

Mica - water accord (Water Appointment Accord - WAA) → 16-03-1991
approved by LCI on 21-03-1991

- 1 - Essay - Sindhi
- 2 - Current affair - water accord - 1991
- 3 - Baita + Pahaka
- 4 - GSA + EV
- 5 - IR
- 6 - Gender
- 7 - English - 11:00pm



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- Introduction
 - legal issue
 - Law Method of distribution provided in 1945 - commission head by Anderson.
 - Three-tier formula against ^{para 2 of} water accord.
 - Technical issue
 - Discrepancy in water accord system - No share of land groundwater
 - Ground water availability in upper vs Lower riparian
 - Fabricated calculation of water loss from Tunga to sea point
 - ~~recalculation of water loss~~
 - Water Theft -
 - Flood canals flowing all the year.
 - No calculation of ~~water~~ Rain fall stream.
 - ~~No inclusion of water fall stream.~~
 - Inappropriate method of water calculation
 - Average formula → Don't exist in water system according to int. syst. standards.

- Water required for agriculture.

• capacity of Tarbela & Mangla

- ~~Ground Discrepancy in water accord of 1991.~~

- No share of ground water - ground water is ~~water~~ ^{like} channeled/rivers
- No calculation of ~~water~~ Rain fall stream
- Fabricated calculation of water loss b/w Tansa & sea port

- water availability for dam?

- Dam ~~cost~~, time period for ~~build~~

- b \$s cost.
- Require how much time to build up in working condition.
- Its life.
- Frozen asset
- True cost vs economic externalities

- Alternative to Dam:

• Acquire system

• Its sustainability • Its life • Cost:- Dam vs Acquirement

- Water diversion calculation due to barrages on Indus river

• from Tansa to Kotri

- Effects of water shortage on Sindh's crop-

Sokhi Bandar, Kati Bandar, Thatta, Badin.

• 2 million acre has taken away by ~~sea~~ sea.

Water issue

Many villages have been swept away by the sea and the once cultivated fields have become barren ~~fields~~ now like Sokhi Bandar village.

Keti Bandar :-

The changing ebb and flow of the River Indus and the web it forms before meeting up with the sea makes KT ~~B~~ Bandar a river town.

- Way back in 1853, this was a bustling sea that was wiped out
- By 1877, it had built itself to a ~~new~~ town again and after a second calamity it had to be rebuilt once more in 1910.
- The KT Bandar of today is ~~of~~ the fourth settlement to rise up from the watery ashes of yesterday.

~~1932~~ 1932

~~1932~~ 1932

1932

1932	Sulekur Barrage	15 lac cusec
1946	Jinah Barrage	9.5 lac cusec
1955	Kotri Barrage	8.75 lac cusec
1959	Tunsa Barrage.	7.5 lac cusec
1962	Gudu Barrage	12 lac cusec
1971	Chashma Barrage	11 lac cusec
1976	Tarbels	25 lac cusec.

40+17+33
60+30=90

88.75 lac cusec

— Read Book ~~of~~ of Alice Albanic → British Journalist.

+ Alternative to Dam.

↳ Acquirer system. زير (زين) پانی کا نظام

- It is economical and sustainable unlike dam.
- sustainable upto 20 years (gives water storage for 20 years)
- Dam gives water storage for 30 to 45 days

According to water expert, Dr. Hassan Abbas, each dam cost almost \$15b to \$25b & it will ^{require} 15 years, almost to come in working condition.

• Problem

- Frozen asset — no liquidity till its start.
- Its losses are for ∞ centuries but it ~~prog~~ gives profit for years — almost 50 years

Start

- True cost → cost paid by financier, builder, & user
- Economic externalities → Price not paid by financier, builder, user but by other parties → In sindh, poor people along zeropoint of sea are paying this cost.
- ↳ Hurts national unity.

+ Bhasha Dam

Khurid Azhar Memon

Position → On the upper position of Tarbela.

- Replacement to Tarbela.
- Give storage for ^{we} almost 50 years.
- No ~~agrian~~ agricultural land near dam position.
- Work as a check to Tarbela.

Legal Issue.

+ 1945 - commission

- Commission of 8 Engineers headed by Anderson.

"That it should not make any recommendation for withdraws of upper-riparian that may adversely affect not only the ~~existence~~ existing but also the future rights of lower riparian and the waters of Indus Basin system."

+ Indus water Treaty - Ijaz Hussain

"A water agreement was executed ~~betw~~ in sep-1945 between Sindh and Punjab by virtue of which Punjab has to take 1 share of water and Sindh 3 from the Indus basin at Ghazi Ghaat. The agreement fixed prosities and ^{provided} framework for sharing waters of the rivers of Indus basin for canals that existed in 1945 or were to plan in future."

+ Water Accord - 1991 :-

Upper Riparian

- Aquifer water 85% - 90%
- Daily recharge.

lower riparian

- Aquifer water up to 5%
- Remaining saline water.
- Depend upon river flows.

کھانہ تک سے تیس سے کھانا تک سائڈ
پڑا دون سٹاک ہیں - میں نیایا غلا کروں

⇒ Did ~~the~~ Punjab share ground water in 1991 - Accord?
⇒ Ans :- No

According to I. Law, "Ground water is tributary of surface water."

• Ground water is just like a river. It has to be shared.

⇒ Sindh depend upon ~~the~~ down stream Tunsa.

Tunsa $\xrightarrow[1100 \text{ km}]{700 \text{ miles}}$ Sea

• Calculated that Tunsa to sea is 15% loss
• Actually it is 40% because of ~~the~~ ^{high} temperature of Sindh.

1991 Para-2 of water accord in case of shortage of water.

IRSA 3 tiers of water sharing system (Read)

↳ Indus River System Authority

Water is distributed among provinces in accordance with Three Tiers formula since 2003 instead of Water Accord of 1991.

↑ chairman Indus River System Authority - Three Tier formula
Sayed Mazhar Ali Shah

= Illegal ⇒ Three Tier formula is illegal.

• Para-2 2. No other share method of share is applicable except water accord of 1991.

- Sher Zaman Ichar
Current chairman of ERSA
from Balochistan

- Sindh Member: Syed Mazhar Ali

+ Water availability

— After consensus of Bhasha dam — there is no other water to store.

— Water availability report of Napda is not based on scientific method but it is fabricated.

(Water Expert
Khalid Azhar Memon)

(iv) Water losses

Tunsa $\frac{700 \text{ miles}}{1100 \text{ km}}$ Sea.

- low water flow (50k-250k cusec) \Rightarrow 40% to 45% \Rightarrow Evaporation loss.

- Insa report \Rightarrow 15% (fabricated).

\Rightarrow A-N. G. Abbassi, ^{owner} ~~due~~ to low water availability dam will ~~not~~ fill in five years.

• Same statement endorsed by Khalid Azhar Memon.

(20) \Rightarrow Canals in Punjab (link canals) are flood canals.

It means ~~they~~ ~~is~~ ~~then~~ that there will be no ~~water~~ in amount of water in these canals except in the times of flood. But, they operate all over the year. So, they are illegal and unauthorized canals. Off-taking channels are drawn from these link canals.

ex:- Thal canal, Tunsa panjnad canal, Chashma canal, Thelum canal.

(21) \Rightarrow No inclusion of water fall stem.
In Punjab there is lot of raw ~~and~~ in Sindh there is hardly 2 to 3 times raw fall.

⇒ Three studies about down stream ~~canals~~ Sindh canals:-

⇒ Water ministry hired panel of Int. experts on water

① In 5 years, Kotri Barrage must be given ~~25 acre~~ 25 million ^{acres} foot.

⇒ In aquifer ^{management}, We can store 3000 million acre feet ~~water~~ water.

⇒ Tarbela capacity would be equal to acquire capacity of Lahore.

Tarbela and Mangla store almost 13.5 million acre^{ft} water
(Hassan Abbasi water expert)

We need water ^{104 million acre feet} of for agriculture each year.

• If we break & eliminate Tarbela & Mangla from earth there will loss of 10% only in agriculture

⑤ Cruel average formula —

According to water experts like Hassan Abbasi and Khalid Azhar Memon, it is illogical to use average formula for water distribution.

• They try to manipulate ~~statist~~ statistics

Shamsh-ul-Mulle — Pak civil engineer — promoted average formula which hurt the water flow in Sindh.

• In one year if there is 0 m acre ft, in second year also 0 million acre feet, in third year if flood comes with 90 m acre ft they make its average & write in documents as 30 m acre ft/yr

→ Environmental Issue

- ~~Big dams~~ There is consensus of int. ~~water~~ experts on water that big dams are dangerous for biodiversity and ~~ecology~~ ecology.

Three Tiers Formulae

Scenario - 1: Water availability less than Historic uses 1977-1982 (105.23 MAF)

- Distribution as per para 14-b.

Scenario - 2: Water availability more than historic uses (105.23 MAF) and less than Para 2 (114.35 MAF)

- Historic uses are protected.
- Balance available as per para - 2 percentage share.

Scenario - 3: - Water availability more than Para-2 (114.35)

- Distribution as per shares in Para - 2 (114.35 MAF)
- Balance as per para - 4 (Flood flows).

Note KPK and Balochistan are ~~not~~ exempted from shortages.

+ Issue on Water distribution +

Punjab

- Distribution should be on Actual Average system Uses (1977-82) as per para 14(b), as envisaged in WAA, till the ~~achievment~~ achievement of figure of para-2 (114.35 MAF), which is possible only when new reservoirs are constructed.
- In the absence of new storage, distribution on para-2 will affect the Average use of ~~para~~ Punjab during shortages.

Sindh

- Distribution as per para - 2 of the Accord even if availability is less than 114.35 MAF
- Exemption to smaller provinces is the violation of accord.



