

**GOVERNMENT OF INDIA
MINISTRY OF AYUSH**

**LOK SABHA
UNSTARRED QUESTION NO. 224
ANSWERED ON 02/02/2024**

“Production and Export of Medicinal Plants”

224. SHRI SUNIL DATTATRAY TATKARE:

Will the Minister of AYUSH be pleased to state:

- (a) the quantity of medicinal plants and herbs produced in the country particularly in Maharashtra during the last three years and the current year, State/UT-wise;
- (b) the details of the financial assistance provided to promote the farming of medicinal plants and herbs during the said period, State/UT-wise;
- (c) the quantity of medicinal plants exported from the country including Maharashtra during the said period;
- (d) the steps taken to promote the production of Ayurvedic and herbal medicines in the country including Maharashtra;
- (e) whether the Government encourages/proposes to encourage the farmers for cultivation of medicinal plants under any scheme; and
- (f) if so, the details thereof along with the steps taken/proposed to be taken by the Government to promote the emerging nutraceutical industry?

ANSWER

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

(a) 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 (NAM) 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 the State of Maharashtra. 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 propagation and supply of quality planting material.

During last three years of the National Ayush Mission (NAM) scheme, under ‘Medicinal Plants’ component of National Ayush Mission, the Ministry of Ayush had supported 25,108 hectare area under cultivation of medicinal plants throughout the country including Maharashtra during the financial year 2018-19 to 2020-21, as the scheme was implemented from the financial year 2015-16 to 2020-21. The detail is given at **Annexure – I**.

Beside this, as per the final estimates shared by Statistics Division, Ministry of Agriculture & Farmers Welfare and from the website (<https://static.pib.gov.in/WriteReadData/userfiles/attachment.pdf>), it has been noticed that the production of medicinal and aromatic plants was 3698000 MT throughout the country. The detail is given at **Annexure – II**.

(b) The Ministry of Ayush had approved an amount of Rs. 6305.240 lakh (including state share) for cultivation of medicinal plants during last three years of the National Ayush Mission (NAM) scheme to promote the farming of medicinal plants and herbs under ‘Medicinal Plants’ component of National Ayush Mission scheme throughout the country including Maharashtra. The state-wise and year-wise detail of fund approved for cultivation of medicinal plants under National Ayush Mission (NAM) scheme is given at **Annexure – III**.

(c) As per the data received from Directorate General of Commercial Intelligence and Statistics, Ministry of Commerce & Industry, the export quantities of medicinal plants (under HS CODE 1211) in the last three financial years and current financial year is given below (all figures in Ton):

2020-21	2021-22	2022-23	2023-24 (APR-SEP)
107961.09	102731.32	95813.41	41259.22

Source: DGCI&S

(d) Ministry of Ayush has implemented Central Sector Scheme AYUSH Oushadhi Gunvatta evam Utpadan Samvardhan Yojana (AOGUSY) which was approved by Standing Finance Committee (SFC) on 16.03.2021. The total financial allocation to this scheme is Rs. 122.00 crores for five years. The objectives of the Scheme are as under:

- i. To enhance India's manufacturing capabilities and exports of traditional medicines and health promotion products under the initiative of Atmanirbhar Bharat.
- ii. To facilitate adequate infrastructural & technological upgradation and institutional activities in public and private sector for standardization, quality manufacturing and analytical testing of Ayush drugs & materials.
- iii. To strengthen regulatory frameworks at Central and State level for effective quality control, safety monitoring and surveillance of misleading advertisements of Ayush drugs.
- iv. To encourage building up synergies, collaborations and convergent approaches for promoting standards and quality of Ayush drugs & materials. Detailed guidelines are available at:

<https://ayush.gov.in/images/Schemes/aoushdhi.pdf>

(e) & (f) Yes, Sir. National Medicinal Plants Board, Ministry of Ayush supports various institutes/organization to organize Awareness Building Program, Exposure Visits, Education and Capacity Building of Stakeholders through Information Education and Communication (IEC) strategy under Central Sector Scheme (CSS) for conservation, development and sustainable management of medicinal plants.

NMPB has supported 129 numbers of projects for various IEC activities to educate array of stakeholders including farmers about different aspects of medicinal plants like conservation, cultivation, Post-Harvest Management and marketing from the financial year 2018-19 to 2022-23. The detail is given at **Annexure-IV**.

Beside this, in the past, Ministry of Ayush had supported 167 number of seminars/workshops / buyer-seller meet / exposure visits and trainings for 13,227 farmers to the concerned implementing agencies during last three year under National Ayush Mission scheme. The detail of activities supported under flexi component is given at **Annexure – V & VI**.

Council of Scientific & Industrial Research (CSIR) is an autonomous Research and Development (R&D) organization involved in R&D in varied areas of science including medicinal plants. CSIR laboratories specially CSIR- Institute of Himalayan Bioresource Technology (IHBT), CSIR- North East Institute of Science & Technology (NEIST), CSIR- Central Food Technological Research Institute (CFTRI), CSIR- National Institute For Interdisciplinary Science and Technology (NIIST), CSIR- Central Institute of Medicinal and Aromatic Plants (CIMAP) are involved in developing nutraceuticals through Mission Mode program implemented by CSIR. The nutraceutical industries both emerging and established ones are encouraged for commercial development of the nutraceutical developed by CSIR as well as industry in a collaborative mode.

CSIR has taken a significant jump and developed various health promoting nutraceutical products based on locally available bio resource under Mission mode program on “Nutraceuticals and Nutritionals - Health and Wellness Reach out through Nutraceuticals and Nutritionals” (2018-2020) and “Immunity Mission - Immunomodulatory Function of Nutritionals and Nutraceuticals for Health and Wellness (2021-2023). The major breakthroughs from CSIR-IHBT are development of nutraceutical formulations for Vitamin –D enrichment, bone & cartilage health, cognition, immunity and sleep disorders management. Considering the societal responsibilities of CSIR, region specific and Pan Indian Nutritious Breakfast/Tiffin/Snacks like products for School children that meets the Recommended Dietary Allowances (RDA) requirement of nutrients through food based approach were also developed. The nutraceutical products developed in these missions are scientifically validated and had undergone Human Intervention Trials for their safety and efficacy. Under CSIR Mission on Nutraceuticals and Nutritionals following nutraceutical products developed, such as Nutraceutical formulation for increased bioavailability of Vit B12, Development of vitamin D2 enriched formulations from *Lentinula edodes* (Shiitake), Kaempferol-enriched nutraceutical for ageing bone, *Punica granatum* peel based nutraceutical for cartilage health based on traditional knowledge, Nutraceutical for management of Benign Prostatic Hyperplasia and Pan India nutrifooods for breakfast (Instant Nutri Upma, Instant Nutri Poha, Instant Nutri Khichdi etc.)

Under CSIR Immunity Mission a number of immunomodulatory herbs and their combinations, including tea polyphenols were explored to combat immune dysfunction. A comprehensive monograph with digital documentation and development of web portal on locally consumed fruits and vegetables, their phytoconstituents and immunity boosting properties was also developed under the mission. Furthermore, the plant specific screening by computational approaches for immunoboosting phytochemicals, including their interaction and pharmacological profile was also revealed.

CSIR-Central Institute of Medicinal and Aromatic Plants (CSIR-CIMAP), Lucknow is promoting medicinal and aromatic plants-based activities in different parts of the country including Maharashtra through development of improved agro-technologies, high yielding varieties and processing technologies of medicinal and aromatic plants. Efforts have also been done for technology dissemination among farmers and entrepreneurs by conducting various awareness and training programmes on production, primary processing and marketing aspects of medicinal and aromatic plants. During last four years and current year 2019-20, 2020-21, 2021-22, 2022-23 and 2023-24, a total of 10 Kisan Melas were organized in which about 24,200 farmers, entrepreneurs and industry representatives participated and gained the knowledge about medicinal & aromatic plants. During the same period, total 59 with two-to-three days' skill-cum-technology up-gradation training programmes were also organized by the institute in various states of country in which a total of 3462 farmers/entrepreneurs got skilled. Total 181 one-day out-reach awareness-cum-training programmes were also organized, in which 11,649 farmers were made aware on the cultivation and processing aspects of medicinal and aromatic plants in different regions of the country. CSIR-CIMAP has developed some nutraceutical products such as CIM-Phalse and CIM-Paushak for industry.

Details of area supported under cultivation of medicinal plants through National Ayush Mission scheme from the financial year 2018-19 to 2020-21.

(Area in hectare)

S.No.	State	2018-19	2019-20	2020-21	Total
1	Andhra Pradesh	508	1338	0	1846
2	Arunachal Pradesh	9	44	98	151
3	Assam	138	0	0	138
4	Bihar	0	175	0	175
5	Chhattisgarh	108	0	0	108
6	Goa	30	30	0	60
7	Gujarat	518	0	0	518
8	Haryana	0	0	0	0
9	Himachal Pradesh	0	70	0	70
10	Jammu & Kashmir	24	28	25	77
11	Karnataka	469	353	1100	1922
12	Kerala	410	0	330	740
13	Madhya Pradesh	1262	790	4270	6322
14	Maharashtra	0	520	0	520
15	Manipur	60	30	0	90
16	Meghalaya	0	108	0	108
17	Mizoram	187	6	29	222
18	Nagaland	103	0	210	313
19	Orissa	378	0	0	378
20	Puducherry	2	5	0	7
21	Punjab	16	340	0	356
22	Rajasthan	519	760	0	1279
23	Sikkim	0	0	58	58
24	Tamil Nadu	765	900	0	1665
25	Telangana	237	341	0	578
26	Tripura	211	0	0	211
27	Uttarakhand	110	208	0	318
28	Uttar Pradesh	3633	0	2236	5869
29	West Bengal	261	748	0	1009
TOTAL		9958	6794	8356	25108

Year-wise detail of estimates of production of Medicinal and Aromatic Plants throughout the country.

S.No.	Financial year	Production of Medicinal and Aromatic Plants (in MT.)
1.	2018-19	795000
2.	2019-20	734000
3.	2020-21	825000
4.	2021-22	664000
5.	2022-23	680000
TOTAL		3698000

Details of fund approved for cultivation of medicinal plants under National Ayush Mission scheme from the financial year 2018-19 to 2020-21.

(Rs. in lakh)

S.No.	State	2018-19	2019-20	2020-21	Total
1	Andhra Pradesh	69.279	220.408	0.000	289.688
2	Arunachal Pradesh	9.360	26.255	59.500	95.115
3	Assam	28.122	0.000	0.000	28.122
4	Bihar	0.000	74.487	0.000	74.487
5	Chhattisgarh	28.107	0.000	0.000	28.107
6	Goa	9.437	9.742	0.000	19.179
7	Gujarat	178.670	0.000	0.000	178.670
8	Haryana	0.000	0.000	0.000	0.000
9	Himachal Pradesh	0.000	54.444	0.000	54.444
10	Jammu & Kashmir	21.504	18.288	21.539	61.331
11	Karnataka	86.485	114.673	359.881	561.039
12	Kerala	115.265	0.000	101.112	216.377
13	Madhya Pradesh	249.359	287.873	853.736	1390.968
14	Maharashtra	0.000	285.356	0.000	285.356
15	Manipur	17.580	15.829	0.000	33.409
16	Meghalaya	0.000	31.526	0.000	31.526
17	Mizoram	39.640	0.954	10.304	50.899
18	Nagaland	38.042	0.000	75.482	113.524
19	Orissa	85.064	0.000	0.000	85.064
20	Puducherry	0.393	0.783	0.000	1.176
21	Punjab	9.469	66.154	0.000	75.623
22	Rajasthan	203.239	327.848	0.000	531.087
23	Sikkim	0.000	0.000	40.989	40.989
24	Tamil Nadu	173.089	260.995	0.000	434.084
25	Telangana	36.874	65.748	0.000	102.622
26	Tripura	42.897	0.000	0.000	42.897
27	Uttarakhand	55.667	133.595	0.000	189.262
28	Uttar Pradesh	564.051	0.000	503.012	1067.063
29	West Bengal	62.201	160.933	0.000	223.134
TOTAL		2123.794	2155.891	2025.555	6305.240

Details of no. of projects supported under Central Sector Scheme for conservation, development and sustainable management of medicinal plants to different organizations throughout country for IEC activities from the financial year 2018-19 to 2022-23.

S. No.	State	Number of Projects sanctioned during F.Y. 2018-19 to 2022-23					Total
		2018-19	2019-20	2020-21	2021-22	2022-23	
1	Andhra Pradesh	0	0	1	1	1	3
2	Arunachal Pradesh	1	0	0	0	0	1
3	Assam	2	0	1	3	2	8
4	Bihar	0	0	0	0	0	0
5	Chhattisgarh	0	0	0	0	0	0
6	Delhi	7	3	2	5	3	20
7	Gujarat	0	0	0	0	0	0
8	Haryana	1	0	1	0	1	3
9	Himachal Pradesh	0	0	0	0	0	0
10	Jammu & Kashmir	0	1	0	0	0	1
11	Jharkhand	0	0	0	0	3	3
12	Karnataka	4	2	0	3	1	10
13	Kerala	0	1	0	0	2	3
14	Ladhak	0	0	0	0	2	2
15	Madhya Pradesh	1	0	0	0	3	1
16	Maharashtra	1	4	2	0	2	9
17	Manipur	2	1	0	0	1	4
18	Meghalaya	1	1	1	0	0	3
19	Mizoram	1	0	0	0	1	2
20	Nagaland	2	0	0	0	0	2
21	Odisha	1	1	2	3	1	8
22	Punjab	2	0	1	1	1	5
23	Rajasthan	2	1	1	0	0	4
24	Sikkim	0	0	0	0	0	0
25	Tamil Nadu	5	2	0	4	7	18
26	Telangana	0	0	0	0	0	0
27	Uttar Pradesh	3	3	0	2	1	9
28	Uttarakhand	2	1	0	0	0	3
29	West Bengal	2	1	1	1	2	7
Total		40	22	13	23	31	129

State-wise detail of IEC activities (seminars/ workshops / Buyer-seller meet / Exposure visits) supported under Medicinal Plants Component of “National Ayush Mission” (NAM) Scheme, Ministry of Ayush from the financial year 2018-19 to 2020-21.

S.No.	State	2018-19	2019-20	2020-21	Total
1	Andhra Pradesh	4	5	0	9
2	Arunachal Pradesh	1	0	0	1
3	Assam	0	0	0	0
4	Bihar	0	3	0	3
5	Chhattisgarh	4	0	0	4
6	Goa	0	1	0	1
7	Gujarat	6	0	0	6
8	Haryana	0	0	0	0
9	Himachal Pradesh	0	3	0	3
10	Jammu & Kashmir	1	2	1	4
11	Karnataka	1	8	2	11
12	Kerala	0	0	0	0
13	Madhya Pradesh	24	12	12	48
14	Maharashtra	0	0	0	0
15	Manipur	2	0	0	2
16	Meghalaya	0	1	0	1
17	Mizoram	5	2	2	9
18	Nagaland	0	0	0	0
19	Orissa	3	0	0	3
20	Puducherry	0	0	0	0
21	Punjab	3	5	0	8
22	Rajasthan	7	4	0	11
23	Sikkim	0	0	1	1
24	Tamil Nadu	0	0	0	0
25	Telangana	2	4	0	6
26	Tripura	0	0	0	0
27	Uttarakhand	0	1	0	1
28	Uttar Pradesh	17	0	14	31
29	West Bengal	2	2	0	4
Total		82	53	32	167

Note: As per information received from the concerned State Implementing Agencies.

No. of farmers supported for training under Medicinal Plants Component of “National Ayush Mission” (NAM) Scheme, Ministry of Ayush from the financial year 2018-19 to 2020-21.

S.No.	State Name	2018-19	2019-20	2020-21	Total
1	Andhra Pradesh	325	60	0	385
2	Arunachal Pradesh	75	50	0	125
3	Assam	0	0	0	0
4	Bihar	0	700	0	700
5	Chhattisgarh	200	0	0	200
6	Goa	25	50	0	75
7	Gujarat	800	0	0	800
8	Haryana	0	0	0	0
9	Himachal Pradesh	0	0	0	0
10	Jammu & Kashmir	518	200	0	718
11	Karnataka	100	225	50	375
12	Kerala	100	100	0	200
13	Madhya Pradesh	440	500	250	1190
14	Maharashtra	0	0	0	0
15	Manipur	200	0	0	200
16	Meghalaya	0	0	0	0
17	Mizoram	500	200	200	900
18	Nagaland	0	0	0	0
19	Orissa	200	0	0	200
20	Puducherry	0	50	0	50
21	Punjab	150	200	0	350
22	Rajasthan	850	800	0	1650
23	Sikkim	0	0	0	0
24	Tamil Nadu	0	250	0	250
25	Telangana	0	360	0	360
26	Tripura	249	0	0	249
27	Uttarakhand	500	150	0	650
28	Uttar Pradesh	2000	0	1000	3000
29	West Bengal	300	300	0	600
Total No. of farmers		7532	4195	1500	13227

Note: As per information received from the concerned State Implementing Agencies.