



The global water crisis: addressing through Indian Jain philosophy

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Abstract:

As the population and demand rise, the crisis of water becomes dominant. A large part of Earth's water is frozen, and less than 1% of water flows in rivers and lakes. It is estimated that globally by 2035, a large percentage of the population will suffer from the water crisis. While many political and institutional debates are carried over the problem of water scarcity, the water crisis is still prevalent and is going to get worsen in coming generations. This article deals with the traditional principles of Jains philosophy to deal with the current water crisis. I shall discuss three main principles of Jaina's philosophy- *ahimsa*, the *non-living water*, and *aparigraha* to deal with the current water situation. In the process, we shall see that following these practices in our daily lives creates a big impact on water conservation globally. These principles help to address the availability of water for our future generations.

Keywords: water crisis, Jaina philosophy, conservation

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Introduction:

The global 'water crisis', as it is often labelled, of which the most obvious manifestation is that 785 million people lack basic access to safe water for domestic use², and it is estimated that 2.7 billion people will suffer from water scarcity by 2025.³ A less documented fact is that 84 percent of rural households in India do not have access to water for their livelihoods. The lack of access to water and proper sanitation is the common cause of diarrheal diseases, estimated to cost the lives of 2.18 million people, three quarters of whom occur in children younger than 5 years.⁴ Water is critical to a wide array of challenges ranging from health, climate change, agricultural demand, and malnutrition. This paper discusses the two important principles of Jainas philosophy- '*ahimsa*' and 'non-living

things as *jiva*' to understand our attitude towards consumption and treatment of water, to conserve water for our future generations.

What is water scarcity? When an individual lacks access to water for basic needs such as drinking, washing clothes, cooking food, we call that the person is scarce of water.⁵ When an entire area or a society suffers from this, we say that the area is scarce of water. Although the scarcity of water is dependent upon many factors such as individual needs, the population, climate change, location, and infrastructures such as dams and reservoirs, the conclusion is that a large share of the population is affected by water scarcity, and up to two-thirds of the population will be affected over the next several decades.⁶

Unlike other environmental resources such as coal and petroleum,

² See WHO (2019) <https://www.who.int/news-room/fact-sheets/detail/drinking-water>.

³ For more on this refer, UN. (2003). Water for People, Water for Life: The United Nations World Water Development Report: Executive Summary: Unesco Pub. This report estimated the data of water scarcity.

⁴ Prüss, A., Kay, D., Fewtrell, L., & Bartram, J. (2002). Estimating the burden of disease from water, sanitation, and hygiene at a global level. *Environmental health perspectives*, 110(5), 537-542. The detailed report shows the list of other infectious diseases spread through water pollution.

⁵ See Rijsberman, F., & Mohammed, A. (2003), especially page no 55-60, Water, food and

environment: conflict or dialogue? *Water Science and Technology*, 47(6), 53-62.

⁶ For more on this refer, Seckler, D., Barker, R., & Amarasinghe, U. (1999). Water scarcity in the twenty-first century. *International Journal of Water Resources Development*, 15(1-2), 29-42; Shiklomanov, I. A. (1991). The world's water resources. Paper presented at the Proceedings of the international symposium to commemorate; and Wallace, J. (2000). Increasing agricultural water use efficiency to meet future food production. *Agriculture, ecosystems & environment*, 82(1-3), 105-119.

water is a renewable resource, which means that its availability is dependent upon various factors such as rain, evaporation, consumption, and utilization. It is often assumed that water scarcity means that people have insufficient water for domestic use, but this is necessarily not the case. The water requirement for domestic purposes is small, and for agricultural needs and production is more.⁷ In this article, I shall elaborate on the Jainas principles of vows, especially focusing on *ahimsa* and *aparigraha*, which helps to create a big impact on water conservation. By incorporating such changes in our lives, we may discover ways for the protection of our environment.

The principle of 'non-living water' and 'ahimsa' for water conservation:

Water has some special properties according to Jain's philosophy. First, there is a concept of *living* water. The Jainas divide living things into five basic categories depending upon their

sense capability. *Apkaya* i.e. the living water falls into the lowest category characterized by a single sense called 'touch'.⁸ Second, the *ahimsa* principle aims at preserving the life of living beings. In the above context, the Jainas philosophy follows the practice of using *non-living* water and the *ahimsa* principle to promote water conservation. In the Jainas way of life, the use of non-living water is essential for *sravaka* (householder).

The water can be made from living to non-living in two ways.⁹ First, different additives are mixed which reduces the acidic content of water. For instance, by mixing ash or cardamom the living water is rendered as non-living water. The ash powder also destroys harmful microbes present in the water. Second, it is the traditional method of boiling water on a heating gas to remove out the impurities present within. The advantage of using non-living water is many. First, the shelf life of boiled water is of about 10 hours. When we estimate and boil

⁷ Rijsberman, F., & Mohammed, A. (2003). Water, food and environment: conflict or dialogue? *Water Science and Technology*, 47(6), 53-62; and Rijsberman, F. R., & Molden, D. (2001). Balancing water uses: Water for food and water for nature. Paper presented at the Thematic background paper to the International Conference on Freshwater, Bonn.

⁸ For more on this refer Kachhara, N. (2005). *Jaina Doctrine of Karma: The Religious and Scientific Dimensions: Dharam Darshan Sewa Samsthan* Udaipur, India.

⁹ Aukland, K. (2016). The scientization and academization of Jainism. *Journal of the American Academy of Religion*, 84(1), 192-233; and Jeoraj, J. (2012). *Science of Dhovana Water*.

water according to one's necessity, we reduce the wastage of water. It naturally puts a control on the tendency of overusing our natural resources. Second, the filtered water kills harmful microbes present in water, and avoid the greatest cause of death among children such as diarrhea and malaria due to water infectivity.¹⁰ It is also believed that by filtering water, one reduces the death-birth cycle of various microbes present in the water. Adopting this line of thinking in one way promotes water conservation to a large extent.

The Jaina culture promotes various methods to conserve water, and re-use water in various activities. For instance, it is a general practice in India to wash vegetables and fruits within a container and use the 'used' water for activities such as pouring water into the plants.¹¹ The kitchenware such as chakla, rolling pin can also be washed with the same

water. All the above types of water are the by-product of household activities called as *dhovana* water which can be utilized for various home activities.

The practice of *dhovana* water helps to solve the sanitation problem prevalent in India.¹² Currently, some 1.2 billion people have no access to safe water, and 3.3 billion people have no effective sanitation. This contributes to more than 3.3 billion deaths each year from water-borne diseases.¹³ The population growth and its subsequent demands ensure that water will become a huge crisis in coming years. The Jain philosophy recommends simple ways of making water pure, and safe for drinking that avoids water-borne diseases.

The *ahimsa* principle limits consumption of water that aims to promote water preservation globally. People require a large amount of water per day to produce their food depending upon their lifestyle and

¹⁰ For more on this refer, Long, J. D. (2011). Jaina Philosophy. In *The Oxford Handbook of World Philosophy*.

¹¹ Jaini, P. S. (2000). Collected papers on Jaina studies: Motilal Banarsidass Publ; and Krishan, Y. (1997). The doctrine of Karma: Its origin and Development in Brāhmanical, Buddhist, and Jaina traditions: Bharatiya Vidya Bhavan.

¹² Refer reports by, Hanjra, M. A., & Qureshi, M. E. (2010). Global water crisis and future food

security in an era of climate change. *Food policy*, 35(5), 365-377.

¹³ Cosgrove, W. J., Rijsberman, F. R., & Rijsberman, F. (2000). World water vision: making water everybody's business: Earthscan; and Mehta, L. (2007). Whose scarcity? Whose property? The case of water in western India. *Land use policy*, 24(4), 654-663.

needs. To produce 1 kg of cereals requires about 1^{m3} of water. However, producing 1kg of meat requires 13 times more water than the normal quantity. This is because water is needed to grow animal fodder which requires massive irrigation lands. A recent study in the US estimates that about 13.5^{m3} of water is used to produce 1 kg of beef.¹⁴ A non-vegetarian diet requires about 5400 l of water compared to 2600 l of water for a vegetarian diet. Besides, a large amount of water used in agricultural needs cannot be recycled.

The principle of water as 'jiva' and 'aparigraha' for water conservation:

The Jainas believe that water possesses life. On the surface level, this might look like a traditional myth or superstition, but this property of water plays a vital role in water conservation. Before undermining the argument, we should understand the efficacy of it in our daily life.

It is said that one drop of water (*sachitta-water*) contains innumerable

living beings.¹⁵ These living beings exist in a state of birth and death. If we store a lot of water that is unnecessary for us, we are then responsible for the killing of these organisms. As noted above, the non-living water is safe for drinking after it is subjected to the methods of cleaning and boiling. The living water as such is harmful not for us but also the microorganisms living inside. The intention behind converting living water to non-living ensures that we budget our requirements and limit the quantity of water for our daily activities, and also avoid our participation in other organism's birth and death cycle. I shall elaborate this with a simple example:

It is generally practiced in the Jaina philosophy to put a layer of cloth around the tap from where the water comes. It could either be a cloth or a pipe that ensures the smooth delivery of water. This process might look illogical, but understand the principle behind this. First, by covering cloth around the tap funnel, we ensure to

¹⁴ See Renault, D., & Wallender, W. W. (2000). Nutritional water productivity and diets. *Agricultural water management*, 45(3), 275-296; Seckler, D., Molden, D., & Sakthivadivel, R. (2003). The concept of efficiency in water resources management and policy. *Water productivity in agriculture: Limits and*

opportunities for improvement, 1, 37-51; and Smakhtin, V. (2004). Taking into account environmental water requirements in global-scale water resources assessments (Vol. 2): Iwmi.

¹⁵ Jacobi, H., & Müller, F. M. (1964). *Jaina sutras*: Motilal Banarsidass.

take a limited amount of water that is useful for us. In this way, we avoid large consumption of water. Second, when we open the tap, the water flows from up to down rather erratically, by putting a pipe through the water direction we ensure compassion towards the water, which in turn generates the feeling of compassion towards other living and non-living things. This *karuna* (compassion) ensures judicious utilization of natural resources.

Water use is governed by population growth.¹⁶ As the population increases, the demand increases which thus increases the load on food production and clothing. A large amount of water is used in the industrial production of food and clothing. The agricultural demand for water in India is by far the highest which in turn leads to groundwater depletion.¹⁷ The Jaina principle of '*aparigraha*' plays a vital role. '*Parigraha*' means the collection of external things, and *aparigraha* means non-attachment. When we adopt the principle of *aparigraha* in our daily lives, we limit

the use of resources. We judiciously utilize resource which is necessary for the sustenance of life. For instance, if I have 5 units of clothes with me, that is enough for my survival. Having attachment towards material things increases the load on the environment and thus creates harmful effects. When we limit the use of water in our daily activities, we promote water conservation and ensures environmental protection.

Conclusion:

This article elaborates on the principles of Jainas philosophy that are vital in dealing with the current water crisis. This is the time to think and reflect upon our traditional practices to ensure a safe and healthy environment for our future generations. As Dr. Abdul Kalam once said,

"I cannot help feeling guilty, because I belong to the generation who contributed to the destruction of the environment or simply did not take into account all the warning signs" (Year 2070- A Presentation by Abdul Kalam.)

¹⁶ Narayanamoorthy, A. (2004). Drip irrigation in India: can it solve water scarcity? *Water policy*, 6(2), 117-130.

¹⁷ Franco, J., Mehta, L., & Veldwisch, G. J. (2013). The global politics of water grabbing. *Third World Quarterly*, 34(9), 1651-1675.