

**GOVERNMENT OF INDIA
MINISTRY OF AYUSH**

**LOK SABHA
ADMITTED UNSTARRED QUESTION NO. 288
TO BE ANSWERED ON 3RD FEBRUARY 2023**

MEDICINAL PLANTS AND RARE SPECIES

**288. DR. BEESETTI VENKATA SATYAVATHI:
SHRI CHANDRA SEKHAR BELLANA:
SHRI KURUVA GORANTLA MADHAV:
SHRIMATI CHINTA ANURADHA:
SHRI M.V.V. SATYANARAYANA:**

Will the Minister of **AYUSH** be pleased to state:

- (a) whether the Government has conducted any survey to identify medicinal plants and rare species of herbs, State-wise including Andhra Pradesh;
- (b) if so, the details thereof and if not, the reasons therefor;
- (c) whether the Government has implemented any scheme to provide financial assistance for cultivation of medicinal plants and rare species of herbs;
- (d) if so, the details thereof including the funds sanctioned and released, State-wise so far; and
- (e) if not, the reasons therefor?

ANSWER

**THE MINISTER OF AYUSH
(SHRI SARBANANDA SONOWAL)**

- (a) & (b):** Yes Sir. The Botanical Survey of India (BSI), an organization under Ministry of Environment, Forest and Climate Change mandated for survey of plant diversity of the country including medicinal and aromatic plants. As per BSI an estimated more than 8000 species of medicinal plants are found in the country including State of Andhra Pradesh. As per BSI data, estimated 1500 species are found in Western Himalaya, 3000 species in Eastern Himalaya, 2000 species in Western Ghats, 1500 species in Eastern Ghats and 750 species in Andaman & Nicobar Islands.

The Central Council for Research in Ayurvedic Sciences (CCRAS) through its Medico Ethno Botanical Survey programme has conducted survey and documented 1004 species of medicinal plants in Andhra Pradesh during the period of 1971-2000. The list of rare species of medicinal plants documented in Andhra Pradesh is available at **Annexure-I**

The National Medicinal Plants Board (NMPB), Ministry of Ayush, under its ‘*Central Sector Scheme on Conservation, Development and Sustainable Management of Medicinal Plants*’ has also supported R&D projects on survey and identification of medicinal plants. Details of projects supported during last five years are at **Annexure-II**.

(c): Ministry of Ayush, Government of India had implemented Centrally Sponsored Scheme of National Ayush Mission (NAM) to promote the cultivation of medicinal plants since 2015-16 to 2020-21. Under ‘Medicinal Plants’ component of the National Ayush Mission Scheme, market driven cultivation of 140 prioritized medicinal plants in identified clusters/zones was supported and implemented in a mission mode through selected State Implementing agencies throughout the country including Andhra Pradesh. As per the scheme guidelines, the support was provided for:

- (i) Cultivation of prioritized medicinal plants on farmer’s land.
- (ii) Establishment of nurseries with backward linkages for raising and supply of quality planting material.
- (iii) Post-harvest management with forwarding linkages.
- (iv) Primary processing, marketing infrastructure etc.

Under this scheme, subsidy @30%, 50% and 75% of the cost of cultivation was provided for cultivation of 140 medicinal plants throughout the country. The subsidy was provided on following basis:

Medicinal plants Category	Subsidy Category
Species that are highly endangered and in high demand by AYUSH industry	75% of the cost of cultivation
Species that are endangered and sources of supply are declining	50% of the cost of cultivation
Other species in demand by AYUSH industry and for exports	30% of the cost of cultivation

(d) & (e): The details of State-wise fund sanctioned and released from the Financial Year 2015-16 to 2020-21 for medicinal plants component under National Ayush Mission (NAM) Scheme is at **Annexure-III**.

List of Rare species of medicinal plants documented in Andhra Pradesh:

Sl. No.	Botanical Name	Family	Status
1.	<i>Crateva adansonii</i> DC ssp. <i>odora</i> (Buch.-Ham.) Jacobs.	Capparaceae	Vulnerable
2.	<i>Boswellia ovalifoliolata</i> Bal. & Henr.	Burseraceae	Vulnerable
3.	<i>Goiania leptostachya</i> DC.	Rhamanaceae	Rare
4.	<i>Saraca asoca</i> (Roxb.) de Wilde	Fabaceae	Rare
5.	<i>Peucedanum dhana</i> Ham.	Apiaceae	Rare
6.	<i>Embelia ribes</i> Burm. f.	Myrsinaceae	Rare
7.	<i>Rauwolfia serpentina</i> (L.) Benth. ex Kurz.	Apocynaceae	Rare
8.	<i>Decalepis hamiltonii</i> Wt. & Arn.	Apocynaceae	Rare
9.	<i>Leptadenia reticulata</i> (Retz.) Wt. & Arn.	Apocynaceae	Rare
10.	<i>Marsdenia tenaessima</i> (Roxb.) Moon	Apocynaceae	Rare
11.	<i>Oroxylum indicum</i> (L.) Vent.	Bignoniaceae	Vulnerable

Annexure-II.

State/UT-wise details of projects supported on Survey, identification, and characterization aspect based research activities on various medicinal plants during last 05 years under Central Sector Scheme on Conservation, Development and Sustainable Management of Medicinal Plants'

State/UT	Project title and agency detail
Assam	<p>‘Critical appraisal and validation of Local Health Traditions (LHTs), Oral Health Traditions (OHTs) and Ethno Medicinal Practices (EMPs): An inclusive study among Ethnic communities of Northeast India’.</p> <p>Central Ayurveda Research Institute (CARI), Guwahati (Assam), Borsojai, PO- Beltola, Guwahati, Kamrup (M), Assam- 781028</p>
	<p>Identification and Development of High Yielding Varieties of <i>Kaempferia galanga</i>: A High Value Endangered Medicinal Plant.</p> <p>Council of Scientific and Industrial Research (CSIR)- North East Institute of Science & Technology (NEIST) P.O. RRL Jorhat 785006, Assam</p> <p>Plant species: <i>Kaempferia galanga</i></p>
New Delhi	<p>‘Collection, Characterization and Conservation of <i>Bunium persicum</i>: an Endangered Plant Species’.</p> <p>Tissue Culture and Cryopreservation Unit, ICAR- National Bureau of Plant Genetics Resources, New Delhi- 110012.</p> <p>Plant selected: <i>Bunium persicum</i></p>
Himachal Pradesh	<p>‘Survey, mapping, development of cultivation techniques, evaluation of selected germplasm and economics of <i>Fritillaria roylei</i> Hook.f., (Kakoli) an important plant of the Ashtavarga Group of Medicinal and Aromatic Plants’.</p> <p>Himalayan Forest Research Institute, Conifer Campus Panthaghati, Shimla- 171013.</p> <p>ICAR- NBPGR, Regional Station, Phagli, Shimla, H.P., 171004.</p> <p>Plants selected:- <i>Fritillaria roylei</i></p>
	<p>‘Survey, Selection, Phyto-chemical Evaluation, Cytogenetical Characterization and Multi-location testing of Harar (<i>Terminalia chebula</i> Rets) in India’.</p> <p>College of Horticulture and Forestry, Dr. YS Parmar University of Horticulture and Forestry, Nauni, Solan-177001.</p> <p>Plant species: <i>Terminalia chebula</i> Rets</p>
	<p>‘Development of geo-tagged digital database and spectral library of</p>

	<p>medicinal plants in protected cultivation in the foot hills of Western Himalayas’.</p> <p>Department of High Altitude Biology (HAB) Division, Palampur, Himachal Pradesh-176061.</p>
Karnataka	<p>‘Identification of elite types, Molecular Characterization and Conservation of Highly-traded and threatened Medicinal Plants in the Central Western Ghats’.</p> <p>Plant species: <i>Coscinium fenestratum</i>, <i>Embelia ribes</i>, <i>Salacia oblonga</i> and <i>Mappia foetida</i>.</p> <p>College of Forestry, UAS Dharwad, SIRSI, Uttra Kannada, Karnataka - 581401, telephone: 9448933680.</p> <p>Ashoka Trust for Research in Ecology and the Environment Conservation Genetics Lab, Royal Enclave Srirampura, Jakkur PO Bengaluru 560064 (ATREE) telephone: 09448182477,</p>
Kerala	<p>‘Germplasm conservation and Phytochemical evaluation of <i>Adhatoda beddomei</i> C.B.CI. (Cittaadalotakam)’.</p> <p>Department of Botany, University of Kerala, Kariavattom, pin-695581, Thruvananthapuram.</p> <p>Plant species: <i>Adhatoda beddomei</i></p> <hr/> <p>Genetic stock development, standardization of good agricultural practices (GAPs) and market analysis of <i>Pseudarthria viscida</i> (L.)- a red listed high volume trade medicinal plant.</p> <p>Kerala Agriculture University, KAU P.O , Thrissur, Kerala</p> <p>Plant species: <i>Pseudarthria viscida</i></p>
Madhya Pradesh	<p>‘Germplasm collection and bio-molecular characterization of Black Turmeric (<i>Curcuma Caesia Roxb.</i>)’</p> <p>Jawaharlal Nehru KrishiVishwaVidhalya, Jabalpur, Madhya Pradesh-482004</p> <p>Plant species : <i>Curcuma caesia Roxb</i></p>
Rajasthan	<p>‘Exploration and Documentation of Ethno-medicinal Practices of Rural and Tribal Population of Rajasthan’.</p> <p>Department of Food and Biotechnology, JyotiVidyapeeth Women’s University, Jaipur – 303122, Rajasthan</p> <p>Plant species:</p> <ol style="list-style-type: none"> 1. Khairkatha (<i>Acacia catechu</i> (L.f) Willd. 2. Dokanta (<i>Acanthos permumhispidum</i>) DC. 3. AndhiJhara (<i>Achyranthes aspera</i> L.) 4. Danteli (<i>Barleriaprionitis</i> L) 5. Akra (<i>Calotropis procera</i> (Ait) R. Br.) 6. Kair [<i>Capparis decidua</i> (Forsk.) Edgew.] 7. Dholimusali (<i>Chlorophytum tuberosum</i>)

	<p>Survey, Inventorisation, Documentation, Propagation and Conservation of rare, endangered and threatened medicinal plants of Arid and Semi Arid Regions.</p> <p>AFRI, New Pali Road, Jodhpur-342005</p> <p>JNV-University, Jodhpur-342005</p>
West Bengal	<p>‘Medicinal orchid: A step towards population for commercial cultivation through collection, conservation and multiplication in Himalayan region of Darjeeling and Sikkim Himalayas’.</p> <p>Department of Genetics and Plant breeding & Plant Breeder, Uttar BangaKrishiViswaVidyalaya (UBKV), Regional Research Satation (HZ), Kalimpong, Darjeeling, West Bengal -734301.</p>

Annexure-III

The State/UT-wise status of funds allocated and released for medicinal plants component under NAM (2015-16 to 2020-21)

(Rs. in Lakhs)

S. No.	State	Fund approved	Fund released
1.	Andhra Pradesh	1246.306	787.918
2.	Arunachal Pradesh	246.254	194.854
3.	Assam	702.611	632.350
4.	Bihar	287.201	172.321
5.	Chhattisgarh	438.700	263.220
6.	Gujarat	848.014	508.808
7.	Goa	102.739	61.643
8.	Haryana	120.867	72.520
9.	Himachal Pradesh	500.287	456.456
10.	Jammu & Kashmir	395.926	339.307
11.	Karnataka	1233.653	781.353
12.	Kerala	1086.987	690.149
13.	Madhya Pradesh	3072.130	1585.179
14.	Maharashtra	969.991	581.994
15.	Manipur	337.082	309.454
16.	Meghalaya	181.524	163.372
17.	Mizoram	276.109	235.283
18.	Nagaland	341.365	273.260
19.	Orissa	278.862	167.317
20.	Punjab	339.033	203.420
21.	Puducherry	25.583	23.025
22.	Rajasthan	1881.410	1162.905
23.	Sikkim	129.606	97.660
24.	Tamil Nadu	1104.307	662.584
25.	Telangana	731.463	472.273
26.	Tripura	83.944	79.156
27.	Uttar Pradesh	3108.794	1871.464
28.	Uttarakhand	643.745	585.417
29.	West Bengal	1134.985	680.991
	Total	21849.478	14115.653