



Review of World Bank Two Most Terrible Moves Resulting in All Ever Increasing, Terrible Climate Calamities over the Entire Earth Globe along with Continuous Huge Disasters in Pakistan

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Abstract

The World Bank (WB) has been recommending and financing programs to various countries for their developments and some arbitration too in some issues between various countries, but two of its moves have not only brought persistently increasing disaster locally in Pakistan, but have opened huge Gates for continuously boosted almost all extremely huge Catastrophic Climate Calamities over the entire Earth Globe. The first one is terrible Indus water Treaty 1960 (IWT) between India and Pakistan sponsored by WB which blocked dissipation of 14.235 ZJ (Zeta Joules = 10^{21} Joules) Earth Global heat per year by the naturally established unique Huge Global Air Conditioner (GAC). Henceforth Global Heat Contents and Temperature (GHT) is continuously building up at extremely huge rate of 16.48 ZJ, the 2.255 ZJ being contribution of all other Global contributors. This is resulting into continuously increasing floods of catastrophic calamities over the entire Globe. This GAC was badly crippled by WB through diversion of its Freon, the 39 million acre-feet water of eastern three rivers of Pakistan irrigating its southeastern area to India. The 2nd terrible move was the misleading recommendations for developments of Water and Power Resources of Pakistan. The Pakistani Resources having heat transporting potential of 25.673 ZJ per year and successfully extinguishing the fire being continuously fueled IWT were blocked from playing their role in control of Global Climate Calamities. Both these are discussed particularly highlighting the WB blunders in the light of scientific and Global Heating vision and way forward is shown in this work for safe existence of life on the Earth Globe. The entire world is motivated to immediately mobilize exporter of GHT, the complete GAC system, through

immediate developments of all infrastructures required for 3 unique parts of Pakistan's WEPC to safely defuse the 60 years piled up heap of this huge terrible GHT explosive and crush its all terrible tribes. This work reiterates that if its recommendations are carried out fully, the GHT, its all terrible tribes and Global Climate Calamities, will come down to their pre-1960 status in 42 years excluding 10 years their mobilization period. It also sternly asserts that activation of complete Pakistan irrigation role in GAC is all unique and vital and has no substitute or alternate.

Subject Areas

Environmental Sciences, Global climatology

Keywords

Water Evaporation and Precipitation Cycle, Global Heat Export to Outer Space, Persian Air Wheel Heat Pump, Indus Water Treaty, Pakistan Irrigation as Coolant of Global Air Conditioner

1. Introduction

The Earth Globe is facing number of extremely acute problems and calamities continuously increasing both in numbers and in intensity with time particularly much sharply after 1960-73. The mother of almost all these is the continuously rising Global Heat Contents and Temperature (GHT) [1]. In the early 20th century, this situation was designated as climate change, then in its middle, it was named as Global warming and in its late decades it was asserted as Global heating/Global Climate Emergencies and the situation is deteriorating so quickly that soon it will probably be named as Global Boiling or Roasting if its blocking rather reversal measures are not taken up immediately. Some of the contributors to 16.48 ZJ annual heat input to the Global Environmental, mainly the human activities have been recognized, but sum of their all contribution is only about 2 ZJ. The major and basic one which entered this battlefield in 1960-73 with a firing power of 14.235 ZJ pointed out and proved in [1] [2] [3] [4] and reviewed and upgraded in [5] is not yet world widely recognized and hence no successful measure to block this activist has yet been approved. This culprit was recognized in [1] as implementation of Indus water treaty (IWT), sponsored by WB, USA, UK, Australia, West (then) Germany etc. As per this treaty diversion measure of all 39 MAF water of eastern 3 rivers of Pakistan to India started since 1960 and completed in about 10 - 12 years in successive steps. This 39 MAF irrigating only and only southeastern Pakistan was the Freon of huge Global Air Conditioner (GAC) [1], which was thus blocked. The rise in rate of GHC growth (2 to 16.48 ZJ) and GHT is locked-up with this Freon, and this is self-evident from all the graphs of GHC, Global Temperatures, Global calamities etc both in the 10 - 12 years transition period and also thereafter. One of its affected adversaries is Northern Atlantic Hurricanes (NAH), which has experienced extreme critical rise

in its 15 characteristic parameters only in the era of IWT activation [4].

Some more major aftermaths of the IWT are elaborated in [5] as given below along with confirmation of the mechanism of unique Global role of Pakistani irrigation systems through Indian air wheels and monsoons on the Global Climate.

1) Huge but at different levels heating of major World Oceans as per their location in the IWT line of fire.

2) Monotonic response of Polar and glacier Ice sublimation growth rate, with obvious lead of Greenland on account of direct attack through NAH, the recipient of major share of IWT aftermath and also due to both being neighbors in the same quarter of Northern Hemisphere.

3) Six times increase in rate of their ice sublimation as compared to that in 1990s [6] is obviously due to buildup heap of GHC and the growth of driving temperature difference.

4) Monotonic response of brakes applied to sublimations rate of polar and Alpine glaciers by GAC activated with Freon feed from Pakistani floods and hence an instant small Global cooling [5].

5) About 95% dependency and close linkage of Major NAH with Indus River flows and hence its sponsor, the Indian Monsoons [5].

The GAC, the actual global temperature reliever through heat export to troposphere, has thus been crippled badly by IWT and ultimately the heat load is shifted to the other two Global temperature reliever without heat export *i.e.* its sleeping partners, the World Oceans and the ice of poles and glaciers [2] [5] stated at number 1 - 3 above and they are giving way to this undue, unnatural and unprecedented attack, both extremely critical and with serious aftermaths.

The IWT have been under wide discussions not only in India and Pakistan, but also at International forums, UNO and WB circles within the views of world peace, legal gentility, riparian water right safety, across borders hostilities controls, its silence about the response to climate affects etc and a few to its possible role in climate changes in the local domain [7]-[12], but non found it to be the basic and major culprit behind the curtain of GHT and is the Prime Mover and driver of all the extreme Global Climate Calamities. This was caught red handed and successful comprehensive solution to overcome this nightmare discussed in references [1] [2] [3] [4] [5] is awaiting worldwide approval and support of scientific community and its forceful affirmation and strong assertion to their governments, media and ministries handling environmental issues. *In the mean times world must also recognize the major blunders responsible to and boosting these problems and scientific logic in their deactivation measures. The major one of these is implementation of Indus Water Treaty of 1960 (IWT) [13] [14] sponsored by WB and USA along with various other countries.* This move of WB has hurled down the Earth Globe and its all inhabitants to ever increasing disasters and is continuously poring petrol on this fire through continuous blocking the export of 14.235 ZJ Global Heat/year to outer space by blockage of Southeastern Pakistan irrigation supply [5]. Another possible export of 25.673 ZJ per year [5] was possible through optimum development of Water

and Power Resources, but by misguiding and promoting extremely huge hurdles through the implementation of terrible recommendations report on these Resources again by WB [15] de-tracked this opportunity. This opportunity was provided to WB in about 1963 and if it was not misguided, it would have been pumping out 9.893 ZJ Global heat per year by 1975 and by about 2000 another 15.78 ZJ Global heat per year. Unfortunately, the WB lost this opportunity and completely mismanaged, mishandled and derailed Pakistan in benefiting from its resources so badly either by their incompetency or by biased actions or willful misguidance, but surely unknowing the extremely terrible Global aftermaths of its both moves. The decision makers; judges, rulers, jurists, arbitrators, member of the committees recommending about the cases of high bilateral concerns, scientific organization and Engineering concerns must not be prejudiced, biased or under undue pressures and should see their decisions from all angles to avoid their unsuitable long and short term consequences and repercussions on human beings. Many of such decisions have rolled a millions of peoples in an endless pit of continuous calamities and disasters. The above stated two moves, 1) IWT-1960 implementation and 2) WB de-tracking recommendations about mobilizing the “Water and Power Resources of West Pakistan” are supporting, promoting and in continuation of the calamities of 3) Award of Redcliff Commission on Partition of Indian Subcontinent in 1947 and thus unknowingly have heavily pounded the entire Globe with continuously increasing numerous disasters and calamities. Not only Pakistan and its population is continuously paying a huge price of all these horrible moves but to the extreme astonishment, these all and perhaps mainly these all if not only these all have very secretly released number of huge herds of global dragons, devils, tigers and wolfs attacking on all the Global livings, both the animal and agro-plants, both on the surface of earth and beneath the water surface. These dragons are the GHT and its all tribe, extremely huge snow, hails and wind storms, hurricanes, tornados, typhoons, floods, extreme heat waves, wildfire, earthquakes, tsunamis and out bursting of volcanoes disasters etc. on the entire Globe and these dragons are hunting their prey very mercilessly. The IWT have the major role in boosting GHT, the mother of almost all of these dragons as proved in [1] [2] [3] and it's both direct and indirect roles in boosting NAH Tribe as presented in [4] [5], while aftermath of WB recommendations is pointed out in reference [3] [5] and that of Celestial boosters in [16]. The discrepancies and faults in strategies, principle and ideologies of WB have been elaborated in [17] while blunders in its estimates and recommendations are analyzed in this work in view of Global Climate Calamities control. The IWT being the aftermath of 3rd, while 2nd is also due to the scenario created by 3rd and the 1st one, thus the 3rd one is more responsible of all this than the first two. The 3rd one provided base and ground for the other two, hence its main implications need elaborations preceding the rest.

2. Redcliff Commission, the Most Terrible Move

At the partition of Subcontinent in 1947, joint collaboration of Indian Congress,

Redcliff Commission and Lord Mountbatten carried out number of drastic moves against Pakistan which gave birth to endless series of problem for Pakistan, people of both India and Pakistan, people of whole the World through shattering of global peace, detonating the extremely terrible Global Heating and all its children and colleagues throughout the Earth Globe. One of these terrible moves was the award of highly Muslim Populated two Tehsils of Gurdaspur to India to provide her an access to Kashmir and thus enabling India to claim the right on Indus river system against the prevalent water distribution and usage status. This move along with extreme perhaps willful mismanagements on the part of British Government Administration wide opened the gates of extreme disasters like

1) Indian Government sponsored Willful assassination of millions of Muslim and in reaction hundreds of Hindus and Sikhs at partition and in India the game is still continuously carrying on after 73 years against minorities particularly the Muslims sponsored by RSS doctrines.

2) Indian occupation of Kashmir and continuous attacks on Kashmiri public on both sides of Line of Control.

3) Continuous bombing and terrorist activities targeting all interests of Pakistan including its general public, even too young and innocent school children throughout Pakistan sponsored by Indian Intelligence RAW.

4) Indian Self Sponsored Dramas of terrorism to keep Pakistan always under pressure along with cleverly fooling World Media, Rulers, Think tanks and Intelligentsia.

5) Continuous inhuman terrible atrocities to millions of Kashmir's folk, particularly women and children every year by the brutality of Indian Army since then. India has banned the entry of Human Rights Commissions of the entire world and all the International Media in Kashmir and fooling the whole world from reporting of almost all of these atrocities.

6) Gave access of all the Pakistani rivers in Kashmir to the India and thus put the life on the Earth Globe on extremely terrible as well as horrible stack.

7) Snatched all the flow of three eastern rivers against the traditions, against the existing usage, against the existing flow pattern, against the logical equal distribution of flow per unit irrigate-able area. **India has 1440 MAF rivers flow (Without the 39 MAF transferred to India by IWT) & 1520 MAF rain fall; thus total about 2960 MAF i.e. 1091 Acre foot/ some unit of cultivatable areas, while Pakistan has 142 MAF rivers flow excluding the above stated 39 MAF & 40 MAF rain Fall; Total = 182 MAF i.e. 416 Acre foot/same unit of cultivatable areas. Thus Indian had already 2.62 times more flow per unit irrigated area than Pakistan) [18].**

8) Indians have terrible designs about the other three rivers and are continuously indulged in their obstruction through dams' constructions and flow diversions.

9) Indians have always tried to fill the dams on these rivers before the monsoons and discharge it, all of a sudden at the peak of monsoons flow to extremely

inundate Pakistan and its population with extremely critical floods. An immediate and effective solution to hand over the flow management of all these dams to Pakistan as the Indian can never be trusted in their right full, correct and logical operation.

10) Deprived Pakistan almost completely from its due share in all the resources, like finances, reserves, military hardware, state-owned Industries, water flow resources etc.

11) Pushed the boarder near head works to Pakistan side to give their whole control to India.

12) Have resulted in almost four battles between India and Pakistan.

13) Always putting all efforts in obstructing developments both in Pakistan and Kashmir like CPEC, Karakorum highways, Dams in Pakistan, and that in Pakistani held Kashmir.

14) It, provided the scenario for IWT-1960 and WBR implementation, which

a) has rolled the ever increasing Global Heating, hurricanes, tornados, typhoons, wind and snow storms, heavy rain, floods disasters on the Earth Globe and all its inhabitants through implementation of IWT-1960, thus obstructing the outflow of 14.235 ZJ of Global Heat/year since 1973, rather 1960 [1] [5].

b) Particularly resulted in huge losses of property and life in Caribbean countries, USA, Canada and Europe through NAH being continuously promoted by IWT since 1960.

c) The winter snow storms are also agitated by GHT buildup again continuously fueled by IWT [1] [5].

15) It has resulted in extremely terrible and lethal gifts, not only for all the humanity on the Earth Globe but for all the living animals and plants. One of these is IWT, huge train engineered by worthy WB, India, USA, UK, Canada, Australia, Germany and France etc., continuously running fully loaded and efficiently dispersing ever increasing Global disasters and calamities through 14.235 ZJ heat injected yearly into the Earth Globe. The 2nd is the disastrous aftermath of WB recommendation Report on Water and Power Resources of Pakistan which detonated annually 25.673 ZJ Global heat dissipation potential.

16) Along with these huge and extreme floods of ever increasing disaster as stated below, this terrible move has created number of persisting and ever mounting problems, differences, enmity, conflicts and wars.

3. Indus Water Treaty, the Most Terrible Move

In early 1960, Indus Water Treaty was enforced by World Bank and its supporters on Pakistan and hence, Pakistan was deprived of 39 MAF water of its three rivers; Ravi, Bias and Sutlej, perishing the echo system of Entire Global environments. This was not the first, rather it was the 3rd and most sever attack on this area and most sever on the whole Globe. One such setback of immense Global environmental concern has been received some 4000 years ago by rever-

sion of river Sarasvati [19] to India, and another, the 2nd one, a few hundred years ago by barraging and reversion of rivers Ghaghar-Hakra-Nara [20] again to India which were irrigating Chulistan and Thar of Sindh. The earlier two, being in the pre-industrialization age and compensation by flow of the three rivers; Ravi, Bias and Sutlej were not noticed through environmental effects, although these might have boosted the hard and dry season in Northern Africa including deserting of Sahara and Middle East and quitting of the last ice age of the Earth Globe. This 3rd move has hurled whole the Earth Globe into a deep hell and since then it is falling deeper and deeper with increasing extreme troubles and disasters. Every year heat contents of this globe are increasing, starting from about 2 ZJ per year in 1960 to more than 16.84 ZJ per year since 1970 [1] [3] [5]. To understand the situation, it is necessary to know the mechanism and working of the natural complex Global Air Conditioning System (GAC) [5] which has been blocked by IWT. The working of this natural GAC starts with rising of air heated by the Sun heat on the Chulistan, Rajasthan and Thar deserts of Indian subcontinent. Here Sea to land breeze drags it along with itself towards north in the summer and by July 15th, this breeze drops and the rising air forms westward rolling air wheels. From November onward, land to sea breeze drags these air wheels along with itself towards south. In winter air rising phenomenon drops under cold environment and in spring this situation prevails again due to remnants of cold environment except westward slipping of about 7% - 10% of their average peak since 24th April [5] [16] [17]. The rising and westward rolling of the air wheels heated at these deserts near the earth surface by the sun radiations when fully blended with water vapors at southeastern Pakistan through its irrigation supply carry on transporting Global heat to the troposphere as a Persian Air Wheel Heat Pump, evaporating and absorbing heat in its lower half and condensation with vomiting and ejecting global heat absorbed during evaporation to troposphere right from Pakistan till their journey to the western end of Atlantic Ocean and a few of these even crossover to the western end of Pacific. The second *i.e.* the Southern part of these air wheels rollover the Indian Ocean and Eastern Coast of Africa till the Southern Ocean with the same mission. The water absorbed by these air wheels from the Southeastern Pakistan acts as coolant in this GAC system like Freon in the refrigerator.

The above stated Sahara part of air wheels is more forceful being in the main stream of easterlies, having direct push of Indian Monsoons and most efficient due to highest driving temperature difference available on Sahara route of Africa than its Indian Ocean route [5]. The basic and prime role in this system is that of water vapors with capability of more than 88.24% of the heat transport to outer universe while less than 11.76% is that of its other constituents including air [5]. This system with above stated location and components is **unique in whole the world**. Its air wheels roll more than 117 times on Sahara track till middle of the Atlantic and more than 127 times on the Indian Ocean track till Southern Ocean transporting more than **14.235 ZJ Global heat only by its water vapors component** which have been unknowingly blocked by WB terrible move of IWT

implementation [5]. This has shattered whole the Earth Global and its GHT stability and put it on wheels on a downward steeply inclined track terribly loading GHT day by day. Also about 15 characteristics parameters of NAH were found to be extremely agitated mainly and only in IWT era [4]. Also about 95% collaboration and dependence of NAH was found to be on Indian monsoons shown by their matching with Indus river flows [17], while Alpine glaciers sublimation rate reduction instantly 80% - 90% match with GAC cooling as a result of Freon feed by evaporation of Pakistani floods water escaped out of river channel along with diminishing rise in Oceanic heat contents and melting of polar ice exactly matching the developed obstruction in GHT growth by this short feed of Freon to GAC [5]. Green land leads on Antarctica and reported 6 times growth in their rate of melting as compared to that in 1990's [6] are all exactly matching with the GHT buildup by IWT terrible role [5].

In simple words, along with creation of the Earth Globe, God created its Unique Huge Global Air Conditioner (GAC) to control its heat contents and temperature and set a continuous supply of its fresh coolant, the water through irrigation of southeastern Pakistan, but WB unknowingly diverted it to India through IWT-1960 against the prevalent flow distribution, usage and natural flow route and particularly against the Global Climate extremely vital needs. This is **continuously jeopardizing** the Global health and peace with **continuously increasing pace**. This needs immediate reversal of IWT-1960 to restore the continuous supply of coolant of GAC, the 39 MAF irrigation water to Southeastern Pakistan.

4. World Bank Recommendation on Water & Power Resources

The WB 2nd terrible move is the implementation of its Recommendations on development of "Water and Power Resources of West Pakistan" submitted to Government of Pakistan in July 1967. This has ruined Pakistan and hurled endless floods of disasters on the whole World through obstructing Pakistan in its further possible role of Global Heat dissipation to the outer space. With the vision of Global heat dissipation, the optimum development of water resources, Pakistan would have dissipated 25.673 ZJ Global heats per year, while if this is accompanied by the 39 MAF water of IWT reverted back to Pakistan, it can pump out 40 ZJ Global Heat per year. Thus it not only can snub the 16.48 ZJ annual Global Heat contents growths [3] [5] but can also drain out in about 42 years all the 807 ZJ Global heat accumulated in preceding 60 years, going to become 973 ZJ by the next 10 years, as a result of terrible move of IWT-1960 [5]. After completing this goal in these 52 years, it will rebuild the polar and world glaciers along with relief from the aftermath of all human further such drastic moves. It needs the development of all the infrastructures of Pakistan water evaporation and precipitation cycle and other allied projects. Pakistan is badly affected by recommendations of this WB report and also the whole world both directly and indirectly, *may it be incompetency, ignorance or by fault or by no*

vision about global climate emergency and no vision of its only and unique way-out. But, otherwise too, its recommendations are not logical and technically appropriate and one is forced to say it as disastrous for Pakistan. Only a few most important terrible recommendations are discussed here below pertaining mainly to issue of Global Climate Emergency control. WB recommendations has unknowingly removed all possible hurdles and cleared the way for extremely huge continuously running flood of ever increasing horrible Global Calamities and disasters. The mandate of WB was to guide/suggest about development of water and power resources to

1) Make available not only maximum suitable water for maximum possible irrigation needs, but also for future needs in all possible adverse situations and conditions developed by monsoon roaming both in time and space, especially its 37 year cycle.

2) Suggest optimum and comprehensive irrigation system to cover-up the deficiencies generated by the IWT implementation.

3) Avoid all possible disasters of floods through all possible storage dams.

4) Make available most economical, safe and suitable hydro electrical power for maximum possible present and future needs of all Pakistan through all possible storage dams and optimum power generation, transmission and distribution systems.

But WB did it almost exactly opposite perhaps by its incapability and **surely without any vision of its horrible consequences on the Global Heating, Temperature rise, Environmental Issues and extremely huge continuously running flood of ever increasing Global Calamities.** Thus, it has resulted into huge continuously running trains spreading calamities and disasters over the entire world. In place of en-cashing maximum resources for development of Pakistan and advising optimum and comprehensive solution of all possible hurdles, it rather tried to **over** minimize their availability even by promoting all possible or impossible hurdles and inaccurate **reasoning.** A bit detail of its disastrous and adverse approaches is outlined below, while a brief overview of its illogical and unscientific strategies and ideologies is given in [17].

4.1. Terrible Recommendations about Power Generations

Pakistan has more than 86,000 - 95,000 MW hydro-electric power generations potential (**Table 1**) **free from all Heat, greenhouse gasses, pollution and soot (HGPS)** over and above its huge solar and wind power potentials again free from HGPS. In hydro, God has gifted Pakistan in abundance with both the hydropower required parameters of its water resources; the large flow quantity and its extremely high head. In spite of this, WB in final stage has recommended only 1471 MW hydro (**already in pipeline**) against 4867 MW fossil fuel based production almost 3.3 times than hydro by 1967-1975. It has also heavily emphasized fossil fuel as too much cheaper alternate as compared to power generation at multipurpose Tarbela dam [15]. **At present fossil fuel generated power is 30 - 35 times costlier than the hydro, all free from HGPS and risks of fuel supply and price hike.** This shows most terrible lack of future vision of WB

team. WB has added extremely large troubles, extremely huge economic burden and huge disasters to the Pakistan through detonating the bases of economy and creation of too many huge hurdles along with huge disasters over the entire World through **HGPS addition along with obstruction to extremely huge quantity of Global Heat Dissipation** over and above an extremely huge economic dosage to Pakistan through

- 1) Import of their large quantity of costly machinery.
- 2) Continuous import of almost 30 - 35 times costly large Fuels supply in place of hydro power generation without any running cost.
- 3) Huge repeated set back in agriculture, aquaculture and dairy products and extremely huge loss to industries and exports, the byproducts of cheap hydro-power production.
- 4) Extremely huge continuous damages and extremely high financial loss by floods disasters repeated almost every year [16] [17].

Table 1. Power and storage potentials in author's opinion compared with WB estimates.

World Bank Estimates [#]			Estimates in Author's opinion						
Project	In-Service Water Year	Initial Live Storage (MAF)	Storage (MAF)	Additional dam name	Priority	Original power (MW)	Additional power (MW)	Additional power Due to storages at	Total power (MW)
Mangla	1968	5.22	8.77	Mangla (total)	-	2000	0	-	2000
Chasma	1972	0.51	1.5	+Bunji	First	2000	7000	Skardu + Khaplu	9000
Tarbela	1975	8.60	6	DMBhasha	First	6000	15,000		21,000
			4.6	Tarbela*	-	4800	11,800	-do- +DMB	16,600
Sehwan-Manchar	1982	1.80	11.80	+Marala 10	First	0	0		0
			53.50	Rasul*	First	2000	0		2000
Raised Mangla	1986	3.55	3.50	Arja power*	First	3063	0		3063
			0.5	Nielam-Jhehlum	-	950	0		950
Chotiari	1990	0.90	115.90	+Jamrao	First	150	0		150
Kalabagh^(with power)	1992	6.40	153.25	+Tarap, 1.25 + 152	First-T, First-K	13,500	0		13,500
			9	Karot, Rohtas, Bunnah	2 nd	1100	0		1100
Swat	2002	2.00	9.00	+Ambahar	2 nd	1270	0		1270
Low Gariala ^s	2011	4.60	25	U-Warsak*	First	2200	0		2200
Skardu^	After 2020	8.00	10	Khaplu	2 nd	0	0		0
			35	Skardu-Katzara	2 nd	15,000	6500	Khaplu	21,500
Total		41.58	447.32			54,033	40,300		94,333

Notes: [#] given in Table 5-4 on page 122 of WB Report vol. 1 [15]; * data of item in column 3 is replaced by this in 4; + data of item in column 3 is added with this; ^ 14.4 MAF generated controversies; ^s 4.60 MAF unsuitable.

5) Continuous damages to the environment both local and Global by huge quantity of **HGPS** input from its recommended fossil fuel power plants.

6) Thereby removal of all major obstructions in Global Heating and Temperature rise. It seems that this disaster to Pakistan was promulgated due to no visions of Environmental Emergency and its lone alone way out through misguidance of the non technical, non political and non-field actors/regimes (an easy prey to blackmailing as compared to political leaders, a long continuous repeated practice of West against Pakistan) at that time, by the joint venture of enemies of Pakistan and Petroleum Industry Mafia.

7) Misguided the large Tarap and Rasul dams with respectively 152 and 64 MAF storage capacities and 11,965 and 2,400 MW power generation potential.

8) No power output given for Skardu (Katzara) dam, while 15,000 MW was estimated by [21] and about 40,300 MW additional power growth at all downstream hydro power generation stations by regulated additional flow from Skardu and Khaplu storage dams. WB rather emphasized number of obstacles in place of encouraging it and advising solutions of the problems.

9) 350 MW was stated by WB (3600 MW by WAPDA and about 1600 estimated by the author) from Kalabagh dam and that too is jeopardized with controversies initiated by WB. Even baseless obstacles have been initiated in construction of Kalabagh Dam as pointed out below in place of guiding to the solution of any technical problem or at least recommending further studies and thorough investigation.

10) Misguidance to Kohala power tunnel of 1100 MW in place of Arja with dam at its exit and 3036 MW power generation potential with about only 70% additional work and cost.

Hydro power generations are still discouraged by all enemies of Pakistan and **The WB Too** as is evident from its persistent refusal of loan for construction of any dam including Diamer-Bhasha on the baseless plea given by the enemies of Pakistan since about 2000. This generated power crises and load shedding in Pakistan which resulted in huge loss to economical stability of Pakistan and huge continuous burden on its exchequer in import of large quantity of fossil fuels over and above their power plants machinery and extraordinary drainage of finances in import of UPS systems, batteries and inefficient number of small, local and private petroleum based power generators and their imported fuels. These losses are charged to the consumer, but a huge National loss just for nothing. This is also a continuous curse on management of WAPDA, Ministry of Water and Power, Ministry of Planning and Ministry of Energy of Pakistan along with the top regime either foolish or irresponsible or having no vision of the management and no vision of the present and future needs or they are playing for enemies of Pakistan on Pakistan side or cowards and horrified from the consequences of struggle for developments in Pakistan from the International Mafias profoundly indulged in horrifying, teaching extremely hard lesson to the struggler and indulged in huge brain drain of Pakistan at all levels through all,

even horrible means.

Maximum numbers of dams working in tandem or in parallel are all needed, not only for Completely benefiting from its Hydro Power Potential, but is an extremely acute **Global Climate Emergency** demand, wherever possible with priority to irrigation wherever one of the two is only possible. The hydro power production aspect sometimes needs dam many times more than the total river flow as is the case of Indus and Jhelum river of Pakistan and in other such cases too, all the other requirements of dams for all others issues like flood controls and irrigation are all met with automatically more than their demands. The WB neglected all these, particularly hydropower generation and flood control and in place considered the mean river flows for storage estimates and then mercilessly applied number of undue cuts to this too, all together as pointed out below, crushed the issue of hydro power generation at its very beginning and wasted a huge 95,000 MW potential. The hydropower production must be given priority over its production from fossil fuels and all the power requirements must also be met through hydropower resources developed well in time.

4.2. Terrible Recommendations about Irrigation Supplies

Pakistan has sufficient quantity of most suitable surface water for irrigation, but WB has not focused on this aspect too and has no recommendations for its vast and compatible irrigation system development, where power generation was also possible. It has neither considered *storage dam as multi-purpose with huge multiple benefits and utilities, nor considered roaming of monsoons in time and space and hence vitality of multi-decadal flow regulation dictated by 37 years flow cycle* [16] [17]. It has rather too much emphasized pumping of underground water (generally saline) for irrigation at too many locations, thus damaging fertility of land. Wherever, public refute was possible against its obvious and immediate damages to the fertility of land due to large salinity, it was advised to pump it into the canals for unnoticeable slow poisoning. Thus following six heads of losses were borne by Pakistan.

- 1) huge economic burden of heavy initial investment in imported pumping machinery.
- 2) large running cost of imported fuels, its transport to the sites, operator, repair and maintenance charges.
- 3) Vast damages to the fertility of land.
- 4) Vast **Damages** to the environments due to **HGPS** of fossil fuel pumping sets or supply from the fossil fuels generated power of National Grid.
- 5) **Aquifer Damages and its unavailability in draught due to its unplanned pumping.**
- 6) In place of cost free hydropower output as a byproduct of irrigation and flood disaster control, too costly (30 - 35 times) and too risky energy was mostly advised.

The extremely minimum dam storage was emphasized by multiple simulta-

neous cuts and reductions on the availability of surface water sparing and promoting it ultimately for huge and lethal floods and disaster as pointed out above. The pumping of shallow underground water from the water logged areas and its onward usage is suitable if it is not saline, but the underground aquifer charged in 100s of decades will require recharging by surface water supply, a much slow process and this if pumped in large quantities as compared to its recharge ability will create extremely critical crises in water supply at the time of acute needs. Thus pumping of ground water for irrigation

- 1) has huge **Salinity devastation** risk.
- 2) has huge **water level dropping risk** and may create crises particularly at the time of dire need. ***In many areas underground water level has already gone much down and created acute problems due to this unplanned advised activity.***
- 3) Is too much **cost effective**.
- 4) Is dependent on **costly fossil fuel availability**.
- 5) Is dependent on **risky import** of fossil fuels.
- 6) Its pumping machinery and fuel is dependent on **risky political situations** and International trade bindings, embargos and other number of various critical scenarios.
- 7) Is dependent on aquifer **efficient recharge-ability**.
- 8) Underground water pumping is only suitable in water logged areas or the areas needing salinity reduction drive and it is not useable for irrigation.
- 9) Needs **systematic pumping and recharging** after only thorough investigation of its recharge ability.
- 10) Only annual small use of pumped underground water in critical needs is favorable to promote its recharge-ability and keep the pumping system ready to meet emergencies.

Underground water is a natural reserve for usage only in the dry season emergencies and it should not be wasted particularly when surface water is available. Its only urban use in Lahore has dropped its level to extremely critical limits.

4.3. Assessment of Water Availability for Storage

The Maximum possible numbers of dams with Maximum possible storage capacity, working in tandem or in parallel are all needed for

- 1) meeting complete irrigation requirements wherever possible and the GHT control drive, **an Immense Global Concern (AIGC)**.
- 2) **Complete controls of Floods and their all disasters.** (AIGC)
- 3) Complete Hydro Power Production free of HGPS wherever possible with priority to irrigation wherever only one of the two is possible. (AIGC)
- 4) Regulations of fluctuation in flows **within a year** and **within the flow cycles of multiple (37) years** [1] [16] [17]. (AIGC)
- 5) Distribution of incoming silt among number of dams for their long life

with better and efficient system operation. (AIGC)

6) Storage of water both for rural irrigation and urban usages, *i.e.* for maximum circulation, the GHT control drive. (AIGC)

7) Raising hydraulic head for irrigation of the areas at higher level than the level of river flow in its vicinity, *i.e.* maximum circulation. (AIGC)

8) Wide aquaculture promotion, a worldwide UNO food shortage control drive. (AIGC)

WB has not bothered about almost all of these and particularly about the most important points like floods controls, irrigation, power generation, future demands hike and regulation of cyclic flow of multiple years. In place it has **over minimized** these and applied multiple cuts, all together and even some absolutely illogical. Not all the blunders and discrepancies can be discussed in this short work; only the major water related issues having an immense Global Concern (AIGC) directly or indirectly and heavily contributing to GHT control are pointed out and discussed here below while the analysis of its illogical strategies and ideologies is given in [17]. The WB storage assessment basis and doctrines must be reviewed in the light of Global Climate Emergency and results compared with that of the author as given in **Table 1** and also **Table 2**. Following points must be kept in acute view and keen consideration.

1) Flood and its disaster control is one of the prime requirements of the dams. WB did not have any strategy for it, rather neglected it altogether and almost 100s of Billions of dollars loss per year is being met by Pakistan [16] [17] over and above the wastage of water without irrigation and its power generation use. If water and power loss is included, the overall loss may exceed trillions of dollars per year.

2) The average flow storage strategy is absolutely illogical under GHT control emergency. Complete grip on average flow is not possible unless complete storage of all maximum flows is made possible in the dams in all the following possible situations of Peak flow.

a) Storage must be made possible from seasonal roaming of Monsoon 60% limited within 2 months and that too within 10 - 20 days as is the case often and mostly 80% in July. So storage has to be hectic and concentrated in this period and not in 5 months [16]. WB's reduction in storage in the name of irrigation usage of 4 - 5 months is ridicules, rather misuse and wrong interpretations because more than sufficient rains are in irrigation area too, creating drainage emergency even for the flow in pipelines over and above the drainage of extra rainwater. On the other hand, the available extra storage capacity has no binding on release of water at any time, for any need, for any amount within its capacity and flow regulation strategies [16].

b) As elaborated in [17], space roaming of monsoon 24% - 29% rainfall concentrates only in catchment area of any one and 32% - 39% in any two of river groups shown in **Figure 1** and this demands maximum possible storage to fully en-cash the opportunity and safety from flood losses [16]. Thus each river group should be able to handle its complete flood flow storage [17].

Table 2. Indus river system flow statistics and its storage drives.

S/No	Flow in MAF ↓	Rivers →	Indus + Kabul Flows			Jhelum + Chenab Flows			Grand Total	Remarks
			Indus	Kabul	Total	Jhelum	Chenab	Total		
1		Maximum total flow	72	38	110	33	37	70	180	WB Report Statistics
2		Peak flow in peak-flow months	64	29	93	26	31	57	150	
3		Total average/mean flow	66	27	93	23	26	49	142	
4		Peak months average flow	57	22	79	16	20	36	115	
World Bank Estimates										
5		Peak flow in peak-flow months	93			57			150	-do-
6		Taken average flow in Peak months	79			36			115	
7	Neither 150 nor 115, Storable flow after Chenab & Kabul flows 42 (60 max.) MAF cuts		54.2			15.7			69.9	Seasonal view
8	Storable flow after 85-irrigation cut along with so called Feasible/economical cuts		37.7			11.8 – 3.3 = 8.5			46.2	
9	Storable flow after 2000-irrigation cut along with Feasible/economical cuts		22			7.5			29.5	
10	Storable after efficiency ^s drive cut with canals enlargement infeasible		20			6			26	
11	storable after canal remodeling		15			2			17	
12	Agreed at final estimate*		15.5/19.0			6/7.5			21.5/26.5	
13	Decadal storage estimate		26			9			35	Decadal
14	Final sitesbased (Tarbela, Chasma, Chotiari, Sehven-manchar, Warsak, Mangla)^		8.6 + 0.5 + 0.9 + 1.8 + 1.0 = 12.8			8.77			21.57	Sites or space roaming view
15	Further site based (Swat, Skardu, Kalabagh,&Low Garialanot possible)		2 + 8.0 = 10 6.0 + 4.0 = 10 = nil			0			20	
16	Total based on sites		32.8			8.77			41.57	
Author's Estimates										
Maximum recorded flow without any cut to cope with monsoons spatial roaming in place of mean.										
17	Required Storage based on	To Arabian Sea	98.7 + 21.57 = 120.27						120	Seasonal view
18	1973 flood + existing storage 21.5 MAF	To Arabian Sea + withheld in flooded areas	98.7 + 68.7 + 21.57 = 188.97 ≈ 190 + 10% safety factor Total Silt load = 0.1811 + 0.10332 = 0.284465 MAF/year. Thus, it will need 334 years for silting to 50%.						210	
19	Storage for multi-decadal flow regulation with Additional max. 50 MAF irrigational releases.		At least 255 + 21.57 = 277 MAF. This will need 487 years for silting its capacity to 50%.						277	Decadal view
20	Storage for multi-decadal flow regulation with Additional max. 40 MAF irrigational releases in view of 34 - 37 year decadal cycle.		At least 475 + 21.5 = 497 MAF. This will need 874 years for silting its capacity to 50%.						497	
Available Potential Storage Sits			Available Storage Capacity of Potentials Sits							
a. N-Warsak + Mehmand + Ambahar			a. 25 + 2 + 7 = 34							
b. Khaplu + Skardu + DMB + Tarbela + Tarap +			b. 10 + 35 + 6 + 4.6 + 152 + 1.25 + 0.5 + 1 = 210.35							
21	Kalabagh + Cheshma + Bunji		c. 10+8.77 + 53.5 + 5 + 5 + 3 = 85.27							
c. Marala + Mangla + Rasul + Aria, Nielum, Karot, Kunhar + Rohtas + Bunnah			d. 115 + 1.8 + 0.9 = 117.7							
e. Jamrao + Sehwan – Manchar + Chotiari			This will need 787 years for silting to 50%.							
			447.32							
			Sites or space roaming view							

Note: \$ unknown term with no details and no logic. Vol-1, pages 120-124 and * Table 5.5/p123/Vol.1 [15].

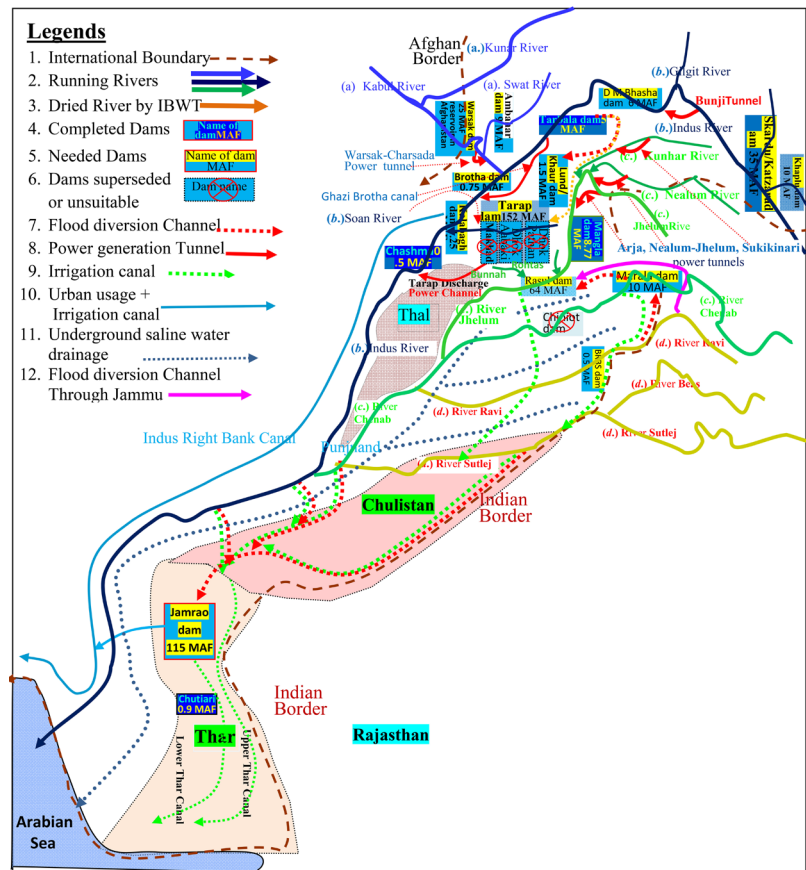


Figure 1. Indus Basin groups with respect to

1. Rivers

- a.) Kabul and Swat rivers.
- b.) Indus, Gilgit, Shioh, Shigar and Soan rivers.
- c.) Jhelum, Chenab, Bunnah, Rohtas, Neelum and Kunhar rivers.
- d.) Ravi, Bias and Sutlej rivers.

2. Dams corresponding to River Groups

- a.) New Warsak, Mehmand and Ambahar.
- b.) Skardu, Khapulu, D M Bhasha, Tarbela, Tarap, Lund/Khaur, Kalabagh and Barotha.
- c.) Mangla, Rasul and Marala.
- d.) Jamrao.

3. Flood diversion Channels

- (b). 01-Tarap: Tarbala-Lund;
- (c). 03-Rasul: i. Marala-Kharian, ii. Chak Amru-Marala, iii. Paraganwala to Jabba Kas or Pathankot -Jammu-Akhnor-Jabba Kas if possible.
- (d). 04-Jamrao: i. Head Sulemanki ii. Punjnand, iii. Khan Bella upstream of Chachran Shareef with a barrage at Khan Bella and iv. Guddu, all to Peer Jamaal.

4. Power Tunnels: (a) Warsak-Charsada,

(b) Bunji,

(c) i. Chinari-Arja, ii. Arja-Bhalgran, iii. Neelum-Jhelum, iv. Muzafarabd, v. Suki Kinari

5. Additional Major irrigational Canals; i. Marala-head Sulamanki, ii. Head Sulemanki-Chulistan-Thar, iii. Rasul-Sutlaj, iv. upper Thar, v. Lower Thar, vi. Lund or Barotha or Kalabagh-Laki Marwat-DI Khan-Tauwnsa-DG Khan-Shikarpur and Dadu to linke with coastal canal, vii. Jamrao-Dadu-Karachi -Gawadar coastal irrigation canal.

Note: Highlighted green are already functioning.

c) The Lunar dictated flow cycle is of 37 years with 5 - 6 years maximum flow clusters followed by 12 - 13 year moderate flow, followed by 3 - 4 years maximum flow clusters and this is followed by 14 - 15 year minimum flow (**Figure 2**) and this 37 years cycle advises the large, rather huge storage and vigilant flow management [16]

3) Canals and barrages are transmission and distribution system and not storage in a running system. Fossil fuel containers and storage dams are the pre usage side of fossil fuel and hydro electrical power generation systems and storage batteries are post generation side of solar or wind power generation system and not the transmission lines, transformers or grid stations. Similarly canals, barrages and watercourses are transmission and distribution lines and in a running irrigation system these can accept only the routine supply and in case of heavy local rains, that too are not required, rather must be avoided. Thus considering storage on basis of

a) average peak flows in place of maximum peak flows

b) Single year flow in place of multiple 5 - 6 years in spite of Monsoons rainfall single spell of 10 - 20 days roaming in 2 months and also wandering in the catchment areas of different rivers groups, likely to concentrate only in one such set continuously in multiple 5 - 6 years, with 37 years storage and flow regulation management directed by lunar cycle of 18.6 years, practically confirmed by flood records (**a sample shown in Figure 3**) of Pakistan [5] [16] [17]

c) reduction in storage for irrigation usage of 4 - 5 months

d) distribution of storage in various dams of various rivers groups in spite of situation pointed out in b) above

e) dam storages reduction by the capacity of barrages and canals of a running system

are all ridicules individually and adding all these reductions together simultaneously is a tremendous slash on Pakistan and whip on the entire World by WB,

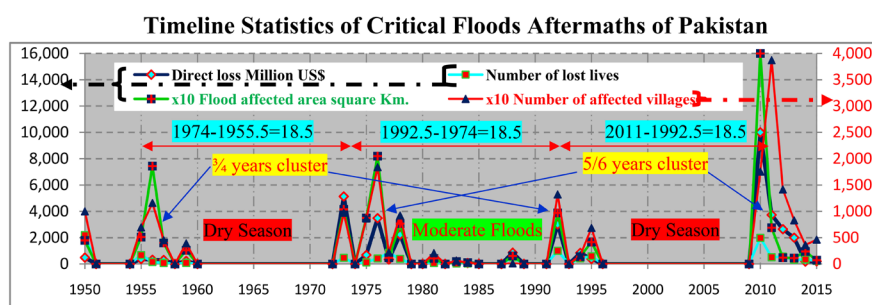


Figure 2. Trend and frequency of floods aftermaths in Pakistan is shown above. The 37 years cycle with its forceful half comprising 5 - 6 years clusters of high extreme floods followed by 12 - 13 years clusters of normal floods and then weak half comprising 3 - 4 years clusters of relatively low extreme floods followed by 14 - 15 years clusters of minimum rivers flows, forced by two 18.61 years lunar Orbital Plane precession cycles, first relatively closer to northern and 2nd closer to southern earth pole respectively is obvious from the above. The 14 - 15 years era may have about 5 year minimum river flow or major/critical dry season in the middle and 4 - 5 years moderate flows around the dry season. Thus 22 years optimal water storage activity will contribute in next 15 years.

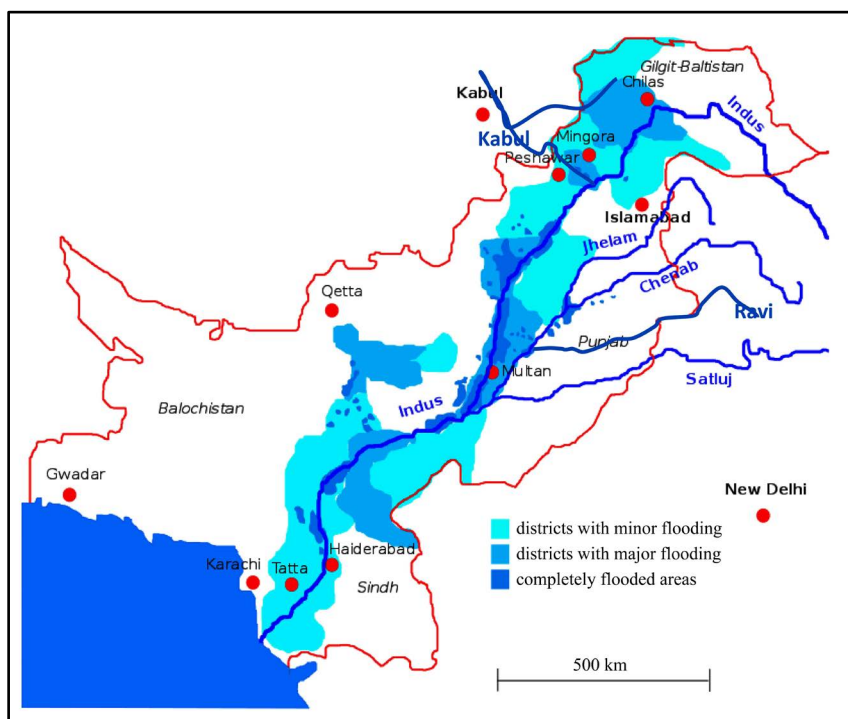


Figure 3. Flooded areas of 2010 super floods as a result of monsoon rains concentrated in the catchment areas mainly of river Indus and Kabul in a single spell of 8 - 10 days.

particularly with GHT and its aftermath Calamities in view. Thus, whereas author recommends 210 MAF storage on maximum annual flow bases, the estimate of WB is 17 MAF *i.e.* about 1/12 only. On the dams sites and decadal or over the multiple years bases author's estimate deduced from the practical observations is 447.32 and 497 MAF respectively against WB 41.57 and 35 MAF, *i.e.* in ratio 10.75:1 and 14.2:1. Here 21.5 MAF in 41.57 of WB have already been achieved and 10.25 MAF have been rolled into controversies while rest is unsuitable, thus actual ratio is 21:1 and 14.2:1 only (**Table 1**, **Table 2**). The 10.25 MAF is **cleverly** pushed into endless controversial discussions as stated below at the very beginning with ***absolutely wrong and fake data by the WB showing Noshehra and area upstream of Khairabad Bridge submerged in Kalabagh Dam reservoir as highlighted in its map*** **Figure 4**.

4.4. Assessment of Dams' Feasibilities and Storage Size

Most of the dams have been disapprove and discouraged by the WB on their feasibility basis through emphasizing all possible hurdles in place of suggesting their solutions or at least alerting Pakistan to save the site from any misadventures creating and promoting further hurdles. The dams' storages leading to

- 1) production of electrical power free of **HGPS**,
- 2) GHT reduction drive through WEPC by wide spread water availability for irrigation and agro-plants and
- 3) promotion of clean environment through enhanced rains, snowfall and agro plants

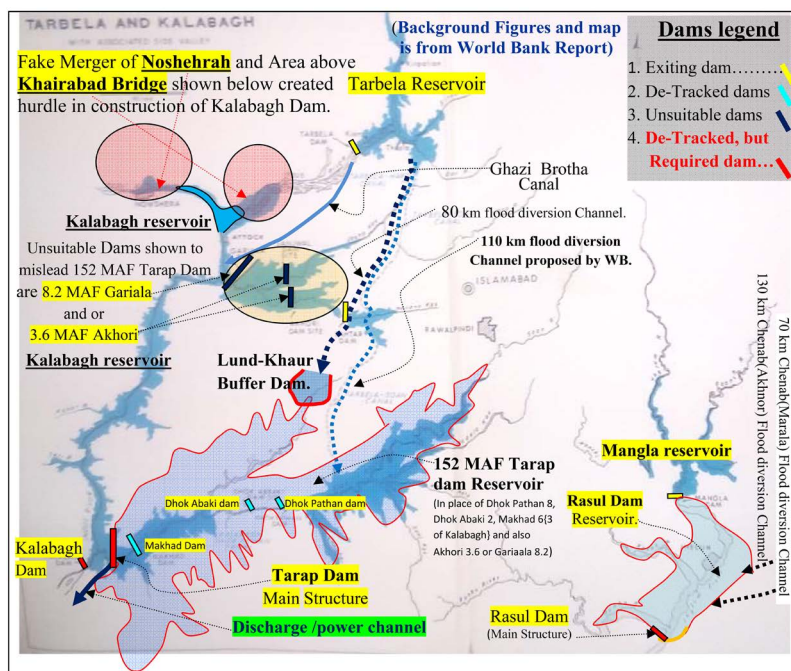


Figure 4. The background Map showing the proposals of WB De-tracking most suitable storage dams on Indus and Jhelum rivers with unsuitable alternate dams and then these too are dropped by one or the other reason.

Indus: The 152 MAF multiyear storage dam Makhad/Tarap is concealed under cover of total 16 MAF Dhoke Pathan, Abaki, and Makhad Dams and is not discussed much, lest its grand suitability may come into limelight. These too are indicated to be impossible with different reasons, while this is said to be superseded by Kalabagh Dam. WB's false indication in the above map and physically marking of absolutely wrong levels of Kalabagh reservoir at Noshehra and upstream of Khairabad bridge as highlighted in this Figure, rolled Kalabagh down into controversies and KPK agitation. Also numbers of baseless, undue and mostly solvable problems were fed to Sindh to oppose its construction. Another illogical alternate to 16 MAF above stated 3 dams suggested was Akhori 3.6 MAF or Gariaala 8.2 MAF with submerger of Attock city. Against its 93 - 110 MAF flow mostly in 10 - 15 days, only 15 MAF is estimated by WB to be available for storage, with rest to inundate Pakistan severely.

Jhelum: Against 88 - 93 MAF flows of Chenab and Jhelum rivers group mainly flowing only in 10 - 20 days and 91 MAF storage potential based on sites, the WB deceitfully presented flow available for storage to be only 2 MAF per year, saying that it is with complete utilization of all flow of Jhelum and Chenab in irrigation. About 64 MAF storage is possible in 300 M Asl Rasul dam if Chenab and its both side Nullas/tributaries are diverted through a flood diversion Channel from Pathankot-Jammu-Akhnor in Indian occupied Kashmir to Jabba Kas. This is deceptively said to be superseded by 8.77 MAF Mangla under deceiving value of only 2 MAF available for storage. The rest 79 - 84 MAF is secured to be ready to ruin Pakistan. This dam may be of 55 MAF capacity at 290 M Asl and 40 MAF at 280 M Asl, while Marala Dam may be 10 MAF capacity. These will need flood diversion channels from Chak Amru to Marala dam along the border and from Marala dam to Kharian to feed Rasul dam. After the completion of WB recommended 21.57 MAF storage by 1973, flood water drained to Arabian Sea in 30 years is 1164 MAF and more than 800 - 900 MAF is partly absorbed and partly entrapped in flooded area by irrigation system setup and evaporated in 12 - 18 months. Thus 1964 MAF in 30 years or 65 - 70 (max.190) MAF has been budgeted by the WB to extend catastrophic flood disaster on Pakistan every year.

is highest Global demand for GHT and its aftermaths control in the present crises age. (AIGC)

The system in block diagram is given in **Figure 1** with storage capacities also shown in **Table 1** along with power production potential for reference. The dams' storages and power production aspects are discussed here below with respect to their river groups shown in **Figure 1**.

4.4.1. Kabul and Swat Rivers/Group-a

Kabul River is 2nd largest flow river of Pakistan with average 27 (max. 38) MAF annual flow and after every 5 - 6 years there is huge flood in it which carries on impounding huge losses till Hyderabad in Sindh (**Figure 1**, **Figure 3**). If its flood attacks happen to be simultaneous with that of Indus, Jhelum, Chenab, Ravi and Sutlej, as is the case in general, then there is catastrophic disaster and loss of billions of dollars all along their tracks (see 2010 super flood, **Figure 3**). Kabul River has small, silted and tarnished Warsak Dam needing replacement. Swat River needs to have Munda /Mehmand and Ambahar Dam for flood control as discussed below.

1) New Warsak Dam and Warsak-Charsada Power Tunnel: A 25 MAF new multipurpose Warsak dam is highly needed on river Kabul. This storage is only possible in Afghanistan with displacement of a few Afghan towns/villages and sub-merger of less than hundred km roads and other minor infrastructures. Huge quantity of aquaculture product received annually by Afghanistan will not only compensate the losses, but will be a permanent paramount source of income and economic growth from tourism, ferry transport and jobs, whereas Pakistan will have

- a) safety from the huge flood losses
- b) Availability of large quantity (25 MAF) of water for irrigation
- c) Huge quantity of electrical power, about 1500 MW from Warsak dam and 700 MW from Warsak- Charsada tunnel, subject to flow regulations by new Warsak dam.

The 3rd and major stakeholder, the whole world will have a huge reduction in GHT growth from its irrigation and HGPS free power generation (AIGC). The new Warsak dam is the only solution for all the three stakeholders and is most affective and extremely beneficial.

The WB has ignored it saying that sufficient data is not available and also uncertain about Afghan concerns. WB also has not recommended further study and enforcement of any limitations/bindings on infrastructures development in possible area of the project site.

2) Mehmand and Ambahar Dams: The Mehmand and Ambahar dams are requested to be built for 7 - 9 MAF to avoid the risk of floods in place of WB recommended 1 - 2 MAF.

4.4.2. Indus and Soan Rivers/Group-b

In this group, number of dams and infrastructures are needed to benefit from it

in GHT, Climate Calamities, greenhouse gasses, pollution and soot (GPS) control through irrigation and resulting in environment cleaner, the rains and agro plants and hydro power production free of huge quantity of **HGPS**. Reduction of Global **HGPS** by WEPC and avoiding its further addition in Global environment is of an Immense Global Concern (**AIGC**) and the dam storage, irrigation and hydropower production meets both these extremely acute demands most efficiently. Thus with this in view the WB strategy of tiny storage estimate as discussed in preceding paragraphs is never ever worth consideration. The submerging of existing roads within the reservoir limits of Skardu, Khaplu, Diamer-Bhash is said to be a big problem, but easy, safe and cheap ferry transport will replace this risky and much costly roads transport and too much costly roads construction, maintenance and landslides losses and obstructions. This may also facilitate huge promotion of the tourism.

1) Katzara (Skardu) Dam: This dam is said to be of 35 MAF storage and 15,000 - 20,000 MW electric power generation capacity [21]. The average annual flow of Indus River at this location is also said to be 35 MAF and thus it has somewhat multi-years flow regulation capability. Its location is about 18 km Downstream of Skardu and storage is in the 3 rivers gorges; Indus, Shiok and Shigar. Here annual maximum flow may be 40 - 45 MAF or even more. Thus maximum possible storage should be gone for and if only 35 MAF dam is possible then at least this must be constructed for downward flow regulations, floods control and huge boost in Hydro power production, both at this site and all downstream power generation locations along with boost in irrigation through huge flow grip and its regulations. WB emphasized many difficulties in construction; like machinery approach, power transmission lines construction and transmission losses etc. and initially recommended only 5.2 MAF and then 8 MAF dam without power generation and that too after 2020 in place of its immediate construction so as to let hurdles flourish to their peak. All the hurdles and difficulties stated are not of any minute worth in view of its benefits and it is **extremely vital in view of its Global Concerns (AIGC)**. Moreover, it will facilitate too much power production at all downstream dams. For example without this DM Bhasha dam may at the most produce power from 6 (its own storage) + 8 (flow other than peak flow) = 14 MAF flow, while with this and Khaplu dam, it may produce from at least $6 + 8 + 35 + 10 = 59$ MAF *i.e.* in place of 6000 MW, it will produce 25,300 MW. Similar is the case for Bunji, Tarbela, Kalabagh and Tarap dams amounting to at least 40,300 MW additional power output. Thus its abandonment is an extremely huge continuous loss and disaster of extreme Global and local concern. The power production will provide **huge relief of fossil fuel import and transport over and above its irrigation gain and saving from huge flood losses**. WB should have recommended solution of the hurdles by removals of bottlenecks in the existing roads at priority etc. The power produced might have been used locally in Skardu, Gilgit and Chilas etc for maximum possible fossil fuels replacement in domestic, industrial and even in trans-

port usage reducing the load on petroleum fuel import and transport to these extremely difficult remote areas, till its possible transmission route to the National Grid is explored. Even 50% line losses will provide 7500 MW and from downstream in place of 40,300, at least 35,000 MW can be made available at the National Grid. Domestic heating in the above areas in winter would have been matching in phase with downstream flow requirements, both for irrigation and power generations en-route. This huge storage in summer will facilitate growth of highly demanded huge fresh water aquaculture products in preceding 9 Months which will mostly be used in 5 months of winter locally and export to all Europe, Russian states, Middle East and all Africa. The flow regulation due to this will facilitate downstream huge flood relief, 35 MAF additional supplies for irrigation at the time of dire need. WB if not had recommended solutions of hurdles and problems, at least it should have suggested/guided for further study and debarred any development work in future in the possible area of the Project. This is perhaps not the negligence, but a huge treason to let the city of Skardu expand and flourish with the facilities like airport etc so that Pakistan may never benefit from its resources. This has perhaps caused not less than million of trillion US\$ loss to Pakistan and even more to the World.

2) Khaplu Dam: This is to be more than 10 MAF capacity dam with 10 - 20 MAF average annual flow. This is flow regulation dam; power generated can be distributed locally and can be transmitted to National Grid through Skardu power network.

3) D. M. Bhasha Dam: This is to be 6 MAF and 6000 MW capacity dam from 60 - 80 MAF average annual flow. WB has been opposing its construction till now to favor and please India and hence not agreeing for granting loan for its construction. The India is to be pleased by the WB even if the entire World goes to Hell, particularly the USA and Europe, the main affected from sever aggressions of increasing Hurricanes Family [22], heat waves, wildfires [23] and wind and snow storms, all these triggered by India in the absence of GAC operated by Pakistan.

4) Tarbela Dam: The main feasibility assessment of this was mostly complete before this report hence remained safe from WB derailing cuts. It was to be 8 MAF capacity dam and annual flow at this location is 80 - 100 MAF. Without the multiple dams upstream, all silt is gathered and settled here and now its capacity is only 4 - 5 MAF.

5) Tarap Dam, one alone in place of 5: The site of Tarap dam with 152 MAF reservoir capacity and 12,000 MW power (author's estimated) covers and includes the sites of 4 dams; Dhoke Pathan, Dhoke Abaki, Makhad and a 3 MAF portion of Kalabagh reservoir with sum of their individual stated capacities as 8 + 2 + 6 (including 3 for Kalabagh) = 16 MAF (Figure 1, Figure 4, Figure 5). One large dam site is disintegrated into 4 and hence storage capacity is squeezed to little more than 1/10th with almost no power production, rather 80% recoverable usage of huge quantity of electrical power which has to be used in pumping water to fill Dhoke Abaki Dam. In addition, it will need digging of deep and

wide channel for supply of water from Kalabagh Dam over and above the import of large pumping and power regeneration machinery and required infrastructure. Dhoke Pathan dam is said to be filled up from overflow of Tarbela through a 120 Km flood diversion Channel. What a beautiful recommendation on the part of WB; only 16 MAF in place of 152 MAF and no power production against 12,000 MW, while Soan river flow itself is sufficient to fill the Dhoke Pathan dam and hence no room for Tarbela overflow, then what for is 120 Km flood diversion Channel? The so called Makhad dam of 6 MAF is not discussed much or highlighted to conceal the most suitable 152 MAF Tarap dam (the

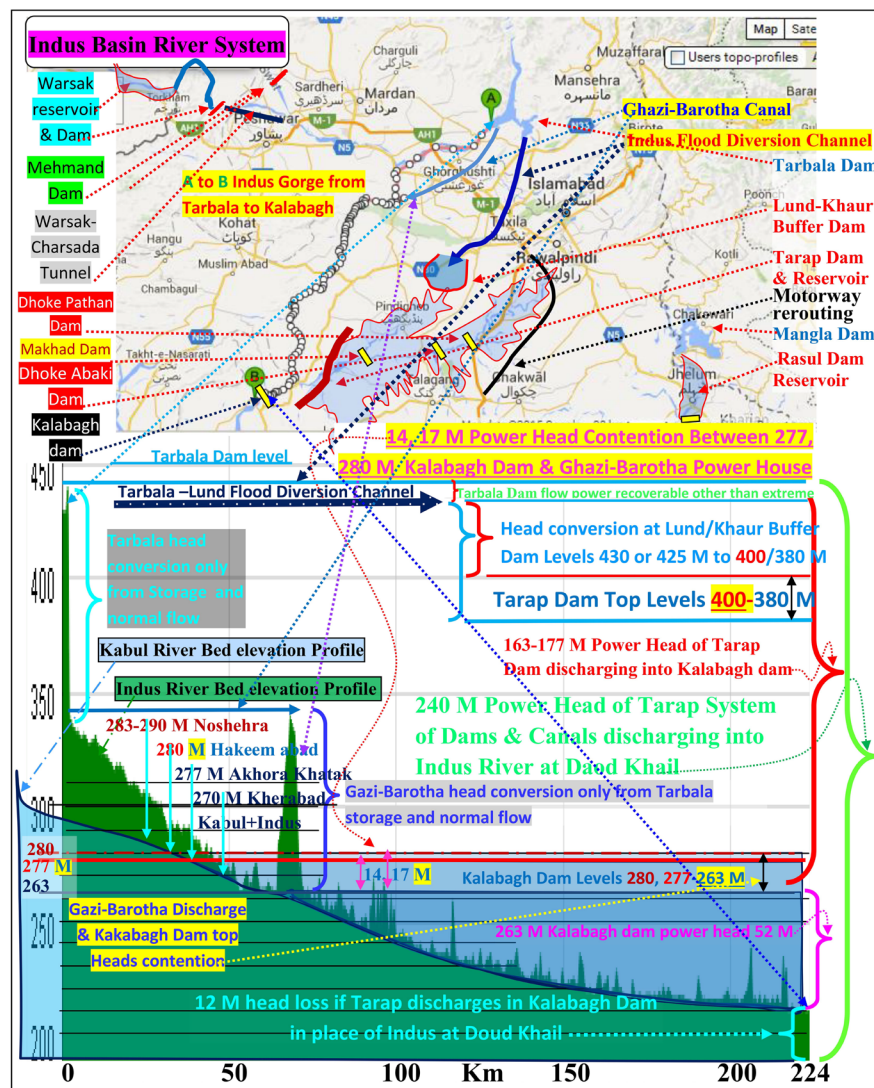


Figure 5. Above is given the Map and Elevation profile of Indus and Kabul Rivers beds from Tarbala/Warsak to Kalabagh showing locations & elevations status of Ghazi-Barotha & Tarbela-Lund Flood Diversion Channels, Tarap, Tarbala, Lund, Mangla, Warsak and Rasul Dams. It also shows the comparison of power head conversion capabilities of Tarap System of Dams & Canals by discharge in Kalabagh dam or in Indus at Doud Khail. Levels of Kalabagh reservoirs and its status at Noshehra, Akhora khatak are also shown along with alternate route of submerging M2 Motorway.

proper name of Makhad dam) from the eyes of all who review or revisit it. It is simply said to be superseded by Kalabagh, as it contains 3 MAF part of Kalabagh reservoir site. Thus 152 MAF Dam is thrown down into a black hole and removed from scene by WB team, no arguments; why superseded, what will be the benefit of this superseding, why not one single multipurpose 152 MAF dam in place of 3 or 4 tiny dams with combined capacity only 16 MAF etc. The story does not end here. Come on and see what happens next.

a) **Tarap Dam Vitality:** The Tarap (WB named it Makhad) dam 152 MAF with 400 M ASL (above sea level) top water level (Figure 5), to be filled by Soan and from Tarbela overflow only above 415 M Asl. It is eminently required enforced by the

i) **Floods Relief:** The flood control strategy must be with the vision to compete maximum possible worst conditions. Maximum peak flow of River Indus at Tarbela is 80 - 100 MAF, that of River Kabul at Warsak is 27 - 38 MAF, that of River Swat 2 - 3 MAF and that of River Soan at Tarap 8 - 10 MAF. The levels do not allow the diversion of 270 M Asl Kabul + Swat at Attock to Tarap dam 380 - 400 M Asl (Figure 5). In the present state of Global environment, all these flow may be simultaneous in single huge spell and with the absence of upstream storage and no storage downstream (Kalabagh not 6 MAF, rather at the most 1.25 MAF, hence it may result in a huge catastrophic disaster downstream. This enforces the largest possible storage and Tarap dam (off channel for Indus) is most suitable and only opportunity of controlling the flood of both Indus and Soan 88 - 110 MAF flow along with allowing absolutely free, wide and safe passage for Kabul river floods.

ii) **Wastage Control of God Gifted water Resource:** Not routing the flood water through storage dam, hydropower generation and irrigational systems will result in a huge Global and local loss of available opportunities with disasters all over the world, through wastage of two huge Global HGPS controllers, the hydropower and irrigation in Pakistan over and above its absolutely unique Global role in GHT and hence Global Climate Calamities control. (AIGC)

iii) **Wastage Control of huge power production opportunity:** Flood water flow with high hydraulic head and huge quantity routed through dams, power generation and irrigation systems is of an immense Global Concern (AIGC). The recovery of hydraulic head between Tarbela and Daud Khail 450 - 200 = 250 M is only possible through Tarap and Lund buffer dams. This will provide almost free of cost 12,000 MW hydropower production with 2000 MW generated during filling and 10,000 MW at the discharge end without any time constraint or limitations and will avoid generation of extremely huge amount of HGPS through usage of extremely costly imported fossil fuel for power generation.

The **Tarap (Mega Makhad) Dam** alone, being too much better than all the above referred five dams including Kalabagh and Akhori all together (as discussed below), is reiterated for storage of Soan river flow at the first stage and

overflow of Tarbela also at 1st or at least at 2nd stage.

b) Indus & Kabul Rivers Flood Control by Tarap Dam. The Tarap dam with flood diversion channel (Figure 4, Figure 5) will avoid the overflow of Tarbela through Indus gorge till Kalabagh or Daod Khail, which otherwise, being: i) much more in quantity, ii) too much forceful due to coming from High altitude and iii) Shorter distance as compared to those of Kabul river flood (Figure 5) may choke the water passage of Kabul river flood flow at Attok, and thus will intensify the flood disaster and prolong its duration with boosting the problems of population of the KPK flood affected areas. Thus Tarap dam and Flood Diversion Channel has extremely prominent and vital role in flood disaster control of both river Indus and Kabul too in KPK, Punjab, Sindh and Baluchistan-Jafferabad.

c) Tarap Dam Benefits: The Tarap system of dams (Tarap & Lund), flood diversion and downstream discharge channel to Indus at Daod Khail will

i) Avoid Extreme Flood Disasters in Punjab, KPK, Sindh and Jafferabad of Baluchistan.

ii) Divert 113 - 142 MAF of the uncontrollable flood water going totally into waste towards highly fruitful irrigational and urban usages in most of the downstream areas of all the four provinces. (AIGC)

iii) Recover 11,965 MW power going into wastage in spite of Kalabagh and also all other possible dams as per WB recommendations as almost 105 MAF flow with 240 M head has to flow down from Tarbela and Kalabagh without power generation. (AIGC)

iv) Avoid the wastage/loss of 80 M hydraulic head of the Indus normal flow greater than the capacity of Ghazi-Barotha Canal and its power house. (AIGC)

v) Avoid the loss of 12 M hydraulic head of all the 105 - 145 MAF flow through its discharge into Indus at Daud Khail due to limited capacity of Chashma barrage both power generation, storage and regulated flow discharge. (AIGC)

vi) Will feed through gravity flow through Kalabagh dam to CRBC (Chashma Right Bank Canal) and avoid electrical power wastage in pumping its feed. (AIGC)

vii) Feed to Tarap right bank canal (TRBC) through Kalabagh dam along with irrigating remaining areas of D I Khan, Laki Marwat, Taank, Taunsa Shareef, D G Khan, Jacobabad, Sibi etc. and may feed to Sehwan-Manchar Lake and also supply completely pollution free water to Karachi and Gawadar for urban usage as its buffer dam Lund and also right side of Tarap dam feed is from the main Indus and is free from induction of human/animal waste of large cities. With this in view and management of continuous flow, the Lund dam size may be accordingly enlarged or flow may be supplied from Tarap dam through Kalabagh or Kalabagh dam itself. (AIGC)

viii) The Dhoke Pathan, and Dhoke Abaki area of main Tarap dam with 8 MAF feed from Soan as compared to 80 - 110 MAF feed from Indus from the

Pindighab side may very well Sterilize the water pollution due to human waste of number of cities, like Islamabad, Rawalpindi, Kahuta, Murree, Chakwal, Tala-gang, Fatehjang etc. The More than 1600% dilution of human waste with 8 MAF and then its delivery after further 90% dilution *i.e.* 144,000% diluted and deformation by aquaculture may be very well safe for irrigation. Moreover it will be in much control and available for at least a year for any further required treatment, a concern of World Health Organization. (AIGC)

ix) Promote huge aqua culture in this area and export highly demanded freshwater fish to Europe, Middle East and North Asian and Russian states. (AIGC)

x) Promote and boost arid agriculture of all the Potahar & surrounding areas through thus increased rainfall intensity and frequency and supported by local underground water pumping from the hence raised ground water table. (AIGC)

xi) Moderate the seasonal peaks of this area and pleasant weather for human being, animals, agriculture and aquaculture output through increased rains.

xii) Promote growth of Tea, Sunflower, Olive & Pam oils plants and Fruit gardens in all Potahar, Salt Range and area between salt range and Jhelum River with enhanced frequent rainfall and raised aquifer for pumping water when needed.

xiii) Cope with the water scarcity for urban usage and irrigation down as well as upstream.

xiv) make the water available through Gravity flow both for irrigation in Mianwali, Thal, Southern Punjab, Southern KPK, Sindh including Chulistan, Thar and Baluchistan eastern and coastal areas, the water vapors feeder as coolant to GAC (AIGC) and its urban usage in Islamabad, Karachi, Hyderabad, Sakhar, Shikarpur, Larkana, Nawabshah and Gawadar too etc.

xv) Reverse the possible disaster resulting due to Global environmental changes boosted Monsoons and also 4, 5 and 37 years monsoon cycles [5] [16] [17] into huge fortune.

xvi) take the huge benefit through water supply management from the God Gifted Local water evaporation and precipitation cycle of Pakistan (WEPC) with rain fall spreading over the whole year and boosted flow from 142 MAF to 393 MAF [24], unique in the world *i.e.* only in Pakistan [5] [16] [17]. (AIGC)

xvii) About 24 out of 43 and 21.87 out of 39 MAF irrigation supply to Chulistan, Thar deserts and rest of southeastern Pakistan (*i.e.* 45.87 MAF) will rain in western India and mainly in Himachal Pradesh and Uttara Khand from November to June as per largest wind cycle No. 4 of Pakistan [3] [5], resulting in additional 35 MAF enhanced flow of its western rivers and 11 MAF additional rainfall in plan areas from Rajasthan to Himachal Pradesh. Thus India will ultimately gain additional 7 MAF water. (AIGC)

xviii) Large storage at higher altitude like this will enable irrigation supply to Chulistan, Thar, Thal deserts and Baluchistan coastal areas and will result in pumping out of additional 15.78 ZJ Global heat to the outer space over and above northern 9.898 ZJ [5]. (AIGC)

xix) Meet through hydroelectric power production, the forthcoming International Bindings and Pressures on Hydrocarbon fuels usage and hence promotion of the Global Heating and Pollution control. (AIGC)

xx) Global Heat control by **unique role** of Pakistan in its pumping heat to the upper atmosphere through WEPC *i.e.* re-recycling of stored water in evaporation through storage and irrigation system and then precipitation in the catchment areas of Pakistani rivers. (AIGC)

xxi) Play a prominent role in GHT, Global pollution and greenhouse gasses control through a huge boost in rainfall and much more from agro-plants resulting from boosted irrigation supply, rainfall intensity and frequency. (AIGC)

xxii) Play a prominent role in avoiding addition of huge quantity of Heat, greenhouse gasses, pollution and soot (HGPs) in Global environment through hydropower production. (AIGC)

xxiii) Provide multi-year flow management and regulation and hence handle the rainfall fluctuations yearly as well as multiple years to stabilize the Global water cycle fluctuations. (AIGC)

Now see the tragic end of this and all the competitors of the Tarap Dam in hands of WB through its recommendations.

6) Dhoke Pathan Dam: Dhok Pathan (8 MAF) Dam was proposed as storage of overflow of Tarbela Dam, fed by a 120 km long flood diversion channel (Figure 4) whereas the maximum flow of Soan alone at Dhok Pathan is 7 - 8 (at Tarap 8 - 10) MAF, thus almost no room for Tarbela overflow. The dam self sufficient in filling is discouraged by linking it to the too much costly 120 km long flood diversion channel through difficult terrain against that of 80 km with relatively easy terrain and with 2000 MW hydro power generation Potential for Tarap. Its storage may provide all the benefits of Tarap at about 8/152 proportion excluding power and a few other particular for Tarap. On the presumption that 6 MAF Akhori dam (without any of above benefits) is a better alternate of Dhoke Pathan Dam for storage of Tarbela dam overflow, Wapda has dropped Dhoke Pathan dam altogether in their future planning. Also on this ground or only due to least care of their responsibility, they did not advise the NHA (National Highways Authority) to avoid the potential dam site en-route of Motorway M2 for which acute need may arise. Presently M2 is crossing the reservoir site, may it be Dhoke Pathan or Tarap Dam (Figure 5) as discussed below and its 41 km will submerge in full dam height, rendering also another 40 km of this Motorway as useless by its possible substitute of 81 km.

7) Dhoke Abaki Dam: Dhoke Abaki 2 MAF or 9 MAF (including 8 MAF Dhoke Pathan Dam upstream) was discussed for storage of Indus river flow in addition to Kalabagh reservoir linked through a deep and wide channel from Kalabagh till Dhoke Abaki and pumping water from this channel to Dhoke Abaki reservoir. 80% of power consumed in pumping may be regained during its discharge. ***Import of Large and costly pumping and power regeneration machinery to pump all water of dam capacity when Kalabagh dam has be-***

come full after the peak flood flow of Indus has safely passed away through it and now the full charge of Dhoke Abaki (2 or 9 MAF from 6 MAF of Kalabagh) is to be pumped in 2 - 3 days of receding flood flow, construction of deep, long and wide channel, availability of huge electrical power during flood receding flow, wastage of 20% power, construction of Kalabagh dam at 280 M Asl are much more than sufficient to discourage the construction of Dhoke Abaki Dam. WB team made it almost impracticable by linking it to Kalabagh dam and its electric motors pumping strategy, with too many ifs and thens and perhaps benefited from Urdu saying “Nain 9 mon tail hoga, nan radha Nachay gi” (never will there be 9 × 40 Kg oil and never shall Radha have to dance) to close its chapter.

8) Kalabagh Dam: Then in the Kalabagh dam discussion by WB, every possible/impossible hurdle has been emphasized and thus the end of Drama was perfectly like story of eight rates going for hunting and they all (no exception) met tragic end, one after the other as given in Urdu Poetry Book of Primary classes. Thus WB team and WAPDA have not only deprived Pakistan from its resources but left it and its public as an easy prey to huge floods disaster of Indus River which is extremely enlarged and further boosted by 8 - 10 MAF flow of River Soan. Feasibility of Kalabagh was mostly complete and it was to be 6 MAF capacity dam and annual average flow at this location is 100 - 110 MAF. Thus 6 MAF storage at the end of flood has no role in flood disaster control, no power generation from the flood flow, no recovery from $450 - 200 = 250$ M Hydraulic Head and also from $332 - 263 = 69$ M that of normal flow excluding the flow through Ghazi-Brotha canal fed power production and wastage of all flood flow along with downstream flood disaster. It was intentionally made controversial by International conspiracy working against Pakistan on all fronts, initiated by WB with absolutely wrong extension of Kalabagh reservoir map over Noshehrah and a vast area of KPK upstream of Kherabad Bridge as highlighted in **Figure 4**, negated by the author as shown in **Figure 5**. Silt problem for it too was much emphasized stupidly in spite of its complete blockage at Tarbela (construction decided) and Warsak dams upstream. Among the three stakeholder provinces two were made against it on mostly baseless grounds, even so much so that the 4th one irrelevant with no concern is made against it. Noshehra city of minimum level 285 M Asl is submerged in 280 M Asl Kalabagh dam reservoir by WB ultramodern science while here height of bed of Kabul river is 283 M Asl. Also in map a vast area of KPK upstream of Khairabad bridge (**Figure 5**) was stupidly shown submerged and when this all could not get public attention, a team was sent which started marking absolutely wrong water level of Kalabagh Dam on the walls of buildings in Noshehra city and this created panic in the local public. Kalabagh-263 M and Brotha-280/277M dams are only for power generation from runoff of Indus combined with Kabul and is level raiser for Indus Right Bank Canal with storage capacity about 1.25 and 0.5 MAF respectively and with these capacities and 263 M Asl in place of 280 M Asl should have no objec-

tion either from Sindh or from KPK and consensus must be arrived at for it.

9) Bunji Power Tunnel: The WB estimate is 2000 MW for Bunji power tunnel, while additional 9000 MW will be generated here by Khaplu and Skardu dams storages regulated flows.

10) All Pakistan Indus Right Bank Canal: A canal from Lund or Tarap flyover crossing the Indus River near Makhad or either through or from Kalabagh dam (**Figure 1**) with any sufficient discharge quantity and level between 260 to 270 M ASL can supply all clean water to all the four provinces on the right bank of Indus, both for rural and urban needs. Even pollution free water for urban use may be provided to the cities on the left bank across the Indus river like Muzafargarh, Multan, Rahimyar Khan, Ghotky, Nawab Shah, Hyderabad, Meerpur Khas etc. It can also feed a New Right Bank Canal for remaining areas of Laki Marwat, Dera Ismail Khan, Taank and Taunsa Shareef over and above its gravity flow feed to Chashma Right Bank Canal. Even the area of Dera Ghazi Khan, Jacobabad, Sibi etc. can be irrigated along with easy feed to Sehwan Manchar Lake from Tarap dam. Also the water supply with gravity flow to Karachi and Gawader is needed for urban use and irrigation of coastal area to boost the maximum feed to Persian Air Wheel Heat Pump, a coolant for GAC [5]. (AIGC) This may also facilitate supply to bottling, transmission pipes and containers export of clean and fresh water to Gulf States and Middle East.

In short, 152 MAF site was concealed under the name of 16 MAF three dams; a self sufficient 8 MAF Dhoke Pathan was cleverly and falsely shown dependent of Indus overflow of Tarbela and was chained and dropped by difficult and costly 120 Km Channel; Dhoke Abaki was tied with number of long ambiguous chains stated above; Makhad Dam was made superseded by Kalabagh without any logical support or ground and then Kalabagh was made intentionally controversial and thus tactfully pushed this all in a no go to either side status and keep tied in main stream of mutual quarrel and controversies.

Thus a unique option of successful flood control, 152 MAF irrigation water with 12,000 MW power opportunities was pushed into a black hole without any flood control, without a single MAF storage or a single MW power generation. This is the tragic end of all this with Pakistan as the target, but the missiles fired could not stop at Pakistan and after penetrating it, these have exploded on the entire Globe, and mankind is yet astonished as to where from this flood of disasters has come. (AIGC) *Thanks God for these controversies on these dams, otherwise the most suitable Tarap dam would have been buried under their cover or at least would have become much difficult and cost intensive. More over thanks God for His highlighting and elaborations of Tarap vitalities, roles and benefits, both local and Global.*

4.4.3. Rivers Chenab, Jhelum, Rohtas and Bunnah/Group-c

The Chenab is 3rd largest river with average 26 (Max. 37) MAF annual flows, but unfortunately its storage sites are mainly in Indian occupied Kashmir and hence Pakistan is continuously being victimized by India stopping its flow when it is

highly needed in Pakistan and releasing it as lethal and disastrous floods [25] [26] during Monsoon without prior intimation or alerting Pakistan to teach it the lesson of its demand for Partition of British-India. The WB on the other hand has gone as per its routine saying that there is no storage site for its flow except 0.5 MAF Chiniot Dam (an unsuitable in author's view) and has been discouraging to think of storage of Chenab flow and concealed its possibility at Rasul and Marala. WB along with Chiniot has agreed for Mangla initially 5 MAF and finally 8.77 MAF after raising its level further, whereas it has ruled out 10 MAF Rasul Dam saying that it is superseded by 5 MAF Mangla. Jhelum river average annual flow is 23 (33 max.) MAF and that of rivers Bunnah and Rohtas are 3 and 5 MAF respectively while Chenab and its tributaries on its both sides flooding almost every year with average $26 + 10 = 36$ MAF and maximum $37 + 10 = 47$ MAF flows. Against all this $41 + 47 = 88$ to 93 MAF maximum and $31 + 36 = 67$ MAF average flow of this group of rivers, WB unwillingly agreed on final 8.77 MAF storage of raised Mangla asserting it to be extremely more than sufficient as compared to its estimate of only 2 MAF flow available for storage **after full consideration of flow of Chenab too**. Its similar estimates and recommendations for all the rivers have resulted in highly disastrous floods and too much scarcity of water for irrigation, generating contentions and quarrels at all levels almost every year, while in 30 years 1165 MAF water has gone to Arabian Sea and about 800 - 900 MAF (thus wastage average 70 MAF/year) has been partially absorbed and mostly entrapped in flooded area by the area profile to evaporate in 6 - 18 months rendering not only existing crops completely perished but also making 2/3 further crops impossible. The author has estimated that 8 - 10 MAF at Marala, 53 - 64 MAF at Rasul can be stored over and above 8.77 MAF of Mangla, 5 MAF of Rohtas and 3 MAF of Bunnah with three flood diversion channels; 1) Chak Amru to Marala; 2) Marala to Khahrian; 3) Paraganwala to Jabba Kas (near Bolani) or the most suitable Pathankot-Jammu-Akhnor-Jabba Kas through the Indian occupied Kashmir for storage of Chenab and all Nullas on its both sides in Marala and Rasul dams and thus complete flood control. With the Jammu route of 3rd flood diversion channel, Rasul dam can be filled upto 63/64 MAF. Thus estimated storage is $8.77 + 64 + 10 + 5 + 3 = 90.77$ MAF with at least 2000 - 2400 MW additional power. Against 88 - 93 MAF annual available flow with almost 80% of it in only 10-15 days with almost equivalent sites storage potential, WB very generously agreed upon only 9.27 ($8.77 + 0.5$) MAF storage of Mangla and Chiniot, with levied almost 9 time lethal cut, whereas its estimate of flow available for storage by some ultramodern technology is only 2 MAF (1/44 of the total). The dams on Bunnah and Rohtas of 3 and 5 MAF may grip all their annual flows and discharge in Rasul dam only at the most suitable time.

1) **Mangla Dam:** with 8.77 MAF capacity is already operative.

2) **Marala Dam in place of Chiniot:** The Chiniot site is not suitable, even for 0.5 MAF storage due to its critical water logging discrepancy and not worth con-

sidering just for this capacity. Marala Dam 8 - 10 MAF capacity is much vital and suitable too.

3) **Rasul Dam:** Rasul dam (then 10 MAF) was abandoned by World Bank team saying that it is superseded by Mangla. In Author view Rasul dam is most vital and all suitable for 53 - 64 MAF water storage of **rivers Chenab**, Rohtas, Bunnah and **all the torrent nullas on both sides of Chenab till river Ravi** over and above the Jhelum overflow of Mangla. Three flood diversion channels are required as stated above and shown in **Figure 1**. The first one of these is to drain the extra water from Marala dam capacity in Rasul dam. Here again WB promoted hurdles in a most potential site and did not advised banning and avoiding of development activities to safeguard the future potential site. 64 MAF Rasul dam is possible if 3rd flood diversion channel is brought via Pathankot, Jammu and Akhnor (in occupied Kashmir) to Jaba Kas. It is all vital for irrigation of northern and southeastern Punjab and can easily feed Chulistan-Thar irrigation canal. Rasul and Marala dam storage may provide all the benefits stated for Tarap at about 74/152 proportion excluding power and a few other particular for Tarap, but have prominent edges over it in their role in GAC through their easy Chulistan and Upper Thar irrigation potential. (AIGC)

4) **Chinari-Arja, Arja-Bhalgran Tunnels and Bhalgran Dam:** In place of 1100 MW 27 km long, 320 M hydraulic Head suggested Kohala power tunnel, go for a triple project of 3063 MW power output and **about 1.7 times cost/workload having multiple (more than about 5) independent sites for workload distribution and parallel, optimal and intensive use of 3M; men, machinery and materials concentration and cost effective logical use of resources to save the time and cost**. This triple project is i) Chinari-Arja only 25 km tunnel, 320 M head and 1100 MW power ii) the Arja-Bhalgran only 11.8 km tunnel, 370 M head and 1600 MW power **+ that due to flow of Bagh river** and iii) Bhalgran Dam with 63 M head and more than 363 MW power is asserted to avoid wastage of hydraulic head, both up and down stream and wastage of about 2000 MW available power opportunity. (AIGC) The 960 MW Neelum-Jhelum is already developed, while Suki Kinari and Muzafrabad potential power tunnels sites need early development.

4.4.4. Rivers Ravi, Bias and Sutlej/Group-d

115 MAF Jamrao dam is also a side valley Dam in the depression of old dried up bed of river Sarasvati [19] and Ghaggar/ Nara/ Hakra [20] with about 80 Km long dike near Nawabshah. This dam can store the rain drainage of all Punjab, Kashmir, KPK and northeastern Baluchistan along with floods of Ravi, Bias and Sutlej and overflow of all the upstream dams through four Channels required **for safely diverting** the Flood water to this dam avoiding the flood damages of the upstream areas too. The WB diverted the attention and recommended 0.9 MAF Chotiari dam a few Kilometers downstream of Jamrao exactly only 0.8% storage of the available opportunity with construction of 23 Km long feeder canal to conceal Jamrao. What a beautiful camouflage of Jamrao dam on the part of WB.

However, recommendation of Chotiari dam has brought in vision the site of 115 MAF Jamrao dam having **direct and most prominent role in GAC**. This dam may provide all the benefits stated for Tarap at the ratio of about 115/152 excluding power and a few other particular for Tarap, but much more than Tarap in its contribution to GAC. (AIGC)

5. Report in Brief on WB Terrible Role

Now within the context and field of water storage let us review the story of report “**Water and Power Resources of West Pakistan**” recommended by World Bank. In the above stated report, WB team has undermined all possible interests of Pakistan where ever it could find an opportunity to teach it number of lessons, the Indus Water Treaty being as **Lesson No 1 of this series**. WB has perhaps strongly focused on limiting the water storage to a minimum in order to provide Indians a justification in their stance of diversion to India of maximum unutilized water of western 3 rivers draining into Arabian Sea. Following may critically be reviewed in this regard.

1) Complete safety from the Floods disaster, a prime motive in water storage requirements is neglected altogether and never ever taken it into any account at all to let Pakistan to be always a pretty prey to all flood disasters almost every year. On the other hand it emphasized construction of thousands of miles of Bunds/levees [27], the cost of their construction, repair maintenance, supervision including cost of damages/disasters due their overflow and breakage in about 50 years with no gain at all against dam’s strategy with about the same cost, but with numerous extremely huge gains. **Lesson No 2**

2) In place of maximum flow in 2 peak flow months with some safety addition, the WB team has gone for 5 month **Average Peak Flow** 115 MAF as the base for storage estimation. *Unless one is able to have a grip on all the flow including maximum, how can one be able to have its average value in control? This means always almost 25% - 35% flow wastage when it is above the average.* If the maximum flow were taken as base for estimation of storable quantity, then from recoded maximum flow about 190 MAF is worth storable as shown in **Table 2**. This should be rather increased by at least 10% (210 MAF) to have control on any unexpected flow. **Lesson No 3**

3) Then WB team has gone for illogical estimates; storage estimated on bases of 41(1922-1963) years average flow of 5 peak flow months considered by WB sounds very attractive but is much deceptive as its 4 years above 37 years flow cycle (**Figure 2**) are from driest season thus reduced even the average too much.. **Lesson No 4**

4) No stoppage here. This average flow based estimate, is further reduced by 42.4 MAF irrigation requirements of 5 monsoon months. *This cut is absolutely irrelevant as the Monsoon flow physically is only for 10 - 15 days in July and August and not distributed over 4 or 5 months and the irrigation requirement in these two month, is almost nil due to local heavy rains more than irrigation re-*

quirements and it rather eminently needs to drain out the extra rain water along with the canals supply in the pipelines too. The flow of next 3 months is not worth storage, these rather may need 2%, 20%, 40% additional supply from storage [16] and this demand must be added in storage requirement and never ever be considered for deduction. **Lesson No 5**

5) Again No stoppage here. All the average flow of rivers Kabul 27 (max. 38) MAF and Chenab 26 (max. 37) MAF (total 53 - 75 MAF) is concealed for wastage and boosting flood disaster saying "There remains **29.5 MAF storable quantity** (22 for Indus and 7.5 for Jhelum) giving full consideration to flows of rivers Kabul and Chenab in irrigation usage." *This means that this is the total admissible water storage of Pakistan in WB view [15]. However, their irrigation use is not elaborated. How their most of flow can be used in irrigation over the year span without storage, when their maximum flow (70%-80%) passes away during only 10 - 15 days. Even their storage for needs of flood control, irrigation, power production and aquaculture promotion could not attract any minute attention of WB.* **Lesson No 6**

6) Again No stoppage here. Look at their statement "*The efficiency of storage capacity, measured as a ratio of mean annual storage yield to storage capacity available, falls off rapidly on the Jhelum River at figures above six MAF, whereas it remains around 100 percent up to nearly 20 MAF on the Indus at Darband*". Thus in WB view/estimate total worth storage of Pakistan is 26 MAF out of annual average 142 (max. 180) MAF flow and that of peak flow months average 115 (max. 150) MAF (**Table 1**). **Lesson No 7**

7) Again No stoppage here. As per *WBR-1 page 122. [15]* "*The figures show that, after completion of IACA's full program of canal remodeling, and on the assumption that kharif requirements will receive priority each year, it will be possible to fill a reservoir on the Jhelum only to the extent of two MAF in every year; whereas it will still be possible to fill reservoirs with total live storage capacities in excess of 15 MAF every year on the Indus*" (Total 17 MAF). **Lesson No 8**

8) In between the lines, the canals widening and remodeling and barrages has been used as storage to further reduce storage of dam. *It is absolutely nonsense. The running irrigation system has already almost full barrages and canals, where come this storage other than the routine feed/supply and delivery.* **Lesson No 9**

9) Whereas on the sites bases, WB recommended 42.5 MAF storage (21.5 MAF achieved, rest either rolled into controversies or is unsuitable) against 447.32 MAF of the author, *i.e.* about 10% (actually 5%). **Lesson No 10**

10) From seasonal flow bases its estimate is 21.5 (26.5) MAF (S. No. 12 **Table 2**) against 190 - 210 MAF of the author, *i.e.* about 11 (13)%. **Lesson No 11**

11) Here in case of Pakistan, there is probability of continuous extraordinary flow in 5 - 6 years [16] [17] and Global climate changes may boost it for some more years in future beyond imaginations. The 37 years cyclic flow pattern [17] due to decadal roaming of monsoons requires over the years or multiple years

storage about 420 - 500 MAF, whereas WB has not seriously considered this most critical issue. WB pointed out and only defined in a sentence in each of its reports vol.1 and 3, while in vol. 2 [15], it has discouraged the idea and closed this chapter altogether saying “*IACA has not programmed for the long term aspects of the third stage providing over-year storage. For a region that is so dependent on water, the Indus is not well suited geographically for the development of storage reservoirs. The topography of the country does not provide large reservoir sites which would be technically or economically easy to develop. Furthermore, the high silt content of the rivers, particularly of the Indus itself, would result in a fast rate of depletion of storage capacity.” vol. 2 page 89 [15]. Tactfully discouraging without any solid reasoning and letting the hurdles grow in place of providing solutions to the problems or at least warning the Government of Pakistan from any other development at potentials sites that may generate any further obstacle or problems in their future emerging vitalities, like growth of Skardu city and airport in 35 MAF Katzara, Jhelum and Saraiy Alamgir cities, GT Road and CPEC Railway part in 64 MAF Rasul, Karakoram Highway in D M Bhasha, M2 Motorway and Pindi Ghap city in 152 MAF Tarap, Afghan towns and villages in 25 MAF Warsak along with 115 MAF Jamrao and 10 MAF Khaplu dams sites having capacities (Km³/status in World large capacity dams) 43/15th, 79/9th, 187/1st, 31/17th, 142.5/5th and 12.3/21st respectively. That is, 3 dams are in the top 10, even one leading the list and 3 in next 11, then, what else could be the large size? However, ultimately it suggested **35 MAF** saying “*Subject to investigation, the present indication is that the third stage, over-year storage, might extend to 9 MAF on the Jhelum and 26 MAF on the Indus.*” vol. 2 page 91 [15]. The author has highlighted most vital sites (Figure 1, Figure 4, Figure 5) amounting to 447.32 MAF capacity stated in (Table 1 & Table 2) with almost all multiple benefits and requirements and are all urgently needed by all the eight parameters of dam demand listed above in section 4.3. While their Global vitalities overrules all economic concerns and constraints, the technology should overcome all the technical problems. However, economics would also strongly emphasize this in view of huge output to input ratio and silt is no problem at all within 400 - 800 years (Table 2) and till that time technology will surely be able to handle this issue amicably.*

Lesson No 12

12) From over the years or decadal flow bases its suggestion is 35 (9 + 26) MAF **subject to investigation** as stated above without any logic, while on basis of 34 years flood records author estimated 277 MAF with annual maximum ADDITIONAL irrigation supply in multiple of 10 MAF (mostly 50 MAF, the maximum limit) when available, whereas it is 497 MAF when additional maximum supply is limited to 40 MAF per year, i. e. total irrigation supply 60-70 MAF from storage over and above the supply of enhanced normal running flow. Thus WB recommendation is about 12.6% and 7%, respectively with respect to that of the author [17].

Lesson No 13

13) *Underground water mostly not suitable for irrigation and always is too much costly with electrical and diesel pumping sets has been emphasized for irrigation supply in place of most suitable and cost free supply from surface storage of water in dams from the available monsoons flow. This activity has endangered the aquifer situation in many areas and is a critical risk of huge loss and tremendous problems in draught situation. Lesson No 14*

14) *Most suitable Hydro electric power potential of 86,000 - 94,500 MW has not been elaborated rather concealed and in place diesel and coal based power plants have highly been emphasized. Against the above potential WB recommended only 1471 MW hydro (1.6% of the potential) and 4867 MW thermal i.e. 3.3 times that of its estimate of hydro. Lesson No 15*

15) Kalabagh dam 6 MAF was presented along with putting the KPK and Sindh horses in the battle against it, not to let it materialize at all, hence not to let Pakistan gain any minute possible benefit. However, 6 MAF Kalabagh storage out of 113 - 142 MAF peakflow will how much avoid the flood disaster? Not at all, as storage will start only at the end of flood peak. How will it guide and control the rest 104 - 137 MAF going into waste (annual average more than 40 MAF/70 MAF max. going to Arabian Sea and the proportionate quantity absorbed and retained by the flood affected area to dry up in 6 - 18 months) in place of its vital irrigation and urban usage? The Chief Minister of Sindh has mourned “**during the rain, we die of drowning in floods and during no rain we die of thirst**”. *Yes, it is the fortune of Pakistan as WB has not recommended its proper storage and handling when available, then how can one be safe from its disaster and how can one benefit from it when it has gone out of reach.* Wapda officials and all intelligentsias here quote the record of average annual flow (40 MAF) going to Arabian Sea below Kotri barrage, but they all have concealed its most disastrous amount absorbed and retained as standing water by the flood affected area destroying the existing and blocking the cropping of 2 - 3 next crops. **Lesson No 16**

16) Illusion of 3600 MW from Kalabagh (not possible in present situation) is given as lollipop to Pakistan so that it may not wakeup, explore and recover 11,965 MW from Tarap's opportunity. **Lesson No 17**

17) Skardu (Katzara) dam of 35 MAF capacity is reduced to 5.2 and then to 8 MAF. Thus it reduced the size to only 23% or less than 1/4 inspite of merger of Skardu city and airport, even in 5 MAF. If city and its installations have to be shifted, then why not 35 MAF. It also avoided highlighting its 15,000 MW hydropower potential, lest it may come into limelight. Line losses, difficult terrain are highly emphasized, whereas, even 50% losses will provide 8000 MW from it and additional 35,000 MW in place of 40,300 MW from downstream stations to the National grid, as detailed in **Table 2. Lesson No 18**

18) The 6 MAF Makhad (Tarap) dam is superseded under the cover of 6 MAF Kalabagh dam in WB report. The Tarap dam is actually of 152 MAF. This is disintegrated in the four dams; Dhoke Pathan, Dhoke Abaki, Makhad and a 3

MAF part of Kalabagh with a net capacity of 16 MAF, thus reduced almost by 10 times. The WB team has de-tracked 152 MAF to 16 MAF and those too have been fired silently one after the other to have nothing at the end. Makhad is not discussed in a bit details lest Tarap or Mega Makhad may come in limelight.

Lesson No 19

19) Against 88 - 93 MAF available flow of Jhelum and Chenab group of rivers with torrent flood flow Nulas on theirs both sides and sites storage potential of 91 MAF, the WB have agreed on 9.27 (8.77 + 0.5) MAF storage. Again 1/10 of available potential. **Lesson No 20**

20) 64 MAF storage potential of Rasul dam most suitable for whole group (c) of rivers, even Chenab and its all torrential flow Nullas is shown only 10 MAF and that too is superseded by 5 MAF Mangla negating its need behind its false estimate of only 2 MAF available for storage in this whole group of 88 - 93 MAF maximum annual flows. **Lesson No 21**

21) The 115 MAF Jamrao is concealed under Chutiari dam of 0.9 MAF. The lollipop of 1/128 size is found sufficient to de-track Pakistan. **Lesson No 22**

22) The bringing of further area under surface water irrigation to meet local demand of food grains was discouraged as it will require further water storage. Also increase in water demands in existing irrigated area was **also** discouraged by directing it to search the means alternate of water, lest additional storage is considered. This was perhaps the preplanned preparation of ground for Indians design of diversion to India the water of western three rivers going to Arabian Sea as is being reiterated by the Indians. **Lesson No 23**

23) The alternate means of water indicated are unnatural fertilizers and pesticides etc. disastrous to ecosystem through air, earth crust and water pollution.

24) Three dam sites were pointed out on River Soan as side valley storage for water of river Indus flow without giving any minute importance or consideration to the role of 8 - 10 MAF flow in rivers Sil and Soan itself. The flow of Soan River alone is well sufficient to fill Dhoke Pathan dam and this dam is misguided by linking it to Indus side valley storage and falsely dependent on most costly 120 Km flood diversion channel. Even, as side valley storages for Indus, it has been, perhaps tried its best to put every possible shadow on their suitability and benefits and emphasized every possible hurdle in their reconsiderations. Thus not even single MAF storage was left possible by these friends and well wishers of Pakistan. **Lesson No 24**

25) About 30 - 35 times costly power generation was recommended with extremely high dose of **Heat, GHG, pollution and soot (HGPS)** to Global Environment along with extremely huge persistent economic dose to Pakistan. **Lesson No 25**

26) Recommended 30 - 35 costly pumping of underground water with too heavy loss to the economy, agriculture output, lands fertility, disruption of aquifer level and undue heavy dose of **HGPS** to Global Environment. **Lesson No 26**

27) The recharge ability of underground aquifer through seepage from the

canals, river beds, watercourses and irrigated area is at the most 8% - 10% of irrigation supply and at the present situation after implementation of WB recommendations about 55 - 60 MAF is irrigation supply till 2020, and an equivalent quantity may be from Natural underground network, thus only 10 - 12 MAF is annually recharged while WB recommended pumping of underground water at the rate of 11 MAF by 1965, $33 + 15 = 48$ MAF by 1975, $45 + 18 = 63$ MAF by 1985, $50 + 27 = 77$ MAF by 2000 (page 84, vol. 2, [15]) to extremely jeopardize the stability of all aquifers and extremely catastrophic disaster risk in Pakistan during any prolonged draught. **Lesson No 27**

6. Conclusions

1) Reversion of IWT 39 MAF water back to Pakistan is vital Global Emergency. (AIGC)

2) Complete and optimal development of water and power resources of Pakistan is extremely and absolutely vital Global Emergency with no alternate or substitute or choice at all for restoration of safe Global Environment and Ecosystem's pre-1960 status in 42 excluding 10 years mobilization period if started simultaneously at all fronts by 2022 [5]. (AIGC)

3) WB has unknowingly hurled all the major disaster and calamities on the entire World and perhaps intentionally on Pakistan. It should confess its blunders and compensate all the losses of Pakistan along with financing all the projects, at least all those misled or deferred intentionally or unintentionally. (AIGC)

4) Ghazi-Barotha power generation system has dictated Kalabagh as not to be above 263 M Asl and at this level its reservoir storage will be at the most 1.25 MAF.

5) With 113 - 142 MAF possible peakflow, 6 MAF (at present only 1.25) Kalabagh dam, neither has any role in flood control, neither reduction nor boosting, both up or downstream, may it be of 263 M or 277 M ASL or even 280 M ASL Level. Also neither it has sizable storage for irrigation supply, nor has power generation capability from the Indus flood. It is rather extremely vital only for power generation from the normal Indus runoff river as indicated below. Mind it, storage has to be gained only at the flood end. (AIGC)

6) As per Wapda, Kalabagh dam had 3600 MW power generation potential at 280 M ASL, however, these figures of power generation are not realistic. With Kalabagh of 277/263 M ASL height, it could hardly be of 2147/1692 MW with the assumption that flow will be over and above the flow demand of maximum generation for at least 6 months of summer season. (AIGC)

7) Tarap dams and canals/flood channel system has the potential

a) to perfectly handle downstream floods of Indus, Soan and Kabul rivers directly and upstream flood of Kabul and Swat indirectly through providing it a safe and free passage to Mianwali.

b) to store 152 MAF and thus provide multiple year storage and supply regu-

lation potential to optimally handle/manage/regulate the water supply for irrigation, urban usage and power generation from year to year. (AIGC)

c) It can easily and very well contribute to the issue of 37 years moon boosted monsoon cycle with 5 - 6 year cluster of much heavy rains flow followed by 12 - 13 year cluster of moderate flow, then 3 - 4 year cluster of somewhat heavy flow followed by 14 - 15 year cluster of relatively draught dictating to manage the total 33 - 37 years fluctuation cycle regulation. (AIGC)

d) to handle water storage of 5 - 6 years cyclic extraordinary rainfall with all maximum possible adverse conditions. (AIGC)

e) to generate huge power 11,965 MW from flood flow of water, never ever possible to generate it in any other dam system at this site, except Tarap. (AIGC)

8) The Tarap, Rasul, Warsak, Marala, Skardu, Khiplu and Jamrao dams are the main contributors in solving the local as well as Global Climate Emergency Problems of Extreme International Concern as pointed out above in their role at numbers xviii - xxiii in part c) of No. 5) in subsection 4.4.2. (AIGC)

9) Rasul and Marala dams can manage the storage of flow of Chenab and its Nullas and that of overflow of Mangla, Rohtas and Bunnah dams.

10) Arja power tunnels is much better choice in place of Kohala with 3063 MW power as compared to 1100 MW with about 70% - 80% extra cost. (AIGC)

11) The 37 years storage and flow regulation strategy is extremely and critically vital as critical dry season is longer being 14 - 15 years than its predecessor 12 - 13 years and its immediate feeder/reliever is of only 3 - 4 years with smaller flow as compared to its predecessor 5-6 long with much more flows. Thus, 37 years flow management and regulation is critically vital.

7. Recommendations

1) **The flow of 39 MAF water of eastern 3 rivers diverted to India under Indus Water Treaty-1960 should be reverted back to Pakistan at once to save the life on the Earth Globe.**

2) **Also remaining 2 parts of WEPC of Pakistan should be immediately mobilized by optimum irrigation of its northern as well as Chulistan, Thar, Thal and Baluchistan to restore safe Global environment as it has**

a) **Blocked** the pumping of Global Heat to the Outer Universe by continuous drainage of coolant (39 MAF water per year) from the natural Global Air Conditioner and thus Global Heat Contents is continuously building up to the highly dangerous heights since 1973 at the rate of 16.48 ZJ heat rise per year.

b) **Blocked Pakistan's moderation/taming** of extremely huge storms and hurricanes taking birth in India [4], growing up in Africa, fueled/equipped by Atlantic resulting in huge disaster and loss in USA and Caribbean countries.

c) It has resulted in terrible status of Oceanic heat contents and marine culture.

d) It has resulted in terrible melting status of polar and world's glaciers ice and made the ecosystem extremely at stack.

e) It has given rise to huge and numerous wildfires and heat waves all over the Globe.

3) Indus Water Treaty aftermaths and Earth Globe Climate Catastrophic Calamities control only through Pakistan irrigation systems must be presented at all International forums.

4) The developments of all infrastructures shown in Table 1 and Table 2 must be started immediately under UNO supervision and management with proper design.

5) As proved, the link of Indus water treaty to the above **issues** and shown that only the Pakistan through its WEPC cycle is capable to handle these issues, the International Community in general, UNO and USA in particular should be forced to reverse Indus Water Treaty along with financing and managing all the related activities of water storage, irrigation, drainage of underground and rain water, development of new irrigate-able areas and its irrigation system in Thar, Thal, Chulitan and Baluchistan. Thus the Nature has reversed their both move against Pakistan and perhaps the 3rd also and enforced the situation in which they are

a) Forced to reverse the IWT.

b) Forced to finance and cooperate in development of all required infrastructures mislead and derailed by WB recommendations and which would have never ever been possible for Pakistan within its resources.

c) Forced to avoid the creation of all obstacles, which is their general practice under their socio-politico-economic interest.

d) Forced to review and resolve the Kashmir issue in view of surety in solution of extreme Global Climate Emergencies.

6) The expenses over all the infrastructures and related activities may be charged as 2 out of 16.48 parts by all the countries as per their fossil fuel and explosives' production and use + their wildfire; 3/4th of remaining 14.48 parts by WB, UK, India and 1/4th by USA, Australia, France and Germany etc. managed by UNO and compensation of losses of Pakistan estimated on actual or 50% of the above by WB and its all sponsors if any in the game of damaging Pakistan interests in the above stated moves.

This would of course relieve the world from number of very critical and serious threats from Global Environmental Issues. This would also accomplish the sayings of Holly Quran “**They moved tricks/plans (against Pakistan) and Allah moved his plan (against them) and Allah is the best of all planners**”.

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Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

- [1] Nazeer, M.M. (2019) Major Culprit behind Horrible Steep Rise of Global Heat Contents and Temperature since 1973 and Its Blockage Strategy. *International Journal of Scientific & Engineering Research*, **10**, Paper ID: 10132594.
- [2] Nazeer, M.M. (2019) Mobilization of Water Cycle and Its Persian Air Wheel Heat Pump to Overcome Global Heating and Its Resulting Terrible Environmental Problems. *Open Access Library Journal*, **6**, e5445. <https://doi.org/10.4236/oalib.1105445>
- [3] Nazeer, M. M. (2019) Reversal of Terrible Global Heating and its Gang through Unique and Complete Water Evaporation and Precipitation Cycle of Pakistan. *International Journal of Scientific & Engineering Research*, **10**, Paper ID: 10132180.
- [4] Nazeer, M.M. (2019) North Atlantic Hurricanes Take Birth in India and Can Be Moderated Only in Pakistan by Reversion of their Agitator, the Indus Water Treaty of 1960. *International Journal of Scientific & Engineering Research*, **10**, 461-481.
- [5] Nazeer, M.M. (2020) New Insights in Role of Indian Subcontinent in Nurture of Global Climate and North Atlantic Hurricanes with an ONLY Window for Their Calamities Control. *Open Access Library Journal*, **7**, e6424. <https://doi.org/10.4236/oalib.1106424>
- [6] Polar Ice Caps Melting Six Times Faster than in 1990s. <https://www.theguardian.com/environment/2020/mar/11/polar-ice-caps-melting-six-times-faster-than-in-1990s>
- [7] Bauer, P. (1960) Indus Waters Treaty India-Pakistan [1960]. <https://www.britannica.com/event/Indus-Waters-Treaty>
- [8] Abas, N., Khan, N., Saleem, M.S. and Raza, M.H. (2019) Indus Water Treaty in the Doldrums Due to Water-Power Nexus. *European Journal for Security Research*, **4**, 201-242. <https://link.springer.com/article/10.1007/s41125-019-00043-y> <https://doi.org/10.1007/s41125-019-00043-y>
- [9] Irfan, M., Qadir, A., Habib, A., Nadia, J. and Ahmad, S.R. (2019) Vulnerability of Environmental Resources in Indus Basin after the Development of Irrigation System. <https://www.intechopen.com/books/irrigation-water-productivity-and-operation-sustainability-and-climate-change/vulnerability-of-environmental-resources-in-indus-basin-after-the-development-of-irrigation-system> <https://doi.org/10.5772/intechopen.86722>
- [10] Chandio, K. (2014) India Re-Thinking Indus Water Treaty. <https://ipripak.org/india-re-thinking-indus-water-treaty/>
- [11] Modak, S. (2019) India Needs to Keep the Indus Waters Treaty Intact, the Long-Standing Water-Sharing Agreement Should Not Be a Soft Target for Punitive Action. <https://thediplomat.com/2019/03/india-needs-to-keep-the-indus-waters-treaty-intact/>
- [12] Nax, N.A. (2016) Looking to the Future: The Indus Waters Treaty and Climate Change. <https://transboundarywaters.science.oregonstate.edu/sites/transboundarywaters.science.oregonstate.edu/files/Publications/Nax%20-%202016%20-%20Indus%20Treaty>

- [%20and%20Climate%20Change%20-%20Thesis.pdf](#)
- [13] No. 6 032 India, Pakistan and International Bank for Reconstruction and Development the Indus Waters Treaty 1960 (with Annexes). Signed at Karachi, on 19 September 1960 Protocol to the Above-Mentioned Treaty. Signed on 27 November, 2 and 23 December 1960 Official Text: English. Registered by India on 16 January 1962 126 United Nations—Treaty Series 1962.
<https://treaties.un.org/doc/Publication/UNTs/Volume%20419/volume-419-I-6032-English.pdf>
- [14] Azhar A. (2011) Indus Water Treaty, a Dispassionate Analysis. *Policy Perspectives*, 8, 73-83. <https://www.jstor.org/stable/42909289>
- [15] World Bank Report on “Water and Power Resources of West Pakistan”
Vol. 1.
<http://documents.worldbank.org/curated/en/182331468758759382/pdf/multi0page.pdf>
<http://documents.worldbank.org/curated/en/597841468098064172/pdf/multi0page.pdf>
<http://documents.worldbank.org/curated/en/597841468098064172/Volume-1-General-report>
Vol. 2.
<http://documents1.worldbank.org/curated/en/113111468774919823/pdf/multi0page.pdf>
<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/944011468091758375/volume-2-program-for-the-development-of-irrigation-and-agriculture>
<http://documents.worldbank.org/curated/en/944011468091758375/pdf/multi0page.pdf>
<http://documents1.worldbank.org/curated/en/944011468091758375/pdf/multi0page.pdf>
Vol. 3.
<http://documents.worldbank.org/curated/en/336271468774973346/Water-and-power-resources-of-West-Pakistan-a-study-in-sector-planning>
<http://documents1.worldbank.org/curated/en/336271468774973346/pdf/multi0page.pdf>
- [16] Nazeer, M.M. (2020) Solar, Lunar and Venus Roles in Some Global Climatic Events. *Open Access Library Journal*, 7, e6419. <https://doi.org/10.4236/oalib.1106419>
- [17] Nazeer, M.M. (2020) Indian Monsoons Roaming in Time and Space and Global Climate Calamities Control Vitalities. *Open Access Library Journal*, 7, e6568. <https://doi.org/10.4236/oalib.1106568>
- [18] Indian Rivers Flows Wikipedia.
https://en.wikipedia.org/wiki/Indian_Rivers_Inter-link
- [19] https://en.wikipedia.org/wiki/Sarasvati_River
- [20] https://en.wikipedia.org/wiki/Ghaggar-Hakra_River
- [21] Engr. Fateh Ullah Khan Gandapur.
<https://www.facebook.com/150438164981190/posts/brief-introduction-of-katzarah-damthere-is-a-spectacular-multi-purpose-and-the-n/770408492984151/>
- [22] Nazeer, M.M. and Naem, A. (1998) Role of Earth Shape and Rotation in Generating and Tracking of Cyclones. *Journal of Natural Science and Mathematics*, 38, 217-227. [https://doi.org/10.1016/S1355-0306\(98\)72112-4](https://doi.org/10.1016/S1355-0306(98)72112-4)
- [23] Nazeer, M.M. (2019) Tragic Aftermath of Californian Jungle Fire and Hawaiian Volcano Out-Burst, a Warning about Persistently Rising Global Warming, Result-

- ing into High Rated Disaster's Chain. *Open Access Library Journal*, **6**, e5118.
<https://doi.org/10.4236/oalib.1105118>
- [24] Nazeer M. M. (2002) Growth Potential of Pakistan's Water Resources and Their Impact on Development, COMSATS. *Science Vision Quarterly*, **8**, 19-20.
- [25] Ali, A. (2013) Indus Floods Mechanisms, Impacts, and Management. Asian Development Bank.
<https://www.adb.org/sites/default/files/publication/30431/indus--floods.pdf>
<http://www.dartmouth.edu/~floods/Archives/1988sum.htm>
- [26] Bhatt, C.M., Rao, G.S., Farooq, M., Manjusree, P., Shukla, A., Sharma, S.V.S.P., Kulkarni, S.S., Begum, A., Bhanumurthy, V., Diwakar, P.G. and Dadhwal, V.K. (2016) Satellite-Based Assessment of the Catastrophic Jhelum Floods of September 2014, Jammu & Kashmir, India. *Geomatics, Natural Hazards and Risk*, **8**, 309-327.
https://www.researchgate.net/publication/306273621_Satellite-based_assessment_of_the_catastrophic_Jhelum_floods_of_September_2014_Jammu_Kashmir_India
<https://www.tandfonline.com/doi/full/10.1080/19475705.2016.1218943>
<https://doi.org/10.1080/19475705.2016.1218943>
- [27] Siddiqui, I.H. (2010) Re-Examining Flood Management Measures for Sindh; International Workshop on Floods in Pakistan-2010.
[https://pecongress.org.pk/images/upload/books/8-Re-examining%20Flood%20Management%20\(Iqtidar\)-11pt.pdf](https://pecongress.org.pk/images/upload/books/8-Re-examining%20Flood%20Management%20(Iqtidar)-11pt.pdf)

Abbreviations

Abbreviations	Stands for	Abbreviations	Stands for
ZJ	Zeta Joules heat = 10^{21} J	MAF	Millions Acre Foot Volume
AIGC	An Immense Global Concern	WEPC	Water Evaporation and Precipitation Cycle
GAC	Global Air Conditioner	GHT	Global Heat Contents & Temperature
GHG	Green House Gasses	WB	World Bank & Chas. T. Main International etc.
NAH	North Atlantic Hurricanes	WBR-n	WB Report on Water & Power Resources of Pakistan vol.-n
IWT	Indus Water treaty	WAPDA	Water & Power Development Authority of Pakistan
GPS	GHG, pollution and soot	HGPS	Heat, GHG, pollution and soot
ASL	Above sea level		