

*ANNUAL REPORT*  
*2015-16*  
*OF*  
*BAGHALATI IRRIGATION DIVISION,*  
*NUAGADA (GANJAM)*

*Executive Engineer*  
*Baghalati Irrigation Division,*  
*Nuagada*

## **Baghalati Irrigation Project**

Baghalati Irrigation Project envisages construction of earth dam across River Bahuda near village Baghalati in Bahuda Basin in the District of Ganjam at longitude 84°23'4" East and latitude 19°8'6" North. The project has a catchment area of 119.50 Sqkm at Dam site. The project proposes to create irrigation potential C.C.A. 5488 Ha in Khariff and 1750 Ha in Rabi . The project was cleared by CWC on 4.7.94.

Due to construction of Baghalati Irrigation project, 122 nos of families of 8 nos of villages were rehabilitated as per **1994 R&R Policy & 286.385 Ha of Forest land** was received from Ministry of Environment & Forest Department. **One more** village namely **Baniabasa** necessitated displacement which has been approved during 2010 vide Director R&R, D.O.W.R Lr. No. 23264 dt: 17.09.10 for which Govt. land of 1.984 Ac has been identified by Tahasildar, Patrapur. One estimate amounting for Rs. 328.13 Lakhs towards R.A. & Infrastructure Development in R&R Colony had been submitted to Spl. LAO, Chatrapur and Rs. 210.00 lakhs placed with his office during March, 2012. Payment of L.A. Compensation of Rs. 35,32,261/- as approved by Govt. in DOWR vide Lr. No. 1764/WR dt: 27.1.2015 to affected families ( AFs) of village Baniabasa is under process.

Due to lack of funding it was contemplated to construct the project in two stages. In **Stage-I** Construction, a truncated earth dam **upto R.L. 104.00 m** having live storage of 1388 Ha m. was taken up. For spillway, it had been proposed to execute **upto RL 97.00 Mtr** in design section and concrete chute carrier upto RD 80.00m. The distribution system was proposed to **create 2411 Ha C.C.A.** by constructing 10.95 Km of L.M.C. and 6.11 Km of R.M.C. along with minor & sub minor respectively. **The Stage- I was construction completed in all respect during 1999-2000 under NABARD Assistance.**

In **Stage- II Construction**, it is proposed to raise earth dam further upto RL 109.00 m in full design section, spillways upto crest level of R.L. 100.00 m with radial gate (4nos.) arrangement to store live storage capacity 3891 Ha m and concrete chute carrier from RD 80m to 201.84 m in full design section. For distribution system, it is proposed to achieve balance 3077 Ha C.C.A. by extension of Left main canal (LMC) and Right main canal (RMC) upto approved length of 20.79 km and 13.765 Km respectively alongwith minors and sub-minors . The Stage – II Construction work is nearing completion.

The status of different activities are explained in detail in this booklet.

## Annual Report of Baghalati Irrigation Division.

Work taken up During 2015-16

Sl No	Name of Work	Head of Account	Agreement Amount.	Expenditure	Status.
1	Renovaton of 3 Nos Fall of Ch Tikarapada Minior Ex L.M.C. Of B.I.P	Critical	938431.00	937815	Work Completed
2	Protaction work to C.D at RD 5167m of L.M.C. Of B.I.P	Critical	519456.00	521843	Work Completed
3	Improvement to Service Road of L.M.C from RD 0.5KM to 1.50 Km of B.I.P	Non Plan	941891.00	897626	Work Completed
4	Strengthening to Aqueduct At RD 7485 M of R.M.C of B.I.P	State Plan	523245.00	422601	Work Completed
5	Protaction work to Aqueduct at RD 1073m of L.M.C. Of B.I.P	Critical	939336.00	661537	Work Completed
6	Protaction work to Fall at RD7400m & Fall at RD7700 of L.M.C. Of B.I.P	Critical	620996.00	621543	Work Completed
7	Renovaton of Supuerpassage at RD320 M At R.M.C from RD 00 to 3000 M of B.I.P	State Plan	519833.00	525657	Work Completed
8	Improvement to Service Road of R.M.C from RD 7.40KM to 10.60 Km of B.I.P	Non Plan Road	937364.00	859824	Work in Progress
9	Strengthening to Aqueduct At RD 490 M of L.M.C of B.I.P	State Plan	1340693.00	1226507	Work Completed
10	Renovaton of 4 Nos Fall of Bharmarapur sub Minior of L.M.C. Of B.I.P	Critical	942266.00	935251	Work in Progress
11	Renovation to ch Tikarapada S/M Ex Bhramarpur Minior L.M.C of B.I.P	Critical	422666.00	422899	Work Completed
12	Improvement to L.M.C by Cement Concrete LinningService in heavy filling reaches in between RD 10650M to 10850m of B.I.P	State Plan	4779074.00	3094288	Work in Progress
13	protection work of L.M.C. By C.C. Linning From RD 4588m to 4821 m of B.I.P	State Plan	4748479.00	4751757	Work Completed
14	Improvement to Service Road of L.M.C from RD 10.80KM to 11.60 Km of B.I.P	Non Plan Road	1580511.00	1439347	Work in Progress
15	Improvement to L.M.C/Slope protection by c.c linning heavy cutting reach inbetween RD0km to 1.60km of B.I.P	State Plan	4887005.00	4257437	Work in Progress
16	Improvement to Service Road of L.M.C from RD 11.60KM to 13.00 Km of B.I.P	Non Plan Road	2059764.00	1107010	Work in Progress
17	Improvement to Bhramarapur Sub Minor -2 in between Rd 00m 3400m of L.M.C. Of B.I.P	State Plan	1682958.00	1653554	Work in Progress
18	Resoration work to Badly damaged left Bank of L.M.C. From Rd 11400 to 11900m of B.I.P	State Plan	2335288.00	1873594	Work in Progress
19	Renovation to structures & Improvement to Vulnerable reaches from RD 300m to 4000 m of Bhramarpur Minior L.M.C of B.I.P	State Plan	1705260.00	1658553	Work Completed
20	Raising & Strengthening of Left Bankof L.M.C from RD 13800m to 14100m of B.I.P	State Plan	4384991.00	3567945	Work in Progress
21	Improvement to L.M.C by cc. Linning in vulonerable reaches inbetween RD 3000M to8000 m of B.I.P	State Plan	4362479.00	3841201	Work in Progress
22	Improvement to Service Road of R.M.C from RD 0.10KM to 2.0 Km of B.I.P	Non Plan Road	1661346.00	1572514	Work Completed
23	Renovation to C,D at Rd 1250m & vRB at RD 1950 m of L.M.C. Of B.I.P	Critical	850988.00	726484	Work Completed
24	Improvement to Ch Tikarapada Minor in vulurable reaches inbetween Rd 0m 2000m of L.M.C of B.I.P	State Plan	1413319.00	1397070	Work in Progress

25	Improvement to L.M.C by c.c lining heavy filling reach inbetween RD 8.35km to 8.65km & At RD 8.72km 9.22 km of B.I.P	State Plan	4961016.00	4200194	Work Completed
26	Renovation of Bhramarapur S/M -I at RD 8220m / 8718m & 02 no of Falls of Bhramarapur S/M -I Ex L.M.C. Of B.I.P	State Plan	2487611.00	2405477	Work Completed
27	Bed clearence of Krushnapur Minor of R.M.C of B.I.P	State Plan (D &M)	197597.00	197567	Work Completed
28	Bed clearence of R.M.C from RD300m to 5320m for khariff irrigation 2015 of B.I.P	State Plan	97812.00	97812	Work Completed
29	Bed clearence of jaganathpur S/M Ex Krushnapur Minor of f B.I.P	State Plan (D &M)	99003.00	99003	Work Completed
30	Removal of Bed deposit of puhundi Minor in between Rd 00 to 6680 m of B.I.P	State Plan (D &M)	197134.00	179493	Work Completed
31	Construction of FootBridge at RD 3200 M of Bhramarpur minor of B.I.P	State Plan (D &M)	157272.00	156436	Work Completed
32	Bed Clearance of Hukuma Minor from RD 0.00m to 4800m and Budhagada S/M from RD 00m to 700m for supplying Khariff Irrigation of BIP.	State Plan (D &M)	206162.00	206162	Work Completed
33	Restoration of approach road from R&B road to EarthDam top of BIP.	State Plan (D &M)	190857.00	165328	Work Completed
34	Renovation and repair of D type and other quarters in Irrigation colony of BIP.	Building	349337.00	349059	Work Completed
35	Renovation and repair of division office of BIP.	Building	90059.00	60000	Work in Progress
36	Bed Clearance of RMC from Rd 5520 to 6400m & RD 7155 to 7485m for supplying Khariff Irrigation 2015.	State Plan (C&B)	98017.00	98017.00	Work Completed
37	Constuction of overHead water Tank inside Baghalati Irrigation colony of BIP.	Building	436146.00	182211	Work in Progress
38	Renovation to Rehabilitation colony Road from Padadiha to Bangeisahi of BIP.	State Plan (R &R)	1280333.00	1279507	Work Completed
39	Renovation to Rehabilitation colony Road from Kantabanki to Bangeisahi of BIP.	State Plan (R &R)	1179632.00	1178568	Work Completed
40	Renovation to Rehabilitation colony Road from Sindurpur UP school to Bangeisahi of BIP.	State Plan (R &R)	1294472.00	1293914	Work Completed
41	Slope Protection to Bhramarpur S/M -II off taking LMC at RD 8.565Km from RD 3.10Km to 3.20Km of BIP.	Non-Plan (Critical)	735623.00	735623	Work Completed
42	Improvement to left bank of LMC from RD 3710m to 4300m of BIP.	Non-Plan (Critical)	627907.00	371345	Work in Progress
43	Improvement to Service Road of RMC from RD 3.70Km to 7.485Km of BIP.	Non-Plan (Critical)	3768363.00	0	Work in Progress
44	Improvement to Service Road of LMC from RD 11.90Km to RD13.37Km of BIP.	Non-Plan (Critical)	2362701.00	379766	Work Completed
45	Slope Protection to LMC from RD 12.00Km to RD 12.30Km near Village Lahunia of BIP.	State Plan (C&B)	5072276.00	820000	Work in Progress
46	Slope Protection to LMC from RD 15.515Km to RD15.78Km near Village Raipur of BIP.	State Plan (C&B)	4647487.00	2420000	Work in Progress
47	Slope Protection to LMC from RD 15.245Km to RD15.515Km near Village Raipur of BIP.	State Plan (C&B)	4793340.00	1820000	Work in Progress
48	Slope Protection to LMC from RD 15.79Km to RD16.45Km near Village Balarampur of BIP.	State Plan (C&B)	3516205.00	1851648	Work in Progress
49	Renovation of 3nos falls of Bhramarpur minor off takinf LMC at RD 9.10Km from RD 3.40Km to 3.50Km of BIP.	Non-Plan (Critical)	751817.00	466032	Work in Progress

50	Slope Protection to LMC from RD 13.25Km to RD14.54Km near Village Kothabati of BIP.	State Plan (C&B)	5161571.00	1388614	Work in Progress
51	Slope Protection to LMC from RD 16.50Km to RD16.70Km near Village Balarampur of BIP.	State Plan (C&B)	4957386.00	1020000	Work in Progress
52	Raising & Strengthening to LMC from RD 17.40Km to tail of BIP.	State Plan (C&B)	4505847.00	848990	Work in Progress
53	Slope Protection to LMC from RD 14.863Km to RD15.135Km near Village BLN Pur of BIP.	State Plan (C&B)	5211897.00	2120000	Work in Progress
54	Removal of obstruction in heavy cutting rock zone from RD 9320m to 9415m of RMC of BIP.	State Plan (C&B)	493658.00	381449	Work in Progress
55	Slope Protection to LMC from RD 17.10Km to RD17.40Km near Village Patharachudi of BIP.	State Plan (C&B)	5059148.00	1902732	Work in Progress
56	Removal of overburden on Rt Service bank of LMC from RD 00Km to Rd 80m of BIP.	Non-Plan (Critical)	480061.00	164000	Work in Progress
57	Construction of Septic tank & Soakpit at Restshed of BIP, Nuagada	State Plan (Building)	66197.00	66133	Work Completed
58	Renovation to Rehabilitation colony Road fromPMGSY Road to Rehabilitation colony at Karabanki of BIP.	State Plan (R &R)	463663.00	0	Work in Progress
59	Renovation to Rehabilitation colony Road fromBatadihapada to LMC left service bank at RD 1170m of BIP.	State Plan (R &R)	463663.00	463017	Work Completed
60	Improvement to approach road from Baghalati Irr. Colony to BID office at Nuagada	State Plan (Building)	489819.00	478424	Work Completed
61	Protection work to LMC by Cement Concrete lining ( Wall) from RD 7670m to 7699.50m of BIP	State Plan (C&B)	489381.00	484282	Work Completed
62	Repair & Maintenance of Rest Shed of Baghalati Irr. Project, Nuagada	Non-Res Building	452957.00	180000	Work in Progress
63	Construction of Salient features board & imp. Of Dam top Road from RD 250m to 1610m of BIP.	State Plan (D&A)	135576.00	135576	Work Completed
64	Slope protection to inner slopes in heavy cutting zone from RD 9300m to 9400m of RMC of BIP.	State Plan (C&B)	479095.00	0	
65	Improvement to Puhundi Minor from Rd 00 to 8.80Km and Krushnapur minor from RD 00Km to 3.80km including sub-minor of Baghalati Irrigation Division under NABARD LOAN Assistance RIDF-XX (Package-B)	NABARD RIDF -XX	50281966.00	15013632	Work in Progress
66	Improvement to RMC from RD 5.0Km to 13.765Km including its minor & S/M of BIP under NABARD Assistance RIDF -XX (Package No-A)	NABARD RIDF -XX	80675134.00	3331441	Work in Progress
<b>Total Amount</b>			<b>Rs.</b>	<b>244562837.00</b>	<b>87965309.00</b>

**EXECUTIVE ENGINEER**  
**Baghalati Irrigation Project**  
**Nuagada**

**SALIENT FEATURE OF**  
**BAGHALATI IRRIGATION PROJECT.**

**I GENERAL**

1	State	:	Odisha
2.	District.	:	Ganjam.
3.	Sub-Division	:	Berhampur.
4.	Village.	:	Baghalati.
5.	River.	:	Bahuda.

**II LOCATION**

1.	Longitude	:	84° 23' 40"E
2.	Lattitude	:	19° 8' 36" N

**III HYDROLOGY**

1.	Catchment	:	119.00 Sq.Km.
2.	Rain fall		
	a) Maximum Annual	:	2115.00 mm
	b) Minimum Annual	:	576.00 mm.
	c) Mean annual	:	1266.00 mm.
	d) Maximum Monsoon	:	1408.00 mm.
	e) Minimum Monsoon	:	540.00 mm
	f) Mean Monsoon	:	1038.00 mm.

**IV. FLOOD**

	Design Flood at Dam site.	:	1522 Cumecs
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**V. PRINCIPAL LEVEL.**

		<b><u>Upto Stage-I</u></b> <b><u>Construction.</u></b>	<b><u>Upto Stage-II</u></b> <b><u>Construction.</u></b>
1	T.B.L.	104.00 M.	109.00 M.
2.	M.W.L.	101.50M.	106.00 M.
3.	F.R.L.	97.00 M.	106.00 M.
4.	D.S.L.	88.50 M.	88.50 M.

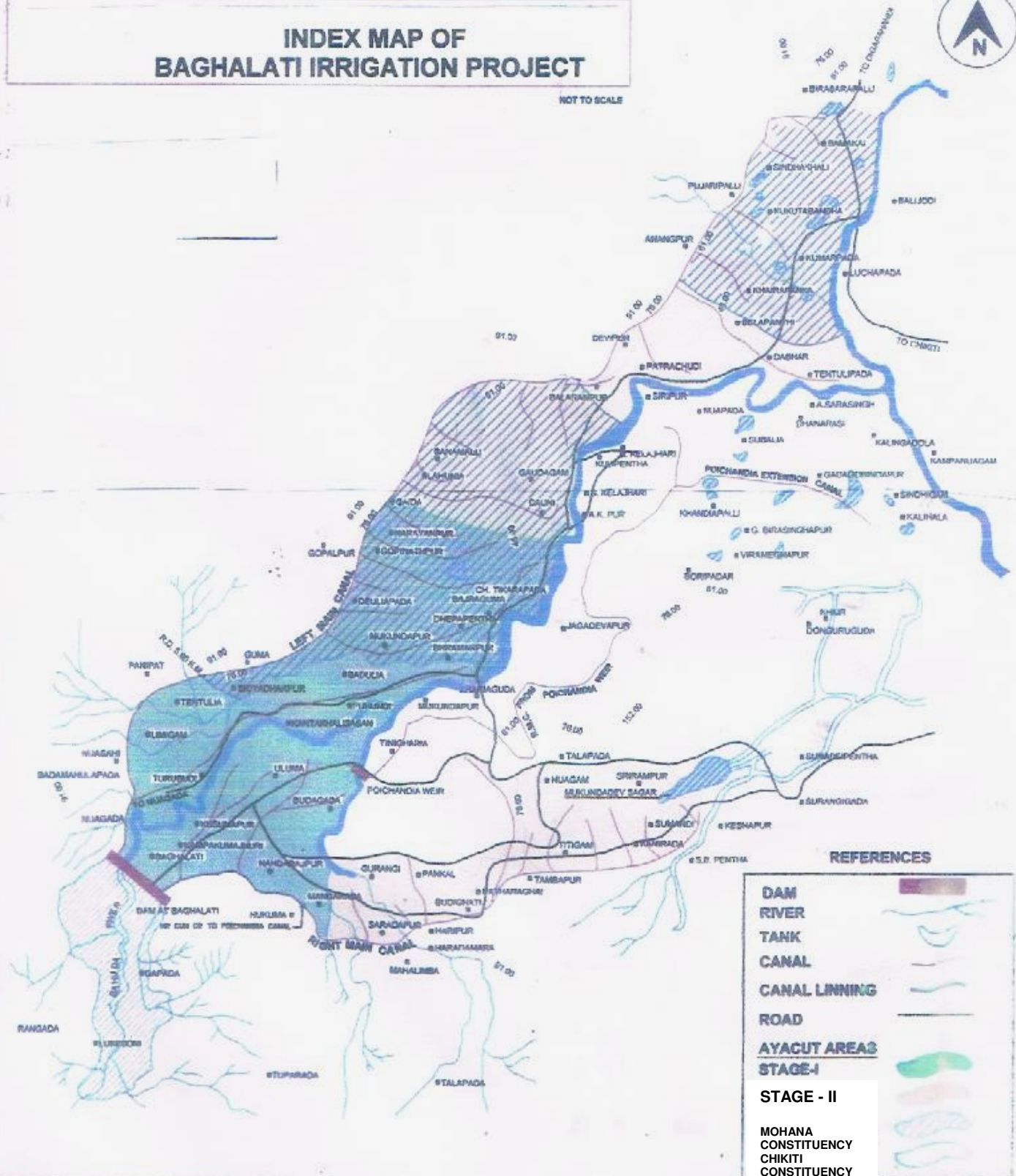
**VI. RESERVOIR CAPACITY AND SUBMERGENCE**

1.	Gross storage at F.R.L.	1818 Ha. M	4321 Ha M
2.	Dead storage at D.S.L.	430 Ha M.	430 Ha.M
3.	Live storage between F.R.L. & D.S.L.	1388 Ha M	2503 ha.M
4.	Submergence at F.R.L.	222 Ha.	336.Ha.
5.	Submergence at M.W.L.	282 Ha.	336 Ha.
6.	No. of village affected	8 Nos.	-
7.	No. of families affected	125 Nos. (ST 97, SC-28)	168 ( Baniabasa-43nos)
8.	Population affected	355 Nos.	483 Nos.

		<u>Upto Stage-I Construction.</u>	<u>Upto Stage-II Construction.</u>
<b>VII</b>	<b>A) DAM</b>		
	EARTH DAM		
	1. Type	Homogenous earthfill with vertical chimney.	
	2. Length	1610 Mtr.	1645 Mtr.
	3. Maximum Height	33 Mtr.	38 Mtr.
	4. Top width.	6 Mtr.	6 Mtr.
	<b>B) SPILLWAY</b>		
	1. Location.	Saddle	
	2. Type.	Chute.	
	3. Length of Spillway (Over all)	56.25 Mtr.	56.25 Mtr.
	5. Number of ways	-	4 Nos.
	6. Size of Gate	-	12.00 Mtr x 6.00 Mtr.
	7. Chute length	80.00 Mtr.	201.84 Mtr.
	8. Size of pier		2.75 Mtr x 15.40 Mtr
<b>VII.</b>	<b>DETAILS OF COMMAND</b>		
	Command area is located in Patrapur & Digapahandi Tahasil of Berhampur Sub-Division in the District of Ganjam, Orissa under Chikiti & Digapahandi Assembly Constituencies.		
	1. a) C.C.A.	2411 Ha.	5488 Ha.
	b) Supplementation to Poichandia system	-	736 Ha.
	<b>Total</b>	<b>2411 Ha.</b>	<b>6224 Ha.</b>
			-
	2. Rabi	1750 Ha.	1750 Ha.

# INDEX MAP OF BAGHALATI IRRIGATION PROJECT

NOT TO SCALE



## REFERENCES

DAM	
RIVER	
TANK	
CANAL	
CANAL LINING	
ROAD	
AYACUT AREAS	
STAGE-I	
STAGE - II	
MOHANA CONSTITUENCY	
CHIKITI CONSTITUENCY	