

GOVERNMENT OF ODISHA



DEPARTMENT OF WATER RESOURCES
LOWER INDRA IRRIGATION PROJECT
ANNUAL REPORT 2016



LOWER INDRA DAM DIVISION, TIKHALI.

FORWARD

It is a matter of great pleasure and satisfaction for me that, annual report 2016 for the Lower Indra Dam Division could be brought out for the first time for the year 2015-16. The important features which find place in this report are primarily on Spillway, Earth Dam and Jharial Distributary and distribution system of Diaton Branch Canal.

The Spill way and earth dam would have completed today but due to agitation of displaced rehabilitated people it could not be completed. The Jharial distribution system estimate preparation is in full swing and in completion stage and Diaton distribution system's land acquisition process is in progress.

There should be technical seminar in regular interval of time for update technical knowledge of technical staffs so that the technical staffs will be ignited to do work with more spirit and to have a good working atmosphere with competitiveness.

Executive Engineer

ORGANIZATION SETUP

This division is headed by an Executive Engineer under administrative control of Chief Construction Engineer, Lower Indra Irrigation Project. The Executive Engineer is assisted by one Deputy Executive Engineer and two Assistant Executive Engineers. Besides other important technical staffs are 4nos of Assistant Engineers and 6nos of Junior Engineers. Non technical ministerial are 6 Junior Clerks and one senior clerk and One Head Clerk with a strength of 19 nos of Peons and 39 nos of W/C staffs.

PRESENT STATUS OF DAM DIVISION, TIKHALI.

TECHNICAL HEAD	SANCTIONED POST	PRESENT STATUS
1. Executive Engineer	01	01
1. Er. Braja Kishore Parida		
2. Deputy Executive Engineer	01	00
1. Er. Jagadish Brahma (I/C)		
3. Assistant Executive Engineer	02	02
1. Er. Jagadish Brahma		
2. Er. Bilash Kumar Sethy		
4. Assistant Engineer	04	01
1. Er. Nila Kantha Maity		
5. Junior Engineer	04	05
1. Er. Tapan Kumar Sethy		
2. Er. Dharani Kisan		
3. Er. Jhurilal Lohar		
4. Er. Suban Kumar Singh		
5. Er. Ramesh Chandra Kashyap		
6. Junior Engineer (Contractual)	02	01
1. Er. Manoranjan Jaipuria		

NON TECHNICAL STAFFS

1. Head Clerk	01	00
1. Sri Chitta Ranjan Nayak (I/C)		
2. Senior Clerk	01	01
1. Sri Chitta Ranjan Nayak		
3. Junior Clerk	06	02
1. Sri Bhimasen Podh		
2. Sri Jaya Prakash Mishra		
4. Draftsman	01	01
1. Sri Gajendra Kapundia		
5. Peon	19	06
1. Sri Rajan Baghel		
2. Sri Binod Bihari Padhi		
3. Sri Keshab Banchhor		
4. Sri Chandra Mani Sabar		
5. Sri Ratan Kumar Adhikari		
6. Sri Tanka Dhara Bharasagararia		
6. Night Watchman	01	01
1. Sri Ananda Gouda		

Work Charged Staffs'

SI No	Name	Designation
1	2	3
1	Sri Asgar Khan	Helper
2	Sri B.V. Prasad Rao	Helper
3	Sri Jagannath Dash	Helper
4	Sri Ramesh Chandra Nayak	Helper
5	Sri. Simanchal Panigrahi	Helper
6	Sri Mongaraj Ganda	Mate
7	Sri Dukhabandhu Sahoo	Mate
8	Sri Rasananda Pradhan	Mate
9	Sri Samandu Bagh	Mate
10	Sri Basanta Kumar Pradhan	Mate
11	Sri Raghunath Majhi	Khalasi
12	Sri Raghunath Pangi	Khalasi
13	Sri Krushna Ch. Khatai	Khalasi
14	Smt Padma Takri	Khalasi
15	Smt Dhanamati Khara	Khalasi
16	Smt. Radhamani Bhatra	Khalasi
17	Smt. Jhunu Patra	Khalasi
18	Sri Subash Chandra Kandhpan	Khalasi
19	Sri Sunadhar Naik	Khalasi
20	Sri Hari Harijan	Khalasi
21	Sri Santosh Kumar Behera	Watch Man
22	Sri Adinarayan Epari	Watch Man
23	Sri Khagapati Pentia	Watch Man
24	Sri Jalandar Naik	Watch Man
25	Sri Sunadhar Kachim	Watch Man
26	Sri Labakusha Khara	Watch Man
27	Sri Rama Khara	Watch Man
28	Sri Srinivas Samal	Watch Man
29	Sri Kailash chandra Swain	Watch Man
30	Sri Sanatan Behera	Watch Man
31	Sri Jaya Khara	Watch Man
32	Sri Harish Chandr Tanti	Watch Man
33	Sri Biranchi Behera	Watch Man
34	Sri Gagan Bihari Naik	Watch Man
35	Sri Raj Kishor Samal	Watch Man
36	Sri Tankadhar Pradhan	Watch Man
37	Sri Mukunda Ch Sahoo	Watch Man
38	Sri Chhabi Naik	Sweeper
39	Sri Jaganath Golary.	Watch Man

INFORMATION ON LOWER INDRA DAM

1. Main Dam

- a. Length - 3780m, DSL-251.00m, FRL – 265.00 m, TBL - 268,50 m
- b. Max height above deepest section – 22 m

2. Dykes

- a. Dyke No –I - 660 m
- b. Dyke No – II - 542 m
- c. Dyke No –III - 1190 m

3. Spillway

- a. Length – - 159m
- b. No of bays - 9
- c. Crest Level - 256m
- d. size of gate - 15X9 m

4. Hydrology

- a. C.A - 1093 Sqm
- b. Design flood - 6831 cumec

5. Reservoir Capacity

- a. At FRL - 321.635 Mcum (X 100 Ham) 1 Ha = 100m X 100m
- b. At DSL (251m) - 7.383 M cum = 738Ham
- c. At 252m - = 2720 Ham
- d. At 254m - = 4640 Ham
- e. At 256 m - = 6880 Ham

6. Submergence/ L.A

- a. Fully -10 nos of villages
- b. Partially - 21(23) nos of villages
- c. Area of submergence – 4766 Ha(private - 3044.89, Govt – 341.59, Forest -1043 ha (Dam- 1009.36ha) others- 370.16)- Total No of L.A cases relating to Dam – 54
- d. Length of reservoir periphery - 91.60 KM

7. Irrigation

- a. Nuapada - 13,500 Ha
- b. Bolangir - 16,400 Ha

8. Canal System

- a. LMC - 49.38 Km, Design Discharge – 35.24 Cumecs. Sill Level – 248.25 m
- b. RMC - 8.22 Km, Design Discharge - 4.51 Cumecs. Sill Level - 249.30

9. Project Cost

- a. Original – 211.7 Cr (I – 134.68, II -77.02)
- b. 1st RE - 521.13 Cr (I – 309.88, II - 211.25)
- c. 2nd RE - 1182.23 Cr (I -728.85, II - 453.38)
- d. 3rd RE - 1624.49 Cr (I- 965.81, II – 658.68)

Information on Head works of LIIP

Brief note on the Project

The Lower Indra Irrigation Project is situated in the District of Nuapara, Odisha near Village Tikhali 18 Km away From Khariar Block Head quarter. The Location of the Dam site is at Longitude 20° 38' 45" E and Latitude 20° 23' 30" N. The Project envisages construction of

- i. Earth Dam (3780 M Long) on River Indra a Tributary of River Tel in Mahanadi Basin in Nuapada district.
- ii. Three numbers of Dykes.(660m,542m,1190m)
- iii. Centrally located Spillway (159 M Long)

Status of head works -

Three dykes are completed in all respect. Earth work of Right side of main earth Dam almost completed except some length of wave deflector. The left earth dam from 00m to 225m and spillway work are yet to be completed.

SPILLWAY -

The Spillway of the Project is an Ogee gated one and located in the river bed with 9 Numbers of bays. The design discharge of the Spillway is **6831** Cumec. The Crest Level of the Spillway is at RL 256 M. The Gate size Of the Spillway is 15 M X 9 M. The tail Water Level is at RL 250.500 M.

Agency -	-	M/S OCCL
Agreement No -	-	20F2/2001-02
Agreement Amount	-	53, 24, 76,590.00
Deviated amount-	-	54, 64, 73,597.00
Date of commencement and completion -	-	26.01.2001/ 25.11.2004
EOT Sanctioned upto	-	30.06.2010
Value of work done	-	Rs 51,57,80,880.00

Physical status of work

Body Wall, ogee and deck slab- Out of 9 blocks in 8 blocks crest has been achieved. Only block No - 4 is at RL 252m. Slab casting in bay No 1, 7,8,9,10 completed. Girder reinforcement binding work is going on on bay No -2

Gate work - Gate work completed in bay no 8,9,10 without hoisting arrangement.

Earth Dam From Rd 00 To 225m

Agency -	-	M/S OCCL
Agreement No -	-	06F2/2003-04
Agreement Amount /deviated amount-	-	7, 12, 00,000/12, 33, 33,546.00
Date of commencement and completion -	-	23.07.03/ 22.10.2004
EOT Sanctioned upto	-	30.06.2010
Value of work done uptojune -2016	-	10,11,39217.00

Physical Progress of Dam -

- Dam has been executed up to R.L 264.5 00m against TBL of 268.from Rd 00 to 225m (left side)
- In right side of spillway Dam top RL is 268.5m except from RL 424m to 500m, which is at RL 263m.

Canal Jurisdiction of Dam Division

1. Jahrial Distributaries - (Estimate pending at CCE office)
L.A Available/ required(5no of cases) = 31.39/78.3 Ac (40%)
2. Minors and sub Minors of Jharial Disty.(estimate willbe submitted within aweek)
(9 No of canals/ 12 No of cases) = 0/67.28 Ac
3. Minor and sub minors of Diaton Branch Canal - (strucutre data to be collected)
(19 no of canals/ 30 no of cases) = 0/184 Ac