

No Water, No Future

By Masaomi Ise





In April 2004, Kofi Annan, then United Nations Secretary-General, gave a speech in Accra, the capital of Ghana. In his speech, he said, "Today, the world is in the midst of water wars. The victims are the people of poor countries. No water, no future."

Freshwater available for humans is actually less than 0.5% of the total amount of water on the earth. Moreover, the amount of freshwater resources has rapidly been decreasing due to environmental destruction and urbanization. Water is now a more valuable resource than oil, for which many countries compete.

For Japan, the "water wars" is not somebody else's problem. Many people think that Japan is a country rich in water, but this is simply not true. Japan imports large amounts of grain and meat from other countries and a lot of water has been used to produce them. As a matter of fact, the amount of this "virtual water" Japan imports reaches 64 billion tons a year. Japan is actually the world's second largest country that imports virtual water. Japan will dry up if it cannot continue to import virtual water from the world where water shortage has now been growing into a serious problem. The "water wars" is thus a security issue for Japan.

According to a survey by the United Nations, approximately 1.3 billion people, or about one fifth of the world population, have no access to safe water. Because of water shortage or drinking of unsafe water, about 27 million people are struck by diseases each year, killing one person every eight seconds. In addition, more than half of the major rivers in the world have dried up or become polluted. This has led to the people who were dependent on the rivers for their livelihoods to lose water infrastructure. As a result, the number of refugees has increased by 25 million every year. This huge number largely surpasses that of war refugees.

The competition over water has been seen throughout human history. There is even a record that, around 2500 B.C., two city states Lugash and Umma had been fighting each other for 50 years over the irrigation rights to the Tigris River. The origin of the word "river" is said to be a Latin word "ribalis," which means "rival." The civilization that developed in the Tigris and Euphrates river valleys is one of the four largest ancient civilizations, along with the Nile, Indus and Huang He (Yellow River) civilizations. Similar to the other civilizations, the Tigris-Euphrates civilization vanished because the land turned into desert because of excess cutting of trees. Until recently, the area had been under the rule of the Hussein government of Iraq. This government's largest measure for governance was water supply. The Hussein government established a system for providing water and food for free in the entire area. Water trucks visited local villages every week and gave water to the village people who presented the cards they had received from the government in advance.

During the Gulf War in 1991, the multinational force attacked the water sources in Iraq as well as the pipe lines for supplying water. The same strategy was used in the recent Iraq war. At the first attack, the multinational force destroyed eight multipurpose dams in Iraq using guided missiles. At the same time, the force attacked the water supply and sewer systems in Bagdad and other major cities, agricultural facilities, and hydraulic power stations. The sewage water from the cities began to be discharged into the Tigris and Euphrates rivers, thus accelerating the pollution of the rivers. Furthermore, the citizens had no choice

but to drink the polluted water, which caused the spread of various infectious diseases such as cholera, hepatitis and typhoid. The Self-Defense Force of Japan stationed at Samawa acquired the water supply from a canal, which was a subsidiary stream of the Euphrates, prepared 80 to 100 tons of safe drinking water each day using four water purification trucks, and distributed the water using water tank trucks. The Self-Defense Force received many words of appreciation such as "the water cured my child's disease."

Worsening Pollution in China

As described above, the Hussein government maintained its power by providing people with water. On the contrary, the Chinese Communist government has been weakening its power base by making light of water supply. In China, the amount of sewage water such as the waste water from factories and households is more than 30 billion tons a year, of which 97% is discharged into rivers and lakes without undergoing any purification treatment. Actually, 80% of Chinese rivers have become so polluted that fish can no longer live in them. The water of those rivers cannot be used for drinking or for agriculture.

In China, there are more than 600 big cities with a population exceeding one million, but more than half of the cities are not yet able to secure sufficient drinking water. As a result, about 370 million people, or about 27% of the total population, are not provided with safe water, and about 160 million people live on water contaminated with organic matter. The researchers of the Chinese Research Academy of Environmental Sciences warn that the exploding health hazard problems can be caused by environmental pollution, especially groundwater contamination. A specialist of a central research organization in Beijing says, "The health hazard caused by water pollution in China is far worse

than that in Japan during the years of its high economic growth, but the investigation of actual conditions has made little progress."

There is also a growing concern over desertification in addition to river contamination. Today, the Huang He River that once nurtured the Chinese civilization is in a state where water runs from the river head through the river mouth for only about 150 days a year. The cause of this is deforestation in the upriver area. Because deforested land lacks the water retention capability, rain easily leads to floods and, if it does not rain, desertification continues. Deforestation has aggravated desertification in various regions. While the percentage of forests to the total landmass of China is 17%, the percentage of

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deserts has already reached about 28%. A desert near Beijing has spread to within several tens of kilometers from the city. This has also caused the scourge of yellow sand to become more and more serious each year. A lot of women walking on the streets wear thin scarves in place of masks to cover their faces. Sand gets even in the water collected in a washbasin.

People need mineral water to brush their teeth. When taking a bath, people store water in a bathtub and wait until the sand settles to the bottom. They then lower themselves into the tub carefully so that they won't kick up the sand. The yellow sand has now come to attack even Japan.

In the agricultural areas along the Huang He, the wheat and cornfields cannot be irrigated for several months because of water shortage. Because of the agricultural production interrupted by water shortage and also the growing population, it is estimated that China will have to import about 200 million tons of grain by around 2015. A sharp rise in grain prices will be unavoidable. It is feared that poor countries in Africa, Asia and South America will not be able to import sufficient grain and the lack of food will thus lead to political instability in these countries.

Taking Control of Water Business in the World

Against the background of the worldwide water shortage, Western companies that are involved in the water business have been growing rapidly. Most notable are the French companies Vivendi and Suez and the British company Thames Water. These three companies have control of about 80% of the water business of the entire world. Vivendi supplies water to more than 100 countries throughout the world. Suez and Thames Water have gained ground in 130 and 44 countries, respectively.

These companies have tied up with the World Bank and make sales saying, "We'll provide water supply and sewerage services by securing the necessary loan from the World Bank." Developing countries that are short of money for investment leap at the chance delightedly. The economists in the World Bank say, "When water services are privatized, services will be improved and people will use water more carefully." They thus back up the privatization of water services. However, is this logic acceptable by poor people who do not even have enough food for one day?

"Dirty" Water Business

In 1998, a local government in South Africa privatized the water services in an area called Dolphin Coast. The water rates, however, were increased by nearly 140% within four years and poor farmers could no longer pay their water bills. The water specialists in the World Bank advised the South African minister in charge of water issues, "The best solution is to make a threat against the residents that the water supply will be stopped if they do not pay their water bills."

Many hard-pressed residents started to use the water of nearby rivers, lakes and ponds. The water, however, had already been badly contaminated because of the direct inflow of domestic waste water and human wastes. As a

result, they had the worst cholera epidemic in South African history in 2002 that attacked more than 250,000 people, of which 300 people died. The angry residents set off a riot. It was also revealed that, behind the 140% rise in water rates, a part of the profits from the water service business had been kicked back to politicians and bureaucrats.

There are plenty of examples of collusion between water business companies and politicians. The private company Maynilad Water that is contracted for water services in Manila of the Philippines is owned by a subsidiary of Suez. According to a report by Maynilad Water, it made an investment of 82 million dollars in 1997 through 2001 in order to improve the water

facilities in Manila. But this amount of money is less than a half of the 170 million dollars that they received from the government. What happened to the difference? We can easily guess the answer when hearing that the manager of Maynilad Water has an office in the Malacanang Palace, the official residence of the President of the Philippines. After the

water services were privatized, the beneficiary payment principle was set out. The water rates then jumped up several-fold. In the poverty area in Manila, water service is available only about three hours a day. But the people cannot even touch the water because the water bills, for them, are nearly equivalent to two day's worth of food. They have no choice but to drink contaminated water.

The World Bank and Asian Development Bank have provided financing of over 300 million dollars for the Philippines. Most of the financing resource has been raised from the ODA budget of Japan. Part of the Japanese people's tax money originally offered for improving the standard of living of the poor in the Philippines disappeared into the collusion of the local government and a Western water company. Taking advantage of the corruption of the governments of developing

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countries, shrewd Western companies make a lot of money by creating a business out of water that is vital for everybody however poor he or she may be. Does this “water business” really help solve the water problems in the world?

Bottled Water Business Destroys the Environment

The global market for bottled water has grown to 35 billion dollars. The per capita consumption of bottled water in Europe is 10 times that of Japan. Nestle, a company based in Switzerland, has already acquired water sources in more than 80 countries in the world. Other companies are now following suit. Because it is estimated that the demand for bottled water will continue to increase from now on, the competition over the limited number of water sources has been intensifying.



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However, the search for water sources often causes the depletion of groundwater and the disruption of ecosystem throughout the area and, therefore, draws a number of lawsuits by local residents. It is highly likely that, as the bottled water market expands in the future, this type of trouble will be seen all over the world.

Green Technology of Japan

One of Japan’s security policies is to make an appropriate level of contribution to prevent water wars that are shaking the world with an aim of bringing about peace and stability to the global community. Japan has sufficient technology required for achieving this purpose.

As for the reverse osmosis membranes that are essential for the seawater desalination technology, Japanese companies have a share of more than

50% in the global market. In a plant opened in Trinidad and Tobago in April 2002, Toray’s technology achieved a cost of 0.707 dollar per ton in terms of fresh water. A plant that Nitto Denko started operating in the United States in February 2003 has come up with a prospect that the cost can be lowered to 0.55 dollar per ton. Toyobo also developed a system in March 2003, which is capable of reducing the cost by 30%.

It is estimated that the market for desalination plants that utilize the reverse osmosis membranes will reach one trillion yen in 2025. If Japanese companies can provide lower-cost plants through cost-cutting competition at which they excel, the world will extend them a warm welcome.

More fundamentally, it is necessary to restore and reconstruct forests and create “green dams.”

Japanese ecologist Akira Miyawaki has presented the most advanced theory that “potential natural vegetation,” the natural vegetation of the habitat, creates strong forests best suited to the habitat. He got a hint for his theory from traditional Japanese forests “chinju no mori.” Miyawaki has been making efforts to restore forests in various areas

including China, Southeast Asia and the Amazon Basin. To protect humans from water wars and build a peaceful international community, the “green and water” technologies of Japan are now being called upon.

Today, there is an increasing number of people in the world who cannot obtain water that is absolutely essential for their lives. We should think again and understand that the freshwater resources are assets shared by all life forms on the earth, and if the freshwater resources are depleted, there will be no future for humans. ■

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