

GOVERNMENT OF INDIA  
MINISTRY OF JAL SHAKTI,  
DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

**RAJYA SABHA**

**UNSTARRED QUESTION NO. 415**

ANSWERED ON 06.02.2023

**ENVIRONMENTAL FLOWS IN INTER-STATE RIVERS**

415. DR. PRASHANTA NANDA

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

- (a) the details of challenges faced by Government in managing the environmental flows in inter-State rivers;
- (b) whether Government has conducted eco-hydrological studies in basins of inter-State rivers;
- (c) the steps taken by Government in eastern part of the country to maintain environmental flows;
- (d) whether it is a fact that the Central Water Commission has conducted post project environmental impact assessment studies of reservoirs in the country; and
- (e) if so, the details thereof?

**ANSWER**

**THE MINISTER OF STATE FOR JAL SHAKTI**

(SHRI BISHWESWAR TUDU)

(a), (b) & (c) Environmental flows are the acceptable flow regime required to maintain the river in desired environmental condition or predetermined state where there are competing water uses. National Water Policy (2012) stipulates that ecological needs of the river should be determined through scientific study, duly accommodating development needs.

Accordingly, the minimum environmental flows to be maintained for the upper Ganga River Basin starting from originating glaciers and through respective confluences of its head tributaries finally meeting at Devaprayag up to Haridwar and the main stem of River Ganga up to Unnao district of Uttar Pradesh has been notified by Gazette Notification issued by Ministry of Water Resources, River Development And Ganga Rejuvenation (National Mission For Clean Ganga) dated October 10, 2018. MoEF & CC, CWC, State Govt. of Himachal Pradesh among others have formulated Guidelines for e-flows.

Challenges exist in notifying or implementation of e-flows on inter-state river where allocation of water share as part of tribunal award or inter-state MoUs amongst co-basin States already exists, while scientifically assessed adequate e-flows have not been provided. Further, challenges also exist in implementation of e-flow regime in context of Hydropower generation where prior-contractual obligation in form of Power Purchase Agreement exists.

Further, the Expert Appraisal Committee of River Valley Projects, MOEF&CC recommends the environmental flow releases from the projects while recommending the environmental clearance of respective project.

Under the Namami Gange Programme, NMCG has sanctioned projects to Wildlife Institute of India (WII) for "planning and management for aquatic species, conservation and maintenance of ecosystem services in the Ganga river basin" and to Central Inland Fisheries Research Institute (CIFRI) for the "conservation & restoration of fish & fisheries of river Ganga from Uttarakhand to West Bengal".

**(d) & (e)** Central Water Commission has conducted post project environmental impact assessment studies of 10 water resource project in the country. The detailed note is attached as **Annexure**.

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**ANNEXURE REFERRED TO IN REPLY TO PART (d) & (e) OF UNSTARRED QUESTION NO. 415 TO BE ANSWERED IN RAJYA SABHA ON 06.02.2023 REGARDING “ENVIRONMENTAL FLOWS IN INTER-STATE RIVERS”.****Detailed note on Post Project Environmental Impact Assessment Studies**

In year 1994, the Government of India issued a notification which made Environmental Impact Assessment (EIA) mandatory for various activities (which included River Valley projects including hydel power, major Irrigation and their combination including flood control). Although some EIA Studies were carried out before 1994, it is only after EIA Notification 1994, EIA has become mandatory and comprehensive EIA studies were to be conducted before project implementation.

As many water resource development projects were implemented and made operational before 1994, the Central Water Commission (CWC) considered taking up the Post Project Environmental (including social) Impact Assessment studies of select water resource projects. The objective of the studies to assess both beneficial and adverse environmental (including social) impacts of selected water resource projects and to formulate environmental management Plan to manage/mitigate the adverse environmental impacts of these projects to the extent possible. The assessment of reservoirs on the aspects such as Primary productivity of reservoir, Reservoir greenhouse emissions and Reservoir Rim Treatment has been made in the studies. The Post Project EIA studies of the 10 water resource projects have been completed so far. The details of the studies completed are tabulated as under:-

<b>S.No.</b>	<b>Title of the Study</b>	<b>State</b>	<b>Year of the Study</b>
1	Environmental Evaluation Study of Jayakwadi Stage-I on Godavari	Maharashtra	2010
2	Environment Evaluation Study of Barna on Narmada River	Madhya Pradesh	2010
3	Environment Evaluation Study of Salandi Water Resource Development Project on Baitarni River	Odisha	2010
4	Environment Evaluation Study of Ramganga Major Irrigation Project	Uttar Pradesh	2012
5	Environment Evaluation Study of Singur Major Irrigation Project	Andhra Pradesh	2012
6	Environment Evaluation Study of Mahi Bajaj Sagar Project	Rajasthan	2013
7	Environment Evaluation Study of Mahanadi Delta Water Resources Development Project	Odisha	2013
8	Post Environmental (including Social) Impact Assessment Study of Tawa Project	Madhya Pradesh	2022
9	Post Environmental (including Social) Impact Assessment Study of Ukai Project	Gujarat	2022
10	Post Environmental (including Social) Impact Assessment Study of Eastern Kosi Canal Project	Bihar	2022