

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI,
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA
REJUVENATION
LOK SABHA
UNSTARRED QUESTION NO. 1475
ANSWERED ON 10.02.2022

RESEARCH RELATING WATER RESOURCES MANAGEMENT

1475. SHRI VISHNU DAYAL RAM

Will the Minister of **JAL SHAKTI** be pleased to state:

- (a) the details of the research and development initiatives relating to water resources management taken up by the Government;
- (b) the details of funds allocated for research and development on water resources management during the last three years;
- (c) whether the Government is aware of any research being conducted on the viability of the use of water resources to generate energy; and
- (d) if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI BISHWESWAR TUDU)

- (a) The details of research and development initiatives relating to water resources management taken up by the Government are as under:
 - A large volume of research work mostly of applied nature is being carried out in the various organisations of Department of Water Resources, River Development and Ganga Rejuvenation (DoWR, RD&GR), Ministry of Jal Shakti namely CWPRS, CSMRS, CWC & NIH. Publications brought out by these organisations in the form of technical reports, research papers, brochures, leaflets, state-of-art reports etc. are widely circulated to various user agencies in India as well as abroad, enriching literature and knowledge in the field of water resources management and development.
 - Under the scheme “Research and Development Programme in Water Sector and Implementation of National Water Mission”, financial assistance by way of grants is also provided to academicians/experts in the Universities, IITs, recognized R&D Laboratories/Institutes, Water Resources/Irrigation Research Institutes of the Central and State governments and NGOs for conducting research in Water Sector.
 - Under the Ground Water Management & Regulation Scheme, Central Ground Water Board (CGWB) is conducting Research & Development projects on ground water management like Sustainability of Aquifer, Ground Water Modelling, Stable isotope investigations, Movement of Arsenic in ground water Sea water intrusion in coastal areas, etc.
 - Under the Namami Gange Programme, Research & Development works have been carried out on different aspects of river rejuvenation. These research projects cover the historical part, cultural part, ecological part as well as scientific and technological part.
 - Department of Drinking Water and Sanitation provides financial support to young entrepreneurs, Start-ups, R&D institutions, innovators, academia and researchers etc. working in water sector to

carry out research, field validation and demonstrations to provide cost-effective solutions for implementation of activities of Jal Jeevan Mission.

- Department of Science and Technology (DST) emphasize problem solving approach and focuses on applications research in view of urgency of the solutions required. Community managed projects have been mounted in areas facing low per capita availability of water with sustainable options such as integrated augmentation of groundwater through recharge measures, rainwater harvesting and conservation etc.
- Indian Council of Agricultural Research (ICAR) through Indian Institute of Water Management (IIWM), Bhubaneswar, and Centres of All-India Coordinated Research Projects(AICRP) on Irrigation Water Management (IWM) and Consortia Research Platform (CRP) on Water with different centres located at various State Agricultural Universities (SAUs) is addressing issues of agricultural water management ensuring higher crop productivity in the country
- The Ministry of Power is promoting Research and Development (R&D) for the Hydro Power Sector through Central Power Research Institute (CPRI) through various R&D schemes.

(b) The details of funds allocated under various ministries during the last three years is enclosed as **Annexure**.

(c) & (d) Hydropower or hydroelectric power is a renewable energy generated by harnessing the power of moving water to produce electricity. Water is also an important input for thermal power plants. The details of some important research being conducted in this area are as under:

- The Excellence Enhancement Centre for Indian Power Sector, New Delhi has conducted the study “Survey & Studies for Development of Guidelines for Optimisation of Water & Waste Water Usage in Coal Based Thermal Power Plants”. The study aimed to identify the areas in which the water consumption can be reduced in Thermal Power Plants and also to identify the possibility of its alternate use within the plant such as additional capacity addition (which otherwise is not feasible due to non-availability of new water linkages) or through other alternative uses in the nearby region.
- CWPRS is engaged in conducting client sponsored site specific applied research in the field of river valley development, hydro power, irrigation studies.

ANNEXURE**ANNEXURE REFERRED TO IN REPLY TO PART (b) OF LOK SABHA UNSTARRED QUESTION NO. 1475 TO BE ANSWERED ON 10.02.2022 REGARDING 'RESEARCH RELATING TO WATER RESOURCE MANAGEMENT'**

Details of funds allocated under various ministries during the last three years for research and development initiatives relating to water resources management

(All figures in Rs crore)

No.	Department/Ministry	2018-19	2019-20	2020-21
1.	Department of Water Resources, River Development & Ganga Rejuvenation			
(a)	Research and Development Programme in Water Sector and Implementation of National Water Mission	45.00	45.00	24.32
(b)	Namami Gange Programme	400.00		
2.	Department of Drinking Water & Sanitation	-	0	1.29
3.	Department of Science and Technology (DST)	61.75	27.70	41.74
4.	Indian Council of Agricultural Research (ICAR)	6.98	6.86	9.76.
