

**RECORD OF DISCUSSIONS OF THE FORTY THIRD (43rd) MEETING OF  
THE JOINT COMMITTEE ON SHARING OF THE GANGA/GANGES  
WATERS AT FARAKKA BETWEEN INDIA AND BANGLADESH HELD IN  
DHAKA ON 4<sup>TH</sup> DECEMBER 2009**

1. The Forty Third meeting of the Joint Committee on sharing of the Ganga/ Ganges waters at Farakka was held in Dhaka on 4<sup>th</sup> December, 2009.
2. The Bangladesh delegation was led by Mr. Mir Sajjad Hossain, Member, Indo-Bangladesh Joint Rivers Commission and Chairman, Joint Committee, Bangladesh side. The Indian delegation was led by Shri S.P. Kakran, Commissioner (Ganga), Ministry of Water Resources, Government of India, Member, Indo-Bangladesh Joint Rivers Commission and Chairman, Joint Committee, Indian side. The list of participants is given at **Annex-I**.
3. At the outset of the meeting, the Team Leader of Bangladesh side welcomed the Indian Team Leader and his delegation to Dhaka for the 43<sup>rd</sup> meeting of the Joint Committee. The Indian Team Leader expressed his sincere thanks to the Bangladesh Team Leader for making excellent arrangements for their stay in Dhaka.
4. The Joint Committee appraised the working arrangements of sharing the dry season flows of the Ganga/Ganges at Farakka from 1<sup>st</sup> January to 31<sup>st</sup> May, 2009 and monitoring thereof by the Indo-Bangladesh Joint Observation Teams stationed at Farakka in India and at Hardinge Bridge in Bangladesh.
5. The Committee examined the field data collected during the period from 1<sup>st</sup> January to 31<sup>st</sup> May, 2009 and noted that these were collected in accordance with the procedures and guidelines laid down by the Committee at its First Meeting held in Dhaka in December, 1996.
6. During discussions in the meeting, the Bangladesh side referred to the flow availability at Farakka during the current dry season from 1st January to 31st May, 2009. In this regard the Bangladesh side pointed out that the issue was also discussed in the 41<sup>st</sup> meeting of the Joint Committee held in Dhaka on 16<sup>th</sup> April, 2009 while Bangladesh received less quanta of water at Farakka than its share as given in the indicative schedule in eight 10-day periods out of ten from 1<sup>st</sup> 10-day period of

January to 1<sup>st</sup> 10-day period of April, 2009 (the other two 10-day periods were guaranteed periods). Bangladesh, however, observed with concern that the flow availability at Farakka were also less than the 40 years average availability in subsequent 10-day periods and Bangladesh consequently received less quanta of water than its share as per indicative schedule from 2<sup>nd</sup> 10-day period of April to 3<sup>rd</sup> 10-day period of May, 2009 except one guaranteed ten 10-day period. Bangladesh side also pointed out that out of total 195 (one hundred ninety five) 10-day periods from 01 January, 1997 to 31 May, 2009, Bangladesh has received less quanta of waters of the Ganges at Farakka than its share as per indicative schedule in 83 (eighty three) occasions. This has adversely affected the Ganges dependent areas in Bangladesh. The Bangladesh side in this regard referred to Article-II (ii) which states that "The indicative schedule at Annexure-II, as referred to in sub para (i) above, is based on 40 years (1949-1988) 10-day period average availability of water at Farakka. Every effort would be made by the upper riparian to protect flows of water at Farakka as in the 40 years average availability as mentioned above". It is evident from the above Article that every effort would be made by the upper riparian (India) to protect the flows at Farakka in each 10-day period as per 40 years (1949-88) average flows, so that, Bangladesh receives its share at Farakka as per the figures given at Annexure-II of the Treaty in each 10-day period. The Bangladesh side enclosed a comparative statement along with graphical representation of flows received by Bangladesh from 01 January to 31 May, 2009 at Farakka vis a vis its share as per 40 years average availability given at **Annex-II** for reference. In this context, the Bangladesh side requested the Indian side to maintain the total availability at Farakka as per figures given in the indicative schedule so that Bangladesh may receive its share as per the indicative schedule in future.

7. While appreciating the Bangladesh's concern regarding availability of less water at Farakka (barrage) site; the Indian side clarified that
  - (i) The lean season inflows in the year 2009 (January – May) is attributed to the adverse hydro-meteorological conditions in the upper catchment area that prevailed upon in this year (a dry year) and as a result, the Indian side has also received less water than Indicative Share shown in the Annexure-II of the Treaty. Further, the respective share of

each party shown in the Indicative Schedule under Ganga/Ganges Treaty can only be adhered to "if actual availability of water (inflows at Farakka) corresponds to the average flows of the period observed during 1949 to 1988" (Reference – Introductory Para of the Schedule).

(ii) As the actual sharing of Ganga/Ganges waters between India and Bangladesh depends upon the inflows available at Farakka; it is divided with reference to the formula mentioned at Annexure-I of the Treaty and accordingly, the Joint teams were measuring the Ganga/ Ganges waters in the lean season and dividing it as per the formula given in Annexure-I at all times to the utmost satisfaction of both sides and in a highly transparent manner. Both sides have got less water in the year 2009.

(iii) It was further clarified that the Indicative Schedule does not provide any guarantee that either party would get the water every year in the ratio mentioned therein but only indicates ~~that~~ the respective share of each party if the actual flows corresponds to the average flows schedule. In fact, it can be possible only 50% of the years (as it is only average line). During the years 1949-88 also, the minimum flows observed were very different than average values and actual flows in a particular year should fall within a band of maximum & minimum observed flows, as shown in **Annex-III**.

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8. It was decided that before commencement of joint observations in the next dry season the Committee should, at the onset of the dry season, decide upon the location of the measurement sites at Farakka in India and at Hardinge Bridge in Bangladesh by considering suitability of alternative sites, if required, taking into consideration the Vertical Velocity Distribution (VVD), Horizontal Velocity Distribution (HVD), Mass Curve and other relevant factors.
9. The Joint Committee held in-depth discussions with regard to the implementation of the arrangements contained in the Treaty of December, 1996 for sharing the Ganga/Ganges waters at Farakka between Bangladesh and India for the dry season of 2009. After detailed discussions, the Joint Committee finalized its Annual Report of the year 2009 for submission to the respective Governments.
10. The Joint Committee wishes to express its special thanks and deep gratitude for the assistance, co-operation and courtesy received from Ministry of Water Resources, Government of the People's Republic of

Bangladesh, Ministry of Foreign Affairs, Government of the People's Republic of Bangladesh, Bangladesh High Commission, New Delhi, Bangladesh Deputy High Commission, Kolkata, Kushtia O & M Circle, Surface Water Hydrology and other offices of Bangladesh Water Development Board (BWDB) in Bangladesh and various Government Departments, Institutions and Organizations including Ministry of Water Resources, Government of India, Ministry of External Affairs, Government of India, High Commission of India, Dhaka, Farakka Barrage Project Authority, Central Water Commission (CWC) and Government of West Bengal in India.

11. The Joint Committee decided to place on record the commendable work done by the members of the Joint Observation Teams both at Farakka in India and at Hardinge Bridge in Bangladesh without which it would not have been possible for the Joint Committee to carry out its functions efficiently.
12. The Joint Committee noted that Mr. Ravi Shanker, Senior Joint Commissioner (ER), Ministry of Water Resources, Government of India and Member of the Joint Committee relinquished the office on 15<sup>th</sup> July, 2009. The Committee recalled with deep appreciation the valuable services rendered by Mr. Ravi Shanker to the Joint Committee through his sincere and untiring efforts. The Committee wishes good health and good luck to Mr. Ravi Shanker and the members of his family for the coming days.
13. The Committee decided to undertake its next visit to the joint observation sites at Farakka in India and hold its 44<sup>th</sup> meeting in Kolkata during dry season of 2010 on mutually convenient dates.

Dhaka

04 December, 2009

  
**S. P. KAKRAN**  
Co-Chairman

  
**MIR SAJJAD HOSSAIN**  
Chairman

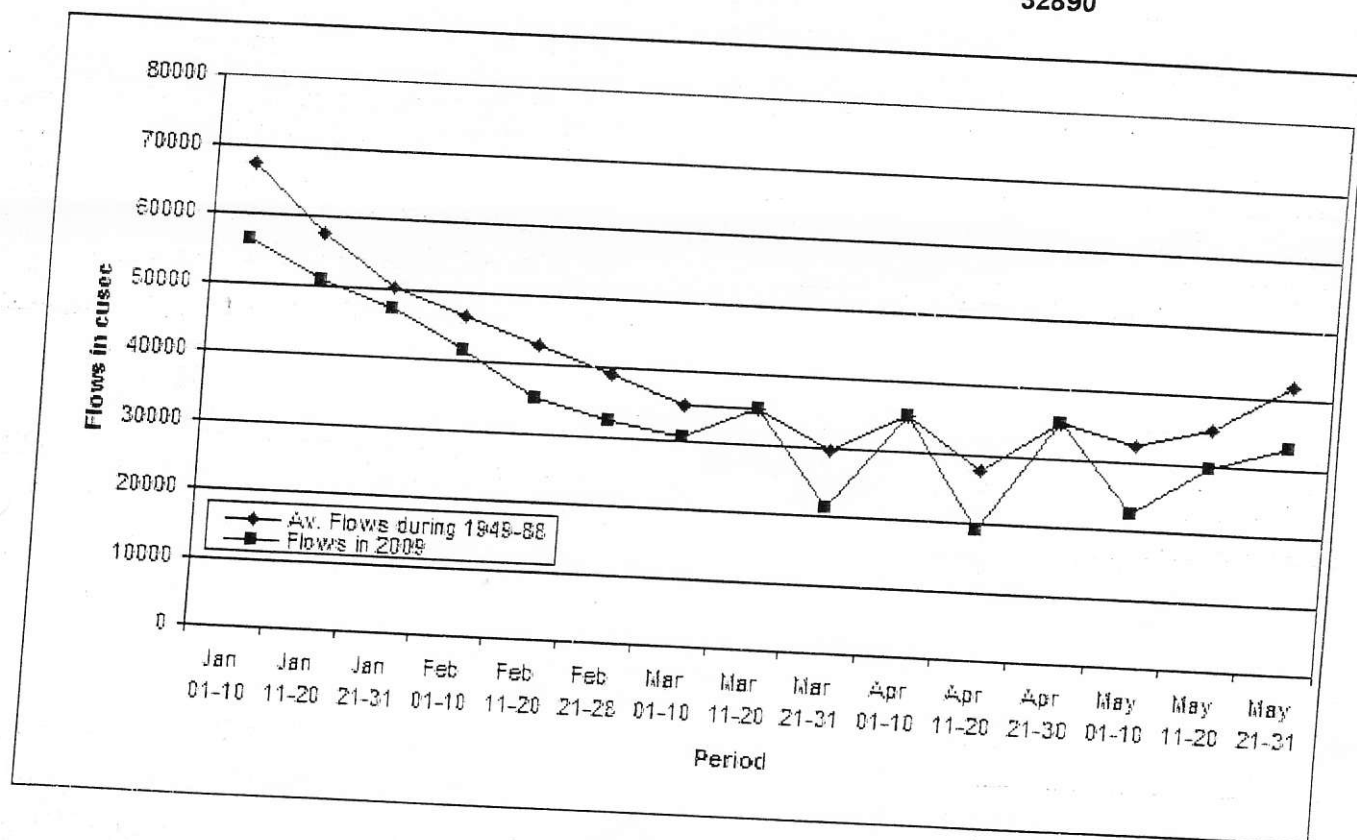
Sl. No.	Indian Delegation	Bangladesh Delegation
1.	Mr S P Kakran Commissioner (Ganga) and Member, Indo-Bangladesh Joint Rivers Commission	Mr. Mir Sajjad Hossain Member, Indo-Bangladesh Joint Rivers Commission
2.	Ms. Ananya Ray Joint Secretary & FA Ministry of Water Resources	Mr. A. H. M. Kausher Chief Engineer, Hydrology Bangladesh Water Development Board, Dhaka
3.	Mr. T.S. Mehra Senior Joint Commissioner (Ganga) Ministry of Water Resources	Mr. Md. Ahasan Ullah Director Joint Rivers Commission, Bangladesh
4.	Mr. Ravi Shanker Director (M&A) Central Water Commission Guwahati	Mr. Mehdi Hasan Director (South Asia) Ministry of Foreign Affairs
5.	Ms. Smita Pant Under Secretary (Bangladesh) Ministry of External Affairs	Mr. Md Rakib Hossain Deputy Secretary Ministry of Water Resources Government of Bangladesh
6.	Mr. Praveen Kumar Deputy Commissioner (Ganga) Ministry of Water Resources	Mr. Md Jahid Hossain Jahangir Executive Engineer Joint Rivers Commission, Bangladesh



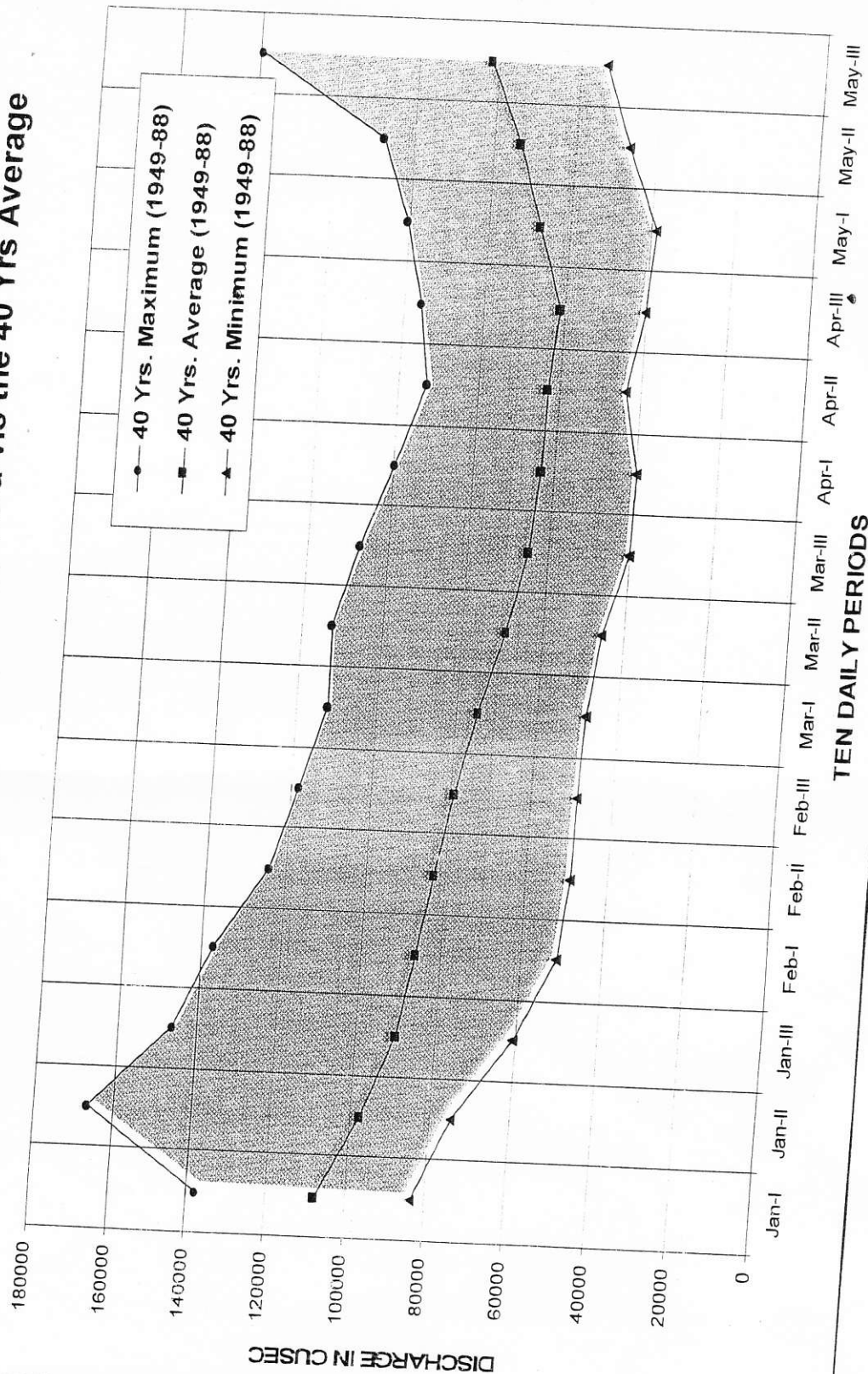
## ANNEX II

Comparative statement of flows received by Bangladesh at Farakka during 2009 vis-à-vis share of Bangladesh based on average flows of 1949-88

Period	Share of Bangladesh at Farakka based on average flows 1949-88 (cusec)	Flows received by Bangladesh at Farakka in 2009 (cusec)
Jan 01-10	67516	
Jan 11-20	57673	56414
Jan 21-31	50154	50654
Feb 01-10	46323	46974
Feb 11-20	42859	41650
Feb 21-28	39106	35000
Mar 01-10	35000	32429
Mar 11-20	35000	30613
Mar 21-31	29688	35000
Apr 01-10	35000	21114
Apr 11-20	27633	35000
Apr 21-30	35000	19219
May 01-10	32351	35000
May 11-20	35000	22446
May 21-31	41854	29655
		32890



# **Inflows of River Ganga at Farakka during 1949-1988 indicating Observed Maximum and Minimum 10-days flows vis-à-vis the 40 Yrs Average**



## COMPOSITION OF THE JOINT TEAM AT FARAKKA FOR THE YEAR 2009

## INDIAN SIDE

1. Mr. Baleswar Thakur  
Executive Engineer,  
Lower Ganga Division,  
CWC, Berhampore.  
(01.01.2009 to 27.05.2009)
2. Mr. M.K. Saha  
Executive Engineer,  
Lower Ganga Division,  
CWC, Berhampore.  
(28.05.2009 to 31.05.2009)
3. Shri A. K. Hazra  
Sub Divisional Engineer,  
Lower Ganga Sub-Division,  
CWC, Farakka.  
(01.01.2009 to 17.01.2009 &  
27.01.2009 to 31.05.2009)
4. Mr. B. Pal  
Sub Divisional Engineer,  
Lower Ganga Sub-Division,  
CWC, Farakka.  
(18.01.2009 to 26.01.2009)
5. Mr. K. K. Dev  
Junior Engineer,  
Lower Ganga Sub-Division,  
CWC, Farakka.  
(01.01.2009 to 31.05.2009)
6. Mr. P. K. Dhali  
Research Assistant,  
Lower Ganga Sub-Division,  
CWC, Farakka.  
(01.01.2009 to 31.05.2009)
7. Mr. S. C. Roy  
Junior Engineer,  
Lower Ganga Sub-Division,  
CWC, Farakka.  
(01.01.2009 to 31.05.2009)
8. Shri A. K. Yadav  
Assistant Silt Analyst,  
Lower Ganga Sub-Division,  
CWC, Farakka.  
(01.01.2009 to 31.05.2009)
9. Shri Bani Ranjan Pal  
Gauge Assistant,  
(01.01.2009 to 31.01.2008)
10. Mr. D.D. Sarqkar  
Junior Engineer,  
B.J. Sub- Division,  
CWC, Krishnagar.  
(01.02.2009 to 20.02.2009 &  
16.04.2009 to 30.04.2009)
11. Shri R. K. Sanyal  
Gauge Assistant, B.J. Sub-Division  
CWC, Krishnagar  
(21.02.2009 to 15.04.2009)

## BANGLADESH SIDE

1. Mr. Md. Mahmudur Rahman  
Executive Engineer,  
Joint Rivers Commission, Bangladesh  
(01.01.2009 to 15.03.2009)
2. Mr. Md. Kabibur Rahman  
Executive Engineer,  
Northern Measurement Division,  
Bangladesh Water Development Board, Pabna  
(01.01.2009 to 15.03.2009)
3. Mr. Gholam Mostafa  
Deputy Director  
Surface Water Hydrology Circle  
Bangladesh Water Development Board  
Dhaka  
(01.01.2009 to 15.03.2009)
4. Mr. Iftekhar Ahmed Dinar  
Assistant Engineer,  
Joint Rivers Commission, Bangladesh.  
(01.01.2009 to 15.03.2009)
5. Mr. Md. Mofazzal Hossain  
Executive Engineer  
Joint Rivers Commission, Bangladesh.  
(16.03.2009 to 31.05.2009)
6. Mr. Md. Nurul Amin  
Executive Engineer  
South Eastern Measurement Division,  
Bangladesh Water Development Board Comilla  
(16.03.2009 to 31.05.2009)
7. Mr. Mahmud Ilias  
Sub Divisional Engineer,  
North Eastern Measurement Sub Division,  
Bangladesh Water Development Board  
Mymensingh  
(16.03.2009 to 31.05.2009)
8. Mr. Mohammad Saif Uddin  
Assistant Engineer,  
Joint Rivers Commission, Bangladesh.  
(16.03.2009 to 31.05.2009)



## COMPOSITION OF THE JOINT TEAM AT HARDINGE BRIDGE DURING 2009

## INDIAN SIDE

1. Mr. Neeraj Kumar Manglik,  
Deputy Director, DSM Directorate,  
Central Water Commission, Sewa Bhawan,  
R.K. Puram, New Delhi 110 066  
(01.01.2009 to 20.02.2009)
2. Mr. Rakesh Kumar  
Deputy Director  
Hydrology © Directorate  
Central Water Commission,  
New Delhi 110 066  
(20.02.2009 to 11.04.2009)
3. Mr. G. Naga Mohan,  
Executive Engineer, Southern Rivers Division,  
Central Water Commission,  
Coimbatore 641 004  
(12.04.2009 to 31.05.2009)
4. Mr. A. K. Rao  
Assistant Director  
Monitoring (N) Directorate  
Central Water Commission, Sewa Bhawan,  
R.K. Puram, New Delhi 110 066  
(01.01.2009 to 19.02.2009)
5. Mr. V. Chandrasekhara Rao  
Extra Assistant Director  
Flood Management - I Directorate  
Central Water Commission, Sewa Bhawan,  
R.K. Puram, New Delhi 110 066  
(20.02.2009 to 11.04.2009)
6. Mr. Jitendra Charan Dwary  
Assistant Director, P & D Directorate  
Central Water Commission,  
Sewa Bhawan, R.K. Puram, New Delhi 110 066  
(11.04.2009 to 31.05.2009)

## BANGLADESH SIDE

1. Mr Md. Daulatazzaman,  
Sub Divisional Engineer,  
Northern Measurement Division,  
BWDB, Pabna.  
(01.01.2009 to 20.03.2009)
2. Mr. Md. Kabibur Rahaman,  
Executive Engineer,  
Northern Measurement Division,  
BWDB, Pabna.  
(21.03.2009 to 31.05.2009)
3. Mr. Md. Tofazzal Hossain  
Assistant Engineer,  
Northern-Measurement Division,  
BWDB, Pabna.  
(01.01.2009 to 31.05.2009)
4. Mr. Md. Mofazzal Hossain  
Section Officer, Bheramara,  
Northern Measurement Division,  
BWDB, Pabna.  
(01.01.2009 to 31.05.2009)
5. Mr. Md. Rezaul Karim  
Surveyor Section Officer, Bheramara,  
Northern Measurement Division,  
BWDB, Pabna.  
(01.01.2009 to 31.05.2009)

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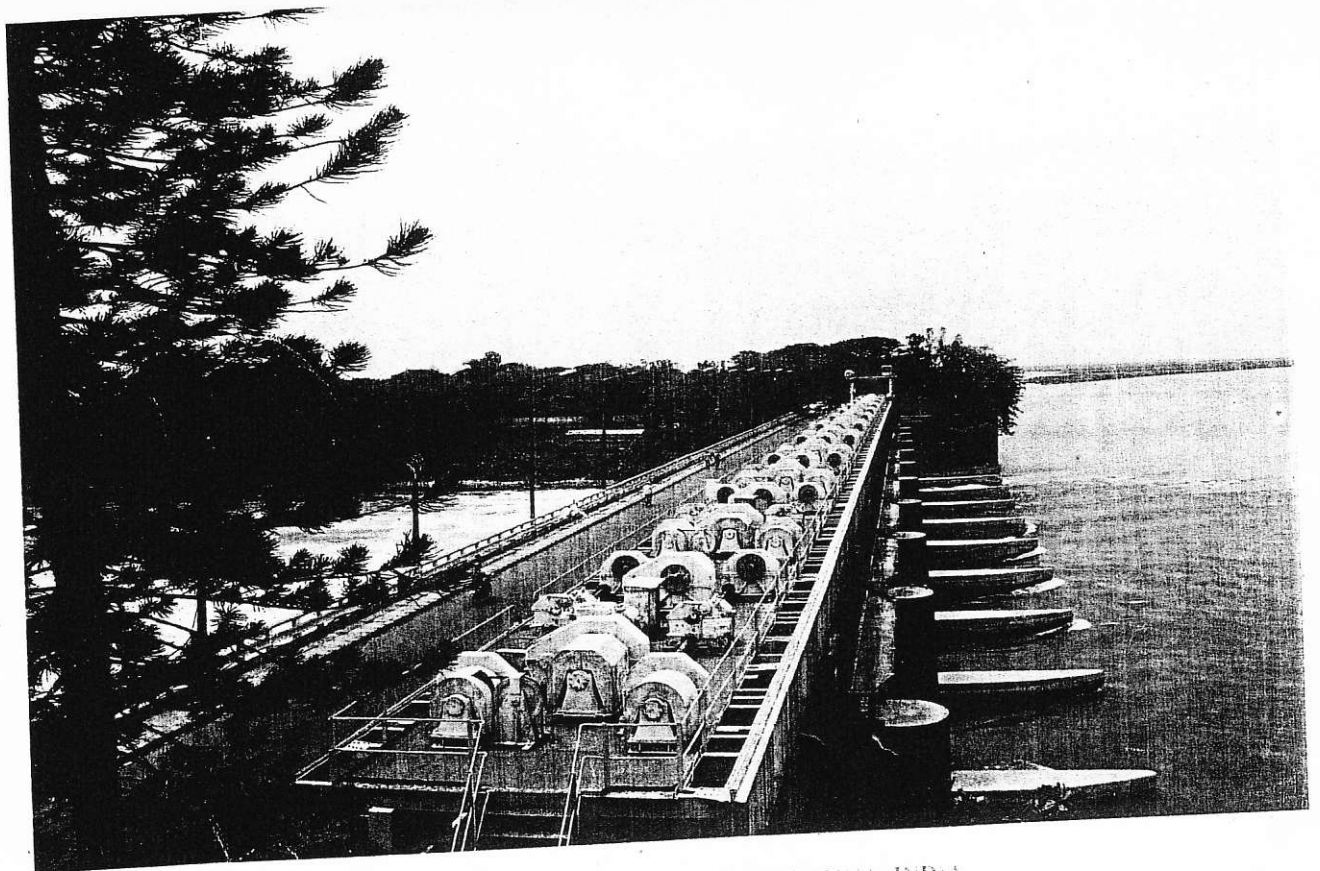
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HARDINGE BRIDGE, BANGLADESH



CANAL HEAD REGULATOR AT TARAKKA, INDIA