# GOVERNMENT OF INDIA MINISTRY OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION LOK SABHA UNSTARRED QUESTION NO. †3822 ANSWERED ON 09.08.2018

## CONSTRUCTION OF DAMS FOR FLOOD CONTROL

#### †3822. SHRI SANTOSH KUMAR

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

(a) the major steps taken by the Government to control the floods affecting Bihar every year;

(b) whether any PFR/DPR has been prepared by any public sector undertakings to construct dams on these rivers for flood control/irrigation/hydel power generation and if so, the details thereof and if not, the prospective action plan prepared in this regard;

(c) whether any hydel power project in the State of more than 50 megawatt capacity is likely to be constructed and if so, the details thereof; and

(d) the details of the works to be undertaken by the Government related to construction of dams to check floods through a tie-up with Nepal?

#### ANSWER

# THE MINISTER OF STATE FOR WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION & PARLIAMENTARY AFFAIRS

#### (SHRI ARJUN RAM MEGHWAL)

(a) The subject of flood management is within the purview of the State Governments. The flood management schemes are formulated and implemented by concerned States with their resources and based on their priority. The Union Government supplements the efforts of the States by providing technical guidance and promotional financial assistance for management of floods in critical areas. In order to mitigate the floods, flood management schemes such as construction of embankments, spurs, studs, revetments, porcupine screens etc. along with activation of pilot channels have already been taken up on different rivers as per requirement and site conditions by the State Government.

The Government of India had launched "Flood Management Programme (FMP)" during XI Plan for providing central assistance to States for works related to river management, flood control, anti-erosion, drainage development, anti-sea erosion, flood proofing works, restoration of damage flood management works etc. which was continued during XII Plan. Further, under the Ministry's Central Sector Scheme, "River Management Activities and Works related to Border Areas (RMBA)", activities viz. hydrological observations and flood forecasting on common border rivers with neighbouring countries, investigation of water resources projects in neighbouring countries and Grant-in-Aid to States/UTs for flood management/anti–sea erosion works are included. Central Assistance amounting to Rs. 907.82 crore and Rs. 160.9284 crore have been released to Government of Bihar under FMP and RMBA scheme respectively till March, 2018.

Apart from the above structural measures, non-structural measures through timely flood forecasting and early warning systems are also being carried out by Central Water Commission (CWC) to minimize the effect of floods. The activities on preparation of reports for inter-linking/ intra-linking of various rivers have also been taken up by National Water Development Agency (NWDA).

(b) National Water Development Agency has prepared pre-feasibility reports of four Inter-Linking of River (ILR) projects under Himalayan Component of National Perspective Plan(NPP) across the rivers originating from Nepal and Southern tributaries of Ganga viz., Kosi-Mechi (lying in Nepal), Kosi-Ghaghra, Chunar-Sone barrage and Sone dam-Southern Tributaries of Ganga. The present status of these four link projects are furnished in **Annexure - I**. These link projects propose to provide irrigation benefits besides flood control etc. The Kosi-Mechi link, Sone dam-Southern Tributaries of Ganga link projects will also provide hydro power generation. The exact quantum of benefits that will accrue will only be known after completion of Detailed Project Reports (DPR) of these projects. Under Intra-State link projects, Detailed Project Reports of Kosi-Mechi (lying in India) link and Burhi Gandak-Noon-Baya-Ganga link projects have been prepared by NWDA. The details of these two schemes are furnished in **Annexure - II**.

(c) DPR of Dagmara Hydroelectric Project (130 MW) in Bihar involving flood protection was submitted by Bihar State Hydro Power Corporation (BSHPC) in Central Electricity Authority (CEA) in April 2012 for concurrence. Concurrence by CEA could not be given due to high project cost and tariff. BSHPC was requested to submit commitment letter from Govt. of Bihar/ concerned Department for bearing the cost apportioned to flood protection. Due to non-resolution of the pending issues by BSHPC, the DPR of Dagmara Hydroelectric Project was returned by CEA in January, 2018 and all the partial clearances issued till date are rescinded.

(d) The management of floods due to rivers like Gandak, Bagmati, Kamla, Kosi etc. which originates in Nepal is important and the related issues are discussed in the existing Indo-Nepal bilateral three-tier mechanisms comprising of (i) Joint Ministerial Commission on Water Resources (JMCWR), (ii) Joint Committee on Water Resources (JCWR) and (iii) Joint Standing Technical Committee (JSTC). Government of India has been engaging with the Government of Nepal for construction of storage dams on these rivers for mutual benefit of the two countries. Broad outcomes of the dialogue mechanisms are given below:

- i. Pancheshwar Development Authority (PDA) has been set up jointly by India and Nepal for development & operation of the Pancheshwar Multipurpose Project on river Sarada. The Detailed Project Report of Pancheshwar Project has been prepared by M/s WAPCOS Limited.
- ii. The survey and investigation work including preparation of DPR of Sapta Kosi High Dam Project and Sun Kosi Storage-cum-Diversion scheme proposed in the Sapta Kosi basin in Nepal is being carried out by a Joint Project office, Sapta Kosi & Sun Kosi Investigation set up at Biratnagar, Nepal..

CWC is maintaining Flood Forecasting Stations in north bank tributaries of Ganga having catchments in Nepal such as Ghaghra, Rapti, Gandak, Burhi Gandak, Bagmati, Kamlabalan, Kosi, Mahananda etc. to give advance warnings to the State Governments concerned for taking necessary precautionary measures. Flood forecast and early warning is formulated and issued by CWC for the rivers flowing from Nepal into India, based on observations carried out at 46 meteorological/hydrological observation sites in Nepal.

**Annexure-I** 

Annexure referred to in reply to part (b) of Unstarred Question No. †3822 to be answered in Lok Sabha on 09.08.2018 regarding "Construction of Dams for Flood Control"

Sl.	Name of link	States	States	Present Status
No.		concerned	benefitted	
1.	Kosi-Mechi	Bihar	Bihar	PFR completed.
				Entirely lies in
				Nepal.
2.	Kosi-Ghaghra	Bihar&UP	Bihar&UP	PFR completed.
3.	Chunar-Sone Barrage	Bihar&UP	Bihar&UP	Draft FR completed.
4.	Sone Dam-	Bihar&	Bihar&	PFR completed.
	Southern Tributaries	Jharkhand	Jharkhand	
	of Ganga			

# Present Status of the Link projects.

# Annexure referred to in reply to part (b) of Unstarred Question No. †3822 to be answered in Lok Sabha on 09.08.2018 regarding "Construction of Dams for Flood Control"

#### i) Kosi-Mechi Intra-State link project(Bihar State)

NWDA has prepared Detailed Project Report of Kosi-Mechi Intra-State link project and submitted to Government of Bihar in March, 2014. Kosi-Mechi link is proposed to start from existing Hanuman Nagar barrage on river Kosi close to Indo-Nepal Border. The Kosi-Mechi Link Project entirely lies in the State of Bihar. The present proposal is to extend the existing Eastern Kosi Main Canal (EKMC) beyond its tail end at RD 41.30 km to RD 117.50 km upto Mechi River, so that rivers Kosi and Mechi which flow through Bihar itself after crossing Indo-Nepal border could be linked together within Bihar. The Link Project will provide additional irrigation facilities to the tune of 2.15 lakh ha in the new command area enroute of the link in Mahananda basin between rivers Parman and Mechi covering Araria, Purnea, Kishanganj and Katihar districts of Bihar. The irrigation water will be provided during kharif season from June to October. The Advisory Committee of MoWR, RD & GR has accepted the project proposal in its meeting held in July, 2016.

### ii) Burhi Gandak-Noon-Baya-Ganga Intra-State link project(Bihar State)

As per the request of Govt of Bihar, NWDA has prepared the Detailed Project Report(DPR) of Burhi Gandak-Noon-Baya-Ganga Link Project (An Intra-State link of Bihar) in December, 2013 and submitted to Government of Bihar and Central Water Commission for techno-economic appraisal. The link project envisages diversion of 492 cumecs of flood waters of Burhi Gandak river to Baya/Ganga river and also provide irrigation to 1.26 lakh ha enroute of the link canal. The diversion of flood water will help in mitigating flood damages in the lower reaches of Burhi Gandak basin in Samastipur, Begusarai and Khagari districts of Bihar State.

Central Water Commission has opined vide letter dated 6.3.2017 that though the project is technically feasible, but will require frequent desilting for maintaining the proposed canal and river in good condition. This needs to be confirmed with model studies. It also emerged that flood protection to adjoining area can also be achieved by constructing embankments only which will be more economical. Looking into the other options available and protecting the area and population from inundation, it will be appropriate to formulate the present proposal as a flood scheme which is likely to be more economical. Accordingly, the views of Central Water Commission have been communicated to Govt. of Bihar in March, 2017 and July, 2018.

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