



REPORT OF EXPERT COMMITTEE ON IMPACT OF INTERLINKING OF RIVERS ON BIHAR



**WATER RESOURCES DEPARTMENT
GOVERNMENT OF BIHAR**

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विषय "राष्ट्रीय नदियों को जोड़कर जलान्तरण परियोजनाओं का बिहार पर प्रभाव " का दिनांक 4 सितम्बर 2004 को दिये गये प्रसांगिक बिन्दुओं पर आधारित प्रतिवेदन ।

प्रसंग बिहार सरकार, जल संसाधन विभाग की अधिसूचना संख्या-5/पी.एम.सी./ (जल विज्ञान)/ 9-8/93 भाग-7-921 दिनांक 04.09.2004 ।

महाशय,

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अनुलग्नक-यथावत् ।

आपका विश्वासी

(कुबेरनाथ लाल) 30-4-05


अध्यक्ष, विशेषज्ञ समिति।

Preface

The Expert Committee constituted by the Govt. of Bihar was entrusted with job of studying the effect of the National effort of 'Interlinking of the Rivers' on the State of Bihar. Previous to this Report the Expert Committee had examined the status of Bihar with respect to Water Availability and its various need for 2050 AD considering conjunctive use. But as the government of Bihar has desired vide its Notification No.5/ PMC-921 dated 04.09.2004 that this study should be carried out only with respect to available water Resources and should give its recommendations on some specific term, the Committee considered it essential to project the need of irrigation as well as non-irrigational need till 2050 AD. The requirement of available water has variation in both space and time, where as, there is surplus of water in monsoon month, there is acute shortage in non-monsoon months. The committee took this opportunity to deal with and commenting on all the six Pre-feasibility report of interlinking scheme prepared by NWDA, related to Bihar.

Suggestion with respect to Kosi-Ghaghra-link Canal, Sone-Dam STG Link Canal and Chunar-Sone Barrage Link Canal have been dealt in details. Emphasis has been given to mitigate the flood peaks so to give some respite from recurring flood havocs.

The South Bihar admittedly has shortage of water but even North Bihar is unable to meet the projected requirement in non-monsoon month. The State is in urgent need to store monsoon water, which otherwise is going to drain down the sea, and there is urgent need of provision of more flow in Ganga so as to remove any de-facto restriction on use of Ganga water in Bihar. The study also reveals that for the ever- increasing population in Bihar by the year 2050 AD, the proposed intensity of irrigation is a necessity. Coverage of all possible land under irrigated agriculture with shortage of water in non-monsoon month in North Bihar may be met with use of ground water in that zone, but that in South Bihar will need special effort. Various suggestions have been given in the report by the Committee to enable reducing the gap. Conjunctive use of surface and ground water with special effort to enhance the recharge of ground water by surplus monsoon water of North Bihar may have to be adopted, in absence of sufficient additional storage reservoirs to store monsoon surplus before transfer to other part of the country.


(K. N. Lal) 30.4.06
Chairman

ACKNOWLEDGEMENT

The Government of Bihar vide Notification No. 5/PMC (Hydrology) 9-8/93 Part-7 - 921 dated 04.09.2004, constituted a Technical Committee of Engineers to study the effect of Interlinking of Rivers on Bihar and for advising the State Government accordingly. The notification is enclosed as Appendix-1.

2. The Committee held several sittings and went in great depth for about more than seven months. In the mean time Sri. S.C.Sinha after attending first two meetings went on a Foreign assignment. Thereafter, another learned member Sri. Ram Ratan Prasad underwent a surgery. In the month of February assembly election of Bihar state was held which also affected the progress of the work to a great extent necessitating the Committee for extension of time and number of sittings.
3. The Committee held its first meeting on 9.09.2004. Suggestion was given to constitute a cell of engineers under the leadership of the Chief Engineer, Hydrology & Project Planning to assist the Committee on the advice and direction of the Committee.
4. By the office order no. P.M.5 (International) 2-15/2003- part-II 1037, Patna dated 6.10.2004 the Government of Bihar constituted a cell with Er. K.D. Singh, Director, Hydrology Directorate, Patna, Er. Satyendra Kumar Sinha, Executive Engineer, Investigation and Project Preparation Division, and four Assistant Engineers viz. Er. Nagan Prasad, Er. Arti Sinha, Er. Timir Kanti Bhaduri and Er. Manoranjan Verma to assist the Committee in its computations and data collections.

Acronyms

AD	Ante Dommine
ALT.	Alternative
Av.	Average
BCM	Billion Cubic Meter
CC	Cement Concrete
CCA	Culturable Command Area
CD Works	Cross Drainage Works
cumec	Cubic Meter per second
cusecs	Cubic feet per second
C-SB	Chunar-Sone Barrage
CWC	Central Water Commission
DG	Director General
DPR	Detailed Project Report
D/s	Downstream
EL	Elevation above mean sea Level
EMC	Eastern Main Canal
FSD	Full Supply Depth
FRL	Full Reservoir Level
GCA	Gross Command Area
G&D	Gauge and Discharge
GDP	Gross Domestic Product
GOB	Government of Bihar
GOI	Government of India
GW	Ground Water
HW	Hot Weather
HYV	High Yield Variety
IWD	Integrated Water Resources Development
JTF	Jogighopa-Tista-Farakka
KHD	Kosi High Dam
Km.	Kilometre
Km ³	Cubic Kilometre
KW	Kilo Watt
L.ha	Lakh Hectare
L/s	Longitudinal Section
LUP	Land Use Planning
m ³	Cubic Metre
MAF	Million Acrefeet
MCM	Million Cubic Metre
MDDL	Minimum Draw Down Level
m	Metre
M ha.	Million Hectare
MI	Municipal and Industrial
MP	Madhya Pradesh

REPORT

ON

IMPACT OF INTERLINKING OF RIVERS ON BIHAR

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Plate No

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