# GOVERNMENT OF INDIA MINISTRY OF AYUSH LOK SABHA UNSTARRED QUESTION NO. 2067 TO BE ANSWERED ON 06.12.2024

## 'Storage of Medicinal Plants'

### 2067. Shri Anto Antony:

Will the Minister of Ayush be pleased to state:

- (a) the details of the Research and Development projects funded by the Government to promote Agro-techniques, post-harvest management and storage of medicinal plants;
- (b) the details of the medicinal plants that have been identified for conservation and resource augmentation under the said project;
- (c) the corrective measures that have been taken in Kerala to conserve and enhance medicinal plant resources and the progress made in this regard; and
- (d) the details of the medicinal plant species specific to Kerala that have been prioritized for conservation and development?

#### **ANSWER**

# THE MINISTER OF STATE (I/C) OF THE MINISTRY OF AYUSH (SHRI PRATAPRAO JADHAV)

- (a) & (b). Presently, National Medicinal Plants Board (NMPB), Ministry of Ayush, Government of India, under its Central Sector Scheme (CSS) on 'Conservation, Development and Sustainable Management of Medicinal Plants' provides project-based financial support to carry out research activities on various aspects of medicinal plants including Agrotechniques, post-harvest management and storage of medicinal plants to Government as well as private universities/research institutions/organizations across the country. Details of the projects supported on Agro-techniques, post-harvest management, and storage of medicinal plant aspects during past five years are appended in **Annexure I**. List of medicinal plants identified for conservation and resource augmentation from the projects that were supported under its Central Sector Scheme (CSS) on 'Conservation, Development and Sustainable Management of Medicinal Plants' for Agro-techniques, post-harvest management and storage of medicinal plants aspects are placed in **Annexure-II**.
- (c). NMPB, Ministry of Ayush, Government of India, under the scheme mentioned above, also provided project-based support to the State Forest Department of Kerala for conservation and Resource Augmentation of medicinal plants. In this regard, 33 projects have been supported to cover 987.97 ha. area for Resource Augmentation of medicinal plants.

(d). Under the above projects, the medicinal plant species viz. Abrus precatorius, Aegle marmelos, Artocarpus hirsutus, Asparagus racemosus, Adhatoda vasica, Calotropis procera, Centella asiatica, Coscinium fenestratum, Caesalpinia sappan, Desmodium gangeticum, Dysoxylum malabaricum, Evolvulus alsinoides, Garcinia indica, Gloriosa superba, Hemidesmus indicus, Mesua ferrea, Nyctanthes arbor-tristis, Ocimum tenuiflorum, Piper longum, Rauvolfia serpentina, Santalum album, Smilax zeylanica, Symplocos cochinchinensis, Stereospermum colais, and Terminalia chebula etc. are supported for Conservation & Resource Augmentation in Kerala.

# Annexure-I

Details of research and development projects were supported under its Central Sector Scheme (CSS) on 'Conservation, Development and Sustainable Management of Medicinal Plants' for Agro-techniques, post-harvest management and storage of medicinal plants aspects during the past five years:

| S. No. | Project Title & Medicinal Plant Species                                                                                                                                                                                                                                                                                                                                            | Organization<br>Details                                                          | Sanctioned amount              |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|--------------------------------|
|        | Agro-techniques                                                                                                                                                                                                                                                                                                                                                                    |                                                                                  |                                |
| 1      | Genetic stock development, standardization of good agricultural practices (GAPs) and market                                                                                                                                                                                                                                                                                        | Kerala<br>Agriculture                                                            | 35.150                         |
|        | analysis of <i>Pseudarthria viscida</i> (L.)- a red listed high volume trade medicinal plant.  Medicinal Plant species: <i>Pseudarthria viscida</i>                                                                                                                                                                                                                                | University,<br>Thrissur                                                          |                                |
| 2      | Conservation, Bioprospection and Development of good agricultural practices for <i>Rheum emodi</i> , <i>Saussurea costus</i> , <i>Podophyllum hexandrum</i> and <i>Aconitum</i> species for Ex-situ cultivation in Jammu and Kashmir.  Medicinal Plant species: <i>Rheum emodi</i> , <i>Saussurea costus</i> , <i>Podophyllum hexandrum</i> and <i>Aconitum heterophyllum</i>      | CSIR-Indian<br>Institute of<br>Integrative<br>Medicine, Sanat<br>nagar, Srinagar | 26.268                         |
|        | Post-harvest management                                                                                                                                                                                                                                                                                                                                                            |                                                                                  |                                |
| 3      | To ascertain and evaluate the non-destructive substitutes of the bark of <i>Saraca asoca</i> (Roxb.) de Wilde.                                                                                                                                                                                                                                                                     | Govt. Science<br>Collage, Bhilad<br>VNSGU,                                       | 12.199<br>GSC Bhilad<br>12.300 |
|        | Medicinal Plant species: Saraca asoca                                                                                                                                                                                                                                                                                                                                              | Udhan-Surat                                                                      | VNSGU                          |
| 4      | Mycotoxins, fungal and heavy metal contamination of selected herbal raw material and efficacy of some traditionally used plant products as mycotoxins suppressors during post harvest processing.  Medicinal Plant species: Phyllanthus emblica, Tinospora cordifolia, Andrographis paniculata, Senna alexandrina, Hemidesmus indicus, Withania somnifera and Asparagus racemosus. | B.H.U.,<br>Varanasi                                                              | 39.580                         |
| _      | Storage                                                                                                                                                                                                                                                                                                                                                                            | T 1' T .''.                                                                      | 21.060                         |
| 5.     | Genetic enhancement and post-harvest studies in <i>Bacopa monnieri</i> .  Medicinal Plant species: <i>Bacopa monnieri</i>                                                                                                                                                                                                                                                          | of Horticultural<br>Research,<br>Bangalore                                       | 31.960                         |
| 6.     | Pre and post-harvest enhancement of secondary metabolites in <i>Withania somnifera</i> by adopting patented process and technology transfer.  Medicinal Plant species: <i>Withania somnifera</i>                                                                                                                                                                                   | Padmashree Institute of Management and Sciences Bangalore                        | 18.938                         |

## Annexure-II

List of medicinal plants identified for conservation and resource augmentation from the projects that were supported under its Central Sector Scheme (CSS) on 'Conservation, Development and Sustainable Management of Medicinal Plants' for Agro-techniques, post-harvest management and storage of medicinal plants aspects, are as:

| Sr No | Plant Species           |
|-------|-------------------------|
| 1.    | Pseudarthria viscida    |
| 2.    | Rheum emodi             |
| 3.    | Saussurea costus        |
| 4.    | Podophyllum hexandrum   |
| 5.    | Aconitum heterophyllum  |
| 6.    | Saraca asoca            |
| 7.    | Phyllanthus emblica     |
| 8.    | Tinospora cordifolia    |
| 9.    | Andrographis paniculata |
| 10.   | Senna alexandrina       |
| 11.   | Hemidesmus indicus      |
| 12.   | Withania somnifera      |
| 13.   | Asparagus racemosus     |
| 14.   | Bacopa monnieri         |