

Public Involvement in Water Management in China

Asit K. Biswas, Distinguished Visiting Professor, University of Glasgow, UK

Simply speaking, ethics are a set of moral principles that steer overall societal behaviour. They guide any specific society's beliefs as to what could be considered right or wrong, or what is just or unjust. They, thus, affect the individual as well as societal behaviour.

From a historical and global context, ethical values are neither constant over time, nor are they the same in all countries of the world during any specific period of time. As the world changes due to evolving situations and scientific and technological advances, and cultural mores are transformed, ethics may undergo modifications as well.

For most people, ethical values are often subjective and relative. Consider smoking. During the 1950s and 1960s, most people smoked. In fact, smoking among women was promoted because it could act as "torches of freedom" which could contribute to equality between men and women. In fact, during the 1950s and 1960s, smoking was as ubiquitous in most parts of the world as water bottles are today. Societal views on smoking started to change during the 1970s.

Different eras may have different ethical norms on specific issues. In the same era, when ethical values may be similar in different parts of the world, they may be approached in different ways.

1. Public involvement: Chinese style

Let us consider the ethics of public participation in water management in the world. In general, an overwhelming majority of the people in the Western world currently believe, and have generally believed over the past 4-5 decades, that public participation is essential if water development projects and management practices are to be sustainable, equitable and socially acceptable.

There is also a strong belief in the Western world that in a hierarchical country like China, there is no, or at best very limited, public involvement in water-related management activities.

Having worked extensively in China since 1980, and visited the country over 100+ times, there is no question that the Chinese authorities get the public involved extensively. However, the way the public is involved in water management practices and processes is very different from the West.

China gets its people involved in water management practices and processes, but they do not term it public participation. Thus, it is generally believed outside China that there is no public involvement in water management. This belief is erroneous.

Having been an advisor to 26 governments on water and environmental issues at mostly Ministerial levels over the past 50 years, there is no question that significantly more people in China are directly involved in water management practices, for prolonged periods of time, compared to the West. Because of paucity of time, let me give only three examples of public involvement in water management practices in China that enriches the overall process.

1.1 Volunteers

An important way many Chinese get involved in water management is through a process called volunteers. These volunteers not only help in water management but also in other development and social activities. These help to improve resources management and enhance their quality of life and also the overall environmental quality.

The volunteers come from all ages: school students, working people and retired individuals. They volunteer regularly in their own ways. They do not receive any financial compensation, nor are they politically coerced or encouraged.

Consider a megacity like Shenzhen. It is often called the "volunteer capital" of the world. Nearly 1 in 3 people in Shenzhen volunteer for various social and development activities. This directly contributes to social welfare. Many of the volunteers help with water management activities.

In the early 1970s, Shenzhen, then known as Bao'an county, was basically a small border city with some 28,000 population. It was basically a custom stop into mainland China from Hong Kong, and consisted of several fishing villages. Shenzhen became the first special economic zone of China due to its close proximity to Hong Kong. By 2020, Shenzhen had a population of 17.56 million. It is now the largest financial centre of the world, and also among the top 10 cities of the world having the largest economy. It now has the second-largest number of skyscrapers, and the fifth-highest number of billionaires in the world. This remarkable transformation has happened within the last four decades.

A major consequence of this breakneck urban and economic development in such a short time has meant the

waters of the Shenzhen River and its Bay are seriously polluted. The volunteers of Shenzhen are playing important roles in assisting the Water Department to monitor and manage the situation, including helping the inhabitants to be increasingly aware of the high level of water pollution and what they can do about it.

Currently, every day volunteers take water quality samples in several locations of the Shenzhen Bay, and monitor the levels of several parameters like colour, turbidity, pH, and total dissolved solids. The volunteers are trained properly by the Water Department. The data obtained by the volunteers complement the water quality database of the water authority. The Ministry consistently receives new data from the volunteers on the water quality of the Bay. They also receive visual reports from the volunteers on surface water quality.

The citizens of Shenzhen, and of several other Chinese cities, help in water management.

1.2 River Chief Systems

China has developed a unique system where citizens play important roles in identifying and informing river chiefs of all sources of visible pollution.

There is a saying in China that “nine dragons manage water.” In China, like in all other countries, there are many government departments responsible for managing water-related issues. They have overlapping responsibilities, jurisdictions, responsibilities and accountabilities. This invariably contributes to inefficiencies and poor water management.

The River Chief System started in 2007 when a massive outbreak of blue-green algae occurred in the Lake Taihu. This seriously affected the main drinking water source of Wuxi. In order to overcome this serious and urgent problem, the Wuxi local government tried a new experiment by nominating the senior-most officials of the Chinese Communist Party to be River Chiefs for 64 major rivers. Their tasks included issues like protecting water resources, water pollution control, restoration of water ecology and enforcement of all laws and regulations. The River Chief System takes full advantage of China’s top-down administrative system and hierarchical system of the party and the state.

The Wuxi experiment was a remarkable success. Within only one year, the percentage of major rivers that met quality standards increased from 53.2% to 71.1%. In September 2012, encouraged by the success of the River Chief System, the entire Jiangsu province started to nominate senior-most officials of the party or the state as River Chiefs.

Impressed by the success, in 2016, China’s central government decreed that every lake and river, or segments thereof, must have a River Chief to keep the water bodies free of visible pollutants. By 2018, there were some

1.1 million River Chiefs. They are accountable “for life” for any serious pollution that may have happened during their watch.

On each stretch of a river or lake, notice boards have been erected at frequent intervals, with the name and mobile telephone number of the Chief. Any member of the public who may see a visible source of pollution, or note a foul smell of water, can call the River Chief with appropriate information or complaints. Promotions in their regular jobs take direct account of their performance as River Chiefs. In addition, surprise inspections are carried out to ensure that the River Chiefs are promptly addressing the information and complaints they are receiving from the public.

This is another example of the Chinese public getting involved directly in improving water quality.

1.3. Rain gardens

Another concept that has enhanced the public’s involvement and association with water is rain gardens. It also fulfils several other objectives. Among these are retaining stormwater which could reduce levels of local flooding, recharge of groundwater, filtering and reducing pollutants carried by urban runoff, and reducing ambient air temperature due to urban heat island effects of cities.

A very important function of rain gardens is to increase people’s interactions with water and also provide a venue for social interactions. Rain gardens harvest rainwater from the roofs of buildings nearby, as well as from nearby highways and pavements. They create a park-type of atmosphere, often with shallow ponds and clubhouses. During my latest visit to rain gardens in Suining City in Sichuan Province, I saw young children trying to catch tadpoles or aquatic insects in the shallow ponds under the watchful eyes of grandmothers, and elderly people drinking tea and playing mah-jong in the clubhouses. Thus, rain gardens have many purposes, including being an attractive place for the young and old to gather and pass time productively.

2. Concluding Remarks

China has developed its own processes and systems for its people to get involved in water management, especially during the post-2000 period. While the River Chief System has been highly effective in managing water quality, it should be noted that this is very effective for a top-down political system. River Chiefs may not be as effective in other countries, as it has been in China.

However, the concept of volunteers and rain gardens can be adopted effectively in other countries, with appropriate modifications for the local conditions.