MANUAL OF RESPONSIBILITY INDUS WATERS TREATY 1960

GOVERNMENT OF PAKISTAN

IFDES WATERS TERRATY 1960

MANUAL OF RESPONSIBILIMY

FOR

THE VARIOUS MINISTRIES, DEPARTMENTS

AND AGENCIES CONCERNED

THE IMPLEMENTATION OF THE TREATY

 $H^{T}IW$

OFFICE OF
THE PAKISTAN COMMISSIONER FOR INDUS WATERS
FERRUARY 1971.

MANUAL OF RESPONSIBILITY

CONTENTS	Ĭ	PAGES
Introduction		(iii) - (v)
Statement of the Treaty provisions with the implementation of which various Ministries/Departments and agencies are concerned	***	1-4
Manual of Responsibility for the Ministry of Defence		5-8
Manual of Responsibility for the Ministry of Home and Kashmir Affairs and States and Frontier Region.	****	9-19
Manual of Responsibility for the Ministry of Industries and Natural Resources.		20-21
Manual of Responsibility for the Meteriological Department		22-23
Manaul of Responsibility for the Government of Baluchistan		24-27
Manual of Responsibility for the Government of NWFP.	# # # #'	28-31
Manual of Responsibility for the various departments of the Government of the Punjab		32-49
Manual of Responsibility for the Government of Sind.	****	5 0- 53

CONTENTS	PAGES
Manual of Responsibility for the Pakistan Western Railways	54 - 58
Manual of Responsibility for the West Pakistan Maricultural Development Corporation.	59
Manual of Responsibility for the West Pakistan Industrial Development Corporation.	60-61
Manual of Responsibility for the West Pakistan Water and Power Development Authority.	62 -6 7
Definitions of important terms	68-71

INTRODUCTION

The Indus Waters Treaty 1960, concluded between the Government of Pakistan and the Government of I_n dia in September 1960, fixes and delimits the rights and obligations of each Party in relation to the other concerning the use of the waters of the Indus system of rivers. Treaty also provides for the settlement of all questions as may arise in regard to the interpretation or application The Government of Pakistan created, as of its provisions. contemplated in the Treaty, a permanent post of Pakistan/ for Indus Waters, the incumbent being the Government's representative for the due and proper implementation of the The Pakistan Commissioner serves as the regular channel of communication with India on all matters relating to the implementation of the Treaty, except for any particular question which either Government may decide to take up directly with the other Government.

2. The Pakistan Commissioner for Indus Waters and his Indian counterpart together form the Permanent Indus Commission. The purpose and functions of the Commission are to establish and maintain co-operative arrangements for the implementation of the Treaty, to promote co-operation between the Parties in the development of the waters of the

Indus System of rivers and, in particular,

- a) to study and report to the two Governments on any problem relating to the development of the waters of the Rivers which may be jointly referred to the Commission by the two Governments; in the event that a reference is made by one Government alone, the Commissioner of the other Government shall obtain the authorisation of his Government before he proceeds to act on the reference;
- b) to make every effort to settle promptly any question which may arise concerning the interpretation or application of the Treaty or the existence of any fact which, if established, might constitute a breach of the Treaty;
- c) to undertake, once in every five years, a general tour of inspection of the rivers for ascertaining the facts connected with various developments and works on the Rivers;
- d) to undertake promptly, at the request of either Commissioner, a tour of inspection of such worlds or sites on the Rivers as may be considered necessary by him for ascertaining the facts connected with those works or sites.
- 3. The Indus Waters Treaty 1960 places certain obligations on both Pakistan and India and it is in the interest of Pakistan, as a lower riparian, to see that these obligations are honoured both in letter and spirit. To achieve this objective the Pakistan Commissioner for Indus Waters had prepared in 1961 a Manual of Responsibilities for official use of the concerned departments and agencies of the Central and the Provincial Governments. The manual indicated the provisions of the Treaty, with the implementation of which each department or agency was either

directly concerned or regarding which it was to initiate some action. With the break-up of West Pakistan into four Provinces, it became necessary to revise the Mannual so as to apprise departments and agencies of the new Provinces of their respective responsibilities in connection with the Indus Waters Treaty 1960. In the revised Mannual independent chapters have been incorporated for the four Provincial Governments in addition to the chapters for the concerned Ministries of the Central G-overnment and the other agencies.

A Statement showing the Paragraphs of Articles and Annexures of the Treaty, with the implementation of which each department or Agency is directly concerned, has also been included in the Mannual.

- 4. The definitions of the relevant terms, as given in the Treaty, have been reproduced at the end of the Mannual for ready reference. In case of any doubt regarding the interpretation or implication of any provision of the Treaty, the matter should be referred to the Pakistan Commissioner for Indus Vaters.
- 5. The 'Transition Period' provided for in the Treaty ended on 31st March 1970. Accordingly the provisions concerning the Transition Period have not been included in the revised Mannual.

STATEMENT OF THE TREATY PROVISIONS
WITH THE IMPLEMENTATION OF WHICH
VARIOUS MINISTRIES / DEPARTMENTS
AND AGENCIES ARE CONCERNED

STATEMENT OF TREATY PROVISIONS WITH THE IMPLEMENTATION OF WHICH VARIOUS MINISTRIES/DEPARTMENTS/AGENCIES ARE CONCERNED.

1.	Mir	uistry of Defence	Article II	_	Paragraphs (2)8(3)
			Article IV	-	Paragraphs (2), (3) and (6)
			Article VI	-	Paragraph (2)
			Article VII	-	Paragraphs (1) and (2)
2.	Kas Sta	istry of Home and hmir Affairs and tes and Frontier ions	Article IV	-	Paragraphs (2). (3), (6), (8), (9), (10), (11) and (12)
			Article VI	-	Paragraphs (1) and (2)
			Article VII	-	Paragraphs(1) and (2)
			Article VIII	I -	Paragraph (4)
			Annexure C	-	Paragraph 9
			Annexure D	-	Paragraph 15
			Annexure E	-	Paragraphs 10 and 17
3.	trie	istry of Indus- es and Natural ources	Article IV	-	Paragraphs (10) and (12)
4.		riological	Article VI	_	Paragraph (2)
	Depa	artment	Article VII	_	Paragraph (1)
5.		ernment of chistan			
	(a)		Article VI	•-	Paragraph (2)
			Article VII	-	Paragraph (2)
			Article VIII	-	Paragraph (4)
	(b)	Irrigation and Power Department	Article IV	-	Paragraph (10)
			Article VI	-	Paragraphs (1) and (2)
			Article VII	-	Paragraph (2)
			Article VIII	-	Paragraph (4)

6. Government of N.W.F.P.

	N.W.F.P.			
	(a) Deputy	Article VI	-	Paragraph (2)
	Commissioners	Article VII	-	Paragraph (2)
		Article VIII	-	Paragraph (4)
	(b) Public Works	Article IV	- Paragraph (10	Paragraph (10)
	Department	Article VI		Paragraph (1) and (2)
		Article VII	-	Paragraph (2)
		Article VIII	-	Paragraph (4)
7.	Government of the Punjab			
	(a) Deputy * Commissioners	Article II	-	Paragraphs (2) and (3)
		Article IV	-	Paragraphs (2), (3), (6), (7) and (13)
		Article VI	-	Paragraph (2)
		Article VII	-	Paragraph (2)
		Article VIII	-	Paragraph (4)
		Annexure B	-	Paragraphs (2), (3) and (6)
	(b) Board of	Article IV	_	Paragraph (13)
	$R_{ m e}$ venue	Annexure B	-	Paragraphs (2): (3) and (6)

^{*} Provisions of Articles IV(6), VI(2), VII(2) and VIII(4) concern all the Deputy Commissioners. Provisions of Article II(2), II(3), IV(2), IV(3) and IV(7) concern the Deputy Commissioners of Lahore, Sahiwal, Sheikhupura and Sialkot only. Provisions of Article IV(13) and Paragraphs 2, 3 & 6 of Annexure B concern the Deputy Commissioner of Sialkot District only.

	(-) = -	
	(c) Forest Department	Article IV - Paragraph (11)
	(d) Industries Department	Article IV - Paragraphs(10), (12) and (13)
	(e) Irrigation and Power Department	Article II - Paragraphs (2), (3) and (4)
		Article III - Paragraph (3)
	•	Article IV - Paragraphs (2), (3), (4), (6), (7), (8), (9) and (10)
		Article VI - Paragraphs (1) and (2)
		Article VII - Paragraphs(1) and (2)
		Article VIII - Paragraph (4)
		Annexure D - Paragraph (13)
8.	Government of Sind	
	(a) Deputy Commissioners	Article VI - Paragraph (2) Article VII - Paragraph (2) Article VIII - Paragraph (4)
	(b) Irrigation and	Article IV - Paragraph (10)
	Power Department	Article VI - Paragraphs (1 and (2)
		Article VII - Paragraph (2)
		Article VIII - Paragraph (4)
9,	Pakistan Western Railways	Article II - Paragraph (2) and (3)
		Article IV - Paragraphs (2), (3), (6) and (7)
		Article VI - Paragraph (1) and (2)
		Article VIII - Paragraph (4)
10.	West Pakistan Agri- cultural Development Corporation	Article VIII + Paragraph (4)

West Pakistan Article IV Paragraphs (10) and (12) 11. Industrial Development Corporation

West Pakistan Water 12. and Power Development Authority

Paragraphs (2), (3), (6), (7), (8) and (9) Article IV

Paragraphs (1) and (2) Article VI

Paragraphs (1) and (2) Article VII

Article VIII - Paragraph (4)

MANUAL OF RESPONSIBILITY FOR THE MINISTRY OF DEFENCE

MANUAL OF RESPONSIBILITY FOR THE MINISTRY OF DEFENCE

PROVISIONS OF THE TREATY

REMARKS

Article II(2)

Except for Domestic Use and non-Consumptive Use. Pakistan shall be under an obligation to let flow, and shall not permit any interference with, the waters of the Sutled Main and the Ravi Main in the reaches where these rivers flow in Pakistan and have not yet finally crossed into Pakistan. The points of final crossing are the following: (a) near the new Hasta Bund upstream of Suleimanki in the case of the Sutlej Main, and (b) about one and a half miles upstream of the syphon for the B.R.B.D. Link in the case of the Ravi Main.

To see that the obligation understaken by Pakistan is fulfilled and no water is withdrawn for Consumptive use, other than Domestic use, from the border reaches of the two rivers.

Article II(3)

/other than Domestic Use

Except for Domestic Use,
Non-Consumptive Use and Agricultural Use (as specified taken by Pakis in Annexure B), Pakistan shall be under an obligation to let flow, and shall not permit any interference with, the waters (while flowing in Pakistan) of any Tributary which in its natural course joins the Sutlej and the natural course joins the Sutlej Sutlej and the Pakistan.

To see that the obligation und taken by Pakis is fulfilled a no water is to withdrawn for Consumptive Us from the tributaries of the Sutlej and the Ravi Which joint these rivers in the border

To see that the obligation undertaken by Pakistan is fulfilled and no water is to be withdrawn for Consumptive Use. from the tribu . taries of the Ravi which join these rivers in the border reaches, except for the withdrawals for Agricultural Use as provided for in Paragraphs 2 and 3 of Annexure B to the Treaty.

PRCVISIONS OFTHE TREATY

REMARKS

Lrticle IV(2)

Each Party a-grees that any Mon-consumptive Use made by it shall be so made as not to materially change. on account of such use, the flow in any channel to the prejudice of the uses on that channel by the other Party under the provisions of this Treaty. In exe~ cuting any scheme of flood protection or flood control each Party will avoid, as far as practicable, any material damage to the other Party, and any such scheme carried out by India on the Western Rivers shall not involve any use of water or any storage in addition to that provided under Article III.

To see that the schemes undertaken in Pakistan meet the stipulated requirements.

:Article IV(3)

Nothing in this Treaty shall be construed as having the effect of preventing either Party from undertaking the stipulated reschemes of drainage, river training, conservation of soil against erosion and dredging, or from removal of stones, gravel or sand from the beds of the Rivers: Provided that

To see that the schemes undertaken in Pakistan meet quirements.

(a) in executing any of the schemes mentioned above, each Party will avoid, as far as practicable, any material damage to the other Party.

Article IV(6)

Each Party will use its best endeavours to maintain the natural channels of the Rivers, as on the Effective Date, in such condition as will avoid, as far as practicable, any obstruction to

To see that the obligation undertaken by Pakistan is fulfilled and to bring to the notice of the Pakistan Commissioner for Indus

the flow in these channels likely to cause material damage to the other Party.

Waters any contravention of this provision by India.

Article VI(2)

If, in addition to the data specified in Paraoraph (1) of this Article, either Party requests the supply of any data relating to the hydrology of the Rivers, or to canal or reservoir operation connected with the Rivers, or to any provision of this Treaty, such data shall be supplied by the other Party to the extent that these are available. To supply to the Pakistan Commissioner for Indus Waters the data requested by him in this connection.

Article VII(1)

The two Parties recognise that they have a common interest in the optimum development of the Rivers, and, to that end, they declare their intention to co-operate, by mutual agreement, to the fullest possible extent. In particular:-

To supply to the Pakistan Commissioner for Indus Vaters as and when necessary, its proposals for works to be undertaken under this Article.

(a) Each Party, to the extent it considers practicable and on agreement by the other Party to pay the costs to be incurred, will, at the reduest of the other Party, set up or install such hydrologic observation stations with-in the drainage basins of the Rivers, and set up or install such meteorological observation stations relating thereto and carry out such observations thereat, as may be requested, and will supply the data so obtained.

- (b) Each Party, to the extent it considers practicable and on agreement by the other Party to pay the costs to be incurred, will, at the request of the other Party, carry out such new drainage works as may be required in connection with new drainage works of the other Party.
- (c) At the request of the either Party, the two Partics may, by mutual agreement, co-operate in undertaking engineering works on the Rivers.

The formal arrangements, in each case, shall be as agreed upon between the Parties.

Article VII(2)

If either Party plans to construct any engineering work which would cause interference with the waters of any of the Rivers and which, in its opinion, would effect the other Party materially, it shall notify the other Party of its plans and shall supply such data relating to the work as may be available and as would enable the other Party to inform itself of the nature, magnitude and effect of the work. If a work would cause interference with the waters of any of the Rivers but would not, in the opinion of the Party planning it, affect the other Party materially, nevertheless the Party planning the work shall, on request supply the other Party with such data regarding the nature. magnitude a nd effect, if any, of the work as may be available.

To supply to the Pakistan Commissioner for Indus Waters data requested by him in this connection. MANUAL OF RESPONSIBILITY FOR THE MINISTRY OF HOME AND KASHMIR AFFAIRS AND STATES AND FRONTIER REGION

MANUAL OF RESPONSIBILITY FOR MINISTRY OF HOME AND KASHMIR AFFAIRS AND STATES AND FRONTIER REGION

PROVISIONS OF "HE TREATY

REMARKS

Article IV(2)

Each Party agrees that any Non-Consumptive Use made by it shall be so made as not to materially change, on account of such use, the flow in any channel to the prejudice of the uses on that channel by the other Party under the provisions of this "reaty. In executing any scheme of flood protection or flood control each Party will avoid, as far as practicable, any material damage to the other Party, and any such scheme carried out by India on the Western Rivers shall not involve any use of water or any storage in addition to that provided under Article III.

To see that the schemes undertaken in the Azad Kashmir and Jammu State and Frontier regions meet the stipulated requirements and to inform the Pakistan Commissioner for Indus Waters r∈garding any contravention of this provision by India that may come to their notice.

Article IV(3)

Nothing in this Treaty shall be construed as having the effect of preventing wither Party from undertaking schemes of drainage, river training, conservation of soil against erosion and dredging, or from removal of stones, gravel or sand from the beds of the Rivers: Provided that

(a) in executing any of the schemes mentioned above, each Party will avoid, as far as practicable, any material damage to the other Party; To see that the schemes undertaken in Azad Kashmir and Jammu State and Frontier regions meet the stipulated requirements.

REMARKS

- (b) -----
- (0) -----
- (d) should Pakistan desire to increase the catchment area, beyond the area on the Effective Date, of any natural or artificial drainage or drain, which receives drainage waters from India, or, except in an emergency, to pour any waters into it in expess of the quantities received by it as on the Effective Date, Pakistan shall, before undertakeing any work for these purposes, increase the capacity of that drainage or drain to the extent necessary so as not to impair its officacy for dealing with drainage waters received from India as on the Effective Date.

Article IV(6)

Each Party will use its best endeavours to maintain the natural channels of the Rivers, as on the Effective Date, in such condition as will a-void, as far as practicable, any obstruction to the flow in these channels likely to cause material damage to the other Party.

To see that the obligation undertaken by Pakistan fulfilled and to bring to the notice of the Pakistan Commissioner any contravention of the provision by India.

Article IV(8)

The use of the natural channels of the Rivers for the discharge of flood or other excess water shall be free and not subject to limitation by Either Party, and neither Party shall

To supply to the Pakistan Commissioner for Indus Waters well before every flood season a list of the

REMARKS

have any claim against the other in respect of any damage caused by such use. Each Party agrees to communicate to the other Party, as far in advance as practicable, any information it may have in regard to such extra-ordinary discharges of water from reservoirs and flood flows as may effect the other Party.

sites for which India is to be asked to supply flood data to Pakistan.

Article IV(9)

Each Party declares its intention to operate its storage dams, barages and irrigation canals in such manner, consistent with the normal operations of its hydraulic systems, as to avoid, as far as feasible material damage to the other Farty. To see that the provision is corplied with within Azad Kashmir and Jammu State and the Frontier Regions.

Article IV(10)

Each Party declares its intention to prevent, as far as practicablo, undue pollution of the waters of the Rivers which might affect adversely uses similar in nature to those to which the waters were put on the Effective Date, and agrees to take all reasonable measures to ensure that, before any sewage or industrial waste is allowed to flow into the Rivers, it will be treated, where necessary, in such manner as not materially to affect those uses: Frowided that the criterion of reasonable ness shall be the customary practice in similar situations on the Rivers.

To see that the provision is complied with-in the Agad Kashmir and Jammu State and the Frontier Regions.

REMARKS

Article IV(11)

The Parties agree to adopt, as far as feasible, appropriate measures for the recovery, and restoration to owners, of timber and other property floated or floating down the Rivers, subject to appropriate charges being paid by the owners.

To see that arrangements are made for the recovery of marked drift timber and other property and for keeping it in safecustody till instructions for its disposal or restoration to the owners are given by the Pakistan Commissioner for Indus Waters.

To supply the Pakistan Comm-issioner for Indus Waters, the details of the recoveries made every month

Article IV(12)

The use of water for Industrial purposes under Articles II(2), II(3) and III(2) shall not exceed:

- (a) in the case of an industrial process known on the Effective Date, such quantum of use as was customary in that process on the Effective Date;
- (b) in the case of an industrial process not known on the Effective Date:
 - (i) such quantum of use as was customary on the Effective Date in similar or in any way comparable industrial processes; or

To see that the industrial Uses in Azad Kashmir and Jammu State and the Frontier Regions conform to this provision.

REMARKS

(ii) if there was no industrial process on the Effective Date similar or in any way comparable to the new process, such quantum of use as would not have a substantially adverse affect on the other Party.

Article VI(1)

The following data with respect to the flow in, and utilisation of the waters of, the Rivers shall be exchanged regularly between the Parties:

- (a) Daily (or as observed or estimated less frequently) gauge and discharge data relating to flow of the Rivers at all observation sites.
- (b) Daily extractions for or releases from reservoirs.
- (c) Daily withdrawals at the heads of all canals operated by government or by a government agency (hereinafter in this Article called canals), including link canals.
- (d) Daily escapages from all canals, including link canals.
- (e) Daily deliveries from Link canals.

These data shall be transmitted monthly by each Party to the other as soon as the data for a calendar month have been collected and

To supply to the Pakistan Commissioner for Indus Waters the relevant data observed in Azad Kashmir and Jammu State and the Frontier Regions. The data shall reach the Pakistan Commissioner within two months of the end of the month to which the data relate.

tabulated, but not later than three months after the end of the month to which they relate: Provided that such of the data specified above as are considered by either Party to be necessary for operational purposes shall be supplied daily or at less frequent intervals. as may be requested. Should one Party request the supply of any of these data by telegram, telephone, or wireless, it shall reimburse the other Party for the cost of transmission.

Article VI(2)

If, in addition to the data specified in Paragraph (1) of this Article, either Party requests the supply of any data relating to the hydrology of the Rivers, or to canal or reservoir operation connected with the Rivers, or to any provision of this Treaty, such data shall be supplied by the other Party to the extent that these are available.

To supply to the Pakistan Commissioner for Indus Waters the data requested by him in this connection.

Article VII(1)

The two Parties recognize that they have a common interest in the optimum development of the Rivers, and, to that end, they declare their intention to co-operate, by mutual agreement, to the fullest possible extent.

To supply to the Pakistan Commissioner for Indus Waters as and when necessary, its proposals for works to be undertaken under this Article.

In particular: -

- (a) Each Party, to the extent it considers practicable and on agreement by the other Party to pay the costs to be incurred, will, at the request of the other Party, set up or install such hydrologic observation stations within the drainage basins of the Rivers, and set up or install such meteorological observation stations relating thereto and carry out such observations thereat, as may be requested, and will supply the data so obtained.
- (b) Each Party, to the extent it considers practicable and on agreement by the other Party to pay the costs to be incurred, will, at the request of the other Party, carry out such new drainage works as may be required in connection with new drainage works of the other Party.
- (c) At the request of either Party, the two Parties may, by mutual agreement, co-operate in undertaking engineering works on the Rivers.

The formal arrangements, in each case, shall be as agreed upon between the Parties.

REMARKS

Article VII(2)

/ supply

If either Party plans to construct any enginearing work which would cause interference with the waters of any of the Rivers and which, in its opinion, would affect the other Party materially, it shall notify the other Party of its plans and shall/such data relating to the work as may be available and as would enable the other Party to inform itself of the nature, magnitude and effect of the work. If a work would cause interference with the waters of any of the Rivers but would not, in the opinion of the Party planning it, affect the other Party materially, nevertheless the Party planning the work shall, on request, supply the other Party with such data regarding the nature, magnitude and effect, if any, of the work as may be available.

To supply to the Pakistan Commissioner for Indus Waters data requested by him in this connection.

Article VIII(4)

The purpose and functions of the Commission shall be to establish and maintain co-operative arrangements for the implementation of this Treaty, to promote co-operation between the Parties in the development of the waters of the Rivers and, in particular,

To assist the Pakistan Commissioner for Indus Waters in planning, arranging and undertaking the tours of inspection in Azad Kashmir and Jammu State and Frontier Regions.

- (a) -----
- (b) -----

REMARKS

- (c) to undertake, once in every five years, a general tour of inspection of the Rivers for ascortaining the facts connected with various developments and works on the Rivers.
- (d) to undertake promptly, at the request of either Commissioner, a tour of inspection of such works or sites on the Rivers as may be considered necessary by him for ascertaining the facts connected with those works or sites; and

Annexure (a) Paragraph(9)

On those Tributaries of the Jhelum on which there is any wricultural Use or hydro-lectric use by Pakis-tan, any any Agricultural Use by India shar he so ma-de as not to affect -wersely the then existing Againultural uses developed Use or hydro-electric us. by Pakistan on those Tributar ies.

To keep the Pakistan Commiss. ioner for Indus Waters informed of the Agricultural & hydro electric on the Jhelum tributaries in Azad Kashmir and Jammu State his not any contravent of this provision by India.

Annexure D Paragraph 15

Subject to the provisions of Paragraph 17, the works connected with a Plant shall be so operated that (a) the volume of water received in the river upstream of the Plant, during any period of seven consecutive days, shall be delivered into the river

To keep the Pakistan Commissioner for Indus Waters informed of the Agricultural and hvdro-electric uses developed below the Plant during the same seven-day period, and (b) in any one period of 24 hours within that seven-day period, the volume delivered into the river below the Plant shall be not less than 30%, and not more than 130% of the volume received in the river above the Plant during the same 24-hour period: provided however that:

on the Jhelum tributaries in Azad Kashmir and Jammu State and to bring to his notice any contravention of this provision by India.

- i) where a plant is located at a site on the Chenab Main below Ramban, the volume of water received in the river upstream of the Plant in any one period of 24 hours shall be delivered into the river below the Plant within the same period of 24 hours;
- ii) where a Plant is located at a site on the Chenab Main above Ramban, the volume of water delivered into the river below the Plant in any one period of 24 hours shall not be less than 50% and not more than 130% of the volume received above the Plant during the same 24-hour period; and
- on a Tributary of The
 Jhelum on which Pakistan
 has any Agricultural Use
 or hydro-electric use,
 the water released below
 the Plant may be delivered, if necessary, into
 another Tributary but only
 to the extent that the then
 existing Agricultural Use

REMARKS

or hydro-electric use by Pakistan on the former Tributary would not be adversely affected.

Annexure E Paragraph 10

Notwithstanding the provisions of Paragraph 7, any Storage work to be constructed on a Tributary of The Jhelum on which Pakistan has any Agricultural Use or hydroclectric use shall be so designed and operated as not to adversely affect the then existing Agricultural Use or hydroclectric use on that Tributary.

To keep the Pakidtan Commissioner for Indus Waters informed of the Agricultural and hydro-electric uses developed on the Jhelum Tributaries and to bring to his notice any contravention of this provision by India.

Annexure E Paragraph 17

The flood Storage specified againstitem (b) in Paragraph 7 may be affected only during floods when the discharge of the river exceeds the amount specified for this purpose in the design of the work; the storage above Full Reservoir Level shall be released as quickly as possible after the flood recedes.

To bring to the notice of the Pakistan Commissioner for Indus Waters any contravention of this provision by India that may come to their notice.

MANUAL OF RESPONSIBILITY FOR THE MINISTRY OF INDUSTRIES AND NATURAL RESOURCES

MANUAL OF RESPONSIBILITY FOR THE MINISTRY OF INDUSTRIES AND NATURAL RESOURCES

PROVISIONS OF THE $\mathbf{\bar{A}}$ in $\mathbb{N}^{3}\mathbf{H}\mathbf{U}_{\mathrm{th}}$ REMARKS Article IV(10) Each Party declares To see that the its intention to prevent, provision is as far as practicable, compiled with. undue pollution of the waters/which might affect / of the Rivers adversely uses similar in nature to those to which the waters were put on the Effective Date, and agrees to take all reasonable measures to ensure that, before any sewage or industrial waste is allowed to flow into the Rivers, it will be treated, where necessary, in such manner as not materially to affect those uses: Provided that the criterion of reasonableness shall be the customary practice in similar situations on the Rivers. Article IV(12) The use of water for To collect and industrial purposes under Articles II(2), II(3) and supply to the Pakistan Comm-III(2) shall not exceed: issioner for (a) in the case of an Indus Waters data industrial process regarding the use of waters in the known on the Effective industrial pro-Date, such quantum of use as was customary cesses in Pakistan where subin that process on the Effective Date; stantial quantity of water is (b) in the case of an inused. dustrial process not known on the Effective Date: (i) such quantum of use as was customary on the Effective Date in similar or in any way comparable industrial

process; or

REMARKS

ii) if there was no industrial process on the Effective Date similar or in any way comparable to the new process, such quantum of use as would not have a substantially adverse effect on the other Party.

MANUAL OF RESPONSIBILITY
FOR THE
METEREOLOGICAL DEPARTMENT

MANUAL OF RESPONSIBILITY FOR THE METERIOLOGICAL DEPERTMENT

PROVISIONS OF THE TREATY

REMARKS

".rticle VI(2)

If in addition to the data specified in Paragraph (1) of this Article, either Party requests the supply of any data relating to the hydrology of the Rivers, or to canal or reservoir operation connected with the Rivers, or to any provision of this Treaty, such data shall be supplied by the other Party to the extent that these are available.

To supply to the Pakistan Commissioner for Indus Waters the data requested by him in this connection.

Article VII(1)

The two Parties recognise that they have a common interest in the optimum development of the Rivers, and, to that end, they declare their intention to co-operate, by mutual agreement, to the fullest possible extent. In particular:-

- To supply to the Pakistan Commissioner for Indus Waters, as and when necessary, its proposals for works to be undertaken under this Article.
- (a) Each Party, to the extent it considers practicable and on agreement by the other Party to pay the costs to be incurred, will, at the request of the other Party, set up or install such hydrologic observation stations within the drainage basins of the Rivers, and set up or install such meteorilogical observation stations relating thereto and carry out such observations threat, as may be requested, and will supply the data so obtained.
- (b) Each Party, to the extent it considers practicable and on agreement by the

other party to pay the costs to be incurred, will, at the request of the other Party, carry out such new drainage works as may be required in connection with new drainage works of the other Party.

(c) At the request of the either Party, the two Parties, may, by mutual agreement, co-operate in undertaking engineering works on the Rivers.

The formal arrangements, in each case, shall be as agreed upon between the Parties.

MANUAL OF RESPONSIBILITY
FOR THE
GOVERNMENT OF BALUCHISTAN

MANUAL OF RESPONSIBILITY FOR THE VARIOUS DEPARTMENTS OF THE GOVERNMENT OF BALUCKISTAN

PROVISIONS	OF THE	TREATY	DEPIR	TMENTS I	REMARKS	3
Article IV(10)	clares tion to as far cable, llution waters vers wh affect uses si nature to whice ters we the Eff and agr all rea sures t that, h sewage waste i flow in it will where n such ma materia those u that th reasona be the tice in	prevent as practiundue por of the Rinch might adversely milar in to those of the water to the sonable more allowed to the Rinch adversely or indust so allowed to the Rinch to affect the treat ecessary nuer as allowed to the Rinch to affect the treat ecessary nuer as allowed to the Rinch to affect the treat ecessary nuer as allowed to the Rinch to affect the treat ecessary nuer as allowed to the Rinch to affect the treat ecessary nuer as allowed to the Rinch to affect the treat ecessary nuer as a similar on the Rinch the	ga and Por Del men la	4	To see that provision i complied wi	.ຣ
rticle VI(1)	with res	following spect to , and util of the wa	th∈ li-	Irri- gation and Power	To supply Pakistan (issioner f dus Waters	omm. or I

of, the Rivers shall Depart- relevant data be exchanged regular- ment. for each caler ly between the Parties:

(a) Daily (or as observed or estimated less

for each calendar month with-in two months of the end of the month to which the data relate.

DEPART-MENTS CONCERNED

REMARKS

frequently) gauge and discharge data relating to flow of the Rivers at all observation sires.

- (b) Daily extractions for or releases from reservoirs.
- (c)Daily withdrawals at the heads of all canals operated by government or by a government agency (hereinafter in this Article called canals), including link canals.
- (d)Daily escapages from all canals, including link canals.
- (e)Daily deliveries from link canals.

These data shall be transmitted monthly by each Party to the other as soon as the data for a calendar month have been collected and tabulated, but not later than three months after the end of the month to which they relate: Provided that such of the data specified above as are considered by either Party to be necessary for operational purposes shall be supplied daily or at less frequent intervals, as may be requested. Should one Party request the supply of any of these data by telegram, telephone, or wireless, it shall reimburse the other Party for the cost of transmission.

DEPART-PROVISIONS OF THE TREATY MENTS REMARKS. CONCERNED |

Article VI(2) If, in addition to the data specified in Paragraph (1) of this Article, either Party request the supply of any data relating to the hydrology of the Rivers, or to canalii) Deputy or reservoir operation connected with the Rivers or to any provision of this Treaty, such data shall be supplied by the other Party to the extent that these are available.

i) Irrigation and P_{ower} Department. Commissioner of the districts having areas within the Indus Basin.

To supply to the Pakistan Commissioner for Indus Waters the data requested by him in this connection.

Article VII(2) If either Party plans to construct any engineering work which would cause interference with the waters of any of the Rivers and which, in its opinion, would affect the other Party materially, it shall notify the other Party of its plans and shall supply such data relating to the work as may be available and as would enable the other Party to inform itself of the nature, magnitude and effect of the work. If a work would cause interference with the waters of any of the Rivers but would not, in the opinion of the Party planning it, aff-

ect the other Party materially, nevertheless the Party planning the work shall, on request

supply the other Party with

i) Irrigation and Power Department. ii)

Deputy Commissioners of the districts having areas within the Indus Basin.

To supply to the Pakistan Commissioner for Indus Waters data reguested by him in this connection.

DEPART-MENTS CONCERNED

REMARKS

such data regarding the nature, magnitude and effect, if any, of the work as may be available.

*r+icle VIII(4)

The purpose and i) functions of the Commission shall be to establish and maintain co-operative arrangements for the implementi) Deputy tation of this Treaty, to promote co-operation between the Parties in the development of the waters of the Rivers and, in particular.

- (b)
- (c) to undertake, once in every five years, a general tour of inspection of the Rivers for ascertaining the facts connected with various developments and works on the Rivers.
- (d) to undertake promptly, at the request of either Commissioner, a tour of inspection of such works or sites on the Rivers as may be considered necessary by him for ascertaining the facts connected with those works or sites, and

Irrigation and Power Department. Commissioners of the districts having areas within the Indus Basin.

To assist the Pakistan Commissioner for In-dus Waters in planning arranging and under -taking the tours of inspection in their jurisdiction.

MANUAL OF RESPONSIBILITY
FOR SITE
GOVERNMENT OF N.W.F.P.

MANUAL OF RESPONSIBILITATION OF MARKETS S DEPARTMENTS OF THE GOVERNMENT OF MARKET.

ī	ROMBEK Politika	nic cr	# <u>[</u> [7]		DEPART - LENTS COLCERTED	RELARKO
Article	T.(10)	tts interpretable the River of the Control of	tention is for is for the very in ma o which to the to the is allow is allow	the pre- as prace pollu- thers of ich might ly uses use to hibe wa- on the asures to before any ustrial wed to fivers, outed, y in such at those d that of rea- hall be	Yorks Department	To see that the provis- ion is complied with.

Which VI(1)

The following data with rest of the flow in, and stillzation of the waters of, the important shall be exchanged resultant for the Parties:

(a) Daily (or as observed or estimaked less frequently gauge and discharge data relating to flow of the Rivers at all observation sites. Public Forks Department To supely the Paristan Convission of the mark the relaxant data for each calender month, within two menths of the month to which the data relate

DEPARTMENTS
CONCERNED

REMARKS

- (b) Daily extractions for or releases from reservoirs.
- (c) Daily withdrawals at the heads of all canals operated by government or by a government ment agency (hereinafter in this Article called canals), including link canals.
- (d) Daily escapages from all canals, including link canals.
- (e) Daily deliveries from link canals.

These data shall be transmitted monthly by each Party to the other as soon as the data for a calendar month have been collected and tabulated, but not later than three months after the end of the month to which they relate: Provided that such of the data specified above as are considered by either Party to be necessary for operational purposes shall be supplied daily or at less frequent intervals, as may be requested. Should one Party request the supply of any of these data by telegram, telephone, or wireless, it shall reimburse the other Party for the cost of transmission.

DEPARTURE. PROVISIONS OF ullik $^{
m TREATY}$ I MENTS REMARKS I CONCERNED Article VI(2) If, in addition i) Public

to the data specified in Paragraph (1) of this Article, either Party requests the supply of any data relating to the hydrologii) gy of the Rivers, or to canal or reservoir operation connected with the Rivers, or to any provision of this Treaty, such data shall be supplied by the other Party to the extent that these are available.

Works Depart ment.

All Deputy Commissioners

To supply to the Pakistan Commissioner for Indus Waters the data requested by him in this connection.

Article VII(2)

If either Party plans to construct any engineering work which would cause interference with the waters of any of the Rivers and it. which, in its opinion, would affect the other Party materially, it shall notify the other Party of its plans and shall supply such data relating to the work as may be available and as would enable the other Party to inform itself of the nature, magnitude and effect of the If a work would work. cause interference with the waters of any of the Rivers but would not, in the opinion of the Party planning it, affect the other Party materially, nevertheless the Party planning the work shall, on request supply the other Party

i) Public Morks Department. All Deputy Commissioners.

To supply to the Pakistan Commissioner for Indus Waters data requested in him in this connection.

IDEPART -INENTS ICONCERNED

REMARKS

with such data regarding the nature, magnitude and effect, if any, of the work as may be available.

Article VIII(4)

The purpose and fun- i ctions of the Commission shall be to establish and maintain co-operative arrangements for the implementation of this Treaty, to promote co-operation between the Parties in the development of the waters of the Rivers and, in particular,

- (a)
- (b) ----
- (c) to undertake, once in e-very five years, a general tour of inspection of the Rivers for ascertaining the facts connected with various developments and works on the Rivers.
- (d) to undertake promptly, at the request of
 either Commissioner,
 a tour of inspection
 of such works or
 sites on the Rivers
 as may be considered
 necessary by him for
 ascertaining the facts
 connected with those
 works or sites, and
- (e) -----

 Public Wo-rks Department.

> All Deputy Commissioners.

To assist the Pakistan Commissioner for Indus Waters in planning, arranging and undertaking the tours of inspection in their jurisdiction.

MANUAL OF RESPONSIBILITY
FOR THE
GOVERNMENT OF THE PUNJAB

MANUAL OF RESPONSIBILITY FOR THE VARIOUS DEPARTMENTS OF THE GOVERNMENT OF THE PUNJAB

PROVISIO	NS OF	THE	"REATY	á i4	EPART- ENTS CNCERNED	REMARKS
Article II(2)	Use ar Use, Funder let fl permit with Sutlej Ravi Natlej Ravi Natl	d Nor cakist an old ow, a the war hain tain fain tain and inter ind ar ind ar and and ar and ar and ar and ar and ar and ar and and ar and and ar and and and ar and and and and and and and and and and	for Domes a-Consump an shall bridge interference and the these rivistan and the finally of final te the (a) near ta Bund Suleiman of the B.R.I ream of the B.R.I case of	tive be to not ence the i a- vers i an.	i) Irri- gation and Power Depart- ment. i) Deputy Commi- ssioner of Laho re,Sial kot, Sheikhu pura ar Sahiwal Distric	tan is ful- filled and no water is with- drawn for Consumptive Use, other than Do- mestic Use from the

Article II(3)

Except for Domestic i) Irriga-Use, Non-Consumptive Use and Agricultural Use (as specified in Annexure B), Peristan snari re under an obligation to let flow, and shall not per-ii) Deputy mit any interference with, the waters (while flowing) in Pakistan) of any Tributary which in its natural course joins the Sutlej Main or the Ravi Main before these rivers have finally crossed into Pakistan.

tion and Power Department.

Commissioners of Lahore, Sialkot, Sheikhupura and Sahiwal Districts.

To see that the obligation undertaken by Pakistan is fulfilled and no water is withdrawn for Consumptive Use, other than Domestic Use from the tributaries of the Gutlej and the Ravi which join these rivers in the border

DEPART -MENTS CONCERNED

REMARKS

reaches, except for the withdrawals for Agricultural Use as provided for in Paragraphs 2 and 3 of Annexure B to the Treaty.

Article II(4)

All the waters. while flowing in Pakistan, of any Tributary which, in its natural course, joins the Sutlej Main or the Ravi Main after these rivers have finally crossed into Pakistan shall be available for the unrestricted use of Pakistan: Provided however that this provision shall not be construed as giving Pakistan any claim or right to any releases by India in any such Tributary. If Pakistan should deliver any of the waters of any such Tributary, which on the Effective Date joins the Ravi Main after this river has finally crossed into Pakistan, into a reach of the Ravi Main upstream of this crossing, India shall not make use of these waters; each Party agrees to establish such discharge observation stations/as may be necessary For the determination of the component

Irrigation
and
Power
Department.

As and when : the necessity arises, preposals for th establishment of new discharge observation stations in Pakistan and India should be sent to the Pakistar Commissioner for Indus Waters.

m make such mservations PROVISIONS OF ŭΗE TREATY

DEPART-[MENTS CONCERNED (

REMARKS

of water available for the use of Pakistan on account of the aforesaid deliveries by Pakistan, and Pakistan agrees to meet the cost of establishing the aforesaid discharge observation stations and making the aforesaid observations.

Article III(3)

Pakistan shall have the unrestricted use of all waters originating from sourses other than Depar the Eastern Rivers which ment. are delivered by Pakistan into The Ravi or The Sutlej, and India shall not make use of these waters. Each Party agrees to establish such discharge observation stations and make such observations as may be considered necessary by the Commission for the determination of the component of water available for the use of Pakistan on account of the aforesaid deliveries by Pakistan.

Irrigation and Power Depart-

As and when the necessity arises, proposals: for the establishment of new dis charge observation stations in Pakistan and India shou... be sent to the Pakiston Commission or for Indus Waters.

Article IV(2)

Each Party agrees that any Non-Consumptive Use made by it shall be so made as not to materially change, on account of such use, the flow in any channel to the prejudice of the uses on that channel by the other Party under the

i) Irrigation and Power Department.

To see that the schemes undertaken in Pakistan meet the stipulated requirements

DEPART-PROVISIONS OFuhE. TREATY MENTS REMARKS CONCERNED (

providing of this Treaty. In executing any scheme of flood profection or flood control each Party will avoid, as far as practicable, any material damage to the other Party, and any such scheme carried out by India on the Western Rivers shall not involve anv use of water or any storage in addition to that provided under Article III.

ii) Deputy To see that Commissthe schemes ioners undertaken of Lahore, in Pakistan Sialkot. meet the Sheikhupu-stipulated ra and requirements. Sahiwal Districts.

Article IV(3)

Nothing in this Treaty shall be construed as having the effect of preventing either Party from undertaking schemes of drainage, river train- ii) Deputy ing, conservation of soil against erosion and dredging, or from removal of stones, graval or sand from the beds of the Rivers: Provided that

- (a) in executing any of the schemes mentioned above, each Party will avoid, as far as practicable, any material damage to the other Party:
- (b)

i) Irrigation and P_{ower} Department.

> Commissioners of Lahore, Sialkot, Sheikhupura and Sahiwal Distriets.

To see that the schemes undertaken in Pakistan meet the stipulated requirements and to inform the Pakistan Commissioner for Indus Waters regarding any contravention of the provision by India that may come to their notice.

DEPART - I MENTS I CONCERNED I

REMARKS

- (c) Except as pro-vided in Paragraph (5) and Article VII(1)(b), India shall not take any action to increase the catchment area, beyond the area on the Effective Date, of any natural or artificial drainage or drain which crosses into Pakistan, and shall not under-take such construction or remodelling of any drainage or drain which so crosses or falls into a drainage or drain which so crosses as might cause material damage in Pakistan or entail the construction of a new drain or enlargement of an existing drainage or drain in Pakistan; and
- (d) should Pakistan desire to increase the catchment area, because the Effective Date, of any natural or artificial drainage or drain, which

DEPART-MENTS CONCERNED I

REMARKS

received drainage waters from India, or, except in an emergency, to pour any waters into it in excess of the quantities received by it as on the Effective Date, Pakistan shall, before undertaking any work for these purposes, increase the capacity of that drainage or drain to the extent necessary so as not to impair its efficacy for dealing with drainage waters received from India as on the Effective Date.

Article IV(4)

Pakistan shall maintain in good order tion and its portions of the drainages mentioned below with capacities not less than the capacities as on the Effective Date: -

Irriga-Power Department. complied

To see that this provision is with.

- i) Hudiara Drain
- ii) Kasur Nala
- dii) Salimshah Drain
 - iv) Fazilka Drain

Exticle IV(6)

/ best

Each Party will use its/endeavours to maintain the natural channels of the Rivers, as on the Effective Date, in such condition as will avoid, as far as i) All Depracticable, any

i) Irrigation and P_{ower} Department.

puty Comissioners To see that the **obligation** under-takm by Pakistan is fulfilled and to bring to the notice of the Pakistan

PROVISIONS OF THE TREATY MENTS REMARKS
CONCERNED

obstruction to the flow in these channels likely to cause material damage to the other Party.

Commissioner for Indus Waters any contravention of this provision by India.

Article IV(7)

Neither Party with 1)
take any action which
would have the effect
of diverting the Ravi
Main between Madhopur
and Lahore, or the
Sutlej Main between
Harike and Suleimanke, from its natural
channel between high
banks.

To see that Irrigation the obligaand tion under-Power taken by Pa-Dopar- kistan is tment. fulfilled and to bring to ii) Deputy the notice of Commthe Pakistan issio-Commissioner ners for Indus of La-Waters any Sahiwal contravention of this Sheikhuprovision. pura and by India. Sial kot.

Article IV(8)

The use of the natural channels of the Rivers for the discharge of flood or other excess water shall be free and not subject to limitation by cither Party, and neither Party shall have any claim against the other in respect of any damage caused by such use. Each Party agrees to communicate to the other Party, as far in advance as practicable, any information it may have in regard to such extraordinary discharges of water from reservoirs and flood flows as may effect the other Party.

Te supply Irrigation and to the Pakistan Co-Power Departmmissioner for Indus ment. Waters well before every flood seasen a list of the sites for which India is to be asked to supply floo data to

Pakistan.

DEPART-PROVISIONS OF THE TREATYI MENTS REMARKS CONCERNED | Article IV(9) Each Farty declares Irri-To see that its intention to opgation the provision erate its storage dams, and is complied barrages and irri-Power with. gation canals in such Departmanner, consistent with ment. the normal operations of its hydraulic systems, as to avoid, as far as feasible material damage to the other Party. Article IV(10) Each Party declares i) Irri-To see that its intention to pregation the provent, as far as practivision is and cable, undue pollution Power complied of the waters of the Depart- with. Rivers which might affment. ect adversely uses simi-ii) Induslar in nature to those tries to which the waters Departwere put on the Effective Date, and agrees ment. to take all reasonable measures to ensure that, before any sewage or industrial waste is allowed to flow into the Rivers, it will be treated, where necessary, in such manner as not materia-11y to affect those uses: Provided that the criterion of reasonableness shall be the customary practico in similar situ-

Article IV(11)

The Parties agree to adopt, as far as feasible, appropriate measures for the resovery, and restoration to owners, of timber and other property floated or floating down the

ations on the Rivers.

Forest Department. i) To see that arrangements are made for the recovery of marrived drift timber and other property and

I DEPART-I MENTS I CONCERNED

REMARKS

Rivers, subject to appropriate charges being paid by the owners.

for keeping in in safe custody till instructions for its disposal or restoration to owners are conveyed by the Pakistan Commissioner for Indus Waters.

ii)To supply the details of the recoveries made, every month, to the Pakistan Commissioner for Indus Waters.

Article IV(12)

The use of water for industrial purposes under Articles II(2), II(3) and III(2) shall not exceed:

- (a) in the case of an industrial process known on the Effective Date, such quantum of use as was customary in that process on the Effective Date;
- (b) in the case of an industrial process not known on the Effective Date:
 - such quantum of use as was customary on the Effective Date in similar or in any way comparable industrial process; or

Industries Department. To collect at supply to the Pakistan Countissioner for Indus Waters data regarding the use of waters in the industrial processes in Punjab where substantial quantity of water is used.

PROVISIONS	OF	au HE	TREATY
------------	----	-------	--------

DEPART-MENTS CONCERNED

REMARKS

if there was no industrial process on The Effective Date similar or in any way comparable to the new pro-Cess, such quantum of use as would not have a substantially adverse effect on the other Party.

Article IV(13)

Such part of any water withdrawn for Domestic Use under the provisions of Articles II(3) and III(2) as is subsequently applied to Agricultural Use shall be accounted for as part of the Agricultural Use specified in Annexure B and Annexure C respectively; each Party will use its best endeamours to return to the same river (directly or through one of its $^{\mathrm{T}}$ ribut $\mathbf{\epsilon}_{i}$ 3) all water willdrawn there-from for industrial purposes and not consumed either in the industrial processes for which it was withdrawn or in some other Domestic Use.

i) Board of Revenue

ii) I_ndustries Department

iii) Deputy
Commissioner,
Sialkot

To see that these provisions are complied with.

PROVISIONS	CF	THE	म्रुटि ≅क्ष्रे	IDEPART- IMENTS ICONCERNED	REMARKS
7 - 1 / - 1 - 1 - 1 - 1 - 1					

Article VI(1)

The following data with respect to the flow in, and utilisation of the waters of the Rivers shall be exchanged regular. ly between the Parties:-

- (a) Daily (or as observed or estimated less frequently) gauge and discharge data relating to flow of the Rivers at all observation sites.
- (b) Daily extractions for or releases from reservoirs.
- (c) Daily withdrawals at the heads of all canals operated by government or by a government agency (hereinafter in this Article called canals), including link canals.
- (d) Daily escapages from all canals, including link canals.
- (e) Daily deliveries from link canals.

These data shall be transmitted monthly by each Party to the other as soon as the data for a calendar month have been collected and tabulated, but not later than three months after the end of the month to

Irrigation and Power

To supply to the Pakistan Department. Commissioner for Indus Waters the relevant data for each calendar month, within two months of the end of the month to which the data relate.

DEPART -MENTS CONCERNED

REMARKS

which they relate: Provided that such of the data specified above as ale considered by either Party to be necessary for operational purposes shall be supplied daily or at less frequent intervals, as may be requested. Should one Party request the supply of any of these data by telegram, telephone, or wireless, it shall reimburse the other Party for the cost of transmission.

Article VI(2)

If, in addition to the data specified in Paragraph (1) of this Article, either Party requests the supply of any data relating to the hydrology of the Rivers, or to canal or reservoir operation connected with the Rivers, or to any provision of this Treaty, such data shall be supplied by the other Party to the extent that these are available.

i) Irrigation and Power Department.

ii) All
Deputy
Comma
issioners

To supply to the Pakistan Commissioner for Indus Waters the the data requested by him in this connection.

Article VII(1) The two Parties
recognise that they
have a common interest in the optimum
development of the
Rivers, and, to that
end, they declare their
intention to co-operate,
by mutual agreement, to

Irrigation and Power Department.

To supply to the Takistan Commissioner for Indus Waters, and and when necessary, its proposals for works to be undertaken

I DEPART-I MENTS I CONCERNED

REMARKS

the fullest possible extent. In particular:-

under this Article.

- (a) Each Party, to the extent it considers practicable and on agreement by the other Party to pay the costs to be incurred, will, at the request of the other Farty, set up or install such hydrologic observation stations within the drainage basins of the Rivers. and set up or install such meteorological observation stations relating thereto and carry out such observations thereat. as may be requested, and will supply the data so obtained.
- (b) Each Party, to the extent it considers practicable and on a greement by the other Party to pay the costs to be incurred, will, at the request of the other Party, carry out such new drainage works as may be required in connection with new drainage works of the other Party.
- (c) At the request of the either Party, the two Farties may, by mutual agreement, co-operate in undertaking engineering works on the Rivers.

I DEPART-I MENTS I CONCERNED

REMARKS

The formal arrangements, in each case, shall be as agreed upon between the Parties.

Article VII(2)

If either Party plans to construct any engineering work which would cause interference with the waters of any of the Rivers and which, in its opinion, would affect the other Party materially, it shall notify the other Party of its plans and shall supply such data relating to the work as may be available and as would enable the other Party/inform itself of the nature, magnitude and effect of the work. If a work would cause interference with the waters of any of the rivers but would not, in the opinion of the Party planning it, affect the other Party materially, nevertheless the Party planning the work shall, on request supply the other Party with such data regarding the nature, magnitude and effect, if any, of the work as may be available.

i) Irriga- To supply to tion and the Pakistan Power Commissioner Department. for Indus
ii) All Deputy Requested by Commiss- him in this connection.

<u>/</u> to

Article VIII(4) The purpose and i)
functions of the Commission shall be to establish and maintain
co-operative arrangements for the implementation of this Treaty,

To assist the Irrigation and Pakistan Power Commissioner Departfor Indus ment. Waters in All Deputyplanning, arranging Commissand underioners. taking the

TROVISIONS OF THE THE TY

DEPART MENTS CONCERNED

REMARKS

to promote do-operation botween the Parties in the development of the waters of the Rivers and, in particular,

tours of inspection in their jurisdiction.

- (b) -----
- (c) to undertake, once in every five years, a general tour of inspection of the Rivers for ascertaining the facts dennected with various developments and works on the Rivers:
- (d) to undertake promptly, at the request of either Commissioner, a tour of inspection of such works or sites on the Rivers as may be considered necessary by him for ascertaining the facts connected with those works or sites: and

Annexure B Faradraph 2

Fakistan may with-draw from the Basantar Tributary of The Ravi such waters as may be available and necessary for the irrigation of not more than 100 acres annually.

1) Board $\circ f$

ii) Deputy Commissioner, Sialket

To see that the total Revenue area whother irrigated or **cultivated** on sailab does not exceed the agreed fiaures except in the case of a year of exceptionallheavy floor

			4	7			
PROVIS	ICNS	OF	ТНЕ	ωßΕ «Ἰμ̈́Χ	I DEPA I MENT I CONC		REMARKS
Annexure P Paragraph 3	spec Pak' draw of t tart be a nece yati foll on s Date	ified shan such he follower of control of control of the which which is a fall of the control of	In may callow the bie for that are as the ca	Lie the appropriate the irrivation the Efrican that the start of the irrivation the Efrican the start of the Efrican the Start of the Efrican the Start of the Efrican the Efr	eachii) may y be the ated fec-	Board of Revenue Deputy Comm-issio-ner, Sitalko	ther irri- dated or cultivated on sailab

ion

cultivated after that date: Provided that the total area whether irrigated or cultivated on sailab shall not exceed the limits specified below, except during a year of exceptionally heavy floods when sailab may extend to areas which were not cultivated /sailab as on the Effective Date and when such areas may be cultivated in addition to the limits specified:-Mame of Maximum Tributary Annual

Cultivation (Acres) 14,000 Basamori Be : 26,600

1,800 3,000

Annexura B Paragraph 6

^π່ອຊາດນີ. Ulh

As scor as the statistics for each exop year (co-mmencing with the beginning of kharif and ending with the end of the following rabi) have been compiled at the District Headquarters, but not later than the 30th November following the end

i) Board Revenue.

ii) Deputy Commiss ioner, Sialkot

To supprly this data to the Pakistan Commissioner for

 $I_n dus$ Waters

year of ex-

centionally heavy flors

TREATY THE PROVISIONS OF

DEPART-MENTS CONCERNED

REFARKS

of that crop year, Pakistan shall furnish to India a statement arranged by Tributaries and showing for each of the Districts and Tehsils irrigated or cultivated on sailab from the Tributaries mentioned in Paragraphs 2 and 3:

by 30th September each year.

- (i)the area irrigated, and
- (ii)the area cultivated on sailab.

Annexure D

Subject to the pro-Paragraph 15 visions of Paragraph 17, the works connected with a Plant shall be so operated that (a) the volame of water received in the river upstream of the Plant, during any period of seven consecutive days. shall be delivered into the river below the Plant during the same seven-day period, and (b) in any one period of 24 hours within that seven-day period the volume delivered into the river below the Flantshall be not less than 30% and not more than 130%, of the volume received in the river above the Plant during the same 24-year period: Provided however that:

> (i) where a Plant is located at a site on the Chenab Main below Ramban, the volume of water received in the river upstream of the Plant in any one period of 24 hours shall

Irrigation and Power Department.

To bring to the Pakistan Commissioner for Indus Waters, notice any contravention of this provision by India.

DEPARTMENTS
OONCERNED

REMARKS

be delivered into the river below the Plant within the same period of 24 hours,

ii) where a Plant is located at a sire on the Chenab Main above Ramban, the volume of water delivered into the river below the Plant in any one period of 24 hours shall not be less than 50% and not more than 130%, of the volume received above the Plant during the same/hour period; and

1 24-

iii) where a Plant is located on a Tributary of the Jeelum on which Pakistan has any Agricultural Use or hydroelectric use, the water released below the Plant may be delivered. If necessary, into another Tributary but only to the extent that the then existing hydroelectric use by Pakistan on the former Tributary would not be adversely affected.

MANUAL OF RESPONSIBILITY
FOR THE
GOVERNMENT OF SIND

MANUAL OF RESPONSIBILITY FOR THE VARIOUS DEPARTMENTS OF THE GOVERNMENT OF SIND

PROVIS	CIONS OF THE TR	EATY	DEFART-	T REMARKS
Article IV(1	its intention vent, as far a ticable, undue tion of the war the Rivers which affect adversel similar in natural those to which waters were put Effective Date, agrees to take sonable measure sure that, before sewage or indus waste is allowed flow into the Rit will be treat where necessary such manner as materially to a those uses: Protothat the criterine reasonable mess; be the customary tice in similar ations on the Rit with the criterine ations on the Rit with the criterine ations on the Rit with the customary tice in similar ations on the Rit with the criterine ations on the Rit with the customary tice in similar ations on the Rit with the customary tice in similar ations on the Rit with the customary tice in similar ations on the Rit with the customary tice in similar ations on the Rit with the customary tice in similar ations on the Rit with the customary tice in similar ations on the Rit with the customary tice in similar ations on the Rit with the customary tice in similar ations on the Rit with the customary tice in similar ations on the Rit with the customary tice in similar ations on the Rit with the customary tice in similar ations on the Rit with the customary tice in similar ations on the Rit with the customary tice.	to pre- s prac- pollu- ters of the might ly uses live to the and all rea- es to en- ere any trial d to ivers, ted, in mot ffect lion of shall y prac- situ-	Irriga- tion and Power Depart- ment.	To see that the provision is complied with.
rticle VI(1)	The following with respect to flow in, and uti	the	Irriga- tion and	To supply to the Pakistan

flow in, and utilization of the waters of, the Rivers shall be exchanged regularly between the Parties:-

(a) Daily (or as observed or estimated less frequently) gauge and discharge data relating to flow of the Rivers at all observation sites.

Power Department.

Commissioner for Indus Waters the relevant data for each calendar month, within two months of the end of the month to which the data relate.

DEPART- I MENTS I CONCERNED I

REMARKS

- (b) Daily extractions for or releases from reservoirs.
- (c) Daily withdrawals at the heads of all canals operated by government or by a government agency (hereintafter in this Article called canals), including link canals.
- (d) Daily escapages from all canals, including link canals.
- (e) Daily deliveries from link canals.

These data shall be transmitted monthly by each Party to the other as soon as the data for a calendar month have been collected and tabulated. but not later than three months after the end of the month to which they relate; Provided that such of the data specified above as are considered by either Farty to be necessary for operational purposes shall be supplied daily or at less frequent intervals, as may be requested. Should one Party request the supply of any of these data by telegram, telephone, or

DEPART. I MENTS CONCERNED

REMARKS

wireless, it shall reimburse the other Party for the cost of transmission.

Article VI(2)

If, in addition to the data specified in Paragraph (1) of this Article, either Party requests the supply of any data relating to the hydrology of the Rivers, or to canal or reservoir operation connected with the Rivers, or to any provision of this Treaty, such data shall be supplied by the other Party to the extent that these are available.

i) Irrigation Department.

ii) All Deputv Commissioners

To supply to the Pakistan and Power Commissioner for Indus Waters the data reques. ted by him in this connection.

Article VII(2)

If either Party pla- i) Irrigans to construct any engineering work which would cause interfererence with the waters of any of the Rivers and which, in its op. ii) inion, would affect the other Party materially, it shall notify the other Party of its plans and shall supply such data relating to the work as may be available and as would enable the other Party to inform itself of the nature, magnitude and effect of the work. If a work would cause interference with the waters of any of the Rivers but would not, in the opinion of the Party planning it, affect the other

tion and Power Department.

All Deputy Commissioners.

To supply to the Pakistan Commissioner for Indus Waters data requested by him in this connection.

DEPART-I MENTS CONCERNED

REMARKS

Party materially, nevertheless the Party planning the work shall. on request supply the other Party with such data regarding the nature, magnitude and effect, if any, of the work as may be available.

Article VIII(4) The purpose and functions of the Commission shall be to establish and maintain cooperative arrangements for the implementation ii) All of this Treaty, to promote co-operation between the Parties in the development of the waters of the Rivers and,

in particular,

- (b) --
- (c) to undertake, once in every five years, a general tour of inspection of the Rivers for ascertaining the facts connected with various developments and works on the Rivers:
- (d) To undertake promptly, at the request of either Commissioner, a tour of inspection of such works or sites on the Rivers as may be considered necessary by him for ascertaining the facts connected with those works or sites and

i) Irriga-Power Department.

Deputy Commissioners.

To assist tion and the Pakistan Commissioner for Indus Laters in planning arranging and undertaking the tours of inspection in their jurisdiction.

MANUAL OF RESPONSIBILITY
FOR THE
PAKISTAN WESTERN RAILWAY

MANUAL OF RESPONSIBILITY FOR THE PAKISTAN VESTERN RAILWAY

PROVISIONS OF THE TREATY

REMARKS

Article II(2)

Except for Domestic Use and Non-Consumptive Use, Pakistan shall be under an obligation to let flow, and shall not permit any interference with, the waters of the Sutlej Main and the Ravi Main in the reaches where these rivers flow in Pakistan and have not yet finally crossed into Pakistan. The points of final crossing are the following: near the new Hasta Bund upstream of Suleimanke in the case of the Sutlej Main, and (b) about one and a half miles upstream of the syphon for the B.R.B.D. Link in the case of the Ravi Main.

To see that the obligation undertaken by Pakistan is fulfilled. No water is to be withdrawn, for Consumptive Use, other than Domestic Use, from the border reaches of the two rivers.

Article II(3)

Except for Domestic Use,
Non-Consumptive Use and Agricultural Use (as specified in dertaken by Annexure B), Pakistan shall be and shall not permit any interter is to be ference with, the waters (while withdrawn for flowing in Pakistan) of any
Tributary which in its natural course joins the Sutlej Main or Domestic Use, the Ravi Main before these rivers have finally crossed butaries of the into Pakistan.

To see that the obligation undertaken by Pakistan is ful-Consumptive Tea other than from the tributaries of the Sutlej and the Ravi which join these rivers in the border reaches. except for the withdrawals for Agricultural Use as provided for in Paragra. phs 2 and 3 of Annexure B to the Treaty.

Article IV(2)

Each Party agrees that any Non-Consumptive Use made by it shall be so made as not to materially change, on account of such use, the flow in any channel to the prejudice of the uses on that channel by the other Party under the provisions of this Treaty. In excuting any scheme of flood protection or flood control each Party will avoid, as far as practicable, any material damage to the other Party, and any such scheme carried out by India on the Western Rivers shall not involve any use of water or any storage in addition to that provided under Article III.

To see that th∈ schemes undertaken in Pakistan meet the stipulated requirements.

Article IV(3)

Nothing in this Treaty shall be construed as having the effect of preventing either Party from undertaking schemes of drainage, river training, conservation of soil against erosion and dredging, or from removal of stones, gravel or sand from the beds of the Rivers: Provided that

(a) In executing any of the schemes mentioned above, each Party will avoid, as far as practicable, any material damage to the other Party.

To see that the schemes undertaken in Pakistan meet the stipulated requirements.

Article IV(6)

best endeavours to maintain the natural channels of the Rivers, as on the Effective Date, in such condition as will avoid, as far as practicable, any obstruction to the flow in these channels likely to cause material damage to the other Party. To see that the obligation undertaken by Pakistan is ful-filled.

PROVISIONS OF THE TREATY

REMARKS

Article IV(7)

Neither Party will take any action which would have the effect of diverting the Ravi Main between Madhopur and Lahore, or the Sutlej Main between Harike and Suleimanke, from its natural channel between high banks.

To see that the obligation under · taken by Pakistan is fulfilled.

Article VI(1)

The following data with respects to the flow in, and utilisation of the waters of, Pakistan Commthe Rivers shall be exchanged issioner for Indus regularly between the Parties: - Waters the rele

To supply requa larly to the vant data.

- (a) Daily (or as observed or estimated less frequently) gauge and discharge data relating to flow of the Rivers at all observation sites.
- (b) Daily extractions for or releases from reservoirs.
- (c) Daily withdrawals at the heads of all canals operated by Government or by a Government agency (hereinafter in this Article called canals), including link canals.
- (d) Dairy escapages from all canals, including link canals.
- (e) Daily deliveries from link canals.

These data shall be transmitted monthly by each Party to the other as soon as the data for a calendar month have been collected and tabulated, but not later than three months after the end of the month to which thev relate: Provided that such of the data specified above as are considered by either

Party to be necessary for operational purposes shall be supplied daily or at less frequent intervals, as may be requested. Should one Party request the supply of any of these data by telegram, telephone, or wireless, it shall reimburse the other Party for the cost of transmission.

Article VI(2)

If, in addition to the data specified in Paragraph (1) of this Article, either Party requests the supply of any data relating to the hydrology of the Rivers, or to canal or reservoir operation connected with the Rivers, or to any provision of this Treaty, such data/supplied by the other Party to the extent that these are available.

To supply to the Pakistan Commissioner for Indus Maters the data requested by him in this connection.

/shall be

Article VIII(4) The purpose and functions of the Commission shall be to establish and maintain co-operative arrangements for the implementation of this Treaty, to promote co-operation between the Parties in the development of the waters of the Rivers and in particular,

- (a) ------
- (b) -----
- (c) to undertake, once in every five years, a general tour of inspection of the Rivers for ascertaining the facts connected with various developments and works on the Rivers.

To assist the Pakistan Commissioner for Indus katers in planning, arranging and undertaking the tours of inspection of sites and works on the rivers.

PROVISIONS OF THE TREATY

REMARKS

(d) to undertake promptly, at the request of either Commissioner, a tour of inspection of such works or sites on the Rivers as may be considered necessary by him for ascertaining the facts connected with those works or sites, and

(e)

MANUAL OF RESPONSIBILITY FOR THE WEST PAKISTAN AGRICULTURAL DEVELOPMENT, CORPORATION

MAMUAL OF RESPONSIBILITY FOR THE WEST PAKISTAN AGRICULTURAL DEVELOPMENT CORPORATION

	PROVISIO	NS	OF TH	E TREAT	Y	1 1 1	REMARKS
Article	VIII(4)	sha mai: arco men to) woo: dev. of tion (1)				·t-	To assist the Fakistan Cormissioner for Indus Waters in planning arranging and undertaking the tours of inspection of river were and sites in their jurisdiction.
		(d)	to under at the Commission site or site and the ary by ary by ary by ary the	ne reques ssioner, otion of tes on Si conside him for ne facts	promptly, st of cit a tour of cuch workers red necessarial connected size or six	her f ks as ss- in-	and

MANUAL OF RESPONSIBILITY FOR THE WEST PAKISTAN INDUSTRIAL DEVELOPMENT CORPORATION

MANUAL OF RESPONSIBILITY FOR THE VEST PAKISTAN INDUSTRIAL DEVELOPMENT CORPORATION.

PROVISIONS OF THE TREATY

REMARKS

Article IV(10)

Each Party declares its intention to prevent, as far as practicable, undue pollution of the waters of the Rivers which might affect adversely uses similar in nature to those to which the waters were put on the Effective Date, and agrees to take all reasonable measures to ensure that, before any sewage or industrial waste is allowed to flow into the Rivers, it will be treated, where necessary, in such manner as not materially to affect those uses: Provided that the criterion of reasonableness shall be the customary practice in similar situations on the Rivers.

To see that the provision is complied with.

Artisle IV(12)

The use of water for industrial purposes under Articles II(2), II(3) and III(2) shall not exceed:

- (a) in the case of an industrial process known on the Effective Date, such quantum of use as was customary in that process on the Effective Date;
- (b) in the case of an industrial process not known on the Effective Date:
 - (i) such cuantum of use as was customary on the Effective Date in similar or in any way comparable industrial processes; or

To collect and supply to the Pakistan Commissioner for Indus Waters data regarding the use of waters in the industrial processes in West Pakistan where substantial quantity of water is used.

PROVISIONS OF THE TREATY

REMARKS

(ii) if there was no industrial process on the Effective Date similar or in any way comparable to the new process, such quantum of use as would not have a substantially adverse effect on the other Party.

MANUAL OF RESPONSIBILITY FOR THE
WEST PAKISTAN WATER AND POWER
DEVELOPMENT AUTHORITY

MANUAL OF RESPONSIBILITY FOR THE WEST PAKISTAN WATER AND POWER DEVELOPMENT AUTHORITY

PROVISIONS OF THE TREATY

REMARKS

Article IV(2)

Each Farty agrees that any Non-Consumptive Use made by it shall be so made as not to materially change, on account of such use, the flow in any channel to the prejudice of the uses on that channel by the other Party under the provisions of this Treaty. In executing any scheme of flood protection or flood control each Party will avoid, as far as practicable, any material damage to the other Party, and any such scheme carried out by India on the Western Rivers shall not involve any use of water or any storage in addition to that provided under Article III.

To see that the schemes undertaken in Pakistan meet the stipulated requirements.

Article IV(3)

Nothing in this Treaty shall be construed as having the effect of preventing either Party from undertaking schemes of drainage, river training, conservation of soil against erosion and dredging, or from removal of stones, gravel or sand from the beds of the Rivers: Provided that

 (a) in executing any of the schemes mentioned above, each Party will avoid, as far as practicable, any material damage to the other Party; To see that the schemes undertaken in Pakistan meet the stipulated requirements.

Article IV(6)

Each Party will use its best endeavours to maintain the natural channels of the Rivers, as on the Effective Date, in such condition as will avoid, as far as practicable, any obstruction to

To see that the obligation undertaken by Pakistan is fulfilled and to bring to the notice of the

the flow in these channels likely to cause material damage to the other Party.

Pakistan Commissioner for Indus Waters any contravention of this provision by India.

Article IV(7)

Neither Party will take any a-ction which would have the effect of diverting the Ravi Main between Madhopur and Lahore, orthe Sutlej Main between Harike and Suleimanke, from its natural channel between high banks.

To see that the obligation understaken by Pakistan is fulfilled and to bring to the notice of the Pakistan Commissioner for Indus Waters any contravention of this provision by Indi

Article IV(8)

The use of the natural channels of the Rivers for the discharge of flood or other excess water shall be free and not subject to limitation by Either Party, and neither Party shall have any claim against the other in respect of any damage caused by such use. Each Party agrees to communicate to the other Party, as far in advance as practicable, any information it may have in regard to such extraordinary discharges of water from reservoirs and flood flows as may effect the other Party.

To supply to the Pakistan Commissioner for Indus Waters well before every flood season a list of the sites for which India is to be asked to supply flood data to Pakistan.

Article IV(9)

Each Party declares its intention to operate its storage dams, barrages and irrigation canals in such manner, consistent with the normal operations of its hydraulic systems, as to avoid, as far as feasible material damage to the other Party.

To see that the provision is complied with.

Article VI(1)

The following data with respect to the flow in, and utilization of the waters of, the Rivers shall be exchanged regularly between the Parties:-dus Waters the

To supply regularly to the Pakistan Commissioner for Inrelevant data.

- (a) Daily (or as observed or estimated less frequently) gauge and discharge data relating to flow of the Rivers at all observation sites.
- (b) Daily extractions for or releases from reservoirs.
- (c) Daily withdrawals at the heads of all canals operated by government or by a government agency (hereinafter in this Article called canals), including link canals.
- (d) Daily escapages from all canals, including link canals.
- (e) Daily deliveries from link canals.

These data shall be transmitted monthly by each Party to the other as soon as the data for a calendar month have been collected and tabulated, but not later than three months after the end of the month to which they relate: Provided that such of the data specified above as are considered by either Party to be necessary for operational purposes shall be supplied daily or at less frequent intervals, as may be requested. Should one Party request the supply of any of these data by telegram, telephone, or wireless, it shall reimburse the other Party for the cost of transmission.

PROVISIONS OF THE TRETTY

REMARKS

Article VI(2)

If, in addition to the To data specified in Paragraph Pak (1) of this Article, either iss Party requests the supply of Ind any data relating to the dathydrology of the Rivers, or by to canal or reservoir ope-conration connected with the Rivers, or to any provision of this Treaty, such data shall be supplied by the other Party to the extent that these are available.

To supply to the Pakistan Commissioner for Indus Waters the data requested by him in this connection.

Article VII(1)

The two Parties recognise that they have a common interest in the optimum development of the Rivers, and, to that end, they declare their intention to co-operate, by mutual agreement, to the fullest possible extent, In particular:

To supply to the Pakistan Commissioner for Indus Waters, as and when necessary, its proposals for works to be undertaken under this Article.

- (a) Each Party, to the extent it considers practicable and on agreement by the other Party to pay the costs to be incurred, will, at the request of the other Party, set up or install such hydrologic observation stations within the drainage basins of the Rivers, and set up or install such meteorological observation stations relating thereto and carry out such observations thereat, as may be requested, and will supply the data so obtained.
- (b) Each Party, to the extent it considers practicable and on agreement by the other Party to pay the costs to be incurred, will, at the request of the other Party, carry out such new drainage

works as may be required in connection with the drainage works of the other Farty.

(c)At the request of the either Party, the two Parties may, by mutual acreement, cooperate in undertaking encheering works on the Rivers.

The formal arrangements, in each case, shall be as agreed upon between the Farties.

uticle VII(2)

If either Party plans to construct any engineering work which would cause interference with the waters of any of the Rivers and which, in its opinion, would affect the other Party materially, it shall notify the other Party of its plans and shall supply such data relating to the work as may be available and as would enable the other Party to inform itself of the nature. magnitude and offect of the work. If a work would cause interference with the waters of any of the Rivers but would not, in the opinion of the Party planning it. affect the other Party materially, novertheless the Party planning the work shall, on request, supply the other Party with such data regarding the nature, magnitude and effect, if any, of the work as may be availabl...

To supply to the Pakistan Commissioner for Indus. Waters data requested by him in this connection.

PROVISIONS OF THE TREATY

REMARKS

Article VIII(4)

The purpose and functions of the Commission shall be to establish and maintain co-operative arrangements for the implementation of this Treaty, to promote co-operation between the Parties in the development of the waters of the Rivers and, in particular,

- (a) -----
- (b) -----
- (c) to undertake, once in every five years, a general tour of inspection of the Rivers for ascertaining the facts connected with various developments and works on the Rivers.
- (d) to undertake promptly, at the request of either Commissioner, a tour of inspection of such works or sites on the Rivers as may be considered necessary by him for ascertaining the facts connected with those works or sites; and
- (c) ------------

To assist the Pakistan Commissioner for Indus Waters in planning, arranging and undertaking the tours of inspection within its jurisdiction-

DEFINITIONS OF IMPORTANT TERMS

DEFINITIONS OF IMPORTANT TERMS

The definitions of the important terms used in the Treaty provisions dealt with in this mannual, are reporduced below from Article I of the Treaty and the various paragraphs of the Annexures to the Treaty:-

- 1. The terms "Article" and "Annexure" mean respectively an Article of, and an Annexure to, this Treaty. Except as otherwise indicated, references to Paragraphs are to the paragraphs in the Article or in the Annexure in which the reference is made.
- 2. The term "Tributary" of a river means any surface channel, whether in continuous or intermittent flow and by whatever name called, whose waters in the natural course would fall into that river e.g. a tributary, a torrent, a natural drainage, an artificial drainage, a nadi, a nallah a nai, a khad, a cho. The term also includes any sub-tributary or branch or subsidiary channel, by what-ever name called, whose waters, in the natural course, would directly or otherwise flow into the surface channel.
- 3. The term "The Indus", "The Jhelum", "The Chenab", "The Ravi" The Beas" or "The Sutlej" means the named river (including Connecting Lakes, if any) and all its Tributaries: Provided however that
 - (i) none of the rivers named above shall be deemed to be a "ributary;
 - (ii) The Chenab shall be deemed to include the river Punjnad; and
 - (iii) the river Chandra and the river Bhaga shall be deemed to be Tributaries of the Chenab.
- 4. The term "Main" added after Indus, Jhelum, Chenab, Sutlej, Beas or Ravi means the main stem of the named river excluding its Tributaries, but including all channels and creeks of the main stem of that river and such Connecting Lakes as form part of the main stem itself. The Jhelum Main shall be deemed to extend up to Verinage, and the Chenab Main up to the confluence of the river Chandra and the river Bhaga.

- 5. The term "Eastern Rivers" means The Sutlej, The Beas and the Ravi taken together.
- 6. The term "Western Rivers" means The Indus, The Jhelum and The Chenab taken together.
- 7. The term "the Rivers" means all the rivers, The Sutlej, The Beas, The Ravi, The Indus, The Jhelum and The Chenab.
- 8. The term "Connecting Lake" means any lake which receives water from, or yields water to, any of the Rivers; but any lake which occasionally and irregularly receives only the spill of any of the Rivers and returns only the whole or part of that spill, is not a Connecting Lake.
- 9. The term "Agricultural Use" means the use of water for Irrigation, except for Irrigation of House-hold gardens and Public recreational gardens
- 10. The term "Domestic Use" means the use of water for:
 - (a) drinking, washing, bathing, recreation, sanitation (including the conveyance and dilution of sewage and of industrial and other wastes), stock and poultry, and other like purposes;
 - (b) household and municipal purposes (including use for household gardens and public recreational gardens);
 - (c) industrial purposes (including mining, milling and other like purposes);

but the term does not include Agricultural Use or use for the generation of hydro-clectric power.

11. The term "Non-Consumptive Use" means any control or use of water for navigation, floating of timber of other property, fload protection or flood control, fishing or fish culture, wild life or other like beneficial purposes, provided that, exclusive of seepage and evapor-tion of water incidental to the control or use, the water (undiminished in volume within the practical range of measurement) remains in, or is returned to, the same river or its Tributaries; but the term does not include Agricultural use or use for the generation of hydroelectric power.

- 12. The term "Commissioner" means either of the Commissioner appointed under the provisions of Article VIII(1) and the term "Commission" means the Permanent Indus Commission constituted in accordance with Article VIII(3).
- 13. "The term "interference with the waters" means:
 - (a) Any act of withdrawal therefrom; or
 - (b) Any man-made obstruction to their flow which causes a change in the volume (within the practical range of measurement) of the daily flow of the waters: Provided however that an obstruction which involves only on insignificant and incidental change in the volume of the daily flow, for example, fluctuations due to afflux caused by bridge piers or a temporary by-pass, etc., shall not be deemed tobe an interference with the waters.
- 14. The term "Effective Date" means the date on which this Treaty takes effect in accordance with the provisions of Article XII, that is, the first of April 1960.
- 15. The term "Plant" or Run-of-River Plant means a hydro-electric plant that develops power without Live Storage as an integral part of the plant, except for Pondage and Surcharge Storage.
- 16. "The term "Live Storage" means all storage abov-e Dead Storage.
- The term "Pondage" means Live Storage of only sufficient magnitude to meet the fluctuations in the discharge of the turbines arising from variations in the daily and weekly loads of the plant.
- 18. The term "Surcharge Storage" means controlable storage occupying space above the Full Pondage Level.
- The term "Full Pondage Level" means the level corresponding to the maximum Pondage provided in the design in accordance with Paragraph 8(c) of Annexure D to the Treaty.
- The term "Storage Work" means a work constructed for the purpose of impounding the waters of a stream but excludes
 - (i) a Small Tank

-71works

- (ii) the/specified in Paragraphs 3 and 4 of Annexure D to the Treaty, and
- (iii) a new work constructed in accordance with the provisions of Annexure D to the Treaty.
- The term "Flood Storage Capacity" means that portion of the Reservoir Capacity which is reserved for the temporary storage of flood waters in order to regulate downstream flows, and "Flood Storage" means the corresponding tolume of water.
- ^mhe term Tull Reservoir Level means the level of water in a reservoir corresponding to Conservation Storage Capacity.
- The term "Conservation Storage Capacity" means the Reservoir Capacity excluding Flood Storage Capacity, Dead Storage Capacity and Surcharge Storage Capacity and "Conservation Storage" means the corresponding volume of water.
- The term Dead Storage Capacity means that portions of the Reservoir Capacity which is not used for operational purposes, and "Dead Storage" means the corresponding volume of water.