

Title: Agreement between the Government of the People's Republic of Bangladesh and the Government of the Republic of India on sharing of the Ganges waters at Farakka and on augmenting its flows.

Parties: Bangladesh, India

Basin: Ganges

Date: 11/5/1977

BANGLADESH-INDIA: AGREEMENT ON SHARING OF THE GANGES' WATERS*
[Done at Dacca, November 5., 1977]

Government of Bangladesh
Ministry of Foreign Affairs
(External Publicity Division)
Dacca.

NO-14(1)76-EP. IV

November 5, 1977

Agreement between the Government of the People's Republic of Bangladesh and the Government of the Republic of India on sharing of the Ganges waters at Farakka and on augmenting its flows.

THE GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH AND THE
GOVERNMENT OF THE REPUBLIC OF INDIA,

DETERMINED to promote and strengthen their relations of friendship and good neighbourliness,

INSPIRED by the common desire of promoting the well-being of their peoples,

BEING desirous of sharing by mutual agreement the waters of the international-rivers flowing through the territories of the two countries and of making the optimum utilisation of the water resources of their region by joint efforts,

RECOGNISING that the need of making an interim arrangement for sharing of the Ganges waters at Farakka in a spirit of mutual accommodation and the need for a solution of the long-term problem of augmenting the flows of the Ganges are in the mutual interests of the peoples of the two countries.

BEING desirous of finding a fair solution of the question before them, without affecting the rights and entitlements of either country other than those covered by this Agreement, or establishing any general principles of law or precedent,

HAVE AGREED AS FOLLOWS:

A. Arrangements for sharing of the waters of the Ganges at Farakka..

ARTICLE I

The quantum of waters agreed to be released by India to Bangladesh will be at Farakka.

ARTICLE II

(i) The sharing between Bangladesh and India of the Ganges waters at Farakka from the 1st January to the 31st May every year will be with reference to the quantum shown in column 2 of the Schedule annexed hereto which is based on 75 percent availability calculated from the recorded flows of the Ganges at Farakka from 1948 to 1973.

(ii) India shall release to Bangladesh waters by 10-day periods in quantum shown in column 4 of the Schedule:

Provided that if the actual availability at Farakka of the Ganges waters during a 10-day period is higher or lower than the quantum shown in column 2 of the Schedule it shall be shared in the proportion applicable to that period;

Provided further that if during a particular 10-day period, the Ganges flows at Farakka come down to such a level that the share of Bangladesh is lower than 80 percent of the value shown in column 4, the release of waters to Bangladesh during that 10-day period shall not fall below 80 percent of the value shown in column 4.

ARTICLE III

The waters released to Bangladesh at Farakka under Article I shall not be reduced below Farakka except for reasonable uses of waters, not exceeding 200 cusecs, by India between Farakka and the point on the Ganges where both its banks are in Bangladesh.

ARTICLE IV

A Committee consisting of the representatives nominated by the two Governments (hereinafter called the Joint Committee) shall be constituted. The Joint Committee shall set up suitable teams at Farakka and Hardinge Bridge to observe and record at Farakka the daily flows below Farakka Barrage and in the Feeder Canal, as well as at Hardinge Bridge.

ARTICLE V

The Joint Committee shall decide its own procedure and method of functioning.

ARTICLE VI

The Joint Committee shall submit to the two Governments all data collected by it and shall also submit a yearly report to both the Governments.

ARTICLE VII

The Joint Committee shall be responsible for implementing the arrangements contained in this part of the Agreement and examining any difficulty arising out of the implementation of the above arrangements and of the operation of Farakka Barrage. Any difference or dispute or arising in this regard, if not resolved by the Joint Committee, shall be referred to a panel of an equal number of Bangladeshi and Indian experts nominated by the two Governments. If the difference or dispute still remains unresolved, it shall

be referred to the two Governments which shall meet urgently at the appropriate level to resolve it by mutual discussion and failing that by such other arrangements as they may mutually agree upon.

B. Long-Term Arrangements

ARTICLE VIII

The two Governments recognise the need to cooperate with each other in finding a solution to the long-term problem of augmenting the flows of the Ganges during the dry season.

ARTICLE IX

The Indo-Bangladesh Joint Rivers Commission established by the two Governments in 1972 shall carry out investigation and study of schemes relating to the augmentation of the dry season flows of the Ganges, proposed or to be proposed by either Government with a view to finding a solution which is economical and feasible. It shall submit its recommendations to the two Governments within a period of three years.

ARTICLE X

The two Governments shall consider and agree upon a scheme or schemes, taking into account the recommendations of the Joint Rivers Commission, and take necessary measures to implement it or them as speedily as possible.

ARTICLE XI

Any difficulty, difference or dispute arising from or with regard to this part of the Agreement, if not resolved by the Joint Rivers Commission, shall be referred to the two Governments which shall meet urgently at the appropriate level to resolve it by mutual discussion.

C. Review and Duration

ARTICLE XII

The provisions of this Agreement will be implemented by both parties in good faith. During the period for which the Agreement continues to be in force in accordance with Article XV of the Agreement, the quantum of waters agreed to be released to Bangladesh at Farakka in accordance with this Agreement shall not be reduced.

ARTICLE XIII

The Agreement will be reviewed by the two Governments at the expiry of three years from the date of coming into force of this Agreement. Further reviews shall take place six months before the expiry of this Agreement or as may be agreed upon between the two Governments,

ARTICLE XIV

The review or reviews referred to in Article XIII shall entail consideration of the working, impact, implementation and progress of the arrangements contained in parts A and B of this Agreement.

ARTICLE XV

This Agreement shall enter into force upon signature and shall remain in force for a period of 5 years from the date of its coming into force. It may be extended further for a specified period by mutual agreement in the light of the review or, reviews referred to in Article XIII,

IN WITNESS WHEREOF the undersigned, being duly authorized thereto by the respective Governments, have signed this Agreement.

Done in duplicated at Dacca on the 5th November, 1977 in the Bengali, Hindi and English languages. In the event of any conflict between the texts, the English text shall prevail.

Rear Admiral Musharraf Husain Khan
Chief of Naval Staff and Member., President's Council of Advisers in-charge of the Ministry of Communications, Flood Control, Water Resources and Power, Government of the People's Republic of Bangladesh.

Surjit Singh Barnala
Minister for Agriculture and Irrigation, Government of the Republic of India

SCHEDULE

[Vida Article II (i)]

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

	1	2	3	4
Period	Flows reaching Farraka (based on 75% availability from observed data (1948-73),	Withdrawal by India at Farraka	Release to Bangladesh	
	Cusecs	Cusecs	Cusecs	
January 1-10	98,500	40,000	58,500	
11-20	89,750	38,500	51,250	
21-31	82,500	35,000	47,500	
February 1-10	79,250	33,000	46,250	
11-20	74,000	31,500	42,500	
21-28/29	70,000	30,750	39,250	

March 1-10	65,250	26,750	38,500
11-20	63,560	25,000	38,000
21-30	61,000	25,000	36,000
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	24,000	35,250
21-31	65,500	26,750	38,750

*[Reprinted from the text provided by the Government of Bangladesh.

[According to Article XV, the Agreement entered into force upon signature, November 5, 1977 and shall remain in force for five years.]

THE GOVERNMENT OF THE REPUBLIC OF INDIA AND THE GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH.

DETERMINED to promote and strengthen their relations of friendship and good neighborliness.

INSPIRED by the common desire of promoting the well-being of their peoples.

BEING desirous of sharing by mutual agreement the waters of the international rivers flowing through the territories of the two countries and of making the optimum utilisation of the water resources of their region in the fields of flood management, irrigation, river basin development and generation of hydro-power for the mutual benefit of the peoples of the two countries.

RECOGNISING that the need for making an arrangement for sharing of the Ganga / Ganges waters at Farakka in a spirit of mutual accommodation and the need for a solution to the long-term problem of augmenting the flows of the Ganga / Ganges are in the mutual interests of the peoples of the two countries.

BEING desirous of finding a fair and just solution without affecting the rights and entitlements of either country other than those covered by this Treaty, or establishing any general principles of law or precedent.

HAVE AGREED AS FOLLOWS:

ARTICLE - I

The quantum of waters agreed to be released by India to Bangladesh will be at Farakka.

ARTICLE - II

(i) The sharing between India and Bangladesh of the Ganga / Ganges waters at Farakka by ten day periods from the 1st January to the 31st May every year will be with reference to the formula at Annexure I and an indicative schedule giving the implications of the sharing arrangement under Annexure I is at Annexure II.

(ii) 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.

(iii) In the event flow at Farakka falls below 50,000 usage in any 10-day period, the two governments will enter into immediate consultations to make adjustments on an emergency basis, in accordance with the principles of equity, fair play and to harm to either party.

ARTICLE - III

The waters released to Bangladesh at Farakka under Article I shall not be reduced below Farakka except for reasonable uses of waters, not exceeding 200 cunecs, by India between Farakka and the point on the Ganga / Ganges where both its banks are in Bangladesh.

ARTICLE - IV

A Committee consisting of representatives nominated by the two Governments in equal numbers (hereinafter called the Joint Committee) shall be constituted following the signing of this Treaty. The Joint Committee shall set up suitable teams at Farakka and Hardinge Bridge to observe and record at Farakka the daily flows below Farakka Barrage, in the Feeder Canal, and at the Navigation Lock, as well as at the Hardinge Bridge.

ARTICLE - V

The Joint Committee shall decide its own procedure and method of functioning.

ARTICLE - VI

The Joint Committee shall submit to the two Governments all data collected by it and shall also submit a yearly report to both the Governments. Following submission of the reports the two Governments will meet at appropriate levels to decide upon such further actions as may be needed.

ARTICLE - VII

The Joint Committee shall be responsible for implementing the arrangements contained in this Treaty and examining any difficulty arising out of the implementation of the above arrangements and of the operation of Farakka Barrage. Any difference or dispute arising in this regard, if not resolved by the Joint Committee, shall be referred to the Indo-Bangladesh Joint Rivers Commission. If the difference or dispute still remains unresolved, it shall be referred to the two Governments which shall meet urgently at the appropriate level to resolve it by mutual discussion.

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ARTICLE - XI

For the period of this Treaty, in the absence of mutual agreement on adjustments following reviews as mentioned in Article X, India shall release downstream of Farakka Barrage, water at a rate not less than

90% (ninety per cent) of Bangladesh's share according to the formula referred to in Article II, until such time as mutually agreed flows are decided upon.

ARTICLE - XII

This Treaty shall enter into force upon signature and shall remain in force for a period of thirty years and it shall be renewable on the basis of mutual consent.

IN WITNESS WHEREOF the undersigned, being duly authorised thereto by the respective Governments, have signed this Treaty.

DONE at New Delhi 12th December, 1996 in Hindi, Bangia and English languages. In the event of any conflict between the texts, the English text shall prevail.

(H. D. DEVE GOWDA)	(SHEIKH BASINA)	
PRIME MINISTER		PRIME MINISTER
REPUBLIC OF INDIA.	PEOPLES REPUBLIC OF BANGLADESH.	

ANNEXURE - I

Availability at Farakka	Share of India	Share of Bangladesh
70,000 cusecs or less	50%	50%
70,000 - 75,000 cusecs	Balance of flow	35,000 cusecs
75,000 cusecs or more	40,000 cusecs	Balance of flow

Subject to the condition that India and Bangladesh each shall receive guaranteed 35,000 cusecs of water in alternate three 10-day periods during the period March 1 to May 10.

ANNEXURE - II

(Sharing of waters at Farakka between January 01 and May 31 every year.)

If actual availability corresponds to average flows of the period 1949 to 1988, the implication of the formula in Annex-I for the share of each side is:

Period	Average of total flow 1949-88 (cusecs)	India's share (cusecs)	Bangladesh's share (cusecs)
Jan.			
1-10	107,516	40,000	57,516
11-20	97,673	40,000	57,673
21-31	90,154	40,000	50,154
Feb.			
1-10	86,323	40,000	46,323
11-20	82,858	40,000	42,858
21-28	79,105	40,000	30,106
March			

1-10	74,419	30,410	35,000
11-20	68,931	33,931	35,000*
21-31	64,688	35,000*	29,688
April			
1-10	63,180	28,180	35,000*
11-20	62,633	35,000*	27,633
21-30	60,992	25,992	35,000*
May			
1-10	67,351	35,000*	32,351
11-20	73,590	38,590	35,000
21-31	81,854	40,000	41,854

(* Three ten day periods during which 35,000 cusecs shall be provided).