

**GOVERNMENT OF INDIA  
WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION  
LOK SABHA**

UNSTARRED QUESTION NO:1837

ANSWERED ON:05.03.2015

DECISION SUPPORT SYSTEM

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**Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION be pleased to state:**

- (a) the details of the technology being used by the Government for management of river water system in the country;
- (b) whether Decision Support System for modernization of Ganga and Brahmaputra Basin is being developed with assistance from World Bank;
- (c) if so, the details thereof and the terms and conditions of World Bank for such assistance; and
- (d) the details of various works undertaken so far from such assistance?

**Answer**

THE MINISTER OF STATE FOR WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION  
(PROF.SANWAR LAL JAT)

(a) Development and management of water resources through latest technologies is an ongoing and collective effort of the Central and State Governments. Collection of hydro-meteorological data through a network of hydro-metrological stations, maintaining web based India Water Resources Information System, use of space technology, micro-irrigation (e.g. drip, sprinkler irrigation), desalination, water and waste water treatment etc., are some of the technologies being used for management of water resources in the country.

(b) to (d) Yes, Madam. In Uttar Pradesh (UP), under the UP Water Resources Restructuring Project (UPWSRP) Phase 1, Decision Support Systems (DSS) for Ghagra Gomti river basin and Jaunpur Branch were developed. During Phase 2, there is a plan to develop a DSS for flood forecasting in Rapti River basin assessment system for the State. In Bihar, DSS for flood forecasting system has been developed for Bhagmati Basin. The Flood Management Information System (FMIS) project in Bihar is supporting the development of a decision support system that includes flood forecasting, embankment asset management system and real time data acquisition system as well as the establishment of comprehensive geo-data base. The National Ganga River Basin Project (also supported by the World Bank) in the States of Uttarakhand, Uttar Pradesh, Bihar, Jharkhand and West Bengal, entails water quality monitoring, which can be utilized to build a DSS for improving the water quality in the Ganges river basin.

All Bank-funded projects are required to follow agreed World Bank procedures including procurement and financial management which are discussed and agreed upon in the Articles of Agreement.