

## Main Problems of Unequal Access to Natural Resources in China

*Bao Ziran,*

*Center for Environmental Education and Communications of*

*Ministry of Environment and Protection, China*

At the end of 2011, China's Population reached 13.47billion. A growing population and rapid economic development as well as lax environmental oversight have increased demand and pollution of natural resources in China. Shortages of natural resourced and natural environment degradation are main restrictive factors that affect sustainable development of China's economy and society .

### **Water scarcity**

Total amount of water resources in China is 23257billion.m<sup>3</sup>, constituting the world's fifth-largest national endowment of fresh water. By per-capita standards, however, China's water resources are much more modest at 1730 cubic meters per person annually in 2011(see table 1), as compared to a global average of about 6200 m<sup>3</sup>/person/year. Meanwhile, China's water resources per capita are declining.

**Table1. China's Water Resources Per Capita in 2006- 2011**

<b>Year</b>	<b>Water Resources Per Capita (cu.m/person)</b>
2006	1932.1
2007	1916.3
2008	207 1.1
2009	1816.2
2010	2310.4
2011	1730.2

Source: The Environment Statistic Yearbook in 2012

Water-stressed areas have relied on groundwater to make up the difference, but since at least the 1970s rates of withdrawal have become unsustainable, and water tables are

dropping by approximately one meter annually throughout the North China Plain. Over-extraction of groundwater and falling water tables are big problems, particularly in the north. The central government has adopted two basic policy responses to the water scarcity problem. First, it has continued to finance the gigantic South-North Water Transfer Project or SNWTP. The project aims to transfer some 45 billion cubic meters of water per year from central and southwest China to augment the flow of the Yellow River and meet urban water demand in the Beijing-Tianjin region. The Project envisions eastern, central, and western routes, of which the first is under construction and the second in a stage of advanced planning. But water-exporting provinces in central China have complained at the costs they are expected to bear as part of the project for water treatment, refugee resettlement, and other issues, prompting the central government to impose a tax on Beijing and other beneficiaries of the project. In addition to the supply-augmentation approach represented by the SNWTP, the Chinese government has also attempted to improve water use efficiency and to limit overall demand. A 2002 Water Law attempted to establish a strict licensing regime whereby virtually all water resources were declared to be the property of the state, and water use was made contingent on obtaining a usage license from local authorities.

### **Water pollution**

Water quality is arguably an even more serious problem than is water shortage. According to the 2012 State of the Environment Report by the Ministry of environmental Protection, 57% of underground water in cities is polluted. According to Global Times, at the end of 2012, 298 million people in rural areas were suffering from lack of access to safe drinking water. Water pollution has contributed to a serious environmental health crisis. The Chinese government's policy responses to water quality issues rely largely on strengthening monitoring capabilities and enforcement mechanisms. The 2008 Water Pollution Prevention and Control Law attempted to strengthen earlier legislation by providing for increased penalties, including stiff fines for the executives of polluting enterprises. The government announced in late 2011 a five-year, 380 billion RMB investment plan to improve

urban wastewater treatment facilities, as well as the establishment of some 14,000 monitoring stations throughout the country to continuously monitor water quality.

### **Air pollution**

With the country relying mostly on the combustion of fossil fuels to power plants, factories, cars and houses, air quality is a great issue. Air quality in most cities failed to meet the criteria set by the 12<sup>th</sup> Five Year Plan (2011-2015). This year, most provinces in China have suffered heavy smog which has threatened citizen's health. Air pollution has been linked to increased incidences of cancer, heart disease, stroke and respiratory illnesses.

The government has announced many plans to fight air pollution over the years but has made little apparent progress. On 10<sup>th</sup> September 2013, the central government issued Air Pollution Prevention Act Plan which stated the goal of fighting air pollution. According to News from Xinhuanet on 15th October 2013, the central government announced that it is offering a total of 5 billion yuan (\$818 million) in financial rewards to Beijing and its neighboring provinces to fuel their fight against air pollution. Many actions will be following up. Air pollution is likely to remain so in the near future. Unless the development of renewable energies goes hand in hand with tighter manufacturing and mining regulations.

### **Future actions to tackle above problems**

The new leadership under President Xi Jinping has shown more willingness to tackle pollution as it tries to slow the breakneck economic growth. In November 2013, the Communist Party held its landmark meeting- the Third Session of the Eleventh Central Committee of the Party and unveiled its blueprint including measures of natural resources protection which was supposed to bring the country's development to a new level and the stage of sustainable development.