

ETHICAL AND LEGAL TREATIES ON THE IMPORTANCE OF IRRIGATION AND WATER MANAGEMENT

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ABSTRACT

A fundamental component of all religious and cultural practices is the belief that water has a unique meaning. The God Vishnu who supports life is represented with water in Indian Culture. Hindus consider that ablution at holy river confluences to be extremely important for their spiritual clean. Local Gods and Goddesses were symbolized as rivers, lakes, ponds and springs. For example, River Ganga is personified as Goddess and River Krishna is personified as God. The Vedic hymns documented how humans asked the Gods for water. Theravada, Mahayana, Tantrayana Buddhists respect and symbolize water as a holly symbol. Zen Buddhists sprinkle water at funerals to symbolize the ocean which stand for infinity, while Tibetan Buddhists use water in rites to clean their hands, foot, face and mouth. Before approaching a sacred place, Japanese Buddhists usually provide basins of water for people to wash their hands. In the same way water is a part of rituals in other world religions like Christianity and Islam. Christian churches commemorate the start of religious life with water Baptism. It is usual for Muslims to wash their hands before entering a mosque to pray. Islam requires tahara, ritual purity, prior to fulfilling religious responsibilities particularly salat worship. This text illustrates how ethical and legal scriptures promote irrigation and effective usage of water. Further this article tries to help legislators, environmentalists and religious leaders to support actions that can help in the conservation of water and their actions in the way of achieving United Nation's Sustainable Development Goal number six (Ensure availability and sustainable management of water and sanitation for all). Common faith-based strategies can provide a stronger sense of accountability to address the needs of all groups and stakeholders. Additionally, it encourages individuals to take responsibility for their water use and raises awareness of the value of water. Belief and faith increase feelings shared responsibility and lessen the burden of action of Governments.

Key Words: artificial, belief, development, future, generations, government, religious, value

INTRODUCTION

The term "irrigation" has been taken from the Great Encyclopedic dictionary and it means supply land with water or water land by means artificial channels and ditches.¹ The planning, carrying out and regulating of several operations associated with the effective sourcing and extraction, sustainable use, distribution, conservation, and treatment of water resources is known as water management. A holistic approach is required for ensuring clean water supply for various uses like drinking, Agriculture, industry, sanitation and environmental preservation.² The goal of effective water management is strike a balance between the demands of various industries and communities welfare in the long term. This mainly involves resource optimization, pollution prevention, infrastructure development, water allocation and formulation to provide fair access to water while preserving its and availability and quality for present and future generations. Some of the current water management practices are rainwater harvesting, water conservation programs, groundwater management, desalination, wastewater treatment, river basin management, water pricing and tariffs, integrated water resource management, water policy and regulations etc.³

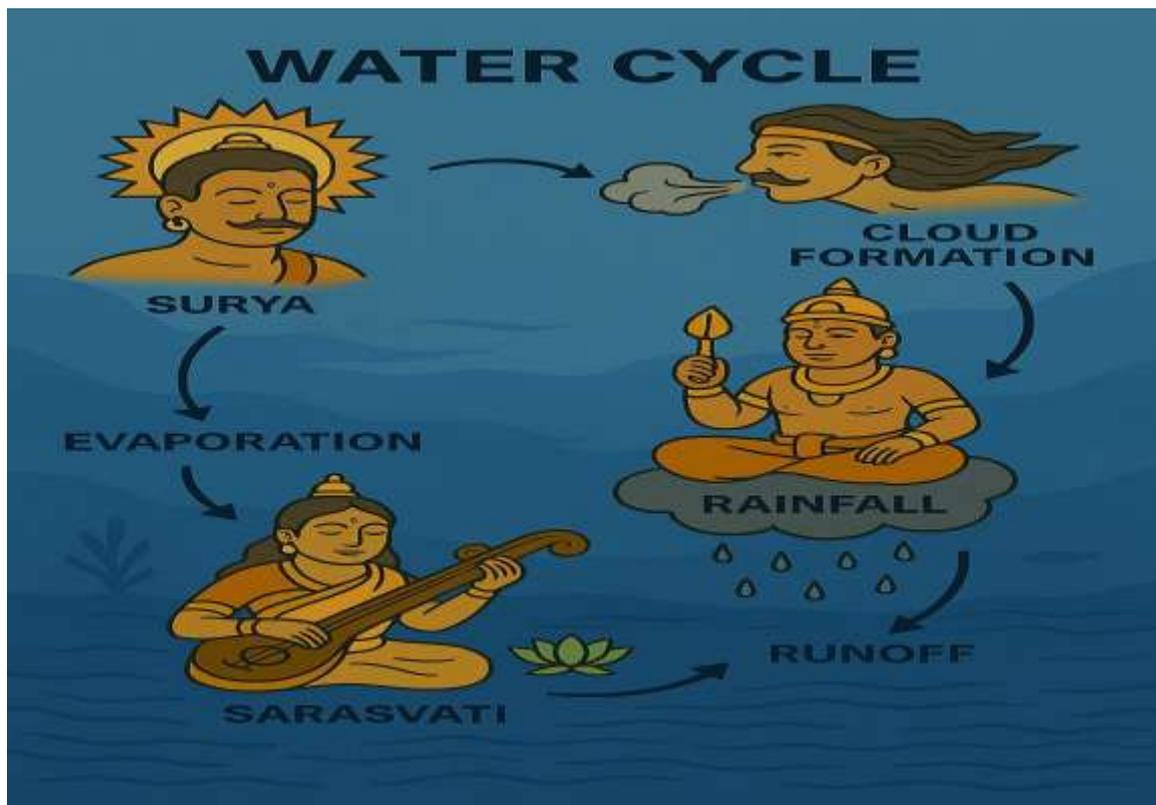
PURPOSE OF THE STUDY:

All the religions offer ethical guidelines to lessen environmental challenges. Common faith based strategies can provide a stronger sense of accountability to address the needs of all groups and stakeholders. It also helps to increase awareness of the worth of water and motivates the people to be accountable for their water use. Belief and faith increase feelings of shared responsibility and lessen the burden of action of governments and saves a lot

of money. This text can help the legislators, environmentalists and religious leaders to support the cause conservation of water by quoting ethical and legal scriptures.

Hinduism:

Even though the Indus valley civilization has material evidences like ponds, lakes, great bath, and Lothal's dockyard for conservation of water, we don't have any decipherable literary ethical and legal evidences to support the cause of water management. Vedic period (1500 -1000 B.C) and later Vedic period (1000 -600 B.C). The oldest texts of Hinduism, the Vedas, acknowledge that the universal, superior and unchangeable thing is a 'Law of interdependence'.⁴ The non-availability of rain make the people not to depend on the mercy of heaven but to use artificial methods to store rain water for all the needs like drinking, agricultural purpose etc. Sky, sea, rivers and wells are sources of water according to Rig Veda.⁵ The Rig Veda highlighted the hydrological cycle: water that is heated by the sun breaks up into small particles, which are then carried by the wind and transform into clouds, which causes repeated rainfall.⁶ The sun is the source of both water and rainfall, according to the saying, "Adityat Jayate Vrisuti" or sun gives rainfall.



Source: open.substack.com

In Rig Veda water is referred as "Pratishta" the fundamental principle or the very foundation of the cosmos. It has inherent purity and the ability to absorb and remove pollutants.⁷ The following was stated in Atharvaveda (II.23.1) about water management that the intensity of drought and water shortage can be reduced by the efficient use of water from ponds, wells, rivers and other resources.⁸ By this, we can say that construction of irrigational works like wells, ponds, tanks and other rain water storage places were promoted by Atharva Veda. The Rig Veda mentions that "the water of rainfall is just like semen of clouds and entering into plants provide ability for flowering and fruiting."⁹

According to Gita, "all creatures have their source in food, but food has its source in the rains"¹⁰ The epic Mahabharata mentions that "one bavi (community well) is better than one hundred wells; one sacrifice is better than hundred bavis; one son is better than one hundred sacrifices and one truthful sentence is better than one hundred sons".¹¹ Here community well used as a unit to measure merit.

In the words of Tiruvalluvar, the Tamil poet,

"Neerinriamaiyathu ulagu yaryarkkum
Van indriamaiyathuolakku"

It means the world cannot exist without water; there will be no ceaseless supply of rainfall. Further if heavens dry up worship to the heavenly ones with due solemnity on earth will not be paid. Neither alms giving nor ascetic practices will abide in the wide world, if the sky dispenses not its gifts.¹² The Sangam period anthology, Purananuru, refers the importance of irrigation in South Indian agriculture by saying: "One who has turned a low land into reservoir to arrest the flow of the running water is one who has upheld a name in the world".¹³

In accordance with laws of Manu, "If any villager fails to do his work allotted to him, in the case of breach of embankment of water courses, the king should take strong action against him".¹⁴ A rich man must always, without

avoiding it and with faith, do charitable works like constructing a reservoir or a well or building a public fountain-says section 229 of Manudharmashastra. This idea is comparable to the Islamic legal notion of religious endorsement or Waqf. A specific duty should be imposed by the Monarch to set up watch keeping, guards and spies on water storages and on houses where water is distributed.-Chapter IX, section 264-266. A reservoir's dam must not be broken and the person who does so will be punished with death by drowning or having his head cut off.¹⁵Tanks, ponds, channels and other water sources should be used as boundaries between two villages, in order to ensure a steady flow of water between two such units.¹⁶

Kautilya, the political advisor to Chandragupta Maurya (321- 297 B.C) wrote a treatise called Arthasastra. Kautilya observed that, the king should involve in the constructions of reservoirs or tanks in the newly found villages.¹⁷ He gave more importance to irrigational works, he generally used setu or setubandha for the term irrigational works.¹⁸According to him, the king may help the people who want to build their own reservoir with locations, roads, carts and other resources. There were two types' irrigational works,

1. Sahodoka- tanks and wells which were fed by springs.
2. Aharayodaka- embankments and tanks which used to accumulate water.

The Nagaraka or Government Superintendent of the city was accountable for the inspection and its preservation.¹⁹ Arthasastra emphasized that all water belonged to the king and the users must pay a water tax for using water from the King's irrigational systems. Water tax exemptions were given to those involved in the construction and upgradation of irrigation facilities. Udakabhaga was referred as watercess. Water rates varied based on its water supply: those who cultivated the land and irrigated by manual labour were to pay 1/5th of the produce as watercess: those by carrying water on the shoulders 1/4th of the production: those by water lifts 1/3th of the production and those who raises water from rivers, tanks, lakes and wells 1/3rd of the production. Kautilya pointed out that, "all those who build the new tanks, should be given the benefit of tax remission for five years, those who repaired the ruined and abandoned ones should get the benefit of four years."²⁰

It is clear from the Arthasastra that the state showed interest in the proper irrigation of the farms. It also referred to the construction of tanks, wells, buildings for shelter, flower and fruit gardens, supply of the materials to private persons for renovation of tanks, encouragement of the construction of reservoirs by private philanthropy, remission of taxes for those who involved in the construction and renovation of tanks etc. Aside from the king's involvement in water management, the local community played significant role.

BUDDHISM

Two distinct types of water are mentioned in Buddhist texts: drinkable (paniya) and cleaning (paribhojaniya), depending on how they are used.. Once certain deity asked the Buddha, How the earthly creatures sustain their life? He was informed by the Buddha that all living things rely on rain to survive.²¹When a guest monk arrives in a monastery, he should ask about drinking and washing water and the resident monk should advise him on how to use water properly.²² The Buddha cared a great deal for water purity. According to him, the following Vinaya (norm) should be followed by monks and nuns who are part of the Sangha, I will not spit in water or ease myself, is training should be observed.²³

A certain divinity once came up to the Buddha and stated "Whose merit grows daily?" Buddha responded that the goodness of an individual who develops a park or forest, installs a bridge, provides watering shades, and makes their home available to others grows every day.²⁴

ISLAM

Islam considers water as precious and regarded it as a gift from God that creates and maintains life on earth. Waqf (endowment) funds were used to finance a number of water management systems throughout the prophet's time, such as irrigation projects and water infrastructure, which met the demands of the community and agriculture. Local Waqf administrations were frequently in charge of overseeing the governance of these initiatives. There are 63 uses of the Arabic word "Ma," which means water, throughout the Quran. (²⁵) (²⁶) The description of paradise as "gardens beneath which rivers flow" contrasts with the idea that God's throne sits on water.²⁷

The application of water in wudu (ablution or washing before prayer) and Ghusl is especially significant for Muslims. One of the individuals Allah will Ignore on the Day of Judgment according to Prophet, is "a man who possessed superfluous water on a way and he withheld it from the travelers."²⁸Legal norms placed a strong emphasis on the obligation to supply water to tourists and people in need. Prophet promoted well-digging for the benefit of the general population in this respect.²⁹ The Prophet's Mosque is roughly five kilometers from the well Romah, which is situated northwest of Medinah. Othman, companion of Prophet, purchased this well and left it for Muslims to use at no cost. It continues even today.³⁰

Community health and water related projects were integral to waqf in al-andalus to ensure the well being of the population. A Muslim who teaches Knowledge who teaches knowledge, irrigates a river, digs a well, plants a palm tree, constructs a Mosque, inherits a Quran and leaves child to ask for forgiveness after his death will receive seven rewards while he is still in his grave (narrated by Anas Ibn Malek in Sahih Al Jargib, Page.73. The Quran strongly encourages water demand management with two clear statements: Firstly, the water reserve is fixed and

secondly it shouldn't be misused. Demand must be controlled because water cannot be extended indefinitely. This is stated as follows

“We send down from the sky in specified measure”.³¹

The Quran informs the people that, they can use God's gifts for moderate nourishment but not to commit excess. This is illustrated as,

“O Children of Adam! Dress properly whenever you are at worship. Eat and drink, but don't waste, surely he does not like the Wasteful”³²

Islamic leaders and scholars have imposed punishments for water abuse such as contaminating or deteriorating clean water. This makes it to possible to use contemporary legislation to penalize or fine polluters. Additionally Prophet wisely prohibited urination into a stagnant water. Saudi Arabia implemented legislation in line with Islamic laws after trying conventional approaches to encourage water conservation. This has resulted in positive water management.

CHRISTIANITY

The word water occurs about 620 times in the Old Testament and 89 times in the New Testament and also featured in some of the well known stories. Jonah was swallowed by a huge fish during a storm, Jesus even walks on water, Noah's ark floats on flood waters, Pharaoh's army is carried on the sea and freshwater comes from a rock in the wilderness.³³ In the paragraphs that follow, we examine the significance of water in creation, the Torah and the Prophets, numerous ceremonies and theological symbolism.

The Jesus said that, “I tell you the truth: unless you are born of water and the spirit, you cannot set foot into the Kingdom of God”.³⁴ Let's approach with sincerity and complete faith, with our bodies cleansed with pure water and our hearts sprinkling clean from an evil conscience.³⁵ The Garden of Eden, located amidst of four major rivers, the pishon, Gihon, Tigris and Euphrates, incredibly fertile. From its moist soil, the first human was then created.³⁶ Later people turned the planet into a violent, corrupt place. The God chose to use the flood as a means to destroy earth and bring about judgment.³⁷ By this we can that God used water as a source of sustenance and threat.

Drought was the worst thing that could happen to the people⁽³⁸⁾ ⁽³⁹⁾ ⁽⁴⁰⁾ or the pollution made water undrinkable.⁴¹ The Hebrew ritual system makes practical use of water and the Levites were sprinkled with water to purify them for service in the Tabernacle.⁴² Ablutions at the Tabernacle served as a continual reminder that one must be cleansed before entering God's presence.⁴³ Jesus life and principles with water and its fictions are attested in the New Testament, especially in the Gospel of John. According to some observers, water even represents the divine presence shown in Jesus humanity.⁴⁴ The spirit of God is living water and it will be released during the life death and resurrection of Jesus.⁴⁵ In a more pragmatic sense, water is associated with humans as spiritual creature and steward of the physical world. Humans were given this nature as custodian by God. Humans were granted dominion over creation since they bore the image of God. This needs to be interpreted as nurturing or caring not exploitation or malice.⁴⁶

Stewardship means not only cultivation but also caring for nature as a source of wholeness and beauty that serves as a constant reminder of God's magnificent act as a creator.⁴⁷ Water is associated with power struggles and injustice. One of the initial territorial disagreements in the Bible, documented in Genesis 21:25-32, concerns over water. Abraham approached the King of Philistine, Abimelech, for a water well that Abimelech's servants had forcibly taken. Following Abraham's diplomatic settlement of the conflict, the location is referred as the Well of Seven (Beersheba), which appears multiple times in later Biblical stories. This water disagreement was handled with consideration and common sense and the disputing were actively negotiating to settle any future disputes in a cooperative manner.⁴⁸ One more example of argument over water was that, the Assyrian king Sennacherib's siege of Jerusalem during King Hezekiah's reign. Outside the city, the Assyrians had cut off the water and food supply. In order to safeguard his people's lives, Hezekiah commanded to construct secret water system to get water into the city via a tunnel that is accessible even today.⁴⁹ “Let Justice roll down like water and righteousness like ever flowing river”.⁵⁰

CONCLUSION

As water shortages become increasingly widespread, water conservation becomes a global issue rather than a local one. Community members are more inclined to preserve this resource if they consult sacred texts for direction. Conservation activities become easier to implement on a daily basis and form ingrained habits when water is viewed as a divine blessing, a resource to be managed for the benefit of all, and a scriptural obligation. By using conservation techniques personally and consistently advocating for conservation measures, community leaders can foster buy-in from the local populace. There is a greater chance that the global SDGs will be accomplished if religious leaders support them. With regard to SDG 6, this would guarantee that water resources were distributed amongst the community members in accordance with the ethical and legal norms and used more prudently.

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