

**APPORTIONMENT OF THE WATERS OF THE INDUS RIVER SYSTEM**  
**BETWEEN THE PROVINCES OF PAKISTAN**

21st March, 1991, will go down in the history of Pakistan as a pivotal breakthrough in its leap towards the 21st century and turning point in its march towards national consolidation. On that day was unraveled a dispute that had been festering in this part of the subcontinent for the past seventy years. As a follow-up to the meeting of the Chief Ministers at Lahore on March 3, 1991, a meeting of the representatives of the four provinces was held at Lahore on March 04, 1991. Another meeting was held at Karachi on March 16, 1991. The list of participants is attached.

The participants agreed on the following points:-

1. There was an agreement that the issue relating to Apportionment of the Waters of the Indus River System should be settled as quickly as possible,
2. In the light of the accepted water distributional principles the following apportionment was agreed to:-

PROVINCE	KHARIF	RABI	TOTAL
PUNJAB	37.07	18.87	55.94
SINDH	33.94	14.82	48.76
N.W.F.P. (a)	3.48	2.30	5.78
(b) CIVIL CANALS**	1.80	1.20	3.00
BALUCHISTAN	2.85	1.02	3.87
TOTAL	77.34 + 1.80	37.01 +1.20	114.35 +3.00

\*Including already sanctioned Urban and Industrial uses for Metropolitan Karachi.

\*\*Ungauged Civil Canals above the rim stations.

3. N.W.F.P / Baluchistan Projects which are under execution have been provided their authorized quota of water as existing uses.
4. Balance river supplies (including flood supplies and future storages) shall be distributed as below:-

Punjab	SINDH	Balochistan	NWFP	TOTAL
37%	37%	12%	14%	100%

5. Industrial and Urban Water supplies for Metropolitan city, for which there were sanctioned allocations will be accorded priority.

6. The need for storages, wherever feasible on the Indus and other rivers was admitted and recognised by the participants for planned future agricultural development.
7. The need for certain minimum escapage to sea, below Kotri, to check sea intrusion was recognised. Sindh held the view, that the optimum level was 10 M.A.F., which was discussed at length, while other studies indicated lower/higher figures. It was, therefore, decided that further studies would be undertaken to establish the minimal escapage needs down stream Kotri.
8. There would be no restrictions on the Provinces to undertake new projects within their agreed shares.
9. No restrictions are placed on small schemes not exceeding 5000 acres above elevation of 1200 ft. SPD.
10. No restrictions are placed on developing irrigation uses in the Kurram / Gomal / Kohat basins, so long as these do not adversely affect the existing uses on these rivers.
11. There are no restrictions on Baluchistan, to develop the water resources of the Indus right bank tributaries, flowing through its areas.
12. The requirements of LBOD will be met out of the flood supplies in accordance with the agreed sharing formula.
13. For the implementation of this accord, the need to establish an Indus River System Authority was recognised and accepted. It would have headquarters at Lahore and would have representation from all the four provinces.
14.
  - a. The system-wise allocation will be worked out separately, on ten daily basis and will be attached with this agreement as part and parcel of it.
  - b. The record of actual average system uses for the period 1977-82, would form the guide line for developing a future regulation pattern. These ten daily uses would be adjusted pro-prata to correspond to the indicated seasonal allocations of the different canal systems and would form the basis for sharing shortages and surpluses on all Pakistan basis.
  - c. The existing reservoirs would be operated with priority for the irrigation uses of the Provinces.
  - d. The provinces will have the freedom within their allocations to modify system-wise and period-wise uses.
  - e. All efforts would be made to avoid wastages. Any surpluses may be used by another province, but this would not establish any rights to such uses.

**10 – Day Seasonal System Wise Adjusted Allocations  
Excluding Flood Flows & Future Storages are as Under:-**

**INDUS WATER ACCORD  
10-DAY SEASONAL SYSTEMWISE ADJUSTED ALLOCATIONS  
(EXCLUDING FLOOD FLOWS & FUTURE STORAGES)**

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**SINDH – KHARIF**

PERIOD		GUDDU BARRAGE SYSTEM	SUKKUR BARRAGE SYSTEM	KOTRI BARRAGE SYSTEM	TOTAL (1000 X Cc)
APR	1.	0.00	34.00	6.20	40.20
	2.	0.20	34.30	6.80	41.30
	3.	1.40	31.60	6.90	39.90
MAY	1.	3.70	35.10	12.30	51.10
	2.	6.50	39.50	15.70	61.70
	3.	12.60	43.10	21.70	77.40
JUN	1.	22.70	49.10	26.90	98.70
	2.	31.10	56.00	32.50	119.50
	3.	35.20	60.60	33.80	129.60
JUL	1.	41.10	61.20	34.20	136.50
	2.	36.20	57.10	29.80	123.10
	3.	30.10	54.30	31.00	115.40
AUG	1.	28.50	54.00	27.60	110.10
	2.	27.80	54.40	23.40	117.80
	3.	28.70	54.60	23.80	107.10
SEP	1.	26.50	55.10	27.60	109.20
	2.	26.79	55.59	25.10	107.40
	3.	25.79	55.80	23.30	104.90
<b>TOTAL MAF</b>		<b>7.77</b>	<b>17.90</b>	<b>8.27</b>	<b>33.94</b>

**INDUS WATERS ACCORD  
10-DAY SEASONAL SYSTEMWISE ADJUSTED ALLOCATIONS  
(EXCLUDING FLOOD FLOWS & FUTURE STORAGES)**

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**SINDH – RABI**

PERIOD		GUDDU BARRAGE SYSTEM	SUKKUR BARRAGE SYSTEM	KOTRI BARRAGE SYSTEM	TOTAL (1000 X Cc)
OCT	1.	17.60	43.60	18.00	79.20
	2.	10.20	37.80	14.50	62.50
	3.	6.30	33.00	11.30	50.60
NOV	1.	4.10	31.40	9.60	45.10
	2.	3.50	31.40	7.50	42.40
	3.	3.20	31.10	5.70	40.00
DEC	1.	2.60	31.40	5.00	39.00
	2.	1.99	31.80	4.70	38.49
	3.	1.99	26.30	4.50	32.79
JAN	1.	5.40	12.30	3.10	20.80
	2.	10.40	5.40	8.60	24.40
	3.	5.50	20.30	11.70	37.50
FEB	1.	1.30	31.90	8.80	42.00
	2.	1.70	31.10	4.90	37.70
	3.	2.30	30.00	5.20	37.50
MAR	1.	2.70	29.70	4.40	36.80
	2.	3.40	29.40	4.20	37.00
	3.	2.00	28.50	4.70	35.20
<b>TOTAL MAF</b>		<b>1.73</b>	<b>10.34</b>	<b>2.75</b>	<b>14.82</b>

**NOTIFICATION**

The S.O (R&C) 2-91/99-2000-Part II, in line with 10 days Barrage wise allocation given in "Water Accord 1991. the Canal 10-days allocations notified as under.

**KOTRI BARRAGE (KHARIF)**

10 days period	Allocation as per Accord	Kalri Begar Feeder	Akram wah	Old Fuleli	New Fuleli	
April	1	6200	2150	2250	560	1240
	2	6800	1640	2770	760	1630
	3	6900	1380	2760	800	1960
May	1	12300	2200	3020	2200	4880
	2	15700	1820	3410	3650	6820
	3	21700	4410	3370	5220	8700
June	1	26900	5630	3440	6440	11390
	2	32460	6710	3770	8480	13500
	3	33800	6100	3460	9910	14330
July	1	31200	6920	460	10490	13330
	2	29800	6140	3200	9940	10520
	3	31300	7080	3340	9770	11110
Aug	1	27600	5600	3230	9450	9320
	2	23400	5540	2640	7800	7420
	3	23800	5760	2680	8300	7060
Sep	1	27600	6520	3140	8660	9280
	2	25100	7900	2980	6420	7800
	3	23300	7510	3090	5520	7180

**KOTRI BARRAGE (RABI)**

10 days period	Allocation as per Accord	Kalri Begar Feeder	Akram wah	Old Fuleli	New Fuleli	
Oct	1	18000	5510	2510	4190	5790
	2	14500	4200	2100	3500	4700
	3	11300	7300	4000	0	0
Nov	1	9200	5540	3660	0	0
	2	7500	4620	2880	0	0
	3	5700	3120	2580	0	0
Dec	1	5000	2880	2120	0	0
	2	4700	2650	2050	0	0
	3	4500	2580	1920	0	0
Jan	1	3100	1700	1400	0	0
	2	8600	6450	2150	0	0
	3	11700	7940	3760	0	0
Feb	1	8780	5300	3480	0	0
	2	4900	2170	2730	0	0
	3	5200	2690	2510	0	0
March	1	4400	1860	2540	0	0
	2	4200	1680	2520	0	0
	3	4700	2480	2220	0	0

*Actual 1570R  
1630  
0 1400 - 4525*

### GUDU BARRAGE (KHARIF)

10 days period	Allocation as per Accord	Begar Sindh Feeder	Desert Pat Feeder	Ghotki
April	1	0	0	0
	2	200	61	84
	3	1400	546	763
May	1	3700	1609	1324
	2	6500	2844	2340
	3	12600	5562	4577
June	1	22700	11454	6587
	2	31100	15173	8725
	3	35200	17392	10001
July	1	41100	20495	11667
	2	36200	18230	10378
	3	30200	16164	9202
Aug	1	28500	15057	9114
	2	27800	14786	8950
	3	28700	15233	9221
Sep	1	26500	12831	11352
	2	26800	13137	11621
	3	25800	12943	11450

### GUDU BARRAGE (RABI)

10 days period	Allocation as per Accord	Begar Sindh Feeder	Desert Pat Feeder	Ghotki
Oct	1	12210	5510	4190
	2	9800	4200	3500
	3	11300	7300	0
Nov	1	9200	5540	0
	2	7500	4620	0
	3	5700	3120	0
Dec	1	5000	2880	0
	2	4700	2650	0
	3	4500	2580	0
Jan	1	3100	1700	0
	2	8600	6450	0
	3	11700	7940	0
Feb	1	8780	5300	0
	2	4900	2170	0
	3	5200	2690	0
March	1	4400	1860	0
	2	4200	1680	0
	3	4700	2480	0

### SUKKUR BARRAGE (KHARIF)

10 days period	Allocation as per Accord	N.W Canal	Rice Canal	Dadu Canal	Nara Canal	K.F East	Rohri Canal	K.F West	
April	1	36200	2975	0	5355	12420	1800	12000	1650
	2	34900	690	0	5355	12680	1825	12500	1850
	3	31600	650	0	5355	10650	1950	11245	1750
May	1	35100	750	0	5859	12300	2075	12266	1850
	2	40100	1775	3050	5059	12800	2075	13366	1975
	3	43800	2890	4150	4549	13861	2150	14250	1950
June	1	51100	4260	8700	4995	13075	2150	15845	2075
	2	58200	6625	12165	5985	13075	2150	16050	2150
	3	62800	8975	14315	5985	13075	2225	16075	2150
July	1	63400	8475	14355	5837	13675	2075	16963	2020
	2	59300	7088	12650	5837	13075	2125	16525	2000
	3	56600	6900	11188	5237	13625	2125	15525	2000
Aug	1	56200	6650	10925	5450	13750	2175	15250	2000
	2	56625	6425	11600	5350	13750	2250	15100	2150
	3	56800	6550	11400	5300	13750	2525	15125	2150
Sep	1	57300	6425	11150	5650	13750	2525	15650	2150
	2	58700	6875	11150	6300	13750	2550	15925	2150
	3	58000	6430	11000	6300	13750	2550	15900	2070

### SUKKUR BARRAGE (RABI)

10 days period	Allocation as per Accord	N.W Canal	Rice Canal	Dadu Canal	Nara Canal	K.F East	Rohri Canal	K.F West	
Oct	1	44600	5400	9600	4000	10000	2400	11200	2000
	2	38700	4900	5350	4000	10400	2300	10000	1750
	3	33900	3500	3000	4000	9450	2300	10000	1650
Nov	1	32200	3000	0	4200	10000	2250	11000	1750
	2	32300	3250	0	4000	10000	2250	11000	1800
	3	31700	3250	0	4000	9400	2250	11000	1800
Dec	1	32100	3400	0	4000	9400	2250	11250	1800
	2	32500	3400	0	4050	9050	2200	12000	1800
	3	26800	3400	0	3000	8000	1700	9000	1700
Jan	1	12900	2000	0	1000	4400	650	4500	350
	2	6100	1000	0	1000	2000	50	2000	50
	3	21000	4000	0	2000	6400	725	7500	375
Feb	1	32500	3475	0	4500	10425	1600	11500	1000
	2	31855	3475	0	4500	9500	1500	11500	1380
	3	30600	3475	0	4500	8300	1500	11500	1325
March	1	30300	3175	0	4500	8300	1500	11500	1325
	2	30000	3175	0	4200	8300	1500	11500	1325
	3	28900	3175	0	3100	8300	1500	11500	1325