</td>
<td>Director, Pin Valley National Park, Kaza district Lahaul &amp; Spiti</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>GO/HP -02/2006</td>
<td>In-situ awareness &amp; conservation of medicinal plants in Tabo Forest Range</td>
<td>Divisional Forest Officer, Spiti Forest Division, Kaza district Lahaul &amp; Spiti</td>
<td>10</td>
</tr>
<tr>
<td>12</td>
<td>GO/KR -02/2006</td>
<td>In-situ conservation &amp; Ex-situ cultivation selected medicinal plants &amp; endangered species in Mysore dt., Karnataka</td>
<td>Smt. Srinivasavala, Deputy Conservator of Forests, Karnataka Forest Department, Mysore (T) Forest Division, Mysore District Karnataka</td>
<td>30</td>
</tr>
<tr>
<td>13</td>
<td>GO/KR -15/2006</td>
<td>In-situ conservation and Ex-situ cultivation of selected medicinal plants and endangered species in Madhugiri Tahsil, Tumkur Dr.</td>
<td>Smt. G.N. Steekantaiah, IFS, Deputy Conservator of Forests, Tumkur (T) Division, Tumkur Dr. – 572 105</td>
<td>30</td>
</tr>
<tr>
<td>14</td>
<td>GO/MIZ - 01/2006</td>
<td>Conservation and Development of medicinal plants and provision for marketing Infra-Structure with capacity building of the rural tribal people</td>
<td>Member Secretary – Cam CEO, N. Vanalaihai Forest Development Agency, P.O. N. Vanalaihai, Dr. – Serchhip, Mizoram</td>
<td>15</td>
</tr>
<tr>
<td>16</td>
<td>GO/TR - 02/2006</td>
<td>Conservation and development of medicinal plants resources of Tripura</td>
<td>Sh. P. Biswas, CEO &amp; Member Secretary, Medicinal Plants Board of Tripura, Van Gavesbana Sadan, Gandhidhram, Agartala – 799 012</td>
<td>25</td>
</tr>
<tr>
<td>17</td>
<td>GO/TR - 03/2006</td>
<td>Conservation and development of medicinal plants resources of Tripura</td>
<td>CEO &amp; Member Secretary, Medicinal Plants Board of Tripura, Van Gavesbana Sadan, Gandhi gram, Agartala</td>
<td>24</td>
</tr>
<tr>
<td>Year</td>
<td>Project Code</td>
<td>Description</td>
<td>Responsible Officer</td>
<td>Location</td>
</tr>
<tr>
<td>--------</td>
<td>--------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>2006-2007</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>GO/AR - 01/2007</td>
<td>Mass Production of Propagules/in-situ conservation and creation and creation of awareness</td>
<td>Director, State Forest Research Institute, Van Vihar, Chimpa, Itanagar - 791 111</td>
<td>Dimapur</td>
</tr>
<tr>
<td>19</td>
<td>Go/AS - 08/2007</td>
<td>Development of medicinal plants Conservation Areas (MPCA) Network in Assam</td>
<td>Chief Conservator of Forestry, Assam, Research Education &amp; Working Plans, Prasant Path, RG Banabah Road, Guwahati - 24</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>GO/GUJ-02/2007</td>
<td>Establishment of medicinal plants conservation Area(MPCAs) in .... In Kachchh saline region</td>
<td>Sh. R.L. Meena, Conservator of Forests, Kachchh Ciyrele, Dist. Hospital Road, Bhij - 370 001</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Go/GUJ-02/2007</td>
<td>Establishment of medicinal plants conservation Area(MPCAs) in .... In South Gujarat (Valsad Circle) Kachchh saline region</td>
<td>Conservator of Forest, Gujarat State Forest Department, O/o of the PCCF, 14th Block, Old Sachivalaya, Gujarat</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>GO/JR - 02/2007</td>
<td>Harvesting of mps and augmentation of Resources in Jharkhand with emphasis on conservation in Protected areas &amp; sustainable harvest in 5 representative divisions</td>
<td>Chief Conservator of Forests (Development), Department of Forest &amp; Environment, Nepal House, Doranda, Ranchi - 834 002</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Go/KR - 09/2007</td>
<td>Conservation &amp; propagation of rare/endpointed/threatened medicinal plants in Hirekalguda State Forest of Ariakere Range</td>
<td>Dy. Conservator of Forest, Karnataka Forest Department, Hassan Forest Division, Hassan - 573 201, Karnataka</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Go/MZ - 01/2007</td>
<td>Establishment of Medicinal Plants Conservation Areas (MPCA) in Mazoram</td>
<td>Chief Conservator of Forests, Environment &amp; Forest Department, EFO Complex, Tulikhuabland, Aizwal</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>GO/NG - 01/2007</td>
<td>Conservation &amp; sustainable use of medicinal plants and augmentation of resources incl. development of marketing network in Nagaland</td>
<td>Principal Chief Conservator of Forests, Old Ministers Hills, Kohima - 797 001</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Go/NG-02/2007</td>
<td>Conservation&amp; Sustainable use of medicinal plants and augmentation of resources of resources including development of marketing network in Nagaland State</td>
<td>Conservator of Forests, (Research, Planning &amp; Utilization), Dimapur Nagaland - 797 112</td>
<td></td>
</tr>
</tbody>
</table>
National Medicinal Plants Board  
Department of AYUSH  
Details of projects sanctioned for Conservation - NGO projects from 2004-05 to 2006-07

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Year</th>
<th>No. of projects</th>
<th>Area</th>
<th>Amount (Rs.)</th>
<th>Sanctioned</th>
<th>Released</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2004-05</td>
<td>6</td>
<td>27ac</td>
<td>64.00</td>
<td>44.00</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2005-06</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2006-07</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
<td>0.00</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Total</td>
<td>6</td>
<td></td>
<td>64.00</td>
<td>44.00</td>
<td></td>
</tr>
</tbody>
</table>
(a) The steps that have been taken to prepare community knowledge registers under the National Programme for promoting conservation of medicinal plants and traditional knowledge are as follows:

(i) A standard format for Community Knowledge Register has been prepared.

(ii) The facilitating agencies have been oriented towards the role of the Community Knowledge Register in protecting community knowledge of medicinal plants as per the provisions of the Biological Diversity Act, 2002.

(iii) The Community Knowledge Register is prepared through the involvement and participation of the local healers and with their prior informed consent.

(iv) The Community Knowledge Register thus prepared is maintained by the local community, and is not given to the facilitating agency.

(b) Under the National Programme for promoting conservation of medicinal plants and traditional knowledge, the facilitating agencies at the local level involved in preparation and updating such a register include:

(i) Swami Ramananda Tirtha Regional Institute, Hyderabad, Andhra Pradesh

(ii) Rural Communes, Mumbai, Maharashtra

(iii) SAMBANDH, Bhubaneswar, Orissa
(iv) Jagran Jan Vikas Samithi, Udaipur, Rajasthan

(v) Tagore Society for Rural Development, Kolkata, West Bengal.

(c) Preparation of registers on traditional knowledge of local people is a measure towards protection of their knowledge from its unauthorized use without sharing of benefits arising from such use. The Biological Diversity Act provides for sharing of benefits arising out of the use of such knowledge with the holders of the knowledge.

---------

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT AND FORESTS
RAJYA SABHA
STARRED QUESTION NO-102
ANSWERED ON-22.11.2007
CONSERVATION OF MEDICINAL PLANTS AND TRADITIONAL KNOWLEDGE
102. SHRI SANTOSH BAGRODIA
HARISH RAWAT

(a) the elements of the National Programme for Promoting Conservation of Medicinal Plants and Traditional Knowledge;

(b) the organizational structure set up to implement various objectives of the programme and in what manner the finances are being delegated to the participating States; and

(c) the number of States which have identified the sites for the conservation of medicinal plants, the details of the medicinal plants, State-wise, and area-wise?

ANSWER
MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT AND FORESTS

(SHRI NAMO NARAIN MEENA)

(a)/(b)&(c) : A Statement is laid on the Table of the House.

A statement in respect of Rajya Sabha Starred Question No 102 due for answer on 22.11.2007, by Shri Santosh Bagrodia and Shri Harish Rawat regarding “Conservation of Medicinal plants and Traditional Knowledge”

(a) A project entitled “National Programme on Promoting Conservation of Medicinal Plants and Traditional Knowledge for Enhancing Health and Livelihood Security” has been taken up in nine states, namely Kerala, Karnataka, Tamil Nadu, Andhra Pradesh, Orissa, West Bengal, Rajasthan, Maharashtra and Madhya Pradesh, with financial support from United Nations Development Programme (UNDP). The project started in May, 2006 with UNDP contribution of US $ 3 million
Medicinal Plants – Highlighted in Rajya Sabha from 2005 to till date (Monsoon Session, 2013)

(approx. Rs. 12 crores), to be completed in four and half years. The main elements of the project include: establishment of a system for rapid threat assessment and trade regulation; a network of Medicinal Plant Conservation Areas (MPCAs), state level medicinal plant seed centre; method for sustainable harvest and augmentation; home herbal garden; community knowledge registers and mainstreaming traditional medicine into official primary health programme.

(b). The Union Ministry of Environment and Forests is the National Executing Agency for the programme and the Foundation for Revitalization of Local Health Tradition (FRLHT), Bangalore is the technical coordinating agency. The Forest Departments of the concerned states are the designated nodal agencies for implementation. The funds are released by the Ministry of Environment and Forests to the FRLHT for further release to the implementing agencies. The funds so disbursed are reimbursed by UNDP to the Government.

(c) Under the project only four States viz. Madhya Pradesh, Orissa, West Bengal and Rajasthan were required to identify sites for conservation. Of these, three States namely Madhya Pradesh, Orissa and Rajasthan have identified sites for conservation upto October, 2007. Teams of Taxonomists have been constituted for inventorisation of medicinal plants.

--------

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT AND FORESTS
RAJYA SABHA
STARRED QUESTION NO-10
ANSWERED ON-15.11.2007
MEDICINAL PLANTS.
10. SHRI KAMAL AKHTAR

(a) the details of the steps taken by his Ministry for conservation of medicinal plants during the last three years, State-wise;

(b) the details of the amount spent under the head during the said period, State-wise;

(c) the details of the financial assistance/grant/help provided to Government and Non-Government Organisations for conservation of medicinal plants, State-wise and organisation-wise; and

(d) the details of amount to be spent during the financial year 2007-08, State-wise?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT AND FORESTS

(SHRI NAMO NARAIN MEENA)

(a), (b),( c) and (d) A statement is laid on the Table of the House.
Statement referred to in reply to parts (a), (b), (c) and (d) of Rajya Sabha Starred Question No.10 to be replied on 15.11.2007

(a) The Ministry of Environment & Forests has taken a number of steps for conservation & protection of medicinal plants, which inter-alia include, the following:

i) Operationalizing the United Nations Development Programme (UNDP) Project entitled ‘National Programme on Promoting Conservation of Medicinal Plants & Traditional Knowledge for Enhancing Health & Livelihood Security’ which is to be implemented in nine States, namely, Karnataka, Kerala, Tamil Nadu, Maharashtra, Andhra Pradesh, Rajasthan, Orissa, West Bengal and Madhya Pradesh. The project is being coordinated by Foundation for Revitalization of Local Health Traditions (FRLHT), Bangalore.

ii) Recognizing and supporting a Centre of Excellence on ‘Medicinal Plants & Traditional Knowledge’ at FRLHT, Bangalore in October, 2002.

iii) Implementing the National Afforestation Programme (NAP) Scheme which include models such as ‘Mixed Plantation of Trees having Minor Forest Produce and Medicinal Value’ and ‘Regeneration of Perennial Herbs and Shrubs of Medicinal Value’ that relate to promotion of medicinal plants through afforestation and regeneration.


(b) & (c) Under the NAP scheme, during the last 3 years (2004-05 to 2006-07), a total sum of Rs.773.87 crores was released to ongoing Forest Development Agencies in different States, for afforestation activities including promotion of medicinal plants among other things. The State-wise details of funds released is given as under:

<table>
<thead>
<tr>
<th>S. No.</th>
<th>State</th>
<th>Number of FDA</th>
<th>Number of JFMC’s</th>
<th>Total Area (in Ha.)</th>
<th>Amount Released (Rs. in crore)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Andhra Pradesh</td>
<td>8</td>
<td>461</td>
<td>10470</td>
<td>32.35</td>
</tr>
<tr>
<td>2</td>
<td>Chhattisgarh</td>
<td>6</td>
<td>156</td>
<td>5025</td>
<td>48.18</td>
</tr>
<tr>
<td>3</td>
<td>Gujarat</td>
<td>9</td>
<td>430</td>
<td>9930</td>
<td>38.34</td>
</tr>
<tr>
<td>4</td>
<td>Haryana</td>
<td>3</td>
<td>187</td>
<td>2050</td>
<td>21.01</td>
</tr>
<tr>
<td>5</td>
<td>Himachal Pradesh</td>
<td>11</td>
<td>389</td>
<td>7474</td>
<td>31.24</td>
</tr>
<tr>
<td>6</td>
<td>Jammu &amp; Kashmir</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>14.67</td>
</tr>
<tr>
<td>7</td>
<td>Karnataka</td>
<td>10</td>
<td>232</td>
<td>7440</td>
<td>67.74</td>
</tr>
<tr>
<td>8</td>
<td>Madhya Pradesh</td>
<td>21</td>
<td>614</td>
<td>17870</td>
<td>45.62</td>
</tr>
<tr>
<td>9</td>
<td>Maharashtra</td>
<td>12</td>
<td>297</td>
<td>11780</td>
<td>43.74</td>
</tr>
<tr>
<td>10</td>
<td>Orissa</td>
<td>12</td>
<td>482</td>
<td>8338</td>
<td>37.38</td>
</tr>
<tr>
<td>11</td>
<td>Punjab</td>
<td>6</td>
<td>292</td>
<td>4285</td>
<td>7.47</td>
</tr>
<tr>
<td>12</td>
<td>Rajasthan</td>
<td>20</td>
<td>284</td>
<td>7590</td>
<td>17.68</td>
</tr>
</tbody>
</table>
During the last 3 years (2004-05 to 2006-07), a sum of Rs.2.23 crores have been provided to the Centre of Excellence on Medicinal Plants and Traditional Knowledge at FRLHT, Bangalore.

(d) During 2007-08, there is an allocation of Rs.322.57 crores under the NAP scheme which is for medicinal plants as well as other afforestation activities. The allocation for the Centre of Excellence on Medicinal Plants and Traditional Knowledge at FRLHT, Bangalore is Rs.80 lakhs.
ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF HEALTH & FAMILY WELFARE

(SMT. PANABAKA LAKSHMI)

(a) As per available reports, it is estimated that there are about 8000 plant species having medicinal properties

(b) There are no such reports.

(c) There is no such proposal. Government has set up a Task Force on High Altitude Medicinal Plants to deal with various issues related to development of these plants.

--------

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
UNSTARRED QUESTION NO-1259
ANSWERED ON-04.08.2006
CULTIVATION OF MEDICINAL PLANTS IN BENGAL REGION .
1259 . SHRI PRASANTA CHATTERJEE

(a) whether Government are formulating any scheme for promotion of cultivation of medicinal plants in the North Bengal and districts of Darjeeling, Jalpaiguri and Coochbehar;

(b) if so, the details thereof; and

(c) if not, the reasons therefor?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF HEALTH & FAMILY WELFARE

(SMT. PANABAKA LAKSHMI)

(a) & (b) the Promotional and Contractual Farming Scheme of National Medicinal Plants Boards have been implemented for cultivation and development of medicinal plants in the State of West Bengal. Three (3) projects, one (1) in Coochbehar and two (2) in Darjeeling districts are going on. Further proposals as and when received through State Medicinal Plant Board as per scheme may also be considered. The Department of Agriculture & Cooperation has launched a Centrally Sponsored Scheme under National Horticulture Mission (NHM) in the country during 10th Five Year Plan w.e.f 2005-06 for holistic development of Horticulture Sector. Promotion of cultivation of medicinal plants has been included as one of the components under NHM from
2006-07. In the Annual Action Plan, 2006-07 of West Bengal, cultivation of medicinal plants has been approved in 100 ha. Area in five districts of Darjeeling, Jalpaiguri, Murshidabad, Nadia and North 24 Parganas (20 ha. in each district) at a cost of Rs. 11.25 lakh.

(c) Does not arise

--------

GOVERNMENT OF INDIA
MINISTRY OF COMMERCE AND INDUSTRY
RAJYA SABHA
UNSTARRED QUESTION NO-189
ANSWERED ON-26.07.2006
EXPORT OF HERBAL MEDICINAL PLANTS .
189 . DR. M.A.M. RAMASWAMY

(a) whether India has been exporting herbal/medicinal plants;

(b) if so, the total value of medicinal plants exported during the last three years;

(c) whether Government propose to export the finished products only and not plants;

(d) if so, the details thereof; and

(e) if not, the reasons therefor?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF COMMERCE AND INDUSTRY

(SHRI JAIRAM RAMESH )

(a)&(b) Yes Sir, India has been exporting herbal/medicinal plants. The export values of crude drugs (excluding herbal extracts) for the last three years are as follows:


(c)to(e) No Sir, according to the current Foreign Trade Policy, export of several medicinal plants and finished products are permitted. However, the Government encourages export of value added herbal products because India has rich natural resources and technical expertise to produce value added herbal products.

--------

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
STARRED QUESTION NO-407
ANSWERED ON-12.05.2006
CULTIVATION OF MEDICINAL PLANTS IN RAJASTHAN
407. DR. GYAN PRAKASH PILANIA

(a) whether there are special plans and a road map to encourage cultivation of medicinal plants in the country;

(b) if so, the details thereof;

(c) whether Government are formulating any scheme for promoting cultivation of medicinal plants in Rajasthan also;

(d) if so, the details thereof, specifying the names of medicinal plants and the present status of their cultivation and production;

(e) whether Government have conducted any survey with regard to the problems being faced in this context by cultivators of the state;

(f) if so, the details thereof and the remedial measures proposed therefor; (g) whether some proposals are pending consideration with the centre; and (h) if so, the response of Government thereto?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE

(SMT. PANABAKA LAKSHMI)

(a) to (h): A Statement is laid on the Table of the House. STATEMENT REFERRED TO IN REPLY TO RAJYA SABHA STARRED QUESTION NO. 407 FOR 12TH MAY, 2006 ...

(a) & (b) Medicinal Plants Board has been set up through Government resolution notified on 24th November, 2000, to coordinate all matters related to medicinal plants sector. Based on the report of the `Task Force on conservation and sustainable use of medicinal plants of the Planning Commission` which inter-alia identified the thrusts areas and recommended a road map, the Medicinal Plants Board has been implementing Promotional and Contractual Farming Schemes under which financial assistance is provided for development and cultivation of medicinal plants

(c)&(d) The Medicinal Plants Board is providing financial assistance for projects under Contractual Farming and Promotional Schemes to the States and UTs including the State of Rajasthan. Under Contractual Farming, Scheme subsidy @ 30% of the project cost is provided as financial assistance to the farmers subject to a maximum of Rs. 9 lakhs. Under Promotional
Scheme, grant up to a maximum of Rs. 30 lakh is provided for various Promotional activities which include projects on production of quality planting material, training, awareness, extension and setting up of Herbal Gardens. The main species cultivated in Rajasthan are Isabgol and Senna (Sonamukhi). Information regarding area of land (in hectares) and Production (in metric tons) in respect of Isabgol is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Area (in hectares)</th>
<th>Production (in metric tons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-01</td>
<td>10024</td>
<td>72494</td>
</tr>
<tr>
<td>2001-02</td>
<td>9496</td>
<td>61413</td>
</tr>
<tr>
<td>2002-03</td>
<td>12095</td>
<td>74147</td>
</tr>
<tr>
<td>2003-04</td>
<td>9951</td>
<td>72783</td>
</tr>
<tr>
<td>2004-05</td>
<td>12172</td>
<td>8153</td>
</tr>
<tr>
<td>2005</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Information regarding area of land (in hectares) and Production (in metric tons) in respect of Senna (Sonamukhi) is as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Area (in hectares)</th>
<th>Production (in metric tonnes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-01</td>
<td>946</td>
<td>107</td>
</tr>
<tr>
<td>2001-02</td>
<td>954</td>
<td>107</td>
</tr>
<tr>
<td>2002-03</td>
<td>1644</td>
<td>28</td>
</tr>
<tr>
<td>2003-04</td>
<td>1856</td>
<td>36</td>
</tr>
<tr>
<td>2004-05</td>
<td>1681</td>
<td>63</td>
</tr>
</tbody>
</table>

The other medicinal plants cultivated with financial assistance from the Board are Amla, Aloe-vera, Guggal, Kalihari, Stevia, Lemon grass, Palmarosa, Shatawari, Coleus, Kalmegh, Ashwgandha, Safed Musli etc.

The National Medicinal Plants Board has launched an evaluation study through Indian Council of Forestry Research and Education (ICFRE), Dehradun and Indian Institute of Forest Management (IIFM), Bhopal. Their report is awaited. Besides, the State Medicinal Plants Board carries out regular monitoring to assess the implementation of the projects and address the problems being faced by the farmers. Availability of Quality Planting Material and Marketing of the produce are some of the problems areas. The Board is sanctioning projects specifically for production of Quality Planting Material so that the farmers get the planting material of quality. The State Medicinal Plants Boards also assist the farmers in various ways including supply of information on market trends of medicinal plants and the buyers for the produce. The State Medicinal Plants Boards also conduct training programmes for the farmers to provide technical inputs and relevant information.

The receipt of project proposals and their consideration is a continuing exercise.
Medicinal Plants – Highlighted in Rajya Sabha from 2005 to till date (Monsoon Session, 2013)

(a) the details of proposals sent by various States, especially by Madhya Pradesh to his Ministry regarding plantation of medicinal plants; and

(b) the status of action taken/proposed to be taken in this regard?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF HEALTH & FAMILY WELFARE

(SMT. PANABAKA LAKSHMI)

(a) & (b) A total 6955 proposals from various States/UTs including 1311 from Madhya Pradesh State were received by National Medicinal Plants Board during the year 2005-06 for providing assistance under Promotional and Contractual Farming Schemes of the Board. A total of 1464 projects involving financial outlay of Rs. 5756.38 lacs were sanctioned for various States/UTs during the year 2005-06 under these schemes. These include 209 projects involving financial outlay of Rs. 541.30 lacs for the State of Madhya Pradesh.

--------

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE
RAJYA SABHA
UNSTARRED QUESTION NO-2581
ANSWERED ON-16.12.2005
SCHEME FOR CULTIVATION OF MEDICINAL PLANTS.
2581. SHRI BALAVANT ALIAS BAL APTE
KRIPAL PARMAR

(a) whether Government are formulating any scheme for promoting cultivation of medicinal plants;

(b) if so, the details thereof;

(c) if not, whether Government feel the necessity of conducting a study in this regard; and

(d) if so, the details thereof?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE
(SHRI KANTI LAL BHURIA)

(a) to (d): The Government has set up National Medicinal Plants Board under the aegis of Ministry of Health and Family Welfare, as an agency that is responsible for coordinating all matters relating to medicinal plants including drawing up policies and strategies for their conservation, proper harvesting, cost-effective cultivation, research and development, processing, marketing of raw material etc. in order to protect, sustain and develop this sector. The Board has formulated and implemented promotional, commercial and contractual farming schemes for providing financial assistance as per operational guidelines for development of medicinal plants sector in the country. The promotion schemes are aimed at bringing awareness about the importance of medicinal plants and medicinal plants sector as a whole, besides covering basic studies in areas like inventorisation, applied research and development, in-situ and ex-situ conservation, production of quality planting material, value addition, demand and supply, market position etc. The commercial scheme is aimed at creation of innovative market, value addition, harvesting, processing, storage and packaging. The contractual farming scheme aims at providing financial assistance to farmers for cultivation of medicinal plants with assured market on a large scale. The Board has sanctioned more than 2900 projects involving financial assistance of about Rs.75.00 crores being implemented in different parts of the country during 2002-03, 2003-04 and 2004-05. About 72,000 acres land covered under cultivation of various prioritized medicinal plants. 590 projects involving financial outlay of about Rs.72.57 crores has been sanctioned under promotion schemes. About 65,000 acres land has been covered under promotion schemes involving activities like in-situ/ex-situ conservation and raising of herbal gardens. 32 State Medicinal Plant Boards have been set up so far in 27 States and 5 Union Territories.
THE MINISTER OF STATE IN THE MINISTRY OF HEALTH & FAMILY WELFARE

(SMT. PANABAKA LAKSHMI)

(a) No such information is collected by the National Medicinal Plant Board.

(b) Information regarding amount of assistance sanctioned under Contractual Farming Scheme of National Medicinal Plants Board (NMPB) during the last three years is given below:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount (Rs. in lakhs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002-03</td>
<td>216.25</td>
</tr>
<tr>
<td>2003-04</td>
<td>841.10</td>
</tr>
<tr>
<td>2004-05</td>
<td>1808.74</td>
</tr>
</tbody>
</table>

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
UNSTARRED QUESTION NO-1931
ANSWERED ON-18.03.2005
. PROTECTING MEDICINAL PLANTS .
1931 . SHRI BALAVANT ALIAS BAL APTE
RUDRA NARAYAN PANY

(a) whether it is a fact that Government have prepared that an action plan to protect the medicinal plants linked with indigenous unani system;

(b) if so, the details thereof;

(c) whether it is also a fact that multinational companies are getting Indian medicinal plants planted on a large scale; and

(d) the number of medicinal plants got planted by his Ministry and thenumber of Indian medicinal unani plants got planted by the foreign companies during last three years?

ANSWER
THE MINISTER OF STATE IN THE MINISTRY OF HEALTH & FAMILY WELFARE

(SMT. PANABAKA LAKSHMI)

(a) & (b) The Government has set up a Medicinal Plants Board with a view to co-ordinate all matters relating to medicinal plants, including drawing up policies and strategies for conservation, proper harvesting, cost-effective cultivation, research and development, processing, etc in order to protect, sustain and develop this sector. The Schemes implemented by the Board provides for financial support for promotional activities and for captive cultivation of
medicinal plants used in preparation of drugs under traditional systems of medicine including the Unani system.

(c) & (d) Plants and the knowledge about their medicinal usage in the public domain cannot be patented. However, it is noticed that some individuals and companies in some of the foreign countries have been given patents for the medicinal use of a number of Indian medicinal plants. As there is no effective mechanism to know about the applications made for patents in the patent offices of other countries, it is not possible to indicate the number of patents granted for medicinal use of plants including those used in Unani medicine in foreign countries.

----------

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE
RAJYA SABHA
UNSTARRED QUESTION NO-1094
ANSWERED ON-11.03.2005
PROMOTING MEDICINAL PLANTS THROUGH ORGANIC PRODUCTION.
1094. SHRIMATI AMBIKA SONI

(a) whether Government have joined hands with the Food and Agricultural Organisation of United Nations (FAO) in a new project for promoting production of medicinal plants through organic production;

(b) if so, whether this project was to be launched in January, 2005;

(c) if so, the details of the programmes that have been agreed in co-operation with FAO;

(d) whether cost of production in the country was lowest and quality was good but handling systems were not designed for quality; and

(e) if so, to what extent FAO would help Government in this regard

ANSWER

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE

(SHRI KANTI LAL BHURIA)

(a): Food & Agriculture Organisation (FAO) received a regional Technical Assistance Grant from International Fund for Agriculture Development (IFAD) to work on organic production, marketing, certification and processing of Medicinal, Aromatic and Dye Plants (MADP) in India, Nepal, Bhutan and Sri Lanka. The Government has communicated its willingness to FAO to collaborate in the project.
(b): No specific date has been specified for launching the project.

(c): The programmes envisaged under the project include capacity building, transfer of technology, promotion of cultivation/collection of diversity of species based on local requirement, develop, strengthen and test the full production chain for organic MADP products and develop local standards to meet norms on World Health Organisation (WHO) Good Agriculture and Collection Practices (GACP) and Good Manufacturing Practices (GMP).

(d) & (e): Information on relative cost and quality of products across the countries in the region have not been analysed under the project. However, collection of information on these parameters including strengthening of the handling system would form part of the project during the implementation phase.
Medicinal Plants – Highlighted in Rajya Sabha from 2005 to till date (Monsoon Session, 2013)

(SHRI KAPIL SIBAL)

(a) & (b): Some Central Ministries / Departments / Agencies are supporting various research programmes towards development of new drugs and molecules from important medicinal plants. These include Council of Scientific and Industrial Research (CSIR); Indian Council of Medical Research (ICMR); Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha & Homeopathy (AYUSH), Defence Research and Development Organization (DRDO), Department of Science & Technology (DST) and Department of Biotechnology (DBT). Under the programmes supported by CSIR, two herbal formulations have developed as hepatoprotective agents. Other developments include Dilex-C (licensed to M/S Unichem Laboratories, Mumbai) which dilates cervix for medical termination of pregnancy; CONSOAP- contraceptive cream (licensed to M/S Hindustan Latex Limited, Thiruvananthapuram); Arteether- antimalarial drug (licensed to M/S Themis Medicare, Mumbai as E-mal); Picroliv - hepatoprotective drug (licensed to M/S Duphar Interferon, Mumbai) and a memory enhancer (licensed to M/S Lumen Marketing Company, Chennai). The ICMR is presently engaged in development of drug from Vijaysar and compounds from Jamun for diabetes. Under a project supported by DST, a novel oligospirostanoside having potential immunomodulatory activity has been developed from Shatavari. Under the projects supported by DBT, various potential therapeutic agents have been developed from important medicinal plants. These include an immunomodulatory agent (berberin) from Daruharida; a novel peptide from Bitter gourd (Karela), having hypoglycemic activity; a phenolic glycoside from Neem bark having potential activity against hyperacidity and gastric ulceration; anti-cancer agents from bel, Nirgandi and Lal-bhuin anvalah. Some of these lead agents have been further taken up for converting into drugs. Some Indian Pharma companies have also developed new molecules from Reetha and Satyanasi for migraine and psoriasis, respectively which have been cleared for Phase-I clinical trials.

(c) No systematic and comprehensive efforts have been made so far on digitalizing Inventory and documentation of our country’s Bio-Reserves. However, the Department of Biotechnology (DBT) under the auspices of National Bioresource Development Board (NBDB) has been pursuing work on preparation of digitized inventories of bioresources available in the country including medicinal and other economically important plants, animals, marine and microbial resources based on secondary information. The inventory on plant resources is now ready and contains information on nearly 2200 species. Work on other inventories is nearing completion.

(d) Under the Indo-Israel Cooperation, nine projects in genomics have been supported for pharmacogenomics, structural genomics, identification and characterization of novel genes. More than hundred human subjects have been enrolled for the pharmacogenomics study. Genotyping for some of the single nucleotide polymorphisms has been carried out. A database has been created to study the structure of proteins selected from the completed genome sequences. Several differentially regulated genes from Trichoderma virens, a fungus used as a biocontrol agent, have been identified and differential libraries have been constructed.

(e) & (f) In fact 52 technologies developed from Bio-Tech Laboratories have been transferred to industries and other user agencies so far. Out of these, seventeen have been already commercialized and are available to people for use. These products are in the areas of agriculture, aquaculture, human health, animal productivity and environmental safety.
GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
RAJYA SABHA
UNSTARRED QUESTION NO-1549
ANSWERED ON-16.12.2004
MEDICINAL PLANTS IN JAMMU AND KASHMIR .
1549 . PROF. SAIF-UD-DIN SOZ

(a) whether Government are aware of the need to conserve herbs/roots, flowers of medicinal importance in Jammu and Kashmir State; and

(b) if so, whether his Ministry has undertaken any schemes/progress in this direction during the last three years till September 30, 2004?

ANSWER

MINISTER OF STATE (INDEPENDENT CHARGE) OF THE MINISTRY OF SCIENCE & TECHNOLOGY AND MINISTER OF STATE (INDEPENDENT CHARGE) OF THE DEPARTMENT OF OCEAN DEVELOPMENT

(SHRI KAPIL SIBAL)

(a) to (b): Yes Sir, The Government is fully aware of the need to conserve herbs / roots, flowers of medicinal importance in Jammu and Kashmir State. Some Central Ministries / Departments / Institutes are supporting various research programmes for conservation of herbs / roots, flowers of medicinal importance in Jammu and Kashmir State. The Council of Scientific and Industrial Research through one of its institutes i.e. Regional Research Laboratory (RRL) in Jammu which has a branch in Srinagar (J&K), is involved in the conservation of some important and endangered species of medicinal plants / parts. The Department of Biotechnology (DBT) has established a gene bank for conservation of medicinal plants of Western Himalayan Region including that of Jammu and Kashmir at Regional Research Laboratory (RRL), Jammu. Field gene banks have been established at Jammu (Sub-tropical), Bonera (temperate) and Leh (cold-arid) regions for conservation of the genetic resources of medicinal plants of Western Himalayas. A seed bank and in vitro bank has also been developed. One more DBT-sponsored project on conservation and multiplication of endangered medicinal plant diversity of Kashmir Himalayas has been recently completed at Sher-E-Kashmir University of Agricultural Sciences and Technology, Shalimar- Srinagar. Another DBT-sponsored project is being implemented by Kashmir University, Srinagar on collection and conservation of important medicinal plants of Jammu and Kashmir region. The National Medicinal Plants Board (NMPB), Department of
Ayurveda, Yoga & Naturopathy, Unani, Siddha & Homeopathy (AYUSH), Ministry of Health and Family Welfare has also supported a total number of twenty projects during the last three years till September 04, 2004 under promotional and commercial schemes for overall development of this sector in Jammu and Kashmir state.

---------

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE
RAJYA SABHA
UNSTARRED QUESTION NO-3173
ANSWERED ON-22.08.2003
POTENTIAL OF JHARKHAND FOR CULTIVATION OF MEDICINAL PLANTS ENERGY PLANTATIONS .
3173 . SHRI S.S. AHLUWALIA

(a) whether the potentials of Jharkhand for cultivation of medicinal plants and energy plantations like Ethanol have been examined;

(b) if so, the details of the findings thereof; and

(c) if not, the reasons therefor?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE
(SHRI HUKUMDEO NARAYAN YADAV)

(a)&(b): No specific study has been conducted to examine the potential for cultivation of medicinal plants and energy plantation in the State of Jharkhand.

(c): The Government of India is implementing a Centrally Sponsored Scheme on Macro Management in Agriculture-Supplementation/Complementation of States’ efforts through Work Plan under which the State Governments can take up various programmes including the cultivation of medicinal plants as per their felt needs and requirements. The State Governments prepare the work plan after ascertaining the potential and requirement. Besides, the National Medicinal Plants Board under Ministry of Health and Family Welfare is also implementing schemes for cultivation of medicinal plants in the country including Jharkhand.

---------

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
UNSTARRED QUESTION NO-2740
ANSWERED ON-18.08.2003
MEDICINAL PLANTS.
2740. SHRIMATI JAMANA DEVI BARUPAL
T. SUBBARAMI REDDY

(a) whether her Ministry is frustrated with poor co-operation from the other Departments in its efforts to streamline conservation and harvest of medicinal plants;

(b) if so, whether any efforts have been made to dissolve the non-functional committees or to bring these under the control of the Department of Indian Systems of Medicine and Homoeopathy;

(c) whether her Ministry had called a meeting of the National Medicinal Plant Board, which was set up in 2000 to look at the ways for sustainable harvest of medicinal plants;

(d) if so, the decisions taken thereat; and

(e) the steps being taken to implement them?

ANSWER

MINISTER OF HEALTH AND FAMILY WELFARE AND PARLIAMENTARY AFFAIRS

(SMT. SUSHMA SWARAJ)

(a) The Government Departments always endeavour to cooperate so as to streamline conservation and harvest of medical plants.

(b) Does not arise.

(c) Yes, Sir.

(d) & (e) Several decisions were taken to develop the sector which are being implemented.

- -------

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE
RAJYA SABHA
UNSTARRED QUESTION NO-2100
ANSWERED ON-08.08.2003
MISSION FOR MEDICINAL PLANTS
2100. SHRI R. KAMARAJ
THANGA TAMIL SELVAN

(a) whether Government have initiated any ad-hoc mission for researching medicinal plants throughout India;

(b) if so, the details thereof;

(c) whether Government have taken any measure to check exploitation by foreigners who are visiting India in the name of research study and importing medicinal plants at a huge cost in the name of foreign origin; and

(d) if so, the details thereof?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE
(SHRI HUKUMDEO NARAYAN YADAV)

(a) & (b) : The Indian Council of Agricultural Research has established National Research Centre for Medicinal & Aromatic Plants at Anand in Gujarat. The Centre is conducting research on all aspects of medicinal and aromatic plants. Multi-location and multi-disciplinary research is also conducted under All India Coordinated Research Project on Medicinal and Aromatic Plants having 11 centres located in State Agriculture Universities and ICAR Institutes. In addition, 8 ad-hoc projects are under operation at different centers of the ICAR.

(c) & (d) : The Indian ‘Biological Diversity Act’ of the Government of India has provisions to check exploitation of our genetic resources including medicinal plants by foreigners.

---------

GOVERNMENT OF INDIA
MINISTRY OF COMMERCE AND INDUSTRY
RAJYA SABHA
STARRED QUESTION NO-101
ANSWERED ON-28.07.2003
EXPORT OF HERBAL AND MEDICINAL PLANTS
101. MISS MABEL REBELLO
B.J. PANDA

: 

(a) whether the Export-Import Bank of India has identified herbal and medicinal plants as an important sub-sector for enhancement of exports;
(b) whether the current global demand of the herbal and medicinal plants is around 51,000 crores and whether it has released a booklet in this regard; and

(c) Government’s action plan for exploiting the situation to the maximum in the global market?

ANSWER

MINISTER FOR COMMERCE & INDUSTRY

(SHRI ARUN JAITLEY)

(a) to (c) A Statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO PARTS (a) TO (c) OF THE RAJYA SABHA STARRED QUESTION NO.101 FOR ANSWER ON 28TH July, 2003 REGARDING EXPORT OF HERBAL & MEDICINAL PLANTS

a). Yes, Sir. b). The global demand for medicinal plants was estimated to be valued over Rs. 4,700 crores or US $1 billion (US $ 1000 million) in 2001. (1US$ = Rs.47/-approx) (Source: PC-TAS, ITC/UNCTAD, Geneva, SITC Code 2924 - Plants and parts of plants primarily used for pharmacy, perfumery and insecticides: fresh, dried, powdered). EXIM Bank brought out an Occasional Paper (No. 54) on `Indian Medicinal Plants - A Sector Study` in 1997. The updated study is under finalisation and is expected to be released in August, 2003.

c) Government’s action plan for exploiting the situation to the maximum in the global market is summarized below:- 
   o The Department of Indian Systems of Medicine under the Ministry of Health & Family Welfare has recently introduced a promotional scheme, through National Medicinal Plants Board, providing incentives for commercial cultivation of medicinal plants, which can aid in their export. 
   o There are several government initiatives focused specifically on medicinal plants resources. The Ministry of Health has a programme called `Vanaspathi- van scheme` for encouraging forest departments to raise medicinal plants on degraded forestlands. The Department of Indian System of Medicine has also been promoting establishment of herbal gardens and development of agro-technology protocols for prioritized species. 
   o The Ministry of Environment and Forests has been implementing a pioneering programme in peninsular India for conserving wild populations of inter and intra specific medicinal plant diversity of that region. 
   o The Department of Biotechnology has established four cryo-preservation gene banks for medicinal plants to conserve the species. 
   o The Indian Council for Agricultural Research has been implementing an All India coordinated programme for the cultivation of medicinal and aromatic plants. 
   o The Department of Science and Technology, through the Council for Scientific and Industrial Research (CSIR), has initiated an R & D project on traditional medicine, for standardizing prioritized herbal products under internationally acceptable norms. 
   o The Office of Director General Foreign Trade, Department of Commerce, has issued a Notification No. 3 dated 31st March 2003, according to which plant and plant portions obtained from the wild and their cultivated varieties, except for 29 species of plants listed in Appendix 2 of Schedule 2 of ITC (HS) Classification of Import & Export items, 2002-2007 and Certain species of plants listed under CITIES (Convention on International Trade in Endangered Species) are freely exportable with NOC/Cultivation Certificate from Government Authorities. Even formulations made from the 29 prohibited species are freely exportable. 
   o A panel has been formed in the CHEMEXCIL, an autonomous Export Promotion Council setup by the Department of
Commerce, for giving thrust to exports of Ayurveda and Herbal Medicine. Financial assistance to individual exporters of the industry is also being granted for participating in International Trade Fairs through its Marketing Development Assistance (MDA) Programme. In addition, through its Market Access Initiative Scheme, the Department of Commerce is financing the conduct of market study and follow-up activities to promote exports.

---------

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE
RAJYA SABHA
UNSTARRED QUESTION NO-5131
ANSWERED ON-09.05.2003
PROMOTION OF HERBAL AND MEDICINAL PLANTS.
5131. MS. PRAMILA BOHIDAR

(a) the names of the programmes being implemented by Government for the promotion of herbal and medicinal plants; and

(b) the percentage of production during the last three years?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE

(SHRI HUKUMDEO NARAYAN YADAV)

(a): The following programmes are being implemented by the Government of India for the promotion of herbal and medicinal plants:

1. The Department of Agriculture & Cooperation in the Ministry of Agriculture is implementing a Centrally Sponsored Scheme on Macro Management in Agriculture- Supplementation/Complementation of States` efforts through Work Plans. Under this scheme the State Governments can prioritise their activities as per the felt needs and requirements among various programmes including development of medicinal and aromatic plants.

2. The Department of Indian System of Medicine & Homoeopathy (DISMH) in the Ministry of Health and Family Welfare is implementing the following schemes:

(i) Central Scheme for development & cultivation of Medicinal Plants.

(ii) Central Scheme for development of Agro-techniques & cultivation of Medicinal Plants. Besides, the DISMH have constituted a National Medicinal Plants Board for overseeing the
development of medicinal plants, which is implementing various programmes for the
development of medicinal plants.

(b): No estimates are available about the production of herbal and medicinal plants during the
last three year.

---------

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE
RAJYA SABHA
UNSTARRED QUESTION NO-4346
ANSWERED ON-02.05.2003
CULTIVATION OF MEDICINAL PLANTS IN RAJASTHAN .
4346 . SHRI KHAN (DURRU) AIMADUDDIN AHMAD

(a) whether there is great potential for cultivation of medicinal plants in certain areas of
Rajasthan;

(b) whether Government have conducted any survey so as to ascertain the exact locations where
medicinal plants could be grown;

(c) if so, the details in this regard;

(d) whether despite availability of various species of medicinal plants in those areas, there is no
infrastructure for marketing of those by products of valuable medicinal plants; and

(e) if so, measure contemplated by Government to improve the situation?
ANSWER

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE

(SHRI HUKUMDEO NARAYAN YADAV)

(a): Yes, Sir.

(b) & (c): A Team of Scientists of Indian Council of Agriculture Research (ICAR) identified
different medicinal plants suitable for growing in different agroclimatic zone of Rajasthan. The
details are given in the Annexure.

(d): At present the marketing of medicinal plants is mainly being done through private traders.
(e): To improve the existing situation, State Government has recently constituted the Rajasthan State Medicinal Plants Board to look after the marketing as well as other developmental aspects of medicinal plants in the State.

ANNEXURE

Zone-wise details of Medicinal plants identified for cultivation in the State of Rajasthan

Zone No. Agroclimatic Zone Crops
Zone 1a Arid Western Plain Senna, Guggal, Aloe Zone 1b Irrigated North-Western Plain Safed Musli, Agwagandha, Isabgol Zone 1c Hyper Arid partially irrigated western plain Aloe, Senna Zone 1b Transitional plains of Luni Basin Senna, Isabgol, Mehandi Zone IIa Semi Arid Eastern Plain Senna, Guggal, Aloe Zone IVa Subhumid Southern Plain and Aravalli Hills Isabgol, Opium Poppy, Aswgandha, Safed Musli. Zone IVb Humid Southern Plain Opium Poppy, Safed Musli, Lemongrass. Zone V Humid South Eastern Plain Safed Musli, Lemongrass

-------

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
UNSTARRED QUESTION NO-2550
ANSWERED ON-07.04.2003
SETTING UP OF EXPORT ZONES FOR MEDICINAL PLANTS .
2550 . PROF. M. SANKARALINGAM

(a) whether it is a fact that the Medicinal Plants Board in its second meeting has recommended setting up of export zones for specified medicinal plants;

(b) if so, the steps taken by Government to set up export promotion zones;

(c) how many zones have been contemplated to encourage the export; and

(d) the details of medicinal plants recommended by the Board?

ANSWER
MINISTER OF HEALTH AND FAMILY WELFARE AND PARLIAMENTARY AFFAIRS

(SMT. SUSHMA SWARAJ)

(a): Yes, Sir.

(b): The State Medicinal Plants Boards were requested to take steps to setup such zones in their states.
(c): During last financial year one export promotion zone has been notified on Medicinal and Aromatic plants covering five districts in the state of Uttaranchal.

(d): The recommended species are Atees, Isabgol, Senna, Mulethi, Ashwagandha, Safed Musali and Henna etc., which have International market.

--------

GOVERNMENT OF INDIA
MINISTRY OF COMMERCE AND INDUSTRY
RAJYA SABHA
UNSTARRED QUESTION NO-1869
ANSWERED ON-10.03.2003
PATENTING OF INDIAN HERBS AND MEDICINAL PLANTS BY MNCS.
1869. SHRI KRIPAL PARMAR

(a) whether it is a fact that some developed countries and multi-national companies have got patented many Indian herbs and medicinal plants;

(b) if so, the details thereof; and (c)

(c) the action taken by Government in defence of their claim on the Indian herbs and medicinal plants being patented by the other countries?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF COMMERCE AND INDUSTRY

(SHRI CH. VIDYASAGAR RAO)

(a) to (c): Herbs and medicinal plants, existing in nature, would not meet the criteria of patentability, namely, novelty, inventiveness and industrial applicability. However, patents have reportedly been granted on compositions based on properties of certain herbs/medicinal plants. No such information is maintained as patents are granted under the sovereign prerogative of countries according to their respective patent laws and have territorial effect, that is, they are effective only in the country of grant.

However, as and when information is received about patents being obtained on certain items which are not considered patentable and which affect Indian interests, steps are taken to assess whether the grant of such patent can be challenged under the patent laws of the country concerned. Earlier a patent granted in the United States of America on the use of turmeric in wound healing was successfully challenged and was also cancelled by the Patent Office of the country concerned. Similarly, a patent on the fungicidal property of neem, granted in Europe, was successfully challenged. The claims of the patent on Basmati Ricelines and grains granted in the United States of America which had the potential of affecting India’s commercial interest were also challenged. The said claims were subsequently cancelled by the United States Patent
and Trademark Office and the title of the patent was also amended. A patent is normally challenged by the person(s) whose interests are affected/jeopardised.

---------

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT AND FORESTS
RAJYA SABHA
UNSTARRED QUESTION NO-1760
ANSWERED ON-07.03.2003
CONSERVATION OF MEDICINAL PLANTS
1760. SHRI H.K.JAVARE GOWDA

(a) whether it is a fact that rare medicinal plants have been identified in Karnataka Forests particularly Western Ghats;

(b) if so, the details of varieties of medicinal plants identified by the Ministry in the State;

(c) the details of amount spent on medicinal plants conservation activities in the State during the past three years;

(d) whether Government propose to set up a Research and Development Institution on medicinal plants in the State; and

(e) if so, the details thereof?

ANSWER
MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT AND FORESTS

(SHRI DILIP SINGH JU DEV)

(a) & (b) During floristic studies undertaken by the Botanical Survey of India (BSI) in the Karnataka forests particularly Western Ghats, rare medicinal plants numbering about 36 have been identified. The list is given in Annexure-I.

(c) Rs.95.91 lakhs have been spent in Karnataka for activities relating to in-situ conservation of medicinal plants during the previous three years under a DANIDA supported project implemented by the Ministry of Environment and Forests. The National Medicinal Plants Board (Department of Indian System of Medicine and Homoeopathy) has also sanctioned eight projects in Karnataka during 2001-2002. These projects include activities related to medicinal plants conservation. The total value of these projects is Rs.119 lakhs.

(d)&(e) There is no such proposal.

ANNEXURE-I
ANNEXURE IN RESPECT OF PART (a&b) OF THE RAJYA SABHA UNSTARRED QUESTION NO.1760 REGARDING ‘CONSERVATION OF MEDICINAL PLANTS’ FOR REPLY ON 07.03.2003.

S.No. Name of Species

1. Aphanamixis polystachya (Wall)Parker
2. Calophyllum apetalum Willd
3. Canarium strictum Roxb
4. Chonemorpha fragrans (Moon) Alston
7 Dysoxylum malabaricum Beddome ex Hiern
8. Eulophia ramentacea Lindl. ex Wight

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE
RAJYA SABHA
STARRED QUESTION NO-63
ANSWERED ON-22.11.2002
EXPORT OF MEDICINAL PLANTS .
63 .  SHRIMATI N.P. DURGA
ALLADI P. RAJKUMAR

(a) what bottlenecks India is facing in playing a major role in the supply of medicinal and herbal plants for the global herbal medicine and cosmetics industry; and
(b) the agencies involved in encouraging farmers to use latest technological developments for better and quicker yields of such plants and selling the produce in the global market?

ANSWER

MINISTER OF AGRICULTURE (SHRI AJIT SINGH)

(a)&(b): A Statement is laid on the Table of the Sabha.

STATEMENT IN RESPECT OF PARTS (a) AND (b) OF RAJYA SABHA STARRED QUESTION NO. 63 FOR 22/11/2002 REGARDING EXPORT OF MEDICINAL PLANTS.

(a)&(b): The low share of India’s presence in the global trade of medicinal plants could be attributed to poor quality of produce, unorganized production and marketing system, lack of awareness and inadequate database. A Task Force on Conservation and Sustainable Use of Medicinal Plants constituted by the Planning Commission has identified the following bottlenecks in the development of medicinal plants:

1. The medicinal plants are collected mostly from the wild without paying attention to the stage of maturity, stored haphazardly for long period of time under unsuitable conditions thereby causing deterioration in the quality which are not acceptable to importers and standard drug manufacturing units.

2. The marketing of Medicinal Plants is inefficient, informal, secretive and opportunistic. As a result, raw material supply situation is shaky, unsustainable and exploitative. This results in depletion of resource base, exploitation of rural people, adulteration and non-availability of quality herbal drugs for domestic consumption as well as for exports.

3. As forest habitats disappear and overharvesting for commercial use reduces the stocks of wild medicinal plant material, there is a corresponding drop in the availability of the plants normally used as the first and last resort for all health care by rural population.

4. Despite the wealth of resources available, the sector has not developed owing to the absence of suitable standardization, quality control and efficacy of drugs. It has yet to formalize and organize marketing and trade and integrate the development of medicinal plants form production to consumption to boost export of herbal formulations.

5. The medicinal plants sector has a number of stakeholders having divergent interests. There is lack of coordination and each stakeholder is interested in strengthening specific aspects of his sector only and ignoring the overall development.

6. Several constraints exist due to inadequate awareness; inadequate investments in research and development; manufacturer – exporter dissonance; lack of quality and standardization norms; and lack of adequate marketing and trade information.

The Central Government have taken various initiatives to promote Research and Development of medicinal plants in the country including creation of infrastructure for quality testing. The
following agencies are involved in encouraging the farmers to use the latest technologies for getting higher yield and deriving higher income:

(i) The National Research Centre on Medicinal & Aromatic Plants, Anand, Gujarat under the Indian Council of Agricultural Research (ICAR) is carrying out research work exclusively on medicinal & aromatic plants.

(ii) Council of Scientific and Industrial Research (CSIR) and its constituent laboratories including Central Institute of Medicinal and Aromatic Plants (CIMAP) are also carrying our research activities for the development of these plants.

(iii) Department of Agriculture & Cooperation, Ministry of Agriculture is implementing developmental programmes on medicinal and aromatic plants through Plan Scheme to address the issues of quality planting material, conservation of germplasm, coverage of area under improved varieties and quality assessment through Regional Analytical Laboratories.

(iv) National Medicinal Plants Board, Ministry of Health and Family Welfare is implementing various programmes in an integrated manner and is overseeing the overall development of medicinal plants in the country as an Apex Body.

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
UNSTARRED QUESTION NO-2696
ANSWERED ON-12.08.2002
CONSERVATION AND SUSTAINABLE USE OF MEDICINAL PLANTS.
2696. SHRI NANDI YELLAIAH

(a) the main recommendations of the report of task force on conservation and sustainable use of medicinal plants submitted by Planning Commission in March, 2000;

(b) whether Government have implemented the recommendations;

(c) if so, the details thereof; and

(d) if not, the reasons therefor?

ANSWER
THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE (SHRI A. RAJA)

(a): Recommendations of the report are mainly related to conservation, cultivation, sustainable use, quality control of Medicinal Plants and setting up of Medicinal Plants Board.
(b) to (d): Following steps have been taken for implementation of the recommendations:- Medicinal Plants Board has been set up in November, 2000 Planning Commission has increased the outlay for development of Medicinal Plants in Tenth Plan. Medicinal Plants Conservation Areas (MPCAs) and Medicinal Plants Management Plan Development Areas (MPDAs) are being established for conservation of Medicinal Plants. Scheme viz.‘Non Timber Forest Produce including Medicinal Plants’ has been merged into National Afforestation Programme in the Tenth Five Year Plan. Under this Programme, funds are provided to decentralized Forest Development Agencies (FDAs) in which development of medicinal plants is a component. Financial support is being provided to Botanical Gardens for Ex-situ Conservation of rare plants including rare medicinal plants. Vanaspati vans have been funded. NGOs are being assisted for creating awareness. Traditional Knowledge Digital Library (TKDL) is being established. National Gene Bank has been set up for collection, conservation and characterization of medicinal & aromatic plants. Programmes on application of bio-technology in medicinal & aromatic plants have been implemented. National Research Centre on Medicinal & Aromatic Plants at Anand (Gujarat) is carrying out researches on different aspects of medicinal and aromatic plants. The Government has notified Good Manufacturing Practices (GMPs). State Pharmacies and Laboratories have been assisted. Private Laboratories will be recognized to function as public test houses. Pharmacopoeial work has been speeded up.

--------

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
UNSTARRED QUESTION NO-4846
ANSWERED ON-13.05.2002
USE OF MEDICINAL PLANTS .
4846 . SHRI NARENDRA MOHAN

(a) whether his Ministry has devised adequate provisions to encourage sustainable use of medicinal plants and attach conservation values to them so that Ayurvedic system is strengthened;

(b) if so, the details thereof; and

(c) whether the provisions are sufficient to protect this system of alternative medicine from world-wide companies patenting their drug development schemes based on traditional systems of medicine?

ANSWER
THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE (SHRI A. RAJA)
(a) to (c) Medicinal Plants Board has been set up to ensure availability of Medicinal Plants used in Indian Systems of Medicine & Homoeopathy, and coordinate all matters relating to their conservation and development.

Traditional Knowledge Digital Library (TKDL), a collaborative project between the Department of Indian systems of Medicine & Homoeopathy and National Institute of Science Communication (CSIR) has been initiated with the objective of protecting the grant of patents on Indian Traditional Knowledge, in particular Ayurveda in first phase of the project. On completion, the TKDL portal will be made available to patent examiners globally which will prevent patenting by others of our knowledge.

(a) whether it is a fact that medicinal plants in the country are rapidly on extinct;

(b) if so, the steps taken by his Ministry to protest the medicinal plants in the country;

(c) whether any action plan has been formulated for this purpose; and

(d) if so, the details thereof?

ANSWER
THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE
(SHRI A. RAJA)

(a) There is no evidence that medicinal plants are becoming extinct rapidly in the country.

(b) to (d) However, Government have taken steps to encourage conservation and cultivation of plants species through various schemes such as in-situ/ex-situ conservation, Biosphere Reserves, establishment of Gene Banks and developing Agro-techniques. A Medicinal Plants Board has also been set up which will coordinate activities relating to conservation and cultivation of medicinal plants.
UNSTARRED QUESTION NO-2747
ANSWERED ON-14.12.2001
CENTRAL SCHEMES FOR MEDICINAL AND AROMATIC PLANTS ETC. .
2747 . SHRIMATI CHANDRA KALA PANDEY

(a) the salient features of the Centrally sponsored schemes of Development of Medicinal and Aromatic Plants; Development of Roots and Tuber Crops; Development of Mushroom, Bee keeping; Scheme for foundation and certified seed production of vegetable crops, State Land use Boards; Oilseeds production programme;

(b) the criteria for allocating funds under each scheme to States and corresponding central share; whether these funds would be given to States as 100 per cent grant or whether it would follow the usual 70/30 (loan/grant) formula for Plan assistance; and

(c) the State-wise details of proposals received, funds released and utilized during the last three years?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE

(SHRI HUKUMDEO NARAYAN YADAV)

(a): These schemes aim to increase the production and productivity of the respective crops through Supply of quality planting material of improved varieties and making available technical know-how to growers through trainings and demonstrations. The scheme on State Land Use Board envisages implementation of 19 point recommendations of the National Land Use Policy and promote scientific land use/review of land based programmes at State level etc. The scheme on Bee-keeping aims at increasing productivity of crops through enhanced pollination. These Schemes, except the scheme on Oilseeds Production Programme, have now been subsumed, since October, 2000, in the scheme on macro management of agriculture – Supplementation/complementation of States’ efforts through work plans. Under this scheme States have greater flexibility to prioritise their needs. The programmes of these schemes can now be pursued by the States/UTs through their work plans.

(b): The approved pattern of assistance under the scheme is in the ratio of 90:10 for the Centre and the States respectively except in the case of North-Eastern States including Sikkim who are being given 100% Central assistance. The Central assistance released to the States would be in the ratio of 80% grant and 20% loan. The allocation of funds under the scheme is made to States /UTs after mutual discussion with them on their work plans. However, States can make further allocations on individual interventions according to their developmental priorities based on work plans.

Under the Centrally Sponsored Scheme on Oilseeds Production Programme the criteria for allocation of funds is done on the basis of area as well as the production of Oilseeds Crops in a particular State.
(c): In order to avail assistance under macro management scheme, each State/UT submits its proposals in form of work plans which are discussed between the Department of Agriculture & Cooperation and the States/UTs concerned for allocation of funds. Statements indicating release of funds utilization/unspent balances is annexed at Annexures-I to VII.

Annexure-I

(Rs. in lakhs) FUND RELEASE AND UTILIZATION FOR MACRO MANAGEMENT OF AGRICULTURE

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Name of State</th>
<th>2000-2001 Release</th>
<th>Unspent as on 1.4.01</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Andhra Pradesh</td>
<td>2266.970</td>
<td>1985.930</td>
</tr>
<tr>
<td>2</td>
<td>Arunachal Pradesh</td>
<td>534.000</td>
<td>171.920</td>
</tr>
<tr>
<td>3</td>
<td>Assam</td>
<td>434.710</td>
<td>804.490</td>
</tr>
<tr>
<td>4</td>
<td>Bihar</td>
<td>352.560</td>
<td>1130.270</td>
</tr>
<tr>
<td>5</td>
<td>Jharkhand</td>
<td>0.000</td>
<td>311.210</td>
</tr>
<tr>
<td>6</td>
<td>Goa</td>
<td>26.420</td>
<td>79.200</td>
</tr>
<tr>
<td>7</td>
<td>Gujarat</td>
<td>3000.000</td>
<td>1020.320</td>
</tr>
<tr>
<td>8</td>
<td>Haryana</td>
<td>1233.390</td>
<td>294.400</td>
</tr>
<tr>
<td>9</td>
<td>Himachal Pradesh</td>
<td>1241.290</td>
<td>160.080</td>
</tr>
<tr>
<td>10</td>
<td>Jammu &amp; Kashmir</td>
<td>840.050</td>
<td>498.190</td>
</tr>
<tr>
<td>11</td>
<td>Karnataka</td>
<td>6020.080</td>
<td>1340.880</td>
</tr>
<tr>
<td>12</td>
<td>Kerala</td>
<td>3026.700</td>
<td>3026.700</td>
</tr>
<tr>
<td>13</td>
<td>Madhya Pradesh</td>
<td>3920.420</td>
<td>10.970</td>
</tr>
<tr>
<td>14</td>
<td>Chhattisgarh</td>
<td>963.000</td>
<td>690.760</td>
</tr>
<tr>
<td>15</td>
<td>Maharashtra</td>
<td>8892.110</td>
<td>2527.760</td>
</tr>
<tr>
<td>16</td>
<td>Manipur</td>
<td>479.130</td>
<td>579.210</td>
</tr>
<tr>
<td>17</td>
<td>Maghymala</td>
<td>542.320</td>
<td>545.750</td>
</tr>
<tr>
<td>18</td>
<td>Mizoram</td>
<td>622.030</td>
<td>68.870</td>
</tr>
<tr>
<td>19</td>
<td>Nagaland</td>
<td>1170.670</td>
<td>0.000</td>
</tr>
<tr>
<td>20</td>
<td>Orissa</td>
<td>614.890</td>
<td>1887.040</td>
</tr>
<tr>
<td>21</td>
<td>Punjab</td>
<td>667.290</td>
<td>1398.600</td>
</tr>
<tr>
<td>22</td>
<td>Rajasthan</td>
<td>6575.150</td>
<td>1708.370</td>
</tr>
<tr>
<td>23</td>
<td>Tamil Nadu</td>
<td>4441.270</td>
<td>1845.560</td>
</tr>
<tr>
<td>24</td>
<td>Tripura</td>
<td>475.910</td>
<td>48.550</td>
</tr>
<tr>
<td>25</td>
<td>Uttar Pradesh</td>
<td>6333.950</td>
<td>1783.640</td>
</tr>
<tr>
<td>26</td>
<td>Uttaranchal</td>
<td>889.970</td>
<td>130.570</td>
</tr>
<tr>
<td>27</td>
<td>West Bengal</td>
<td>1077.830</td>
<td>53.690</td>
</tr>
<tr>
<td>28</td>
<td>Sikkim</td>
<td>737.860</td>
<td>119.230</td>
</tr>
<tr>
<td>29</td>
<td>Chandigarh</td>
<td>0.650</td>
<td>0.000</td>
</tr>
<tr>
<td>30</td>
<td>Dadra &amp; N. Haveli</td>
<td>21.610</td>
<td>0.000</td>
</tr>
<tr>
<td>31</td>
<td>Dam &amp; Diu</td>
<td>4.340</td>
<td>0.000</td>
</tr>
<tr>
<td>32</td>
<td>Delhi</td>
<td>61.030</td>
<td>61.030</td>
</tr>
<tr>
<td>33</td>
<td>A &amp; N</td>
<td>38.870</td>
<td>0.000</td>
</tr>
<tr>
<td>34</td>
<td>Pondicherry</td>
<td>54.470</td>
<td>71.420</td>
</tr>
<tr>
<td>35</td>
<td>Lakshadweep</td>
<td>10.180</td>
<td>0.000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>57571.120</td>
<td>24354.610</td>
</tr>
</tbody>
</table>

Annexure-II

(Rs. in lakhs)

FUND RELEASE AND UTILIZATION FOR MUSHROOM SCHEME
### Annexure-III

(Fund Release and Utilization for Root & Tuber Crops Scheme)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Andhra Pradesh</td>
<td>1.41</td>
<td>0.00</td>
<td>0.50</td>
<td>1.50</td>
</tr>
<tr>
<td>Arunachal Pradesh</td>
<td>0.00</td>
<td>0.00</td>
<td>0.75</td>
<td>0.00</td>
</tr>
<tr>
<td>Assam</td>
<td>0.00</td>
<td>0.00</td>
<td>0.61</td>
<td>0.70</td>
</tr>
<tr>
<td>Bihar</td>
<td>3.00</td>
<td>0.00</td>
<td>1.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Goa</td>
<td>0.00</td>
<td>0.00</td>
<td>0.25</td>
<td>0.00</td>
</tr>
<tr>
<td>Gujarat</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Haryana</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Himachal Pradesh</td>
<td>0.00</td>
<td>0.00</td>
<td>0.28</td>
<td>0.00</td>
</tr>
<tr>
<td>Jammu &amp; Kashmir</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Karnataka</td>
<td>0.00</td>
<td>14.52</td>
<td>2.05</td>
<td>2.30</td>
</tr>
<tr>
<td>Kerala</td>
<td>2.85</td>
<td>1.20</td>
<td>1.82</td>
<td>0.00</td>
</tr>
<tr>
<td>Madhya Pradesh</td>
<td>0.63</td>
<td>0.00</td>
<td>1.00</td>
<td>1.78</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>0.00</td>
<td>2.30</td>
<td>0.50</td>
<td>3.45</td>
</tr>
</tbody>
</table>

Total: 197.92 262.81 178.96 121.46 50.00 2.75

(Rs. in lakhs)
## Medicinal Plants – Highlighted in Rajya Sabha from 2005 to till date (Monsoon Session, 2013)

<table>
<thead>
<tr>
<th>State</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manipur</td>
<td>0.57</td>
<td>0.42</td>
<td>0.50</td>
<td>0.50</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Maghyala</td>
<td>0.00</td>
<td>0.00</td>
<td>0.25</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Mizoram</td>
<td>0.00</td>
<td>0.83</td>
<td>0.75</td>
<td>0.00</td>
<td>0.00</td>
<td>0.75</td>
</tr>
<tr>
<td>Nagaland</td>
<td>0.00</td>
<td>0.00</td>
<td>0.25</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Orissa</td>
<td>5.45</td>
<td>0.95</td>
<td>0.50</td>
<td>5.50</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Punjab</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Rajasthan</td>
<td>0.73</td>
<td>0.75</td>
<td>0.75</td>
<td>0.65</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Tamil Nadu</td>
<td>1.00</td>
<td>0.96</td>
<td>0.58</td>
<td>1.75</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Tripura</td>
<td>6.60</td>
<td>6.45</td>
<td>0.75</td>
<td>0.60</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Uttar Pradesh</td>
<td>1.58</td>
<td>3.28</td>
<td>3.00</td>
<td>5.33</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>West Bengal</td>
<td>0.00</td>
<td>0.00</td>
<td>0.50</td>
<td>0.50</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Sikkim</td>
<td>0.55</td>
<td>1.19</td>
<td>0.55</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Chandigarh</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Dadra &amp; N. Haveli</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Daman &amp; Diu</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Delhi</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td>24.37</td>
<td>33.46</td>
<td>17.23</td>
<td>24.04</td>
<td>0.00</td>
<td>0.75</td>
</tr>
</tbody>
</table>

### Annexure-IV

**FUND RELEASE AND UTILIZATION FOR VEGETABLE SCHEME**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Andhra Pradesh</td>
<td>0.00</td>
<td>0.00</td>
<td>6.00</td>
</tr>
<tr>
<td>2</td>
<td>Arunachal Pradesh</td>
<td>4.20</td>
<td>0.00</td>
<td>6.50</td>
</tr>
<tr>
<td>3</td>
<td>Assam</td>
<td>0.00</td>
<td>0.00</td>
<td>5.00</td>
</tr>
<tr>
<td>4</td>
<td>Bihar</td>
<td>0.00</td>
<td>0.00</td>
<td>10.00</td>
</tr>
<tr>
<td>5</td>
<td>Goa</td>
<td>2.94</td>
<td>2.72</td>
<td>12.17</td>
</tr>
<tr>
<td>6</td>
<td>Gujarat</td>
<td>2.61</td>
<td>4.76</td>
<td>15.00</td>
</tr>
<tr>
<td>7</td>
<td>Haryana</td>
<td>5.99</td>
<td>4.50</td>
<td>13.50</td>
</tr>
<tr>
<td>8</td>
<td>Himachal Pradesh</td>
<td>0.00</td>
<td>0.00</td>
<td>7.50</td>
</tr>
<tr>
<td>9</td>
<td>Jammu &amp; Kashmir</td>
<td>0.00</td>
<td>0.00</td>
<td>7.50</td>
</tr>
<tr>
<td>10</td>
<td>Karnataka</td>
<td>10.00</td>
<td>5.98</td>
<td>23.16</td>
</tr>
<tr>
<td>11</td>
<td>Kerala</td>
<td>4.50</td>
<td>2.25</td>
<td>21.50</td>
</tr>
<tr>
<td>12</td>
<td>Madhya Pradesh</td>
<td>0.00</td>
<td>0.00</td>
<td>18.00</td>
</tr>
<tr>
<td>13</td>
<td>Maharashtra</td>
<td>0.00</td>
<td>1.11</td>
<td>18.00</td>
</tr>
<tr>
<td>14</td>
<td>Manipur</td>
<td>0.00</td>
<td>21.05</td>
<td>11.50</td>
</tr>
<tr>
<td>15</td>
<td>Maghyala</td>
<td>5.70</td>
<td>2.30</td>
<td>5.80</td>
</tr>
<tr>
<td>16</td>
<td>Mizoram</td>
<td>3.45</td>
<td>2.55</td>
<td>10.05</td>
</tr>
<tr>
<td>17</td>
<td>Nagaland</td>
<td>9.00</td>
<td>0.30</td>
<td>4.50</td>
</tr>
<tr>
<td>18</td>
<td>Orissa</td>
<td>15.00</td>
<td>15.00</td>
<td>108.70</td>
</tr>
<tr>
<td>19</td>
<td>Punjab</td>
<td>0.00</td>
<td>0.00</td>
<td>9.40</td>
</tr>
<tr>
<td>20</td>
<td>Rajasthan</td>
<td>8.92</td>
<td>5.34</td>
<td>9.84</td>
</tr>
<tr>
<td>21</td>
<td>Tamil Nadu</td>
<td>0.00</td>
<td>12.00</td>
<td>9.00</td>
</tr>
<tr>
<td>22</td>
<td>Tripura</td>
<td>4.98</td>
<td>1.02</td>
<td>6.00</td>
</tr>
<tr>
<td>23</td>
<td>Uttar Pradesh</td>
<td>0.00</td>
<td>62.26</td>
<td>15.00</td>
</tr>
<tr>
<td>24</td>
<td>West Bengal</td>
<td>0.00</td>
<td>0.000</td>
<td>18.00</td>
</tr>
<tr>
<td>25</td>
<td>Sikkim</td>
<td>3.82</td>
<td>4.50</td>
<td>9.58</td>
</tr>
<tr>
<td>26</td>
<td>Chandigarh</td>
<td>0.00</td>
<td>0.00</td>
<td>4.00</td>
</tr>
<tr>
<td>27</td>
<td>Dadra &amp; N. Haveli</td>
<td>10.00</td>
<td>0.00</td>
<td>4.00</td>
</tr>
<tr>
<td>28</td>
<td>Daman &amp; Diu</td>
<td>0.00</td>
<td>0.00</td>
<td>3.00</td>
</tr>
<tr>
<td>29</td>
<td>Delhi</td>
<td>2.97</td>
<td>5.50</td>
<td>6.30</td>
</tr>
<tr>
<td>30</td>
<td>A &amp; N</td>
<td>0.99</td>
<td>2.00</td>
<td>3.00</td>
</tr>
<tr>
<td>31</td>
<td>PONDICHERRY</td>
<td>0.00</td>
<td>0.00</td>
<td>4.00</td>
</tr>
</tbody>
</table>
GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE
RAJYA SABHA
UNSTARRED QUESTION NO-2859
ANSWERED ON-22.03.2001
GROWING OF MEDICINAL PLANTS BY UTILISING BIO TECHNOLOGY
2859 . SHRI RAVI SHANKAR PRASAD

(a) whether Government’s attention has been drawn to the observation of one of the members of the Planning Commission which appeared in the Delhi edition of the ‘Hindu’ Daily dated the 28th February, 2001, that bio-technology should be adopted in the cultivation of medicinal plants and also forest produce like bamboo; and

(b) if so, the steps being taken by Government for identifying medicinal plants for growing on a massive scale by utilizing bio-technology?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE

(SHRI SHRIPAD Y. NAIK)

(a)&(b): Yes, Sir. The Government is encouraging the adoption of bio-technology for the cultivation of medicinal plants and bamboo. The Department of Biotechnology, Ministry of Science & Technology and the Indian Council of Agricultural Research, Ministry of Agriculture have been supporting a number of programmes on the production of medicinal plants through tissue culture for large scale production of these plants. Regeneration protocols have been developed for about ten different species and four Gene Banks have been established for conservation of the important medicinal plants. Protocols for tissue culture have been developed for medicinal and aromatic plants like Reuvolfia serpentina, Chlorophytum and Commiphora mukul and for bamboo. Large quantity of bamboo plants produced by the Tissue Culture Pilot Plants at Tata Energy Research Institute (TERI), New Delhi and National Chemical Laboratory (NCL), Pune have been planted at various locations of the country. For increasing the area under medicinal plants, the Department of Agriculture and Cooperation is extending support to the farmers under the Centrally Sponsored Scheme on Macro Management in Agriculture – Supplementation/Complementation of States’ Efforts through Work Plans.
PROMOTION OF MEDICINAL PLANTS 
2086 . SHRIMATI SAROJ DUBEY

(a) whether Government are aware that medicinal plants are almost vanishing due to neglect;

(b) if so, whether Government are going to take any effective steps to promote medicinal plants;

(c) if so, the details thereof; and

(d) if not, the reasons therefor?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE

(SHRI SHRIPAD Y. NAIK)

(a): Yes, Sir.

(b)&(c): A Central Sector Scheme on Development of Medicinal and Aromatic Plants was launched by the Ministry of Agriculture during the VIII Plan under which medicinal plants are conserved through establishment of Herbal Gardens the State Agricultural Universities. Presently, assistance for area expansion under medicinal and aromatic plants is being provided under Centrally Sponsored Scheme on Macro Management in Agriculture – Supplementation/Complementation of States’ Efforts through Work Plans. The Indian Council of Agricultural Research is providing research support in the conservation of medicinal plants through their programmes of

(i) All India Coordinated Research Project on Medicinal & Aromatic Plants,
(ii) National Bureau of Plant Genetic Research
(iii) National Agricultural Technology Project on Plant Biodiversity under Jai Vigyan National Science & Technology Mission and
(iv) Project funded by Department of Biotechnology on G-15 Genebanks for Medicinal & Aromatic Plants. The Department of Indian Systems of Medicine & Homoeopathy (DISMH), Ministry of Health & Family Welfare, is also implementing a scheme by providing Central Assistance for Development of Agro- Techniques and Cultivation of Medicinal Plants used in Ayurveda, Siddha, Unani and Homoeopathy. Besides, a Medicinal Plants Board has been set up by the DISMH for the overall development of medicinal plants in the country.

(d): Does not arise.

---------

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
(a) 29 Medicinal plants have been identified which are threatened/endangered.

(b) These plants, plant portions, derivatives and extracts prepared out of these plants obtained from the wild are not allowed to be exported. Further, collection of certain plant species covered under Schedule-VI of the Wildlife (Protection) Act, 1972 from any forest land or a specified area has been banned by law. Steps are also being taken to encourage propagation and cultivation of such plant species by including them under various schemes such as in-situ/ex-situ Conservation, Biosphere reserves, establishment of Gene Banks, agro-techniques. A Medicinal Plants Board has been set up which will also coordinate activities relating to conservation. ....

--------

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE
RAJYA SABHA
UNSTARRED QUESTION NO-102
ANSWERED ON-22.02.2001
DEVELOPING MEDICINAL AND AROMATIC PLANTS .
102 . DR. DASARI NARAYANA RAO

(a) whether any Central scheme for developing medicinal and aromatic plants is under implementation in Andhra Pradesh;

(b) if so, the details thereof;
(c) whether the tribals of the State are participating in this scheme; and

(d) if so, the details thereof and the incentives being given to the tribals for this purpose?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE

(SHRIPAD Y. NAIK)

(a) & (b): A Central Sector Scheme on Development of Medicinal and Aromatic Plants was initiated during the VIII Plan. The Scheme was approved for implementation during the Ninth Plan with an outlay of Rs.14.50 crores. The Scheme was continued till the year 1999-2000 and with effect from the year 2000-01 it was merged under the Centrally Sponsored Scheme on Macro Management in Agriculture – Supplementation/Complementation of State Efforts through Work Plans. Under this Scheme assistance of Rs.9.81 lakhs has been provided to NG Ranga Agricultural University, Hyderabad for production of quality planting material of aromatic plants, setting up of herbal gardens and nurseries for medicinal plants. Besides assistance to the tune of Rs.12.83 lakh was provided to the Government of Andhra Pradesh for developing seed production-cum-demonstration plots and area expansion in farmers’ fields.

(c) & (d): The scheme envisages assistance for setting up of demonstration-cum-seed production plots @ Rs.1500/- per plot of 0.05 ha. Besides, the assistance for area expansion is 25 per cent of the cost subject to a maximum of Rs.12,500/- per ha for a maximum of four ha per beneficiary. The assistance is available to all the farmers including tribals of Andhra Pradesh.

--------

GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
RAJYA SABHA
UNSTARRED QUESTION NO-1425
ANSWERED ON-01.12.2000
AREAS GROWING MEDICINAL PLANTS.
1425. SHRI ANANTA SETHI

(a) whether Government have identified the areas in different States where medicinal plants are grown; and

(b) if so, the State-wise details thereof, alongwith the funds provision made by the Central Government during the last three years for growing medicinal plants in those areas?

ANSWER
THE MINISTER OF STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY

(SHRI BACHI SINGH RAWAT)

(a) & (b) : A Centrally sponsored scheme of Non-Timber Forest Produce (NTFP) including medicinal plants is being implemented by National Afforestation & Eco-Development Board (Ministry of Environment & Forests) in different states of the country. The scheme is confined mainly to degraded forest areas. It provides 100% financial assistance to the State Governments for conservation, development and increasing production of non-timber forest produce including medicinal plants. Up to 1999-2000, projects were not sanctioned separately for growing medicinal plants. Hence, no separate funds were earmarked and released for medicinal plants alone. The sanctioned grants for NTFP including medicinal plants during 1997-98, 1998-99, 1999-2000 were Rs. 9.65 crores, Rs. 13.44 crores and Rs. 17.55 crores, respectively. During 2000-2001, medicinal plants have been declared as one of the thrust areas by the Ministry of Environment & Forests and projects solely for medicinal plants are being sanctioned separately under the existing NTFP scheme. As on date, 17 projects are being implemented for medicinal plants and funds provision during the current financial year in different states is: Andhra Pradesh (Rs.27.65 lakhs); Maharashtra (Rs.63.65 lakhs); Himachal Pradesh (Rs.4.14 lakhs); Madhya Pradesh (Rs.35.00 lakhs); Rajasthan (Rs. 48.90 lakhs); Kerala (Rs.19.00 lakhs); Sikkim (Rs.16.80 lakhs); Goa (Rs.10.80 lakhs); Gujarat (Rs.24.00 lakhs); Karnataka (Rs.54.82 lakhs); Bihar (Rs.46.30 lakhs); Tripura (Rs.3.25 lakhs); Manipur (Rs.15.04 lakhs); Mizoram (Rs.12.65 lakhs); Meghalaya (Rs.14.20 lakhs); Tamil Nadu (Rs.23.50 lakhs) and Assam (Rs. 23.95 lakhs).

The Department of Agriculture and Cooperation (Ministry of Agriculture) has also been implementing a Central Scheme for development of medicinal plants through various agencies. During Ninth Plan, an outlay of Rs. 14.50 crores has been allocated to this programme which includes production and distribution of planting material, establishment of nurseries and herbal gardens, Regional Analytical Labs, demonstration plots, area expansion and training of farmers.

---------

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
UNSTARRED QUESTION NO-576
ANSWERED ON-24.11.2000
EXTINCTION OF MEDICINAL PLANTS.
576. SHRI K. M. KHAN

(a) whether it is a fact that due to extinction of a number of species of medicinal plants, the forest resources are not able to meet the full requirement of raw material for medicines;
(b) if so, what steps are being initiated for creating alternative resources for augmenting the availability of medicinal plants for preparation of medicines of Ayurveda, Siddha and Homoeopathy;

(c) whether there is a need now to lift the ban on some of the medicinal plants that had been prohibited earlier for its preservation; and

(d) if so, the details thereof and the steps taken in this direction?

ANSWER
THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE
(SHRI A. RAJA)

(a) There is a restriction on drawing some plants from the wild which have become rare and endangered which has an impact on supply of Medicinal Plants from the wild.

(b) Agro-techniques for plants available in the wild are being developed for ex-situ cultivation. Central Sector scheme has been implemented by the Indian Council for Agriculture Research for encouraging farmers to cultivate Medicinal Plants. Programmes for expansion of the area under medicinal and Aromatic Plants, training of farmers have been introduced w.e.f. 1999-2000. A Medicinal Plants Board has been approved for being set up to inter-alia develop the Medicinal Plants sector.

(c) Keeping in view the need for conservation of endangered plants, there is no such proposal at present.

(d) Does not arise.

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
UNSTARRED QUESTION NO-1468
ANSWERED ON-04.08.2000
AWARENESS FOR CULTIVATING MEDICINAL PLANTS.
1468 . SHRI R.S. GAVALI

(a) whether Government propose to undertake a project to promote awareness among farmers about medicinal plants and make them cultivate the plants on a large scale;

(b) if so, the details thereof;

(c) if not, the reasons therefor;
(d) whether Government propose to set up Medicinal Plant Board, to safeguard the commercial interest of farmers producing these plants; and

(e) if so, the details thereof?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE
(PROF. RITA VERMA)

(a) & (b) A Scheme has been implemented by Indian Council of Agricultural Research for encouraging farmers for cultivation of medicinal plants. Agro-techniques are being developed for ex-situ cultivation. A number of varieties of medicinal and aromatic plants have been developed and made available to the farmers for cultivation.

(c) Does not arise.

(d) & (e) A proposal is being processed to set up a 'Medicinal Plants Board' as an agency which would be responsible to coordinate all matters relating to the development of Medicinal Plants.

........

---------

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
UNSTARRED QUESTION NO-1442
ANSWERED ON-04.08.2000
NATIONAL BORAD FOR MEDICINAL PLANTS.
1442. SHRI V.V. RAGHAVAN
ANANTA SETHI
J. CHITHARANJAN

(a) whether his Ministry had a proposal to set up a National Board for Medicinal Plants;

(b) if so, the main objective of setting up this Board;

(c) the specific steps proposed to be taken by Government to regulate herbal products in the country; and

(d) if answer to part

(a) above be in the negative, whether Government would consider formation of a Board?

ANSWER
ANSWER
THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE
(PROF. RITA VERMA)

(a) & (b) A proposal is being processed to set up a `Medicinal Plants Board` as an agency which would be responsible to coordinate all matters relating to the development of the Medicinal Plant Sector.

(c) The Government has amended schedule `T` of Drugs & Cosmetic Rules, 1945 and notified Good Manufacturing Practices for Ayurveda, Siddha and Unani Medicines. Standards for formulation of single and compound drugs of each system are also being made and periodically included in the Pharmacopoeias.

(d) Does not arise. ...........

---------

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT AND FORESTS
RAJYA SABHA
UNSTARRED QUESTION NO-664
ANSWERED ON-28.07.2000
EXTINCTION OF MEDICINAL PLANTS.
664. SHRI K. RAHMAN KHAN

(a) The Botanical Survey of India (BSI) has prepared a Red Data Book listing the threatened and endangered species of plants including medicinal plants. A list of 29 medicinal plants that are threatened or endangered have been included in the negative list for exports. The plans, plant portions, derivatives and extracts prepared out of these plants obtained from the wild are not allowed to be exported. In order to protect the endangered medicinal plant species from extinction, such species are not allowed to be drawn from the wild.
(b) Yes, Sir. The Task Force Report has suggested a Strategy and Action Programme which inter-alia includes conservation and sustainable use of medicinal plants. The Action Programme includes specify activities for conservation, cultivation, documentation, inventorisation and sustainable use of medicinal plants, involving a number of Ministries and Departments in Government of India.

(c) Measures, for conservation and sustainable use of medicinal plants include:

(i) In-sit regeneration of plaits by National Afforestation and Ecodevelopment Board (NAEB) under the Non Timber Forest Produce (NTFP) scheme including medicinal plants. Regeneration of medicinal plants in degraded forest areas under the Joint Forest Management (JFM) scheme of Ministry of Environment and Forests.

(ii) A Central Scheme for cultivation of medicinal plants is funded by the Department of Indian Systems of Medicine and Homeopathy for setting up of medicinal plant gardens.

----------

GOVERNMENT OF INDIA
MINISTRY OF AGRICULTURE
RAJYA SABHA
UNSTARRED QUESTION NO-4123
ANSWERED ON-04.05.2000
PRESERVATION OF PLANTS AND SEEDS OF MEDICINAL VALUE.
4123. SHRI RAMACHANDRA KHUNTIA

(a) whether Government have any action plan for Central scheme to preserve plants and seeds of medicinal value;

(b) if so, the details thereof; and

(c) if not, the reasons therefor?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE

(SHRI SBPBK SATYANARAYANA RAO)

(a) &(b) A Central Sector scheme on Development of Medicinal and Aromatic Plants is being implemented by the Ministry of Agriculture since the VIII Plan under which plants and seeds of medicinal value are being conserved through the State Agricultural Universities. The Indian Council of Agricultural Research is involved in the conservation of medicinal plants through their programmes of
(i) All India Coordinated Research Project on Medicinal & Aromatic Plants,
(ii) National Bureau of Plant Genetic Research
(iii) National Agricultural Technology Project on Plant Biodiversity under Jai Vigyan National Science & Technology Mission and
(iv) project funded by Department of Biotechnology on G-15 Genebanks for Medicinal & Aromatic Plants.

(c) Does not arise.

--------

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
STARRED QUESTION NO-244
ANSWERED ON-12.03.1999
NATIONAL BOARD ON MEDICINAL PLANTS .
244 .  SHRI BALWANT SINGH RAMOOWALIA
RAJ MOHINDER SINGH MAJITHA

(a) whether it is a fact that an institution named National Board on Medicinal Plants has been constituted recently:

(b) if so, the details of constitution of the Board and the annual amount allocated for the maintenance and functioning thereof; and

(c) the responsibilities entrusted to the Board?

ANSWER
THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE (INDEPENDENT CHARGE) (SHRI DALIT EZHILMALAI)

(a) No, Sir.

(b)&(c): Do not arise.

--------

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
STARRED QUESTION NO-245
ANSWERED ON-12.03.1999
INFORMATION ABOUT MEDICINAL PLANTS FOR TREATMENT .
245 .  SHRI BRAHMAKUMAR BHATT
(a) whether it is a fact that tribal community have the knowledge and information about medicinal plants and shrubs which can cure many diseases, including AIDS;

(b) whether a seminar and a workshop on management of incurable diseases like AIDS were conducted recently, as reported in the Times of India dated 6th February, 1999, Ahmedabad edition, under the caption, `Seminar on Medicinal Plants to be held at Sputara`:

(c) if so, the details thereof;

(d) whether Government are extending cooperation to encourage the tribal people having knowledge in this regard: and

(e) if so, what incentives would be given to them?

**Answer**

The Minister of State in the Ministry of Health and Family Welfare (Independent Charge) (Shri Dalit Ezhilmalai)

(a) to (e): A statement is laid on the table of the House. Statement referred to in reply to Rajya Sabha Starred Question No. 245 for 12.3.1999.

(a) It is a fact that tribal communities have the knowledge and information about the use of Medicinal Plants and shrubs for various diseases. However, no scientifically proved claim has come to notice regarding the treatment of AIDS.

(b) & (c): Yes, Sir. A National Seminar on Medicinal Plants & Traditional Medical Knowledge and a National Workshop on Traditional Knowledge and Management of Incurable Diseases like AIDS was organized on 12th and 13th February, 1999 at Saputara in Dangs Disstt. (Gujarat). It was organized by the Department of Health & Family Welfare, Department of Forest & Environment, Department of Tribal Development Corporation of Government of Gujarat in collaboration with the Gujarat Ayurved University, Jamnager. At this Seminar, about 60 speakers of different disciplines presented papers on the following topics:-

1. Present status on Medico-Botanical Wealth & Traditional knowledge in Gujarat.

2. Assessment of Medicinal Plants requirement by the Pharmaceutical Industry.


4. Assessment of export potential of medicinal plants.

5. Evolving suitable strategies for conservation and regeneration of threatened and over exploited medicinal plants. In the workshop, the role of Ayurveda and other traditional medicine was discussed on intractable diseases such as AIDS Cancer Diabetes Rheumatoid Arthritis, etc.
Medicinal Plants – Highlighted in Rajya Sabha from 2005 to till date (Monsoon Session, 2013)

(d) & (e): As a first step, efforts have been initiated to document and publish tribal medical claims.

---------

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
UNSTARRED QUESTION NO-1928
ANSWERED ON-12.03.1999
PATENT FOR MEDICINAL PLANTS OF DANGS FOREST.
1928. SHRI PRAFULL GORADIA

(a) how many Ayurvedic medicinal plants are found in the forests of Dangs district of Gujarat;

(b) whether any special efforts have been made to grow these plants on a large scale;

(c) whether any pharmacy has been set up to process these herbs and manufacture Ayurvedic medicines; and if so, whether any effort has been made to obtain patents for these medicines?

ANSWER
THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE
(INDEPENDENT CHARGE) (SHRI DALIT EZHILMALAI)

(a): The Central Council for Research in Ayurved & Siddha a autonomous organisations working under the Ministry of Health & family Welfare has carried out survey of Medicinal Plants of Forest area of Dangs District of Gujarat. It has collected 347 plants of medicinal importance out of which 160 plants are of Ayurvedic importance.

(b): The Department of Indian system of Medicine is implementing schemes for setting up of Medicinal Plants gardens and development of agro-techniques of medicinal plants. Some of these Medicinal plants have been covered under these schemes for captivation and development of agro-techniques.

(c) & (d): As per information furnished by Health & family Welfare Deptt. G/o Gujarat, two Govt. Ayurvedic pharmacies are working at Ranpipla and Vadodara. One Ayurvedic Pharmacy is working on cooperative basis in Ahwa, District Dang. No effort has been to obtain patents for these medicines.

---------

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
UNSTARRED QUESTION NO-2226
ANSWERED ON-18.12.1998
MEDICINAL PLANTS IN DARJEELING KURSEONG AND KALIMPON .
2226 . SHRI DAWA LAMA

(a) whether Government would consider to carry out intensive research into the availability of herbal medicinal plants at Darjeeling, Kurseong and Kalimpong;

(b) whether Government would also consider to establish research laboratories at those areas; and

(c) whether Government would also consider to establish medicinal institutes at those to use the rich herbal plants ?

ANSWER
THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE (INDEPENDENT CHARGE) (SHRI DALIT EZHILMALAI)

(a) (b) & (c) Government is very much aware of rich resources of medicinal plants in this region. Botanical Survey of India is already engaged in the survey and investorisation of wild medicinally important herbs/plants of this area. Further, central Council for Research in Ayurveda and Sidha, an autonomous organisation under the Department of indian Systems of Medicine and Homoeopathy also intends to undertake survey of medicinal plants in these area. The State Government of West Bengal has already established one medicinal plant research unit like Cincona Research Centre and Plantation in Mongoow-Kalimpong. Asia`s biggest Plantation unit is established near Jaldhaka of Jalpaiguri District. There are no proposals to establish further research laboratories or medicinal institutes under consideration at present.

---------

GOVERNMENT OF INDIA
MINISTRY OF SCIENCE AND TECHNOLOGY
RAJYA SABHA
UNSTARRED QUESTION NO-1548
ANSWERED ON-11.12.1998
CONSPIRACY TO PATENT INDIAN MEDICINAL PLANTS .
1548 . SHRI RAMA SHANKER KAUSHIK
RAM GOPAL YADAV

(a) whether- it is a fact that a conspiracy is being hatched to patent Indian medicinal plants in the foreign countries, and
(b) if so, what steps Government would take to foil this conspiracy and to formulate a law for its protection?

ANSWER

MINISTER OF SCIENCE AND TECHNOLOGY

(DR. M.M. JOSH1)

(a) & (b) : The Government has no knowledge/information about such a conspiracy. However, the government is greatly concerned about the protection of the country’s medicinal plant wealth. A draft Biodiversity Act for the protection of wild species, and a draft legislation for protection of cultivated varieties with due regard for farmers’ rights are under the active consideration of the government- Besides, the Indian Patent Act is also being revamped. Government has already set up ex-situ and in-situ conservation measures for conservation of germplasm and biodiversity in the form of botanical gardens, biosphere reserves, gene banks, etc.

-------------

GOVERNMENT OF INDIA
MINISTRY OF  INDUSTRY
RAJYA SABHA
UNSTARRED QUESTION NO-70
ANSWERED ON-30.11.1998
PATENTING OF MEDICINAL PLANTS .
70 . PROF. RAM GOPAL YADAV
ISH DUTT YADAV

(a) whether Government are aware of the, conspiracy of patenting Indian medicinal plants in foreign countries; and

(b) what.steps Government propose to take or what type of law they propose to enact and implement to prevent patenting of medicinal plants in foreign countries and by when?

ANSWER

THE MINISTER OF INDUSTRY (SHRI SIKANDER BAKHT )

(a) & (b): No such information is maintained by the Government. Patents cannot be granted for plants, Patents are granted by respective Governments under their patent laws. Whenever information is received about patent being taken on certain products which are not considered patentable, steps are taken to assess whether grant of patent can be challenged.

-------------

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT AND FORESTS
RAJYA SABHA
UNSTARRED QUESTION NO-1145
ANSWERED ON-28.11.1997
AYURVEDIC MEDICINAL PLANTS .
1145 . PROF RAM KAPSE

(a) whether Government have received a communication from Ayurvedic Drugs Manufacturers’ Association demanding a review of the list of various varieties of Ayurvedic Medicinal Plants banned for export;

(b) if so, the details thereof; and

(c) the decision, if any, taken by Government after the review is made?

ANSWER

THE MINISTER OF ENVIRONMENT AND FORESTS (PROF. SAIFUDDIN SOZ)

(a) and (b) Yes, Sir. The Ayurvedic Drugs Manufacturers’ Association had been requesting for allowing the export of formulations made from 18 plants obtained from the wild, which are included in the prohibited list of export.

(c) To resolve this matter, an inter-departmental committee was constituted by this Ministry. Based on the recommendations of the committee export of formulations of the said species by the exporters was allowed for a period of 90 days from 28.8.1997 to clear the existing stock of formulations. Further extension of time upto 31 March 98, by which time the revised Export-Import Policy will become effective, is also being considered. In addition, the Botanical Survey of India has been asked to carry out review of the status of the 53 plants, which have been put on the negative list of exports, in consultation with all concerned and make specific recommendations in the matter.

---------

GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
RAJYA SABHA
UNSTARRED QUESTION NO-2540
ANSWERED ON-14.08.1997
CULTIVATION OF MEDICINAL PLANTS .
2540 . SHRI SOLIPETA RAMACHANDRA REDDY

(a) whether there is a great demand in the world for medicinal plants from India;
(b) if so, whether any steps have been taken to promote commercial cultivation of such plants; and

(c) if so, the details thereof?

**ANSWER**

**THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE (SHRIMATI RENUKA CHOWDHURY):**

(a) Yes, Sir.

(b) and (c) Schemes are being implemented for development and cultivation of these plants through various Government/Semi-Government Organisations and also for development of agrotechniques for their cultivation. This will help in taking up commercial cultivation of medicinal plants.

--------

**GOVERNMENT OF INDIA**

**MINISTRY OF SCIENCE AND TECHNOLOGY**

**RAJYA SABHA**

**UNSTARRED QUESTION NO-584**

**ANSWERED ON-28.07.1997**

**BIOTECHNOLOGY FOR MEDICINAL AND AROMATIC PLANTS**

584 . SHRI SURINDER KUMAR SINGLA

(a) what is being done in the area of biotechnology for medicinal and aromatic plants;

(b) whether the experience of the Department in this area is encouraging;

(c) when will this be commercially exploited; and

(d) what steps are being taken to make this popular?

**ANSWER**

**ED THE MINISTER OF STATE OF THE MINISTRY OF SCIENCE AND TECHNOLOGY AND THE MINISTER OF STATE OF THE MINISTRY OF POWER (SHRI YOGINDER K. ALAGH):** (a) R & D in the area of biotechnology of medicinal and aromatic plants (MAPs) is being carried out in laboratories of CSIR, ICAR, MOEF, universities and through the support of the Department of Biotechnology. The aspects covered include the application of biotechnology for conservation, genetic improvement, micropropagation, production of secondary metabolites and biotransformation of intermediates into pharmacutically useful end products.

(b) Yes, Sir, the Department of Biotechnology (DBT) has initiated a number of projects in recent years in this area. It has set up three national gene banks at the Central Institute of Medicinal and Aromatic Plants (CIMAP), Lucknow; National Bureau of plant Genetic Resources (NBPR),
New Delhi; and Tropical Botanic Garden and Research Institute (TBGRI), Thiruvananthapuram for the collection, conservation and characterization of our precious wealth of medicinal and aromatic plants species, which are rare/threatened/endangered or are being used in traditional system, or those which are commercially exploited. These gene banks have established field banks, seed and pollen repositories, in vitro and cryobanks of a number of species. Micropropagation of certain MAP species, biotransformation of intermediates for more efficient bioactivity as well as genetic manipulation of selected species have been carried out. Scientists at the National Institute of Immunology, New Delhi have isolated active fractions showing immunomodulatory activity from pippali and guduchi. At CIMAP, 250 mutants of periwinkle have been isolated of which one mutant `Nirmal` has shown high alkaloid content. A hairy root bank of several MAP species is also being maintained.

(c) and (d) Through the national gene banks, over 50,000 saplings of common medicinal plants have been supplied to traditional vaidyas, R&D institutions, NGOs and other bodies. Also training programmes to scientists, technicians and beneficiaries on the cultivation and distillation of essential oils at village level. Gradually the research leads are finding place in commercial and societal activities.

---------

GOVERNMENT OF INDIA
MINISTRY OF RURAL AREAS AND EMPLOYMENT
RAJYA SABHA
UNSTARRED QUESTION NO-1894
ANSWERED ON-01.08.1996
PROMOTION OF AGRO FORESTRY AND MEDICINAL PLANTS IN MAHARASHTRA .
1894 . MISS SAROJ KHAMARDE

(a) whether Government have introduced Technology Development, Training and Extension Scheme for the promotion of agro-forestry and medicinal and herbal plants for wastelands development in Maharashtra;

(b) if so, what are the details there of; and

(c) the number of projects presently being taken up in the State, district-Wise, and their position as on date?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF RURAL AREAS AND EMPLOYMENT
(SHRI CHANDRADEO PRASAD VARMA):

(a) and (b) A Central Sector Scheme of `Technology Development, Extension & Training for Wastelands Development in nonforest areas` is under implementation from the year 1994-95 in
the country, including Maharashtra State. Under this Scheme, Technology Development projects including agroforestry system models are promoted and depending upon the suitability and needs of the local conditions, the medicinal and herbal plants are at times integrated. Further, 100% per cent Central Grant is admissible for implementing projects on lands owned by Governments/Government Institutions/ Government Undertakings including Universities and non-profit making Agencies or the Village Panchayats from which the unsufructs will flow to the community. For projects on land belonging to private farmers/Corporate Sectors, the cost is shared in a 60:40 ratio between the Government and the farmers/Corporate Bodies. The objectives of the Scheme include:

(i) to operationalise appropriate, cost effective and proven technologies for development of various categories of wastelands specially problem lands affected by soil erosion, land degradation, salinity, alkalinity, waterlogging etc.,

(ii) to implement location specific pilot project as demonstration models for development of wastelands on a sustainable basis replicable to larger areas,

(iii) to take up pilot projects for development of wastelands through land based activities including pisciculture, duckery, bee keeping, etc.,

(iv) to disseminate research findings about new and appropriate technologies and the application of such technologies for promoting wastelands development.

(c) Presently under Technology Development, Extension & Training Scheme, three Central Sector projects are under implementation in Maharashtra. The details are given in Statement.

<table>
<thead>
<tr>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Title</strong></td>
</tr>
<tr>
<td>Bhima Water-shed Dev. Agro-Ecological Science, Pune</td>
</tr>
<tr>
<td>Bamboo Based Agroforestry Project Kirishi Vidyapeeth, Ahmednagar</td>
</tr>
<tr>
<td>Operational Research BAIF Dev, Pune</td>
</tr>
</tbody>
</table>

(Research...
GOVERNMENT OF INDIA
MINISTRY OF INDUSTRY
RAJYA SABHA
UNSTARRED QUESTION NO-1798
ANSWERED ON-17.08.1995
IDENTIFICATION OF MEDICINAL PLANTS FOR PATENTING .
1798 . SHRI GUNDAPPA KORWAR

(a) whether Government have identified or propose to identify medicinal plants for registration under patent;

(b) if so, the details thereof; and

(c) the details regarding the approach in biological sciences and the implications of patent laws on living organism?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF INDUSTRY (SHRIMATI KRISHNA SAHI):

(a) to (c) Plants and living organisms are not patentable under the provisions of the Patents Act, 1970.

---------