

***SENATE OF PAKISTAN
HOUSE OF THE FEDERATION***

Report No. 3



Report of the Senate Special Committee on Water Scarcity

PRESENTED BY

SENATOR MOULA BUX CHANDIO
CONVENER

SENATE SECRETARIAT

REPORT OF THE STANDING SPECIAL COMMITTEE ON WATER SCARCITY

I, Convener of the Standing Special on Water Scarcity, have the honour to present the report on "To examine the issue of water scarcity in the provinces and implementation of Water Accord-1991 in letter and spirit" moved by Senator Syed Muzafar Hussain Shah on 13th April, 2018 and referred by the House to the Special Committee on Water Scarcity for consideration and report thereof.

2. The composition of the Special Committee on Water Scarcity is as under:-

1. Senator Moula Bux Chandio	Convener
2. Senator Sassui Palijo	Member
3. Senator Ch. Tanvir Khan	Member
4. Senator Dr. Ghous Muhammad Khan Niazi	Member
5. Senator Syed Muzafar Hussain Shah	Member
6. Senator Syed Muhammad Sabir Shah	Member
7. Senator Brig (R) John Kenneth Williams	Member
8. Senator Muhammad Akram	Member
9. Senator Sardar Muhammad Shafiq Tareen	Member
10. Senator Anwar-ul-Haq Kakar	Member
11. Senator Khushbakht Shujat	Member
12. Senator Moulana Abdul Ghafoor Haideri	Member

3. The matter was taken up in the meetings of the Special Committee on 03.05.2018, 08.05.2018, 06.09.2018, 17.10.2018 and 21st February, 2019.

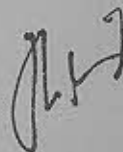
4. The Committee finalized its recommendations in the meeting held on 21st February, 2019 and allowed to submit the report to the House. The following members of the Committee attended the meeting.

1. Senator Moula Bux Chandio	Convener
2. Senator Sassui Palijo	Member
3. Senator Dr. Ghous Muhammad Khan Niazi	Member
4. Senator Brig (R) John Kenneth Williams	Member
5. Senator Khushbakht Shujat	Member
6. Senator Lt. General (R) Abdul Qayyum	Mover

SUMMARY

Global warming and climate change are badly affecting the water resources. Pakistan is probably more challenged than have ever been before but we are not alone. Average temperatures are surging across the globe. According to the Intergovernmental Panel on Climate Change (IPCC), "Drought will become more common and severe across the planet's midlatitudes and subtropics – a cross section of the globe that includes the Mediterranean, the Southwest U.S, the western part of the South America and South Africa." What is happening in Pakistan is not in stricto sensu, the local phenomenon. With the passage of time, the global environment is changing. The teeming population, high indulgence and exploitation of human being with the nature, the decreasing number of forests has resulted in the crisis of water shortage in the country. The expansion in irrigated agricultural land and growing urban areas alongwith the industrialization are putting more stress on water resources. Therefore, an effective management strategy in the field of agriculture and usage of water in household and industrialization can breed better results. Building of more reservoirs cannot be ignored rather it is high need of time. Coastal areas like Gwadar and Karachi portray a very dismal picture of future with reference to scarcity of water in household usage even, what to speak of the industrialization. Southern Punjab and Sindh being lower riparian on Indus Basin irrigation system are badly hit by this water crisis. It is very crucial at this point of time to find ways and means for better management of the system.

Unfortunately, we as a nation could not focus on this important element of life. Neither we could extrapolate the futuristic needs nor examined the effective management strategy of the given resources of water in a scientific way. Resultantly, a



growing competition to obtain maximum share of water resources amongst the provinces emerged. Need of water increased in all the sectors including agriculture, industries, power generation and the domestic use. Day by day it is getting harder for the people of the country to access this scarce resource for productive, consumptive and social usage. In our perspective, inequity in access to water resources is increasing because of competition for limited resources. This competition is particularly affecting rural population who are directly linked with the agriculture. Irrigation is the main stake of our economy and almost 90 percent of total agricultural output is totally dependent on irrigation. At the time of inception, Pakistan was essentially an agriculture based country, that with the passage of time, turned into a diversified economy, as industrialization took hold. It is mentionable that development of industries has not undermined the importance of agriculture in Pakistan although, relatively speaking, the share of agriculture has decreased significantly.

Water resources in Pakistan include rainfall, and the major rainfall in Pakistan is Western depressions (December-March), Monsoons (July-September) during the seasons of Kharif and Rabi, the entire Indus Plane receives an average rainfall of 212 MM and 53 MM respectively.

The agriculture accounts a considerable portion of the total economy of Pakistan. It has 21% contribution to GDP and almost 45% in labour force. At this time while we are looking for export oriented industries as a source of foreign exchange, it is important to note that rice, cotton and cotton based products bring about 65% of our total earnings. Agriculture is also a source of employment in Pakistan. As per the development report of the World Bank (2010) 63% lived in rural areas.



Food security is a serious concern and depends on improvement in agriculture productivity. Agriculture is a performing industry and it is recognized as an important factor in combating wide spread rural poverty. So it also acts as a stabilizing factor in the national economy. All the above factors were duly discussed in the committee meeting and it is a considered opinion of the Committee that it is indispensable to manage water resources and irrigation system properly.

Unfortunately this year we faced acute water shortage. Water available in Tarbela, Mangla and Chashma reservoirs was not only less than last year but also 3.892 MAF less than last 10 years average. It also affected inflows and outflows. It resulted in growing conflict between the provinces. The issue of implementation of Water Accord and the conflicting views of the provinces particularly the Punjab and Sindh surfaced again and again. To discuss and resolve the issue, IRSA meeting was held on 4th January, 2018 in which the following decision was taken by 4:1 majority votes – Member IRSA from Sindh dissented

Scenario I


- Water Availability < Actual Average System Uses 77-82
- Distributed as per 14(b) of the WAA'91

Scenario II

- Water Availability > Actual Average System Uses 77-82 but < Para 2 of WAA 1991
- Actual Average System Uses are protected.
- Balance available as per Para 2 of the WAA'91

Scenario III

- Water Availability > Para 2 of WAA 1991
- Para 2 of the WAA'91 is protected
- Balance as per Para 4 of the WAA 1991



The smaller provinces of KPK & Baluchistan shall remain exempted from sharing of shortages as decided by IRSA on 13.12.2000.”

Eventually the conflicting issue of water distribution was referred to the CCI. It was discussed in its meeting held on 27th May, 2018 and it decided as follows:

“The Council of Common Interests decided to constitute a committee headed by Attorney General of Pakistan and comprising of one representative from each Province. The Committee will look into the current issues of availability of water and its distribution in the country and present its recommendations for consideration of the CCI. The Committee shall also consult the record of proceedings that resulted in approving Water Accord, 1991.”

The Committee constituted by the CCI, headed by Attorney General of Pakistan has held two meetings so far. The first meeting was held on 15th November, 2018 wherein it was decided, that formal notices shall be issued to all the stakeholders to attend 2nd meeting on 4th December, 2018 with the request to furnish their written views on the issue prior to the meeting. The 2nd meeting was held on 4th December, 2018 as scheduled but minutes of the meeting are still awaited. The recommendations of the Committee constituted by the CCI are yet pending in the office of Attorney General of Pakistan.

The IRSA listened to the dissenting views of Sindh Province and submitted the following figures. IRSA was of the view that province of the Punjab was equally sharing shortage upto 38 % as that of Sindh:



PROVINCIAL SHARES (LIKELY SCENARIO)

Period Rabi 18-19	Punjab			Sindh	Baloch.	KPK (Below)	(1000*Cs)	
	J - C	Indus	Total				Total Indus	Total Basin
1	2	3	4	5	6	7	8	9
Oct 1	28.5	27.8	56.3	48.2	4.7	2.3	83.0	111.5
2	26.0	23.5	49.5	36.3	4.1	2.2	66.1	92.1
3	26.0	19.7	45.7	31.4	4.1	2.2	57.3	83.3
Nov 1	25.5	16.8	42.3	31.2	3.2	2.1	53.3	78.8
2	25.0	14.8	39.8	27.9	3.4	2.3	48.3	73.3
3	24.5	13.1	37.6	26.9	2.8	2.3	45.1	69.6
Dec 1	24.0	12.9	36.9	24.9	2.9	2.4	43.1	67.1
2	22.0	12.2	34.2	23.4	2.4	2.2	40.2	62.2
3	14.5	8.8	23.3	18.1	1.8	2.0	30.7	45.2
Jan 1	9.5	11.2	20.7	14.8	2.4	0.0	28.4	37.9
2	10.5	9.0	19.5	19.2	2.8	0.0	31.0	41.5
3	13.5	6.1	19.6	24.6	2.9	0.0	33.6	47.1
Feb 1	16.0	8.2	24.2	24.8	2.5	2.5	38.0	54.0
2	19.5	9.9	29.4	21.1	2.7	2.5	36.2	55.7
3	16.5	10.0	26.5	21.1	2.6	2.5	36.2	52.7
Mar 1	18.5	11.4	29.9	21.8	2.0	2.6	37.8	56.3
2	19.5	13.6	33.1	21.8	2.2	2.6	40.1	59.6
3	26.8	17.5	44.2	25.4	1.5	2.5	46.9	73.6
MAF	7.359	4.949	12.308	9.291	1.022	0.701	15.962	23.321
Shares	11.809	7.942	19.751	14.912	1.022	0.701	24.577	36.386
% Short	-38	-38	-38	-38	0	0		

However the Committee emphasized that 3-Tier formula is not in consonance with the spirit of Water Apportionment Accord 1991. In response to a query about the CJ-Link canal, the process of filling, the past practices and the rules, IRSA authorities submitted that the water of Indus Water System was apportioned as per Water Accord 1991 and Para-14(d) of the Accord grants freedom to all the stakeholders to modify system-wise and period-wise uses within their allocations.


Para-14(d) is re-produced:

“The provinces will have the freedom within allocations to modify the system-wise and period-wise uses.”

The provinces, according to IRSA, are free to use their allocated share in any canal system and operate in any link channel.

RECOMMENDATIONS

- (i) The Committee directed that IRSA should act upon the Water Apportionment Accord, 1991 in letter and spirit till decision of the committee headed by Attorney General of Pakistan.
- (ii) The Committee directed that the decision of the Attorney General of Pakistan be facilitated to avoid undue delay causing heart burning amongst the provinces.
- (iii) It is direly needed to construct additional storage for inter-sessional and inter-year transfer of water for optimum utilization.
- (iv) The losses in canals can be eliminated by lining in areas of high water loss and saline zones.
- (v) Advance systems of irrigation application as drip, sprinkler etc. should be used for more crop per drop.
- (vi) Efficient utilization of water is crucial. Therefore careful and wise use of water in agriculture, domestic and industrial sector is need of the hour.
- (vii) Water charges/bill for usage need to be rationalized for water conservation and revenue generation.
- (viii) Due to heavy over ground water pumping, the water table is lowering down. Arrangements should be made to recharge the aquifer by using flood water by constructing Delay Action Dams, Underground Dams etc.


(JAVAID IQBAL)
Secretary Committee


(SENATOR MOULA BUX CHANDIO)
Convener