

Water Crisis V/S Water Preservation : Human Contribution with Legal Protection

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Abstract

Mother Nature gave us all resources including water in a perpetual manner. we the human being didn't used it, actually we exploited it brutally other living creatures use these in a proper manner only for survival as well as to recharged the Ecological System Every insects contribute their best to create best biodiversity but only we human being are so selfish and self centralized that we think we do and we create facilities for our short term comfort wither it may be harmful to others and be hazardous in future. We invented so many techniques to get a better life for generation, but we are not doing a bitter for Mother Nature. Our knowledge and development is progressive but it should be also protective towards nature because each invention is rooted to the nature and if we will root out the connection between nature and science only the human race will be disappear along with all other species who are innocent and victim of our greediness. In current scenario water is on high risk due to our foolishness. Today what we are facing is our own karma, "Mankind has probably done more damages to the earth in the 20th country than in all of previous human history" truly said by Jacques Cousteau.

Key Words:

-Drinking Water -Resources - Ecological System
 -Human Race -Survival - Crisis and Contribution

"We are living beyond our means. As a people we have development a lifestyle that is drawing the earth of its priceless and irreplaceable resources without regards for that future of our children and people all around the world."

Margaret Mead

A long queue of women and kids carrying empty vessels, going on foot in a harsh sunny day toward a drying well which is about 14 km away. When they reach there, some of them go down about 22 meters in the well to get some water. After a long struggle and facing high risk they succeed to get a vessel of 10-12 liter of brown water. This amount of 10-12 liter water is in the ratio of at least 3-4 people of a family. This water may not be safe for drinking purpose because it is neither clean nor pollution free from fluoride but it is the destiny of thousand of woman in India to provide some drinking water for their family. This no. is increasing in lacks because the remote rural areas are facing this problem from last few years but now this crisis is encroaching the boundaries of city and most of populated area of India. Now people are getting water supply twice or thrice in a week. They have to tolerate and accept the quantity and quality of supplied water.

Some of the villagers have been migrated from their patrimonial land only for the reason of that there were no resources of water, or whatever they have, have been drought from a long time. Some of the villages are blacklisted for the wedding purpose because no one wants to marry their daughter in such kind of village where water has become an issue of torture for sustaining the wedding. So many women got severe injuries or permanent disability during fulfilling their regular task of getting water, and some of them got martyred for this noble duty. This scenario is affecting the complete ecological system of the earth in a global perspective. Most of population of the world is facing crisis of clean drinking water and some of them are unable to get water to survive. This situation is alarming that III world war will be happen only for water.

We are responsible for this situation; we have cut down forests, polluted the rivers, and converted the traditional water sources like Bawari, (Kua) well, into wastage dump yard. We have blasted the mountains and converted into concretes; we are exploring the world as well as polluting the untouched areas like Everest, North and South Pole,

Deep blue sea. We are digging the Earth miles to miles to get precious metal and stones but never feel the pain of Nature. We are encroaching our limits on the account of development. We are demolishing our ecological system with our own hands. We are increasing our population like insects and after some years we will live like a insect who has a very short life span full of struggle of survival. Our industrial and urban development excrete the high level of carbon die oxide, chloro floro carben, sulpher die oxide, helium, methane Etc poisonous gases which affects not only the air but purify of water also. We are nurturing the global warming and a disturbed “manson” schedule. In India where create a new water source was a culture and Heritage, today we Indian have forgotten that culture, how many wells, bawari, pounds or lakes have been constructed or created after independence?

Around 2, 00,000 Indians die every year because they have no access to clean drinking water. 24 out of 29 states are going in worse condition. 21 cities are likely to run out of ground water by 2020. Demand of drinking water 70.1% of the households in urban areas and 18.7% in rural areas. 163 million Indian lack accesses to safe drinking water. 210 million Indian lack accesses to improved sanitation. 21% of communication diseases are linked to unsafe water. 500 children under the age of five, die from diarrhea each day in India. According to Niti Aayog* water scarcity will deduct 6% GDP of India.

*(Niti Aayog national institution for transforming India.)

18% of the world population resides in India and we have only 4% “Usable”, not drinking water sources. 70% of water which is covering the Earth in which only 2% is fresh water and horrible fact is that 1.6% of that fresh water is contained in glaciers and polar ice caps which are melting speedily. Our Planet population is 1.3 billion and expected growth is to 1.7 Billion by 2050 it is a matter of concern. Indian Ground water use is about 1 quarter of the global usage with total usage surpassing that of China and the United States combined. India is 7th Largest Country in the world with a landmass of 3.29 million sq. km. (slightly larger than a there’d of US). Due to groundwater pumping through electricity water table has seen a drop of up to 4 meter in some areas and it is increasing from the past 2 decades on other hand China a country of 50 million population uses a quarter less fresh water. In the lower middle income countries, 38% of health care facilities and 19% sanitation are unimproved due to lack of water sources,* this scenario proves a **Native American Proverb** that we don’t inherit the earth from our ancestors we borrow it from our children.

Constitutional and Legislative scenario:

- ❖ We have fundamental Right to safe Drinking water which is treated as Right to life, covered by Article-21*.
- ❖ Under Article – 262 – Enactment and Adjudication of-The Interstate River water disputes Act, 1956 was introduced, which has a significance role in distribution, development and investment of Water Energy as well as water supply.

*(2010 the UN general Assembly explicitly recognized the Human right to water and sanitation WHO guideline for drinking water quality 2014)

- ❖ Part IX and IX A of our Constitution was empowered through 73th and 74th Amendments, by which concept of Self Governance was... implemented with Panchayati Raj Act, 1993(April 24,1993) and The Cunicipal corporation Act, 1955. Both of the Acts are well competent for water saving policy’s implementation at grass root level.
- ❖ National Guidelines provided by National Rural Drinking water programmed (NROWP)* which are very effective if they have actual implementation in reality. Because it is a sad fact that we have lots of Legal provisions but there is no satisfactory result of their existence. As an example, Maharashtra management of irrigation system by farmers Act, 2005 and Maharashtra Water Resources Regulatory Authority ACT, 2005 (MWRRA) were enacted about 14 years ago but today Maharashtra is facing dangerous drought and suicide rate of farmers is highest in India. Most of states of India created Legislative Protection for water Resources but they don’t push their effectiveness.

deep underground water should be treated as the property of state under **the doctrine of Public Trust**, and covered under sec. 4 of Indian Easement Act, 1882.

- ❖ under sec. 277 of Indian Penal Code, 1860 Adulteration and fouling water should be punishable more than 6 months and fine should be increase from 500rs to 5000 rs.

- ❖ Water (Prevention and control of pollution) Act. 1974 is the most powerful weapon in Indian Democracy to secure Water Resources, it should be activate in its more powerful Avatar. This Act solely is enough to fight with Water crisis.
- * A. jagannath v/s Bihar and Subhash kumar v/s state of Bihar, AIR-1991-SC-420
- * in the judgment of Wasim Ahmed khan V/s Govt. of A.P. 2002 (5) ALT 526 (DB)
- ❖ National Green Tribunal Act, 2010 creating a new path towards Natural Resources protection (under sec. 15) by their recent judgments, on 31st May 2019 paani foundation V/s state of Hariyana, regarding mining affecting ground water in Bhiwari and on 21st May 2019 praveen kakar sons v/s Ministry of Environment, regarding encroachment of green areas and extraction of ground water, it's a new start of preservation of Resources.
- ❖ Establishment of **Jal Shakti Ministry** is a hope and may be a Tool for fighting with this big trouble. We can pray for its success and 'shaktishali' outcomes.
- ❖ Government should promote the river preserving projects like Namami Gange for all big and small rivers of India at every level.

Total water requirement for different uses

S. No.	Uses	1997-98	2010		2025		2050	
			L.	H	L	H	L	H
1	Irrigation	524	543	557	561	611	628	807
2	Domestic	30	42	43	55	62	90	111
3	Industries	30	37	34	67	67	81	81
4	Power	09	18	19	31	33	63	70
5	Inland Navigation	0	07	07	10	10	15	15
6	Flood Control	0	0	0	0	0	0	0
7	Environment	0	0	0	0	0	0	0
8	(i). A forestation (ii) Ecology	0	05	5	10	10	20	20
9	Evaporation losses	36	42	42	50	50	76	76
10	Total	36	42	42	50	50	76	76

- * Total water requirement of the country for different uses as assessed by NCIWRD 1999 (National Commission on integrated water resources development)

Annual availability of water in cubic meters- per year.

Year	Population	Million	Per capita Average
2001	1029	2001 Census	1816
2011	1210	2011 Census	1545
2025	1394	Projected	1340
2050	1640	Projected	1140

Project water demands in (BCM) for various sectors

standing subcommittee report of ministry of water resources (MOWR) NCIWRD							
		MOWR			NCIWRD		
S.No.	Sector	2010	2025	2050	2010	2025	2050
1	Irrigation	688	910	1072	557	611	807
2	Drinking	56	73	102	43	62	111
3	Industry	12	23	63	37	67	81
4	Energy	5	15	130	19	33	70
5	Other	52	72	80	54	70	111
	Total	813	1093	1447	710	843	1180

Failures in water saving policies :-

1. Lack of awareness on various aspects of Planning Programmers and policies among people and authorities.
2. Drinking water source does not always follow the source sustainability plan as well water saving project
3. There is a huge gap between technically dealing and changing climate communities' institutions lacking capacity to take initiatives at various levels.
4. farmer do' not follow cropping practices based on water availability they have heavy dependency on ground water for irrigation
5. Lack of proper regulations with implementation for preventing indiscriminate exploitation of groundwater.

* Sources GOI 2006 cited in ADB (2009.03)

6. Lack of proper protection for river ecosystem (sand mining and mineral exploration is a biggest threat to river ecosystem) despite several conservation laws the destruction is rampant.
7. Too much reliance on rice and wheat production system with less emphasis on day land agriculture there is no strong irrigation scheme for water saving.
8. The Gram Panchayats do' not have a comprehensive plan to maintain water sources and infrastructure as an assets they don't have proper technical financial and departmental support.
9. We have lots of legislative and constitutional provisions without strict implementation. An Indian Environmental law seems in Decorative status. These are treated just a signboard of warning.
10. We Indian never feel the severity of any issue of sensitivity until we don't face the issue our recklessness and self centralizing attitude will be a curse for our upcoming generations that's why **Gandhi ji** said "The earth has enough for our need, but not for our greed".

Suggestions:

1. Government of India established new ministry of **Jal Shakti** it should connect policies and their implementation properly for better feedback loop and data consolidation for checking on implementation on upper mid stream and grassroots level.
2. The Social communities should involve, participate and perform in policy framing for their successful implementation in a sincere manner.
3. The NGOs working is this perspective should aware people to use water as a common pool resource. They must train youth to stop misuse of water.
4. Water for industrial use should be priced and Effluents should be discharged only after meeting EPA standards.
5. State govt. should change the allocating resources system, in which industry should not get priority over drinking water.
6. There should be stringent laws against polluting industries and recycling and reuse of water must be made mandatory.
7. Increasing demand of water due to growing population it must be controlled otherwise all solutions will not be fruitful.
8. There should be equitable development and distribution of water through making minimum basic lifeline water as a human right.

9. There should be proper monitoring and consumption analysis of water use by different categories of consumers than pricing high to ensure that poor's are not denied water access in the name of increasing deficiency of water use.
10. There should be a check through strict enforcement of laws on those people who owns land with ground water resources because in many areas ground water over exhausted and exploited.
11. There should be fixed priorities on local water use for drinking, sanitation and other uses to protect water efficiency.
12. There must be an Audit system related to water supply. Social and technical audits are requiring monitoring water quality and quantity in ratio of demand especially in urban areas as well as rural.
13. Water metering to be introduced and high and water user should be charged pro rata basis (telescopic tariff system).
14. The sporadic water supply should be introduced and promoted which paves the way for creation of formal water markets.
15. Natural water resources should be preserves as an assets, people who are living in a basin area should be more alert n aware about their duties towards water protection from vaporization.
16. Government Institution should promote research work supported to water saving innovations, policy, regulation as well as implementation.
17. Water harvesting system (whs) is also should be mandatory in India. Whether some dense constructed area cannot fulfill the requirements of successful WHS but smart dealing with innovating approach can make it fruitful. We can preserve rain water through WHS.
18. Irrigation process should be advance in water saving mode through new innovative techniques like sprinkler system for smart use of water for irrigation.
19. Cleaning process should be adapt for polluted, chlorine and flurried water so that people can hydrate themselves instead of creating disease for themselves and their kids.
20. We should adopt these water saving techniques in daily life routine :-

- Install water efficient taps with an aerator or flow restrictor to use less water
- Fix leaking taps and replace washers, because a slowly n regular leaking tap can waste 10,000 liters of waters over a year.
- Replace single flush toilets with dual flush toilets and install water efficient urinals with smart control to reduce unnecessary flushing. In **Japan** Hand wash sink is attached on the toilet flush tank so that one can wash his hands and resume water for the next flush.
- Install water efficient shower head which can use up to 40% less water maximum use of shower should be 4-5 minutes
- Install water efficient dishwashers to use 50 % less water than average modal it should be use only in commercial era instead of small scale domestic purposes.
- Use of air conditioner should be set on thermostat to 24° c and switch off heating and cooling after Hrs, If possible try to use fans and natural ventilation.
- Install rain water tanks to promote and utilize water harvesting system, it should be compulsory in a manageable constructed area.
- Garden the drought tolerant plants and use "Mulch" to keep moisture in the soil. In **France**, it is legally compulsory to every new building rooftop in commercial zone must be equipped with solar panels and drought tolerant Plants.
- In school, Educational Institutions or Department chooses water champions who have most concern activity regarding Environment Protection. In **Philippines**, the new law has been introduced which requires all high school and college students to plant at least 10 trees before High schooling and graduation.

We all should plant at least 6 plants yearly because only a Single tree can produce 17.50 Lacks worth oxygen. Recycle water worth of 41 lacks reduce temperature Up to 3%, absolve 3 kg co₂ Per year check expenses about Rs 18 Lacks to protect soil erosion in a life span of 50 year. Whether Govt. and Legislation are performing their duties but this effort should not be mention in files or documents, it should be visible in Environment. It is our pious duty to fulfill our duties with honesty and humanity because this planet is not only for human, all other living creatures are sharing it with their part of contribution then why can't we contribute. It will be our real contribution as Human being and truly worship of Mother Nature and the almighty as per MANUSMRITI-

आपो नारा इति प्रोक्ता आपो वै नरसूनवः।

ता यदस्त्रायनं पूर्व तेन नारायणः स्मृतः ॥ 10 ॥

Water is called “Nara” – water being the offspring of nara, Since water was the first thing created by (or the original residence of) that being, he is on that account, described as “Naryana”.
Manusmriti, (10) verse 1.10

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