

BANSAGAR CONTROL BOARD

Bansagar Control Board was set up by the Government of India in accordance with an agreement reached between the Governments of MP, UP and Bihar on the 16th September 1973 for sharing the waters of River Sone and the cost of the Bansagar Dam. The Board was set up with a view to ensure efficient, economical and early execution of Bansagar dam including all connected works in Madhya Pradesh, but excluding the canal systems which will be executed by the respective States namely, MP, UP and Bihar. The Control Board is in overall charge of the project including its technical and financial aspects. The actual work of construction is carried out under the direction of the Control Board by the Chief Engineer concerned of the Madhya Pradesh Government.

The Union Minister of Water Resources is the Chairman of Bansagar Control Board. Union Minister of Power, Union Minister of State for Water Resources, Chief Ministers of the three States, Ministers holding portfolios of Finance, Water Resources/ Irrigation of the three States and Minister (Energy) of Madhya Pradesh are member of the Control Board.

The main features of the agreement reached by the three States are as follows: -

- Madhya Pradesh will use 2.0 M.A.F. of water from storage of Bansagar Dam in addition to utilizing 1.0 M.A.F. in the upstream and 2.25 M.A.F. downstream of Bansagar Dam for irrigation in the areas of Sone basin in their State. The allocation of Madhya Pradesh is thus 5.25 M.A.F. Uttar Pradesh will use 1.25 M.A.F. of water from river Sone which includes 0.25 M.A.F. from river Kanhar and 1.0 M.A.F. from the storage of Bansagar Dam as well as by lifting water from river Sone. Bihar was allocated 7.75 M.A.F. water from river Sone out of which 1.0 M.A.F. will be from the storage of Bansagar Dam.

- The cost of Bansagar Dam including cost of rehabilitation will be shared in the proportion of water utilized by Madhya Pradesh, Uttar Pradesh and Bihar i.e. 2:1:1 respectively.

The Management of the affairs of the Board is vested in the Executive Committee. Chairman, Central Water Commission is the Chairman of the Executive Committee. Other members include Senior Officers of M/o Water Resources, Central Water Commission, Ministry of Power, participating States of Bihar, MP & UP and the Bansagar Project.

The river Sone has its source at Amarkantak in Shahdol District in Madhya Pradesh at an elevation of 1067.0 m. For about 509 km, the river runs through Madhya Pradesh in the districts of Shahdol and Sidhi and then for a length of about 96 km, it flows through Uttar Pradesh. There after it enters Bihar where it meets the Ganga on its right bank near Bankipur town, 820.74 km from its source. The total catchment area of the Sone river is 69,284 sq.km of which 47,848 sq.km or about 68.9% lies in Madhya Pradesh and the rest in U.P. and Bihar. The catchment area up to the dam site is 18,648 sq.km.

Components of Bansagar Dam:

- 67.5 m high masonry dam including rock fill flanks across the Sone river just downstream of the gorge at Kusumha (Deolond). Length of masonry dam, left rock fill dam and right rock fill dam are 670.00 m, 161.00 m and 185.00 m respectively.
- Six low earth dykes, four on the left bank of Sone river and two on its right bank with a total length of 6.95 km.

Irrigation and Power Benefits from the Project:

Annual Irrigation in Madhya Pradesh	=2.49 lakh hectare
Annual Irrigation in Uttar Pradesh	=1.50 lakh hectare
Annual Irrigation in Bihar	=0.94 lakh hectare
Power generation in Madhya Pradesh	=425 MW

Status of Land Acquisition and R&R Works:

Bansagar Dam at its full height will submerge 56,428 hectare land (34,765 hectare of private land, 17,185 hectare of revenue land and 4,478 hectare of forestland) of 336 villages. The Private land of 34,765 Ha. (now revised to 37090.401 hectare) has been fully acquired along with the property compensation Total number of PAP's are about 1,50,000 of 54,686 families. Development of residential plots in required numbers in model villages have already been done and handed over to the PAP's. Some residual works relating to civic amenities to be provided as per R&R Policy is under progress which are being completed on priority.

Salient Features of the Project

Location	Dam is 0.5 km U/S of Sone Bridge at 51 km on Rewa-Amarkantak State Highway
Category:	Major Inter-State Multipurpose Project (Irrigation, Power Generation, Drinking Water Supply & Flood Control)
Year of Start:	1978
Targeted Year of Completion:	June 2006



Common Water Carrier at 13.71 km

Environmental & Forest Clearance:

The project has been cleared from environmental angle by the Department of Environment in June 1984. Clearance for the forestland (4713.49 hectare) coming under submergence was issued in July 1989.

Construction Programme:

The construction of Bansagar Dam was taken up in 1978 and it was initially targeted to be completed to its full height by June 1987. However, as a result of non-availability of sufficient funds, the R&R works of the project could not keep pace with progress of dam as such the raising of dam was deferred from time to time. The project was at standstill during 1988-89 to 1996-97. Work on the project was restarted with the inflow of AIBP funds provided by the GoI starting from 1996-97. The dam has been raised up to crest level in June 2000. The dam has been raised up to TBL with 18 nos. Crest Gates & Hoisting Arrangements by June 2006 and the reservoir has been filled almost up to FRL during 2006 monsoon.

Physical Progress:

The left and right rock fill dam have been completed up to top level i.e. R.L. 347 M. All masonry non overflow blocks and both the key block on either side have been completed up to top elevation at R.L. 347 M. Works on Spillway Piers & Bridge along with installation of 18Nos. Radial Crest Gates and Stop-Log Gates which was lagging behind have now been completed. All construction sluices have been plugged and gates lowered. Work on installation of Irrigation Sluice Gates have been fully completed. Work on all the six Saddles have also been completed.

The backwaters of Bansagar will submerge SMS Grade Lime-Stone Mines at Kuteshwar. The deposit is valued of over Rs 10,000 crores. These mines have been protected by a ring bund with deep curtain grouting.

Quantitative progresses of various items of work as on 30.06.2011 are as under-

Project Component	Items	Estid. Qty.	Unit	Progress up to 06/2011	% of work done
Masonry Dam	Foundation Excavation	1157	Th. Cum	1157	100%
	Concreting	288	-do-	288	100%
	Masonry	1085	-do-	1085	100%
	Spillway Piers & Bridge	43	-do-	44,651	100%
Rock fill Dam	Balance Drilling & Grouting	26210	RM	25434	100%
	Foundation Excavation	837	-do-	837	100%
	C.O.T. Filling	220	-do-	220	100%
Saddle Dam	Filter Rock fill & Pitching	1772	-do-	1772	100%
	Earthwork	1499	-do-	Completed	100%
	Boulder toe & pitching	158	-do-	Completed	100%
Kuteshwar Scheme	COT excavation, filling & ring bund.	1226	-do-	Completed	100%
	Conventional Drilling	70700	RM	Completed	100%
Gates	Conventional Grouting	6261	MT	Completed	100%
	TAM Drilling	21377	RM	Completed	100%
	TAM Grouting	7719	Cum	Completed	100%
	TAM Rubber Sleeves	42289	Nos.	Completed	100%
	Radial Crest Gates (18 Nos.)	18 Nos.	Nos.	100%	100%
	Stop-Log Gates (2 Sets/ 18 Nos.)	18 Nos.	Nos.	100%	100%
	Passstock Gates	3 Nos.	-do-	100%	100%
Irrigation Sluice Gates	4 Nos.	-do-	100%	100%	

Catchment area up to dam site:	18,648 sq.km.
Average annual rainfall:	1323 mm
Designed flood:	58640 cumecs
75% dependable yield:	0.672 m.h.a.m.
Type of Dam:	Composite Dam (Masonry and Rock fill)
Maximum Height:	67.5 m
Total Length (Main Dam):	1019.90 m
No. & Type of Saddle Dams:	6 nos. / Earth fill/ Total Length 6950 m
No./Size of Crest Gates:	18 nos./ 18.29 m x 15.24 m.
Construction Sluices:	6 nos./ 2.0 m x 3.0 m.
Water Spread at FRL:	51789 ha
Gross/ Live Storage at FRL:	0.637 m.h.a.m./ 0.541 m.h.a.m.
TBL/MWL/FRL/MDDL:	347.00/ 342.934/ 341.649/ 323.100 m
Total No. of villages affected:	299
No. of PAP's / Families:	1.42 lakh persons/ 54,686 families
Estimated Cost in Crores (Year):	91.3 (1978), 448.03 (1987) 936.0 (1991), 1054.96 (1998), 1582.94 (2009).
Benefits:	4.93 lakh hectare of Annual Irrigation. 425 MW Power Generation

Financial Progress & Contribution by the States:

The details of the expenditure and relative contribution of the participating States for Unit I as on 01.06.2011 is given below: -

Total Expenditure	Share Due/ Share Received			Balance Share		
	MP	UP	BIHAR	MP	UP	BIHAR
Up to 3/2011:	759.077	379.5385	379.5385			
1518.154	828.793	299.799	389.562	69.716	79.7395	10.0235
During 2010-11 up to 05/2011:	1.408	0.704	0.704			
2.816	(-7.184)	10.00	00.00	8.592	9.296	0.704
Total as on 30.06.2011:	760.485	380.2425	380.2425			
1520.970	821.609	309.799	389.562	61.124	70.4435	9.3195

AIBP Assistance to the Project:

The project is receiving Central Assistance under the Accelerated Irrigation Benefit Programme (AIBP) from the year 1996-97. Details of CLA sanctioned/ released since 1996-97 onwards is as under-

Year	CLA/ CA released under AIBP			Total
	MP	UP**	Bihar	
1996-97 to 2001-02	203.580	108.110	83.500	395.190
2002-2003	00.000	49.550	00.000	49.550
2003-2004	95.836	40.865	00.000	136.701
2004-2005	28.531	30.390	00.000	58.921
2005-2006	15.600	32.100	00.000	47.700
2006-2007	0.830	18.897	00.000	19.727
2007-2008	13.24	41.520	00.000	54.760
2008-2009	00.000	136.732	00.000	136.732
2009-2010	7.3670	94.967	00.000	102.334
2010-2011	00.000	134.627	00.000	134.627
Total	364.984	687.758	83.500	1136.242

** CLA/ CA included for Bansagar Canal Project, UP also

Main features of the R&R Policy for the PAP's:

Acquisition of Land and Property: Land records would be updated. Land prices would be fixed as per LA Act. All land affected by submergence would be acquired.

Allotment of Agriculture Land: The displaced families would be entitled and be allotted agricultural land from which at least 1 hectare of land has been acquired.

Recovery of Cost of Allotted Land: Fair price will be charged from the allottees for agricultural land allotted to them. Displaced agricultural families of SC/ST, small and marginal farmers will pay at least 50% cost of allotted land as first installment, remaining cost will be recovered in 20 annual installments as interest

Rehabilitation Grant and Grant-in-Aid: PAP's of land-less and agricultural laborers and agricultural families owning 2 hectare or less OR displaced families of SC/ST displaced after 31.12.1997 will be given Rs 10,000/- as rehabilitation grant. Other displaced families will get Rs 5000/- as rehabilitation grant. This grant was earlier Rs 6400/- and Rs 3200/- per family respectively for the above.

Subsistence Allowance: Affected land-less families will be given Rs 6400/- per family as subsistence allowance.

Transportation Grant: The displaced families shall be entitled for Rs 500/- as transportation grant which has now been revised to Rs 5000/-.

Allotment of Rural Residential Plots: Residential plots of size 50 feet X 90 feet would be allotted free of cost to the displaced PAP's. Families not willing for plots will be given financial grant of Rs 2000/-.

Civic Amenities: Civic Amenities will be provided in new settlement. The civic amenities will generally include drinking water, roads, electricity, PHC, Schools (Primary/ Middle level), ponds, drainage system and land for cremation etc.

Other Facilities: Employment facilities, training facilities and age relaxation in appointment of class-III posts in State Govt. etc. will be given to the PAP's. Fisheries training institute will be set up. Monuments of religious and archaeological importance would be shifted outside the submergence areas.



भारत सरकार

GOVERNMENT OF INDIA
बाणसागर नियंत्रण परिषद
BANSAGAR CONTROL BOARD
रीवा (मध्य प्रदेश)
REWA (MADHYA PRADESH)



Bansagar Dam- Head Works



Common Water Carrier at Km 22.00 - Offtake point of Suhawal Canal



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