

**GOVERNMENT OF INDIA
MINISTRY OF AYURVEDA, YOGA & NATUROPATHY,
UNANI, SIDDHA AND HOMOEOPATHY
(AYUSH)**

**LOK SABHA
UNSTARRED QUESTION NO.1982
TO BE ANSWERED ON 12TH February, 2021**

CONSERVATION OF MEDICINAL PLANTS

1982. SHRI MARGANI BHARAT:

Will the Minister of **AYURVEDA, YOGA AND NATUROPATHY, UNANI, SIDDHA AND HOMOEOPATHY (AYUSH)** be pleased to state:

- (a) whether National Medicinal Plant Board is conserving, cultivating, processing and storing all the available medicinal and aromatic plants across the country;
- (b) if so, the details thereof, State/UT-wise and plant-wise;
- (c) whether it is fact that many medicinal plants are becoming endangered and on the verge of extinction, if so, the details thereof indicating such medicinal and aromatic plants that are endangered along with the efforts being made to conserve them;
- (d) whether the Government is aware that there are many tribes, such as Yanadi Tribes in Seshachalam hills in Andhra Pradesh who have been using many medicinal plants for therapeutic use and for relief from different ailments; and
- (e) if so, whether the Government has conducted any study to explore such medicinal plants for commercial use in the country and if so, the details thereof?

ANSWER

**THE MINISTER OF STATE (IC) OF THE MINISTRY OF YOUTH AFFAIRS AND SPORTS AND ADDITIONAL CHARGE OF MINISTER OF STATE (IC) OF THE MINISTRY OF AYURVEDA, YOGA & NATUROPATHY, UNANI, SIDDHA AND HOMOEOPATHY
(SHRI KIREN RIJIJU)**

- (a): Yes, the National Medicinal Plants Board (NMPB), Ministry of AYUSH is conserving, cultivating, processing and storing the medicinal plants across the country.
- (b): National Medicinal Plants Board (NMPB) has been implementing following Schemes w.e.f. 2008-09 for overall development of the Medicinal Plants sector in the country:
 - (i) Central Sector Scheme on “Conservation, Development and Sustainable Management of Medicinal Plants” aimed at providing project based support for survey, inventorization, *in-situ* conservation, *ex-situ* conservation / herbal gardens, linkage with Joint Forest Management Committees (JFMCs), Research and Development etc.

Under Central Sector Scheme, the medicinal plants supported for conservation and resource augmentation in different states through State Forest Department are *Commiphora wightii* (Gugulu), *Rauvolfia serpentina* (Sarpagandha), *Asparagus racemosus* (Satawar), *Aegle marmelos* (Bael), *Andrographis paniculata* (Kalmegh), *Aquilaria malaccensis syn.A. agallocha* (Agar), *Swertia chirata* (Chirata), *Aconitum heterophyllum* (Atis), *Ocimum sanctam*(Tulsi), *Sanatalum album* (Chandan), *Saraca asoca* (Ashok), *Saussarea costus* (Kuth), *Bacopa monnieri* (Brahmi), *Acorus calamus* (Vach), *Solanum nigrum* (Makoy), *Terminalia arjuna* (Arjun), *Picrorhiza kurrooa* (Kutki), , *Hippophae rhamnoides* (Seabuck thorn), *Azadirachta indica* (Neem), *Nardostachys jatamansi* (Jatamansi), *Cinnamomum tamala* (Tejpat), *Berberis aristata* (Daruhaldi), *Pterocarpus santalinus*(Rakta chandan), *Terminalia ballerica* (Baheda), *Taxus wallichiana* (Talispatra), *Embelia ribes* (Vai vidang), *Rubia cordifolia* (Mangistha), *Mucuna pruriens* (Kawanch), *Cinnamomum verum* (Dalchini), *Terminalia chebula* (Haritaki), *Phyllanthus emblica* (Amla), *Boswellia serrata*, *Origanum vulgare* (Van Tulsi), *Oroxylum indicum* (Shyonaka, Sona), *Garcinia indica* (Kokum), *Gmelina arborea* (Gambhari), *Tinospora cordifolia* (Giloe), *Pterocarpus marsupium* (Beejasar), *Podophyllum hexandrum* (Bankakari), *Panax pseudo- ginseng* (Ginseng), *Ficus racemosa* (Anjir), *Aconitum balfouri* (Vatsnabh), *Alpinia galanga* (Kalanjan), *Ficus racemosa* (Anjir),*Rheum emodi* (Revand chini), *Dioscorea deltoidea* (Baniatakari), *Valeriana jatamansi* (Tagar), *Aconitum ferox* (Vatsnabh), *Stereospermum suaveolens* (Padla), *Gymnema sylvestre* (Gudmar), *Strychnos nux-vomica* (Kuchla), *Crataeva nurvala* (Varun), *Sterculia urens* (Gular), *Salacia oblonga* (Saptarangi), *Oroxylum indicum* (Syonaka), *Ptreospermum chelenoides* (Padal), *Premna corymbosa* (Agnimanth), *Uraria picta* (Prishmnparni), *Solanum surratens* (Choti Knatakari), *Solanum indicum* (Brihati), *Gloriosa superba* (Kalihari), *Coscinium fenestratum* (Pita-chandana),*Paris polyphylla* (Satwa) etc.

(ii) Centrally Sponsored Scheme of “National Mission on Medicinal Plants” primarily aimed at supporting cultivation of medicinal plants on private land with backwards linkages for establishment of nurseries, for supply of quality planting material and forward linkages for post-harvest management etc. Since 2014-15, the Scheme is being implemented as “Medicinal Plants” component under Centrally Sponsored Scheme of National AYUSH Mission (NAM) of Ministry of AYUSH. Presently, under the scheme, cultivation / farming of 140 prioritized medicinal plants species are being supported @30%, 50% and 75% of cost of its cultivation. The list of 140 medicinal plants is at Annexure –I.

Under NAM Scheme, Ministry of AYUSH has supported Storage/ Godown to different States/UT,details at Annexure – II.

(c): According to Botanical Survey of India (BSI), an organization under Ministry of Environment, Forest & Climate Change has reported that some of the medicinal & aromatic plants with high commercial value became endangered or critically endangered due to over exploitation and anthropogenic activities. About 76 threatened and critically endangered species are given as follows:

Aconitum balfouri, *Aconitum chasmanthum*, *Aconitum deinorrhizum*, *Aconitum falconeri var latilobum*, *Aconitum ferox*, *Aconitum heterophyllum*, *Acorus gramineus*, *Allium stracheyi*, *Amyris balsamifera*, *Angelica glauca*, *Anogeissus sericea var. numularia*, *Aquilaria malaccensis*, *Aquilaria khasiana*, *Aristolochia bracteolata*, *Aristolochia indica*, *Arnebia benthamii*, *Atropa acuminata*, *Berberis affinis*, *Berberis apiculata*, *Berberis aristata*, *Bergenia stracheyi*, *Boronia megastigma*, *Capparis pachyphylla*, *Carum villosum*, *Cedrus*

deodara, Chlorophytum borivilianum, Colchicum luteum, Commiphora wightii, Coptis teeta, Coscinium fenestratum, Dactylorhiza hatagirea, Dioscorea deltoidea, Elaeocarpus prunifolius, Ephedra gerardiana, Ferrula gummosa, Gaultheria fragrantissima, Gentiana kurooa, Gloriosa superba, Gymnocladus assamicus, Hedychium coronarium, Hedychium spicatum, Hyoscyamus niger, Hydnocarpus macrocarpa, Inula racemosa, Iphigenia indica, Iphigenia pallida, Iphigenia stellata, Jurinea dolomiae, Kolamhoe roseus, Lilium polyphyllum, Madhuca insignis, Myristica fragrans, Myroxylon balsamum var. pereirae, Nardostachys grandiflora, Origanum vulgare, Panax pseudoginseng, Picrorhiza kurrooa, Podophyllum hexandrum, Pogostemon cablin, Pterocarpus santalinus, Rauvolfia serpentina, Rheum emodi, Santalum album, Satureja horensis, Saussurea bracteata, Saussurea costus, Saussurea gnaphalodes, Swertia chirayita, Taxus wallichiana, Taxocarpus kurzii, Tribulus rastasthanensis, Urginea indica, Urginea maritima and Valeriana leschenaultia, Vitex peduncularis.

Under NMPB's Central Sector Scheme on Conservation, Development and Sustainable Management of Medicinal Plants special attention is being given to conserve endangered species of medicinal plants in their natural habitat by way of *in-situ* conservation through development of Medicinal Plants Conservation& Development Areas (MPCDAs) and by way of *ex-situ* conservation through development of Herbal Gardens.

(d) & (e): Yes, the Central Council for Research in Ayurvedic Sciences (CCRAS) is actively engaged in the Collection, Local Health Traditions/ folklore practiced by Local health traditional/Folk healers/tribes related to therapeutic use of medicinal plants under Tribal Health Care Research Program (THCRP) which has been implemented in 15 States/UTs.

LIST OF PRIORITIZED PLANTS FOR CULTIVATION UNDER NAM SCHEME**Plants eligible for 30% subsidy**

#	Botanical Name	Common Name
1.	<i>Abrus precatorius</i>	Chirmati, Chinnoti,
2.	<i>Acorus calamus Linn.</i>	Vach
3.	<i>Adhatoda zeylanica</i>	Adusa
4.	<i>Aloe vera (Linn.) Burn.</i>	Ghritkumari
5.	<i>Alpinia calcarata</i>	Smaller Galangal
6.	<i>Alpinia galanga</i>	Greater Galanga
7.	<i>Andrographis paniculata (Linn.) Burn</i>	Kalmegh
8.	<i>Artemisia annua (Linn.)</i>	Artemisia
9.	<i>Asparagus racemosus Willd.</i>	Shatavari
10.	<i>Azadirachta indica A. Juss</i>	Neem
11.	<i>Bacopa monnieri (L.) Pennell</i>	Brahmi
12.	<i>Bergenia ciliata Stern.</i>	Pashnabhera
13.	<i>Boerhaavia diffusa Linn.</i>	Punarnava
14.	<i>Cassia angustifolia Vahl.</i>	Senna
15.	<i>Caesalpinia sappan Linn.</i>	Patang
16.	<i>Catharanthus roseus</i>	Sadabahar
17.	<i>Celastrus paniculatus</i>	Malkangani, Jyothismathi
18.	<i>Centella asiatica (Linn.) Urban</i>	Mandooparni
19.	<i>Chlorophytum borivillianum Sant.</i>	Shwet Musali
20.	<i>Cinnamomum verum Presl</i> <i>C. tamala</i> and <i>C. camphora</i>	Dalchini, Tejpat, Kapoor
21.	<i>Citrullus colocynthis Forsk</i>	Indrayan
22.	<i>Clerodendrum phlomidis L.f</i>	Ami
23.	<i>Clitoria ternatea L.(Blue & White variety)</i>	Aparajita
24.	<i>Coleus barbatus Benth.</i>	Pather Chur
25.	<i>Coleus vettiveroides K.C. Jacob</i>	Hrivera
26.	<i>Convolvulus microphyllus</i>	Shankhpushpi
27.	<i>Cryptolepis buchanani Roem & schult</i>	Krsna sariva
28.	<i>Curcuma augustifolia</i>	Tikhur
29.	<i>Dacalophis hamiltonii</i>	Nannari
30.	<i>Digitalis purpurea Linn.</i>	Foxglove
31.	<i>Dioscorea bulbifera Linn.</i>	Rotalu, Gethi
32.	<i>Eclipta alba Hassk.</i>	Bhangru, Bhangra,
33.	<i>Embelia ribes Burm. f.</i>	Vai Vidang
34.	<i>Emblica officinalis Gaertn.</i>	Amla
35.	<i>Ephedra gerardiana Wall.</i>	Somlata
36.	<i>Garcinia indica Choisy</i>	Kokum
37.	<i>Ginkgo biloba</i>	Ginkgo
38.	<i>Gymnema sylvestre R. Br.</i>	Gudmar
39.	<i>Hedychium spicatum Buch-Ham.ex Smuth</i>	Kapur kachari
40.	<i>Hemidesmus indicus R.Br.</i>	Anantmool
41.	<i>Holarrhena antidysenterica Wall.</i>	Kurchi/Kutaj

42.	<i>Hyoscyamus niger L.</i>	Khurasani ajwane
43.	<i>Ipomoea mauritiana / Ipomoea digitata</i>	Giant potato
44.	<i>Ipomoea petaloidea Choisy</i>	Vrddhadaruka
45.	<i>Ipomoea turpethum R. Br.</i>	Trivrit
46.	<i>Kaempferia galanga</i>	Indian crocus
47.	<i>Litsea glutinosa</i>	Listea
48.	<i>Lepidium sativum Linn.</i>	Chandrasur
49.	<i>Mucuna prurita Linn.</i>	Konch
50.	<i>Ocimum sanctum Linn.</i>	Tulsi
51.	<i>Oryza sativa cv Njavara</i>	Scented rice
52.	<i>Phyllanthus amarus Schum & Thonn.</i>	Bhumi amlaki
53.	<i>Piper longum Linn.</i>	Pippali
54.	<i>Plantago ovata</i>	Isabgol
55.	<i>Pluchea lanceolata (DC) CB Clark.</i>	Rasna
56.	<i>Plumbago rosea</i>	Leadwort
57.	<i>Pseudarthria viscida</i>	Moovila
58.	<i>Psoralea corylifolia L.</i>	Bakuchi
59.	<i>Rubia cordifolia Linn</i>	Manjishta
60.	<i>Sida cordifolia</i>	Flannel weed
61.	<i>Solanum anguivi</i>	Katheli-badhi
62.	<i>Solanum nigrum Linn.</i>	Makoy
63.	<i>Stevia rebaudiana</i>	Madhukari
64.	<i>Tephrosia purpurea Pers</i>	Sharapunkha,
65.	<i>Terminalia arjuna (Roxb.) Wt. & Arn.</i>	Arjuna
66.	<i>Terminalia bellirica Gaertn.</i>	Behera
67.	<i>Terminalia chebula Retz.</i>	Harad
68.	<i>Tinospora cordifolia Miers</i>	Giloe
69.	<i>Tragia involucrata</i>	Barhanta
70.	<i>Trichosanthes cucumerina</i>	Patol panchang
71.	<i>Valeriana hardwickii</i>	Tagar-ganth, Nihani
72.	<i>Vitex nigundo</i>	Nirgundi
73.	<i>Vetiveria zizanoides</i>	Khas- khas grass
74.	<i>Withania somnifera (Linn.) Dunal</i>	Ashwagandha
75.	<i>Woodfordia fruticosa Kurz.</i>	Dhataki

Plants eligible for 50% subsidy

#	Botanical Name	Common Name
76.	<i>Abies webbiana Lindl</i>	Talispatra
77.	<i>Acacia catechu</i>	Katha
78.	<i>Aegle marmelos (Linn) Corr.</i>	Beal
79.	<i>Albizzia lebbeck Benth.</i>	Shirish
80.	<i>Alstonia scholaris R.Br.</i>	Satvin, Saptaparna
81.	<i>Altinigia excelsa Noronha</i>	Silarasa
82.	<i>Anacyclus pyrethrum DC.</i>	Akarkara
83.	<i>Atropa belledona</i>	Atropa
84.	<i>Coscinum fenastratum (Gertn) Colebr.</i>	Peela Chandan
85.	<i>Crataeva nurvala Buch – Ham.</i>	Varun
86.	<i>Curculigo orchoides</i>	Kali Musali, Musli shiya
87.	<i>Dactylorhiza hatagirea hatagirea (D.Don) Soo</i>	Salampanja
88.	<i>Desmodium gangeticum</i>	Sarivan
89.	<i>Gloriosa superba Linn.</i>	Kalihari
90.	<i>Glycyrrhiza glabra Linn.</i>	Licorice Roots, Mulethi
91.	<i>Gmelina arborea Linn.</i>	Gambhari
92.	<i>Hippophae rhamnoides Linn.</i>	Seabuckthorn
93.	<i>Inula racemosa Hk. f.</i>	Pushkarmool
94.	<i>Juniperus cumminis Linn</i>	Hapushal, Hanber, Hapusha
95.	<i>Jurinea macrocephala Benth.</i>	Dhoop, Jari-dhoop
96.	<i>Leptadenia reticulate (Retz) Wt. & Arn.</i>	Jivanti
97.	<i>Mesua ferrea Linn.</i>	Nagakeshar
98.	<i>Onosma hispidum Wall.ex Don</i>	Ratanjot
99.	<i>Panax pseudo-ginseng</i>	Ginseng
100.	<i>Parmelia perlata Ach.</i>	Saileya
101.	<i>Piper cubeba Linn. f.</i>	Kababchini
102.	<i>Plumbago zeylanica Linn.</i>	Chitrak
103.	<i>Pueraria tuberosa DC.</i>	Vidarikand
104.	<i>Premna integrifolia Linn.</i>	Agnimanth
105.	<i>Pterocarpus marsupium Roxb.</i>	Beejasar
106.	<i>Rauwolfia serpentina Benth. ex Kurz</i>	Sarpgandha
107.	<i>Rheum emodi</i>	Archa
108.	<i>Salacia reticulata, Salacia oblongata</i>	Saptachakra (Saptarangi)
109.	<i>Saraca asoca (Roxb.) De Wilde</i>	Ashok
110.	<i>Smilax china Linn.</i>	Hrddhatri (Madhu snuhi), Chob Chini Lokha
111.	<i>Stereospermum suaveolens DC.</i>	Patala
112.	<i>Symplocos racemosa Roxb</i>	Lodh/Pathani
113.	<i>Tacomella undulate (Sm.) Seem.</i>	Rohitak
114.	<i>Tricopus zeylanicus</i>	Jeevani
115.	<i>Tylophora asthmatica</i>	Damabooti
116.	<i>Taxus wallichiana Linn.</i>	Thuner, Talispatra
117.	<i>Urarea picta (Jacq.) Desv.</i>	Prishnaparni
118.	<i>Valeriana wallichii</i>	Indian Valerian
119.	<i>Vateria indica</i>	Mandadhupa, Dupa
120.	<i>Viola Odorata</i>	Bunafsha
121.	<i>Zanthoxylum alatum</i>	Timoor

Plants eligible for 75% subsidy

#	Botanical Name	Common Name
122.	<i>Aconitum ferox</i> Wall./ <i>A. balfouri</i>	Vatsnabh
123.	<i>Aconitum chasmanthum</i> Stapf	Vatsnabh(API)
124.	<i>Aconitum heterophyllum</i> Wall. ex Royle	Atees
125.	<i>Aquilaria agallocha</i> Roxb.	Agar
126.	<i>Berberis aristata</i> DC.	Daruhaldi
127.	<i>Commiphora wightii</i> (Arn.) Bhandari	Guggal
128.	<i>Coptis teeta</i> Wall.	Mamira
129.	<i>Ferula foetida</i> Regel.	Hing
130.	<i>Gentiana kurroo</i> Royle	Trayamana
131.	<i>Mappia foetida</i> Miers.	Ghanera
132.	<i>Nardostachys jatamansi</i> DC.	Jatamansi
133.	<i>Oroxylum indicum</i> Vent.	Syonaka
134.	<i>Picrorhiza kurroa</i> Benth. ex Royle	Kutki
135.	<i>Podophyllum hexandrum</i> Royle.	Bankakri, Indian podophyllum
136.	<i>Polygonatum cirrhifolium</i> Wall.	Mahameda
137.	<i>Pterocarpus santalinus</i>	Raktachandan, Red sanders
138.	<i>Santalum album</i> Linn.	Chandan
139.	<i>Saussurea costus</i> C.B. Clarke	Kuth, Kustha
140.	<i>Swertia chirata</i> Buch-Ham	Chirata, Charayatah

Annexure - II

State / UT wise detail of Storage / Godown supported for cultivation of medicinal plants under National AYUSH Mission (NAM) scheme (2015-16 to 2019-20)

S.No.	State Name	2015-16	2016-17	2017-18	2018-19	2019-20	Total
1	Andhra Pradesh	-	2	1	1	2	6
2	Arunachal Pradesh	-	-	1	-	-	1
3	Assam	-	1	17	-	-	18
4	Bihar	-	-	-	-	7	7
5	Chhattisgarh	-	1	1	2	-	4
6	Goa	-	-	-	-	1	1
7	Gujarat	-	-	1	2	-	3
8	Haryana	-	-	-	-	-	0
9	Himachal Pradesh	1	2	2	1	1	7
10	Jammu & Kashmir	-	-	-	-	-	0
11	Karnataka	-	-	-	1	-	1
12	Kerala	-	-	-	-	-	0
13	Madhya Pradesh	-	-	6	-	20	26
14	Maharashtra	-	-	1	-	4	5
15	Manipur	-	-	-	1	-	1
16	Meghalaya	-	-	2	-	-	2
17	Mizoram	-	-	1	-	-	1
18	Nagaland	-	-	-	-	-	0
19	Orissa	-	-	-	-	-	0
20	Puducherry	-	-	-	1	-	1
21	Punjab	-	1	-	1	-	2
22	Rajasthan	3	-	2	2	2	9
23	Sikkim	-	-	-	-	-	0
24	Tamil Nadu	-	-	-	-	2	2
25	Telangana	-	-	-	-	-	0
26	Tripura	-	-	-	-	-	0
27	Uttarakhand	-	3	1	1	3	8
28	Uttar Pradesh	12	8	-	9	-	29
29	West Bengal	5	2	3	2	5	17
Grand Total		21	20	39	24	47	151