

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION NO.3172
TO BE ANSWERED ON 06.08.2021

Studies on Wild Plant Resources

3172. SHRI PRATAPRAO JADHAV:
SHRI BIDYUT BARAN MAHATO:
SHRI MANOJ TIWARI:
SHRI SUDHEER GUPTA:
SHRI CHANDRA SEKHAR SAHU:
SHRI SANJAY SADASHIVRAO MANDLIK:
SHRI RAVINDRA KUSHWAHA:
SHRI SHRIRANG APPA BARNE:
SHRI SUBRAT PATHAK:
SHRI RAVI KISHAN:

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether Botanical Survey of India (BSI) has been undertaking taxonomic/floristic studies on wild plant resources of the country, if so, the details and the outcome of the said studies;
- (b) the details of the funds allocated, released and utilized by BSI during each of the last three years and the current year;
- (c) the details of the activities of various centers of BSI along with their achievements during the said period;
- (d) whether BSI has been facing any challenges while performing their objectives and mandates during this period particularly during COVID-19 lockdown; and
- (e) if so, the details thereof and the corrective/remedial action taken by the Government in this regard?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI ASHWINI KUMAR CHOUBEY)

- (a) Yes Sir. Botanical Survey of India (BSI) being an apex scientific research organization in the field of Plant taxonomy is actively involved in undertaking the taxonomic/ floristic studies on wild plant resources of the country. The details of scientific outcomes of BSI under various research projects are enclosed as Annexure I.
- (b) The details of funds allocated and utilized by BSI during each of the last three years and the current year are as under:

S. No.	Year	B.E. (in crores)	Funds released (in crores)	Fundsutilised (in crores)
1.	2018-19	70.80	70.80	67.29
2.	2019-20	76.00	76.00	72.11
3.	2020-21	76.00	63.13	61.83
4.	2021-22	72.00	72.00	22.54 (as on 31.07.2021)

(c) The details of the activities of various centres of BSI along with their achievements during the said period are enclosed as Annexure II. [Details of Projects available in the Annual Reports uploaded on the website of the BSI (bsi.gov.in)]

(d) & (e) Due to prevailing COVID situation and curtailment of funds, various research activities have been hampered and proposed field explorations could not be performed. The targeted objectives of externally funded projects and some ex-situ conservation programmes of BSI could not be fully achieved due to COVID-19 lockdown.

However, in spite of pandemic, following the COVID protocol, BSI has initiated local field surveys for the year 2020-21. During 2020-21, 15 local field surveys have been carried out till date.

ANNEXURE 1

Statement referred to in reply to part (a) of Lok Sabha Unstarred Question No. 3172 to be answered on 06.08.2021

The important achievements of BSI are highlighted here under following areas:

As per the prime mandate, BSI undertakes research in plant taxonomy through extensive field surveys, exploration and documentation of floral resources of the country. In this connection, so far BSI has fully explored about 70% of the geographical regions of the country, whereas about 30% of the areas is either underexplored or unexplored.

Towards documentation of floral information, BSI has so far published about 340 titles of books, 63 volumes of its official Journal "*Nelumbo*" (containing more than 2500 scientific papers), 3 volumes of **Flora of India Checklist**, (which contains updated, accepted names of 21,756 taxa of angiosperms belonging to 269 families and 2868 genera. Besides, 4 volumes of Algae of India checklist containing 4425 algal species, 1232 cyanobacteria, 865 macro algae and 2777 diatoms; documented 15447 taxa of Fungi, 2 volumes of Lichens of India, containing 2917 taxa of Lichens; one volume of Macro lichens of Sikkim, Hornworts of India -An Annotated checklist, containing 2786 taxa of Bryophytes; Checklist of the Gymnosperms containing 82 taxa of Gymnosperms. BSI has also published 30 fascicles on various plant families and plant groups. Besides, towards completion of Flora of India

project, BSI has already published 10 volumes of **Flora of India** and also compiled another 15 volumes.

Besides, BSI has also documented 1671 legumes, 1256 orchids, endemic vascular plants with 4395 taxa, Islands with 2436 species, north-eastern states with more than 7500 species, Fragile ecosystems such as cold deserts contribute 1615 taxa while hot deserts 682 taxa have been published.

Out of the 28 States and 9 UTs, BSI has documented and published flora of 28 states and 3 UTs in 49 volumes. Floristic survey of 114 protected areas including national parks and biosphere reserves have also been completed. A pictorial guide of Himalayan plants containing 10,289 taxa, belonging to 2256 genera and 238 families, is also published by BSI.

ANNEXURE-II

Statement referred to in reply to part (c) of Lok Sabha Unstarred Question No. 3172 to be answered on 06.08.2021

Scientific achievements of various Regional Centres of Botanical Survey of India (BSI) during the period 2018-21 (till date)

S.No.	Area	Name of Centre	Number of work done
1.	Exploration	AJC Bose IBBG, Howrah	11
		A&N Regional Centre	16
		AP Regional Centre, Itanagar	17
		ARID Zone, RC, Jodhpur	07
		CNH, Howrah	25
		CRC, Allahabad	12
		DRC, Hyderabad	29
		ERC, Shillong	35
		HAW Himalayan RC, Solan	15
		NRC, Dehradun	23
		Sikkim HRC, Gangtok	13
		SRC, Coimbatore	38
		WRC, Pune	21
		Industrial Section India Museum, Kolkata	Nil
		Publication/Technical Division, HQ Kolkata	03
		*Externally funded projects	58
2.	Documentation	AJC Bose IBBG, Howrah	364
		A&N Regional Centre	231
		AP Regional Centre, Itanagar	4180
		ARID Zone, RC, Jodhpur	561
		CNH, Howrah	Nil
		CRC, Allahabad	1051
		DRC, Hyderabad	178
ERC, Shillong	710		

		HAW Himalayan RC, Solan	576
		NRC, Dehradun	1970
		Sikkim HRC, Gangtok	7193
		SRC, Coimbatore	5734
		WRC, Pune	4355
		Industrial Section India Museum, Kolkata	Nil
		Publication/Technical Division, HQ Kolkata	400
		*Externally funded projects	4050
3.	New Species recorded	AJC Bose IBBG, Howrah	24
		A&N Regional Centre	11
		AP Regional Centre, Itanagar	05
		ARID Zone, RC, Jodhpur	01
		CNH, Howrah	05
		CRC, Allahabad	03
		DRC, Hyderabad	04
		ERC, Shillong	13
		HAW Himalayan RC, Solan	Nil
		NRC, Dehradun	Nil
		Sikkim HRC, Gangtok	02
		SRC, Coimbatore	09
		WRC, Pune	07
		Industrial Section India Museum, Kolkata	Nil
		Publication/Technical Division, HQ Kolkata	Nil
		*Externally funded projects	10
4.	Publication	AJC Bose IBBG, Howrah	13
		A&N Regional Centre	41
		AP Regional Centre, Itanagar	23
		ARID Zone, RC, Jodhpur	29
		CNH, Howrah	1
		CRC, Allahabad	15
		DRC, Hyderabad	28
		ERC, Shillong	89
		HAW Himalayan RC, Solan	06
		NRC, Dehradun	13
		Sikkim HRC, Gangtok	17
		SRC, Coimbatore	28
		WRC, Pune	54
		Industrial Section India Museum, Kolkata	nil
		Publication/Technical Division, HQ Kolkata	05
		*Externally funded projects	22

Besides Ex-situ conservation of 164 plants carried out at AJC Bose Indian Botanic Garden, Howrah.