

River Basin Management

The River Basin Management Scheme comprises of 2 main components namely:-

1. Brahmaputra Board (Continued from previous plans)
2. Investigation of Water Resource Development Scheme (Continued from previous plans)
 - i. CWC component
 - ii. NWDA component

1. Brahmaputra Board (Continued from previous plans):

The Brahmaputra Board has been setup by an Act of Parliament, called the Brahmaputra Board Act, 1980 and it started functioning since 11th January, 1982 for planning and integrated implementation of measures for control of floods and bank erosion in Brahmaputra and Barak Valley and for matters connected therewith. The states of Arunachal Pradesh, Assam, Meghalaya, parts of the states of Manipur, Mizoram, Nagaland, Tripura Sikkim and a part of West Bengal falling within the Brahmaputra Basin. It is carrying out following major works-

- a. Survey, Investigation & preparation of Master Plan;
- b. Preparation of DPR of Multipurpose Projects;
- c. Drainage Development Schemes;
- d. Anti-erosion works including protection of Majuli Island, Balat Village in Meghalaya, Mankachar and Masalabari area in Assam etc. from flood and erosion.
- e. Construction of Raised Platforms.

2. Investigation of Water Resource Development Scheme (Continued from previous plans)

i) CWC Component

Investigation of Water Resource Development Scheme (IWRDS) - For establishing techno-economic viability, the first and basic requirement for a project is to locate a suitable site to establish its techno-economic viability. Then, **DPR is prepared after detailed survey and investigations** and studies on hydrological, irrigation planning, environment aspects, cropping pattern, crop water requirement etc.

The river basins have been identified to fulfil the objectives of the proposal which are given below:

- (i) Providing hydropower and increasing irrigation potential, especially in North- Eastern States.
- (ii) The new hydroelectric and irrigations projects will provide hydropower and irrigation benefits to the States, especially for North Eastern Region including Sikkim as well as Jammu & Kashmir.
- (iii) Special studies as proposed will explore the power and irrigation potential on the rivers in India.

The DPR of 04 projects were successfully completed and submitted to the concerned State Governments and DEM was successfully generated to locate suitable sites for Irrigation on Adhwara group of Rivers in Sitamarhi District, Bihar during EFC period FY 2017-20 extended up to FY 2020-21. If taken up for implementation, the total expected benefits of these projects in terms of additional Hydropower potential and irrigation potential (CCA) would be 295 MW and 32000 ha respectively.

(Amount in Rs. crore)

CWC Component under IWRDS		FY 2017-18	FY 2018-19	FY 2019-20	Total
	Recurring	10.30	11.15	12.79	34.24
	Non- recurring	3.89	4.49	4.38	12.76
	Taking up Survey and Investigation of emergent and immediate nature		10		10
	Sub total	14.19	15.64	17.17	57.00

NOTE: The EFC Memorandum which was earlier for FY 2017-20, has now been extended up to FY 2020-21.

ii) NWDA Component

As per National Perspective Plan (NPP) for Water Resources Development in 1980 envisaging inter basin transfer of water from surplus to deficit basins, National Water Development Agency (NWDA) was set up under the MoWR in 1982 for carrying out various technical studies to establish the feasibility of the proposals of NPP. Based on the pre-requisite studies e.g. water balances for various sub-basins and diversion points in the country, storage / reservoir studies, toposheet & prefeasibility studies of link canal, NWDA identified 30 links (14 Himalayan and 16 Peninsular) for preparing reports (FRs). NWDA completed the PFRs of all the 30 links and circulated to party States. The Feasibility Reports of 24 link projects (14 under Peninsular Component and 10 under Himalayan Component) were also completed. The DPRs of Ken-Betwa, Par-Tapi-Narmada, Damanganga-Pinjal, Godavari (Inchampalli barrage)-Cauvery (Grand Anicut) {comprising of three links viz., Godavari-Krishna, Krishna-Pennar and Pennar-Cauvery}, Cauvery-Vaigai-Gundar link projects were also completed and circulated among party States.

All the statutory clearances viz. Environmental, Wildlife, Stage-I forest clearance, investment clearance for Phase-I components of Ken-Betwa link project were accorded except CEC clearance of Hon'ble Supreme Court and Stage-II forest clearance which are in progress. Most of the clearances for Phase-II components have also been accorded by the concerned Ministries/Departments. A draft Cabinet Note for funding of the Ken-Betwa link project with 90(C):10(S) funding pattern was also circulated among various Ministries/Departments. The tripartite MoA for implementation of the Ken-Betwa link project was signed by Hon'ble Chief Ministers of UP, MP and Hon'ble Minister for Jal Shakti on 22.03.2021 in the august presence of Hon'ble Prime Minister of India. The PIB Memo for appraisal of the Ken-Betwa link project was also circulated among various Ministries/Departments on 20.05.2021. The techno-economic clearance for Damanganga-Pinjal Link Project was accorded by Ministry of Jal Shakti during July, 2016. The DPR of Par-Tapi-Narmada link project is under appraisal in CWC which is in advanced stage. The studies related to remaining links are in various stages.

The implementation of projects would create an additional irrigation potential of approximately 35 million hectare and generate about 34000 Mega Watts (MW) hydropower, apart from the incidental benefits of flood moderation, navigation, drinking and industrial water supply, fisheries, salinity and pollution control etc.

In addition to the above, out of the 49 intra-State link proposals received from 10 States, NWDA completed the PFRs of 37 link projects and sent to the concerned States. The PFRs of two link projects are under progress. Based on the request of concerned States, the DPRs of Kosi-Mechi, BurhiGandak-Noon-Baya-Ganga link projects of Bihar, Ponnaiyar-Palar link project of Tamil Nadu and Wainganga-Nalganga link project of Maharashtra were completed and sent to the concerned States. The environmental, and investment clearances for Kosi-Mechi link project were accorded and the project is ready for implementation by Govt of Bihar. Based on the request of Govt of Maharashtra, the DPRs of Damanganga(Ekdare)-Godavari and Damanganga(Vagh/Val)-Vaitarna-Godavari(KadvaDev) link projects are in progress.

Expenditures:

Out of the Rs.276.75 Crore allotted as outlay in the EFC during the period 2017-18 to 2019-20, NWDA incurred an expenditure of Rs.227.55 Crore. During the year 2020-21, out of the RE of 74.54 Crore, NWDA incurred an expenditure of Rs.68.79 Crore. The Outlay, Recurring, Non recurring Expenditures of NWDA for the past four years are furnished below:

S.No.	Year	Outlay as per EFC	Recurring	Non Recurring	Expenditure
1.	2017-18	83.61	58.64	15.62	74.26
2.	2018-19	91.97	59.81	20.85	80.66
3.	1019-20	101.17	55.55	16.78	72.33
	Total	276.75	174.30	53.25	227.55
4.	2020-21	---	51.58	17.22	68.79
	Grand Total		222.88	70.47	296.35

Financial Details of the scheme-

- During the 12th plan, CCEA in its meeting dated 28.02.2014 approved the RBMS with a total outlay of Rs 975 crores.
- Accordingly, approval of the scheme was issued by the Ministry on 28.04.2014 with the concurrence of IFD and approval of Hon'ble Minister (WR).
- Expenditure of Rs746.77crore has been incurred till 31st March, 2017 which is 76.59% of the 12th plan outlay.
- The proposal for continuation of RBM scheme for the financial year 2017-18 to 2019-20 for an amount of 674 crores has been recommended for approval by Expenditure Finance Committee in its meeting dated 25.10.2017. The expenditure details (both recurring and non recurring) as recommended for approval by EFC is tabulated below-

Component of RBM	Recurring / Non-recurring	Year 2017-18	Year 2018-19	Year 2019-20	Total
Brahmaputra Board	Recurring	59.17	65.087	71.60	195.86
	Non-recurring	43.45	47.80	52.57	143.82
	Sub total (A)	102.62	112.88	124.17	339.68
CWC Component under IWRDS	Recurring				
	Non-recurring	10.30	11.15	12.79	34.24
	Taking up Survey and Investigation of emergent and immediate nature.	3.89	4.49	4.38	12.76
			10		10
	Sub total (B)	14.19	15.64	17.17	57.00
NWDA Component under IWRDS	Recurring	58.85	64.75	71.25	194.85
	Non-recurring	24.76	27.22	29.92	81.90
	Sub total (C)	83.61	91.97	101.17	276.75
	Grand Total (A+B+C)				673.43 (or say Rs. 674 Cr)