

INDO-BANGLADESH MEMORANDUM OF UNDERSTANDING

New Delhi, November 22, 1985.

In pursuance of the understanding reached between H. E. Lt. General H. M. Ershad, President of the People's Republic of Bangladesh and H.E. Shri Rajiv Gandhi, Prime Minister of the Republic of India during their recent meeting at Nassau, the Bahamas, the Irrigation Ministers of the two countries met at New Delhi from November 18 to 22, 1985 to set out the terms of Reference of a Joint study to be undertaken by experts of the two sides, of the available river water resources common to both countries, with a view to identifying alternatives for the sharing of the same to mutual benefit, including a long term scheme/schemes for augmentation of the flows of the Ganga/Ganges at Farakka and to sign a Memorandum of Understanding for the sharing of the Ganga/Ganges waters at Farakka for a period of three years commencing from the dry season of 1986 on the same terms as the 1982 Memorandum of Understanding.

2. It has already been recognized that the basic problem of inadequate flows of water in the Ganga/Ganges available at Farakka during the dry season imposes sacrifices on both countries, and that the long-term solution lies in augmenting these flows. At the same time, the need to arrive at an equitable sharing of the water available at Farakka has also been recognized.
3. Accordingly it is agreed to undertake a joint study with the following terms of reference:-
 - (i). The objective of the study will be (a) to work out a long term scheme or schemes for the augmentation of the flows of the Ganga/Ganges at Farakka and (b) to identify alternatives for the sharing of the available river water resources common to both countries for mutual benefit.
 - (ii). The study will be undertaken by a Joint Committee of Experts (JCE). The JCE will consist of the Secretaries concerned of the two Governments and the two Engineering Members of the Joint Rivers Commission from each side. The JCE will determine its own procedure and will take such other steps as may be necessary to ensure its completion within the time frame of 12 months.

(iii). The study will cover the following :-

(A) Sharing the available river water resources common to India and Bangladesh.

- (a) Ascertaining the available river water resources common to both countries based on the collection, collation and analysis of available relevant hydro-meteorological data in both countries.
- (b) Study of alternatives for sharing the available river water resources to mutual benefit.
- (c) Identification of the locations of the points of sharing, where appropriate.

(B) Augmentation of the dry season flows of the Ganga/Ganges at Farakka.

Identification of scheme/schemes for the augmentation of the flows of the Ganga/Ganges at Farakka by the optimal utilization of the surface water resources of the region available to the two countries.

4. The study will start immediately and will be completed in 12 months from the date of the present Memorandum. There will be a review of the progress of joint study at the Ministerial level at the end of six months from the date of the present Memorandum of Understanding. At the end of the 12 months period, a summit level meeting between the leaders of the two countries will take place to take a decision on the scheme of augmentation of the flows of the Ganga/Ganges at Farakka and the long-term sharing of the rivers.
5. It is also agreed that on an interim basis, the release of the Ganga/Ganges water available at Farakka for the next three dry seasons and the joint inspection and monitoring arrangements and for this purpose will be as in Annexure 'A'. It is further agreed that in the case of exceptionally low flows during any of the next three dry seasons, the two Governments will hold immediate consultations and decide how to minimize the burden to either country.
6. Signed at New Delhi on the twenty-second day of November Nineteen hundred and eighty-five, in two originals in English, each of which is equally authentic.

For and on behalf of the
Government of the Peoples' Republic
of Bangladesh

For and on behalf of the
Government of the Republic of India

Sd/-
(ANISUL ISLAM MAHMUD)
MINISTER FOR IRRIGATION,
WATER DEVELOPMENT AND
FLOOD CONTROL.

Sd/-
(B. SHANKARANAND)
MINISTER OF WATER
RESOURCES

ANNEXURE-A
SCHEDULE

Sharing of waters at Farakka between the 1st January and the 31st May.

Period	Flows reaching Farakka (based on 75% availability from observed data (1948-1973))	Withdrawal by India at Farakka	Release to Bangladesh
(1)	(2)	(3)	(4)
January 1-10	98,500	40,000	58,500
11-20	89,750	38,000	51,750
21-31	82,500	35,500	47,000
February 1-10	79,250	33,000	46,250
11-20	74,000	31,250	42,750
21-28/29	70,000	31,000	39,000
March 1-10	65,250	26,500	38,750
11-20	63,500	25,500	38,000
21-31	61,000	25,250	35,750
April 1-10	59,000	24,000	35,000
11-20	55,500	20,750	34,750
21-30	55,000	20,500	34,500
May 1-10	56,500	21,500	35,000
11-20	59,250	24,250	35,000
21-31	65,500	26,500	39,000

1. If the actual availability of waters at Farakka during a 10-day period is higher or lower than the quantum shown in 2 of the schedule it shall be shared in the proportion applicable to that period.
2. The Joint Inspection and Monitoring of the above sharing arrangements shall be the responsibility of a Joint Committee consisting of an equal number of representatives on each side. The Joint Committee shall be constituted immediately and shall establish teams to be stationed at Farakka and Hardinge Bridge. These teams shall record at Farakka the daily flows below Farakka Barrage and in the Feeder Canal and the flows passing daily at Hardinge Bridge. The Joint Committee which shall decide its own procedures and method of functioning shall submit the data collected by it and its teams and a yearly report to both Governments.
3. The Joint Committee shall be responsible for implementing the sharing arrangement. Any difficulty arising out of the implementation of the above sharing arrangements and of the operation of the Farakka Barrage shall be examined urgently by this Joint Committee and any differences or disputes, if not resolved by the Committee shall be considered by a panel or an equal number of representatives of the two Governments to whom the Joint Committee shall refer the differences or dispute. If the difference of dispute remains unresolved by the panel, it shall be referred to the two Governments for urgent discussion.

Agreement on sharing of exceptionally low flows at Farakka for 1986-88.

As per Indo-Bangladesh Memorandum of Understanding of 22nd November, 1985, it was agreed that in case of exceptionally low flows during any of the next three dry seasons, the two Governments would hold immediate consultations and decide how to minimize the burden of either country.

In case of exceptionally low flows at Farakka during 1986-88 it is now being agreed that:-

- (i) If the flow at Farakka is up to and above 75% of the standard flow for the corresponding ten day period, the release to Bangladesh would be pro rata release agreed to in the Memorandum of Understanding (The flow reaching Farakka for the various 10-day periods which are incorporated in the Memorandum of Understanding of 22nd November, 1985 will be termed as standard flow for the corresponding period).
- (ii) If the flow at Farakka is below 75% of the standard flow for the corresponding ten-day period, release for Bangladesh would be calculated as below:-
 - (a) Calculate the pro rata release for Bangladesh at 75% of the standard flow.
 - (b) Calculate pro rata release for Bangladesh at the actual flow.
 - (c) `(a)` minus `(b)` would be termed as the burden.
 - (d) The burden would be shared by India and Bangladesh, on 50 : 50 basis i.e. 50% of © would be added to ©.

Signed in two originals at New Delhi on 22nd November, 1985.

Sd/-
(Mohammed Ali)
Secretary
Irrigation, Water Development
FLOOD CONTROL,
And Flood Control,
Government of Bangladesh

Sd/-
(Rammaswamy R. Iyer)
Secretary
Ministry of Water Resources,
Government of India,
New Delhi.

From: The Ganga: Water Use in the Indian Sub-continent

By: Pranab Kumar Parua