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

LOK SABHA UNSTARRED QUESTION NO.3426 TO BE ANSWERED ON 18TH DECEMBER, 2015

PROTECTION OF MEDICINAL PLANTS

3426. SHRI KAMALBHAN SINGH MARABI:

SHRI HARISHCHANDRA CHAVAN:

SHRI P. NAGARAJAN:

SHRIMATI JAYSHREEBEN PATEL:

SHRI PRAHLAD SINGH PATEL:

SHRI KAMAKHYA PRASAD TASA:

SHRI S.R. VIJAYAKUMAR:

SHRI BHAIRON PRASAD MISHRA:

SHRI RAHUL KASWAN:

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

- (a) the details of schemes being implemented by the Government for identification, documentation, conservation/ protection, cultivation and commercial exploitation of indigenous medicinal/herbal plants in the country along with the funds allocated and utilised thereunder during each of the last three years and the current year, State/UT-wise including Manipur;
- (b) the details of the proposals received and the funds allocated/released/utilised thereunder during the said period, scheme and State/UT-wise;
- (c) whether the Government is imparting any training to the farmers/ entrepreneurs/youth for production, processing and marketing of medicinal/ herbal plants and if so, the details thereof indicating the number of people engaged in such activities, State/UT-wise including Manipur;
- (d) whether the Government has any proposal to set up any research institute to conduct research/study on the medicinal and aromatic use of indigenous herbs and plants and if so, the details thereof;
- (e) whether the Government has also identified endangered medicinal/herbal plants being on the verge of extinction and if so, the details thereof; and

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(f) the further measures taken by the Government to increase employment opportunity for cultivation of medicinal/ herbal plants, to protect endangered medicinal/herbal plants and to protect them from being patented in other countries?

ANSWER

THE MINISTER OF STATE (IC) OF THE MINISTRY OF AYURVEDA, YOGA & NATUROPATHY, UNANI, SIDDHA AND HOMOEOPATHY (SHRI SHRIPAD YESSO NAIK)

- (a) & (b): The National Medicinal Plants Board (NMPB), Ministry of AYUSH has been implementing following Schemes for overall development of the Medicinal Plants sector throughout the country including Manipur:
- i). Central Sector Scheme on "Conservation, Development and Sustainable Management of Medicinal Plants" aimed at providing project based support for survey, inventorization, *insitu* conservation, *ex-situ* conservation / herbal gardens, linkage with Joint Forest Management Committees (JFMCs), Research and Development etc. The Scheme is being implemented since 2008 and continued during the 12th Plan. Under the scheme project proposals related to above activities on medicinal plants received from different states which are considered by Project Screening Committee (PSC) and approved in Standing Finance Committee (SFC) of NMPB. During last three years and the current year a total of 351 projects has been approved under the above scheme (**State-wise detail is at Annexure-I**).
- ii). Centrally Sponsored Scheme of National AYUSH Mission (NAM) has a component on Medicinal Plants which is primarily aimed at supporting cultivation of medicinal plants on farmers land with backward linkages through establishment of nurseries for supply of quality planting material, and forward linkages for post-harvest management. The cultivation of medicinal plants is supported by providing subsidy to farmers through the identified implementing agency of concerned state. The assistance is provided as per the State Annual Action Plan approved for concerned State. Prior to NAM Scheme, the cultivation of medicinal plants was being supported under Centrally Sponsored Scheme of "National Mission on Medicinal Plants" of NMPB implemented from years 2008-09 to 2014-15.

The State / UT-wise details of the funds allocated/sanctioned, released and utilized under the above schemes during each of the last three financial years and the current financial year are at **Annexure-II & III**.

(c): Yes, from time to time, NMPB under its central sector scheme organize training programmes for the farmers/entrepreneurs/youth/ other stakeholders for cultivation, production, processing and marketing of medicinal / herbal plants through its Facilitation Centers in different states. During last three years and current year a total of 23 training programmes for farmers were conducted. Besides, 7 workshops/stakeholders meets were also organized through these Facilitation Centers. In addition, during the said period NMPB has also supported 55 projects in different states for conducting workshops/training/seminars etc. on various aspects of medicinal plants.

In addition, different State Agriculture Universities, research institutions / laboratories under Indian Council for Agricultural Research (ICAR) and Council for Scientific and Industrial Research (CSIR) having technical expertise also organizes training programmes for the farmers / entrepreneurs / youths for cultivation, processing and marketing of medicinal / herbal plants and their related agro technologies, processing for value addition to enable their commercial exploitation of the knowhow so developed.

(d): Research on medicinal and aromatic use of indigenous herbs and plants is already being conducted by Central Scientific and Industrial Research (CSIR) through their institutes like Central Institute of Medicinal and Aromatic Plants (CIMAP), Lucknow; Indian Institute for Integrative Medicines (IIIM), Jammu; Institute of Himalayan Bioresource Technology (IHBT), Palampur; National Botanical Research Institute (NBRI), Lucknow; North East Institute of Science and Technology (NEIST), Jorhat and by Indian Council for Agricultural Research (ICAR) through their institutes like Directorate of Medicinal and Aromatic Plants Research (DMAPR), Anand, Gujarat, and by research councils of this ministry like Central Council for Research in Ayurvedic Sciences (CCRAS), Central Council for Research in Unani Medicine (CCRUM), Central Council for Research in Homoeopathy (CCRH) etc.

Setting up of new research Institute is a function of ongoing assessment of priorities for need of any such additional Institute.

(e): According to Botanical Survey of India (BSI), an organization under Ministry of Environment, Forest & Climate Change, about 70 medicinal and aromatic plants species are threatened due to various anthropogenic activities.

The threatened medicinal and aromatic plants are 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, Aquillaria mallaccensis, 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, Colchicum luteum, Coptis teeta, Coscinium fenestratum, Dactylorhiza hatagirea, Dioscorea deltoidea, Elaeocarpus prunifolius, Ephedra gerardiana, Ferrula gummosa, Gaultheria fragrantissima, Gentiana kurooa, Gloriosa superba, Hedychium coronarium, Hedychium spicatum, Hyoscyamus niger, Hydnocarpus macrocarpa, Inula racemosa, Iphigenia indica, Iphigenia pallida, Iphigenia stellata, Jurinea dolomiaea, Kolanchoe roseus, 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, Urginea indica, Urginea maritima and Vitex peduncularis.

(f): The NMPB since 2008-09 is supporting large scale cultivation of medicinal plants in a mission mode on farmers land throughout the country and thereby generating the employment / livelihood opportunities for farmers.

Under NMPB's Central Sector Scheme on Conservation, Development and Sustainable Management of Medicinal Plants special attention has been given to conserve endangered species of medicinal plants in their natural habitat through development of Medicinal Plants Conservation Areas (MPCAs).

Ministry of AYUSH in collaboration with CSIR set up a Traditional Knowledge Digital Library (TKDL) for prevention of misappropriation from Patents grant. To prevent wrongful grant of patents in other countries access of TKDL has been given to International Patent offices under Access Agreement to European Patent Office, Indian Patent Office (CGPDTM), German Patent and Trademark Office, United States Patent and Trademark Office. United Kingdom Intellectual Property Office, Canadian Intellectual Property Office, Intellectual Property Australia, Japan Patent Office, Chile Patent Office, and Malaysian Patent Office. In addition, India has also moved a proposal in the Patent Cooperation Treaty (PCT) Working Group and Meetings of International Authorities (MIA) to include the India Traditional Knowledge Digital Library (TKDL) under PCT Minimum Documentation to prevent the misappropriation of Traditional knowledge through wrongful grant of patents in the countries.

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Annexure-I

State-wise detail of the projects approved under Central Sector Scheme for Conservation, Development and Sustainable Management of Medicinal Plants during each of the last three years and current year

	04.4	No. of Projects Approved							
S.No.	States	2012-13	2013-14	2014-15	2015-16	Total 18			
1	Andhra Pradesh	4	6	7	1				
2	Andaman & Nicobar	0	0	0	1	1			
3	Arunachal Pradesh	0	3	0	3	6			
4	Assam	0	2	1	1	4			
5	Bihar	0	0	0	0	0			
6	Chandigarh	0	0	1	0	1			
7	Chhattisgarh	1	4	1	0	6			
8	Delhi	3	9	12	3	27			
9	Dadra and Nagar Haveli	0	0	0	0	0			
10	Daman and Diu	0	0	0	0	0			
11	Goa	0	0	1	1	2			
12	Gujarat	0	11	10	4	25			
13	Haryana	0	1	0	0	1			
14	Himachal Pradesh	0	3	1	1	5			
15	Jammu & Kashmir	4	5	1	0	10			
16	Jharkhand	<u>.</u> 1	0	3	1	5			
17	Karnataka	4	10	11	0	25			
18	Kerala	3	5	14	10	32			
19	Lakshadweep	0	0	0	1	1			
20	Madhya Pradesh	2	3	4	2	11			
21	Maharashtra	5	8	20	5	38			
22	Manipur	1	2	1	6	10			
23	Meghalaya	0	0	0	0	0			
24	Mizoram	7	0	2	0	9			
25	Nagaland	2	1	0	1	4			
26	Orissa	0	8	2	1	11			
27	Pondicherry	0	0	0	0	0			
28	Punjab	0	3	0	0	3			
29	Rajasthan	2	8	3	2	15			
30	Sikkim	 1	2	3	0	6			
31	Tamil Nadu	3	12	1	1	17			
32	Telangana	0	0	3	5	8			
33	Tripura	1	0	4	0	5			
34	Uttarakhand	0	2	4	9	15			
35	Uttar Pradesh	3	2	7	2	14			
36	West Bengal	2	5	5	4	16			
	Total	49	115	122	65	351			

Annexure-II

State/UT-wise and Year-wise Fund Released during last three and current F.Y. under Central Sector Scheme for "Conservation, Development and Sustainable Management of Medicinal Plants"

(Rs. In Lakhs)

		2012-13		2013-14			2014-15			2015-16 as on 09.12.2015			
S. N	State/UT	Sanctio ned	Released Amount	Utilized Amount	Sanctioned Amount	Released Amount	Utilized Amount	Sanctioned Amount	Released Amount	Utilized Amoun	Sanctioned Amount	Released Amount	Utilized Amoun
Ο.		Amount								t			t
1	Andhra Pradesh	61.96	44.58	41.78	65.95	194.10	28.32	1514.79	761.93	10.85	16.20	26.25	_
2	Arunachal Pradesh	0.00	0.00	0.00	9.23	4.95	4.95	0.00	0.00	0.00	462.57	24.13	
3	Assam	0.00	4.33	4.33	56.22	29.00	23.99	27.74	0.00	0.00	327.17	29.40	_
4	Bihar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_
5	Chhattisgarh	446.51	178.60	178.60	769.96	374.07	312.05	196.50	222.36	0.00	0.00	171.67	_
6	Delhi	44.65	38.80	18.45	106.00	87.86	82.85	306.19	114.12	29.00	15.00	58.17	_
7	Goa	0.00	0.00	0.00	0.00	0.00	0.00	2.00	0.00	0.00	6.36	5.00	_
8	Gujarat	0.00	609.91	514.00	408.43	133.15	46.67	334.55	238.22	0.00	84.53	55.87	_
9	Haryana	0.00	0.00	0.00	2.00	10.87	10.87	0.00	4.69	0.00	0.00	0.00	_
10	Himachal Pradesh	0.00	11.24	11.24	79.49	40.44	40.44	31.26	272.74	83.92	6.00	149.85	_
11	Jammu & Kashmir	71.12	33.38	5.88	88.68	175.09	103.33	25.85	31.19	3.87	0.00	10.87	_
12	Jharkhand	121.99	138.96	138.96	0.00	0.00	0.00	1164.25	618.00	0.00	19.20	74.87	_
13	Karnataka	424.36	191.87	191.87	382.79	281.21	258.95	1470.03	917.39	69.38	0.00	49.30	_
14	Kerala	119.58	50.54	42.84	55.20	161.88	156.88	376.75	159.72	0.00	396.81	160.23	_
15	Madhya Pradesh	61.25	222.30	222.30	1473.00	1338.91	887.91	16.00	11.24	0.00	966.22	27.59	_
16	Maharashtra	1270.31	890.95	888.85	459.95	661.59	528.72	1135.28	351.72	16.24	35.08	748.79	_
17	Manipur	18.00	16.00	16.00	10.40	13.00	13.00	5.00	17.20	0.00	1076.32	37.61	_
18	Meghalaya	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_
19	Mizoram	523.84	265.35	265.35	0.00	174.90	161.10	29.66	11.00	0.00	0.00	161.18	_
20	Nagaland	110.00	74.22	74.22	165.88	99.35	99.35	0.00	87.77	0.00	5.30	17.08	_
21	Orissa	0.00	2.79	2.79	265.01	97.10	32.00	68.04	31.00	0.00	20.45	49.02	_
22	Punjab	0.00	0.00	0.00	61.04	39.01	22.00	0.00	0.00	0.00	0.00	8.00	_
23	Rajasthan	919.24	597.94	377.22	1028.85	684.37	517.79	281.32	320.53	104.94	355.53	320.17	_
24	Sikkim	120.00	177.01	177.01	945.87	547.38	547.38	821.12	611.82	1.00	0.00	0.00	_
25	Tamil Nadu	47.96	16.90	16.90	425.09	190.28	67.15	5.00	8.40	2.40	10.00	55.19	_
26	Tripura	223.90	89.56	89.56	0.00	0.00	0.00	264.80	216.43	3.00	0.00	130.42	_
27	Uttar Pradesh	63.45	4.29	4.29	85.67	188.53	35.85	78.45	58.93	4.00	68.82	54.35	_
28	Uttarakhand	0.00	20.64	5.00	32.53	133.15	125.28	72.65	150.63	0.00	414.98	188.41	
29	West Bengal	53.45	75.48	34.48	230.02	109.00	3.00	1084.96	573.08	22.87	90.40	12.48	_
30	Andaman & Nicobar	0.00	0.00	0.00	0.00	41.27	41.27	0.00	0.00	0.00	15.50	0.00	
31	Chandigarh	0.00	17.12	17.12	0.00	5.00	4.96	2.00	6.46	1.50	0.00	10.50	_
32	D&N Haveli	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	_
33	Daman & Diu	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
34	Lakshadeep	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.69	0.00	19.26	15.00	
35	Telangana	0.00	0.00	0.00	0.00	0.00	0.00	783.11	12.00	0.00	123.95	377.25	_
36	Pondicherry	0.00	0.00	0.00	0.00	1.80	1.80	0.00	0.00	0.00	0.00	0.00	_
	Total	4701.57	3772.76	3339.04	7207.26	5817.26	4157.86	10097.30	5811.26	352.97	4535.65	3028.65	_

State/UT-wise and Year-wise Fund Released during last three and current F.Y. under Centrally Sponsored Scheme of "National Mission on Medicinal Plants"

(Rs in lakhs)

			(Rs. in lakhs)										
	Name of State	2012-13				2013-14			2014-15		2015-16		
S.No		Fund Fund utilised allocated released		Fund Fund allocated released		Fund utilised	Fund allocated	Fund released	Fund utilised	Fund approved			
1	Andhra Pradesh	1112.433	834.32	782.4523	1016.35	963.63	708.60111	1673.41	1200.61	213.76	133.780		
2	Arunachal Pradesh		0	0	158.2	118.65	0	328.57	0				
3	Assam	254.88789	162.81	161.24	386.38	0	0		0				
4	Bihar		0	0	93.27	0	0		0				
5	Chhattisgarh		0	56.8655 (fund utilised from the	0	0	29.94307 (fund utilised		0				
	9			grant released during 2011-12)			from the grant released during 2011-12)						
6	Gujarat		0	9.34 (fund utilised from the grant released during 2011-12)	0	0	0	172.25	172.25		168.082		
7	Haryana		0	28.91876 (fund utilised from the grant released during 2011-12)	228.19	171.14	0	116.67	87.5		51.6788		
8	Himachal Pradesh		0	0	97.54	97.54	0		0		61.981		
9	Jammu & Kashmir		0	9.1(fund utilised from the grant released during 2009-10)	0	0	44.936 (fund utilised from the grant released during 2009-10)		0		54.893		
10	Jharkhand		0	0	327.31	0	0	348.57	0				
11	Karnataka		0	0	216.71	216.71	0	147.76	110.82	68.163	137.204		
12	Kerala	280.55277	210.41	210.41	352.36	264.27	264.27	599.41	0		126.5225		
13	Madhya Pradesh	515.83901	474.59	453.2583	539.01	526.43407	364.30046	676.41	507.3	2.87	306.905		
14	Maharashtra		0	0	913.21	682.44	608.21685	786.51	589.88	400	205.87		
15	Manipur	57.60693	57.6	57.6	105.96	105.96	105.96	73.06	73.06	73.06	60.8		
16	Meghalaya		0	0	75.99	0	0	172.62	172.62				
17	Mizoram	11.89125	8.91	8.91	18.28	18.28	18.28	57.72	57.72	57.72	14.384		
18	Nagaland	240.8175	188.47	188.47	175.88	175.88	175.88	136.08	102.06	102.06			
19	Orissa	261.38876	111.00	210.484	150.66	150.66	99.89495	247.35	191.53				
20	Rajasthan		0	0	28.87	28.87	0	42.51	42.51	11.06	113.532		
21	Sikkim	164.89593	161.94	152.3484	137.59	137.59	0	117.09	77.24	103.05592	30.731		
22	Tamil Nadu	1089.3711	741.5	579.5	1078.59	1022.6698	1078.28	928.56	926.57	926.568	144.224		
23	Telangana				0					284.0725	111.316		
24	Tripura		0	0	93.13	0	0	53.23	53.23		36.064		
25	Uttar Pradesh	1162.4708	834.54	242.7106	852.65	424.36	0	434.07	0	174.3	720.012		
26	Uttarakhand		0	0	278.86	278.86	273.55697	202.03	202.03	138.98	60.466		
27	West Bengal		0	8.15104 (fund utilised from the grant released during 2010-11)	56.96	0	243.70717 (fund utilised from the grant released during 2010-11)		0		180.631		
	Total	5152.1549	3786.09	3159.76	7381.9500	5383.94	4015.82658	7313.88	4566.93	2555.6694	2719.0763		

Note:- From Financial Year 2015-16 the funds are being released under the National AYUSH Mission (NAM) Scheme of Ministry of AYUSH