

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION No. 3035
TO BE ANSWERED ON 20.03.2023

Research and Development for Conservation

3035. SHRI MADDILA GURUMOORTHY:

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

- (a) the details of activities have been undertaken as part of the Research and Development Scheme for Conservation and Development;
- (b) the details of funds allocated and utilised towards Research and Development Scheme for Conservation and Development in last few years;
- (c) whether the Government has undertaken any activities under the Scheme in relation to the effects of climate change; and
- (d) if so, the details thereof and if not, the reasons therefor?

ANSWER

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

- (a) The Ministry supports and funds research projects on identified thematic areas to various research Institutions/Universities etc. for Research and Development for Conservation under its Environmental Research and Development Programme. During the last three years and current financial year, a total of 22 number of research projects under different thematic area have been sanctioned by the Ministry. The details are annexed.
- (b) Details of the funds allocated and released during the last three years and during the current financial year, are as follows:

(₹ in Crore)

Years	Allocated Amount	Released Amount
2019-20	4.50	4.49
2020-21	3.00	2.58
2021-22	5.00	4.21
2022-23	2.50	1.90 (as on 15.03.2023)

- (c) and (d) Under the Scheme, “Climate Change: Vulnerability & Risk Assessment, Process, Mitigation and Adaptation” is one of the thematic area, wherein Ministry is providing financial assistance to the specific research projects. A

total of 03 number of research projects have been sanctioned during the last three years and the details are as follows:

S. No.	Year	Title of the Project	Organization/ University
1	2020-21	Microbial communities in changing climatic regime: Analysis of primary and secondary risk factors	Sri Venkateswara College, University of Delhi, Delhi.
2		NIR Light reflective Nano composite plastering mortar/coating towards climate change adaptation in buildings	MepcoSchlenk Engineering College, Sivaski, Tamil Nadu.
3	2021-22	Understanding the Relationship between Forest and Water in the context of Changing Climate Variables of Narmada Catchment	Indian Institute of Forest Management, Bhopal, Madhya Pradesh.

Annexure

Annexure referred to in reply to part (a) of the Lok Sabha Unstarred Question No. 3035 due for reply on 20.03.2023 regarding “Research and Development for Conservation”.

Year	S.No.	Thematic Area	Title of the Project	Organization
2019-20	1.	Conservation and Management of Landscapes and Ecologically sensitive areas including issues of sustainable livelihoods	Ecology and Recovery of critically endangered Vulture species in Pong Dam Protected Area (PA) and its Eco Sensitive Zone (ESZ) in Himachal Pradesh.	Wildlife Institute of India, Dehradun
	2.	Biodiversity Conservation including Issues of Alien and invasive species and Human-wildlife Interface	An integrated approach for conservation of Takin (<i>Budorcastaxicolor</i>) in North East India: Linking species ecology and traditional ecological knowledge.	Wildlife Institute of India, Dehradun
	3.	Biodiversity Conservation including Issues of Alien and invasive species and Human-wildlife Interface	Assessing fine scale distribution pattern, population and habitat status of northern Swamp Deer (<i>Rucervusduvauceli</i>) across upper Gangetic Plains of north India.	Wildlife Institute of India, Dehradun
	4.	Biodiversity Conservation including Issues of Alien and invasive species and Human-wildlife Interface	Securing habitats for threatened mountain ungulates through robust population assessment and conservation planning.	Wildlife Institute of India, Dehradun
	5.	Biodiversity Conservation including Issues of Alien and invasive species and Human-wildlife Interface	Assessment of Disease Prevalence in Ungulates in Protected Areas of North East India.	Wildlife Institute of India, Dehradun
	6.	Biodiversity Conservation including Issues of Alien and invasive species and Human-wildlife Interface	Quantification of the Economic and Ecological Services of Eco-tourism as a Livelihood Option for the Sustainability of the Rhino Population in Manas Tiger Reserve, Assam.	Rain Forest Research Institute, Jorhat

7.	Pollution Prevention - Clean Technologies and Processes, Cleaner Production, 3Rs, Resource Efficiency, Waste Minimisation and Management, etc.	Design, Development and Evaluation of Indigenous Sensors Based Air Quality Monitoring System and Data Analysis Using Deep Learning.	St. Peters Institute of Higher Education and Research
8.	Biodiversity Conservation including Issues of Alien and invasive species and Human-wildlife Interface	Population Status, Ecology and Conservation of the Indian Swiftlet (<i>Aerodramus unicolor</i>) West Coast and Offshore Islands in the Western Ghats of Maharashtra.	Salim Ali Centre for Ornithology and Natural History
9.	Biodiversity Conservation including Issues of Alien and invasive species and Human-wildlife Interface	Ecological assessment of endemic and threatened Laughing thrushes of the Western Ghats to develop conservation plan for securing their population and habitats.	Salim Ali Centre for Ornithology and Natural History
10.	Pollution Prevention - Clean Technologies and Processes, Cleaner Production, 3Rs, Resource Efficiency, Waste Minimisation and Management, etc.	Sustainable utilisation of Industrial waste materials for the development of cementlessferrocement precast panels for Impact load.	MepcoSchlenk Engineering College, Chennai
11.	Biodiversity Conservation including Issues of Alien and invasive species and Human-wildlife Interface	Emerging infectious disease in birds across a gradient of alien invasive trees mapped using Remote Sensing on Shola Sky Islands.	Indian Institute of Science Education and Research
12.	Socio-economic issues of environment and Sustainable Development	Assessment of Landfill Gas Recovery and Utilization and Reduction of GHG Emission at the Madurai landfill, Tamil Nadu, India.	Thiagarajara College of Engineering, Madurai
13.	Biodiversity Conservation including Issues of Alien and invasive species and Human-wildlife Interface	Tracking and assessment threats of highly critically endangered scaly giant Chinese Pangolin (<i>Manispentadactyla</i>) with special reference to sensitization of local communities for its long-term conservation in north-eastern states of India.	Amity University

	14.	Biodiversity Conservation including Issues of Alien and invasive species and Human-wildlife Interface	Assessment of Changes for the Conservation and Management of Sathyamangalam Tiger Reserve.	Pondicherry University
	15.	Socio-economic issues of environment and Sustainable Development	Development of low energy-low carbon ECO cementitious binders via synergistic use of low graded industrial wastes for sustainable development.	CSIR- Central Building Research Institute, Roorkee
	16.	Socio-economic issues of environment and Sustainable Development	Development of performance improved precast lightweight composite materials using solid waste.	CSIR Central Building Research Institute, Roorkee
2020-21	17.	Climate Change: Vulnerability & Risk Assessment, Process, Mitigation and Adaptation	Microbial communities in changing climatic regime: Analysis of primary and secondary risk factors.	Sri Venkateswara College
	18.	Climate Change: Vulnerability & Risk Assessment, Process, Mitigation and Adaptation	NIR Light reflective Nano composite plastering mortar/coating towards climate change adaptation in buildings.	MepcoSchlenk Engineering College
2021-22	19.	Sustainable Management of Natural Resources	Habitat distribution modelling and reinforcement of two threatened trees in the Kerala region of the Western Ghats for the improvement of their conservation status.	Jawaharlal Nehru Tropical Botanic Garden & Research Institute, Trivendrum
	20.	Ecosystems Conservation & Management (Mountain, Forest, Coastal, Wetlands, Pastoral, etc.) and Evaluation of Ecosystem Services	Exploration And Conservation Of Edible And Medicinal Mushroom Diversity And Documentation Of Ethno Mycological Knowledge From Forests Of Coimbatore District Of Western Ghats For Restoration Of Nutritional Security Through Recycling Of Agro Forest Wastes.	Tamil Nadu Agricultural University, Coimbatore
	21.	Climate Change: Vulnerability & Risk Assessment, Process, Mitigation and Adaptation	Understanding The Relationship Between Forest And Water In The Context Of Changing Climate Variables of Narmada Catchment.	Indian Institute of Forest Management, Bhopal

	22.	Biodiversity Conservation including Issues of Alien and invasive species and Human-wildlife Interface	An exploration of the mangroves of the Eco-Sensitive Zone of Bhadrak wildlife division (Odisha) for their fungal endophyte diversity.	Vivekananda Institute of Tropical Mycology
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