

## Why is the south-north water project being postponed?

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Almost all Chinese journalists are asking the same question: why is the central route of the massive south-north water transfer project, with its multi-billion dollar budget and decades of feasibility studies, being postponed? So far, and though the Office of the South-to-North Water Diversion Project<sup>1</sup> announced the postponement through the official *Xinhua* News Agency, no official explanation has been given.

There are at least three reasons:

**First**, both local governments and experts have urged the state to do more work and more feasibility studies of socio-economic conditions, in an effort to protect the quality of the projects nationwide and control construction costs. That means a large number of proposed projects will be cut, and even big projects, like the south-north water transfer project, will need to be “downsized.” There is also the likelihood that most of the supplemental projects of the south-north water project will be cut, or downloaded from the central government to the local governments.

**Second**, the cost of building the south-north water transfer project has doubled with changes in the national policy, hikes in commodity prices, and changes in the investment structure of the project. According to the head of the Office of the South-to-North Water Diversion Project, the investment issue – how much it will cost and who will pay -- has already been resolved. Though no details have been given, it appears that the central government is likely to contribute more than originally planned.

**Third**, it has become more and more difficult to move the affected people because the rate of compensation is too low. For a long time, the compensation level for losses caused by water projects has been far lower than those caused by commercial real estate developments. As the reporter from the *South Wind Window* discovered in 2008, when doing interviews in the suburbs of Shijiazhuang, capital of Hebei province, the compensation for a plot taken by a local real estate developer was five times higher than the compensation for a nearby piece of land which was taken for the construction of a diversion canal that was part of the central leg of the south-north water transfer project. The villagers who were displaced by this part of the water transfer project have been seeking help from higher authorities on this matter.

In fact, these three reasons are but one: that is, the central leg of the South-North water transfer project has been postponed because of the costs and financing. It is no wonder that the total cost for the project has doubled: the prices of inputs have risen, many supplementary projects in addition to the main canal need to be built, and the standard of compensation for relocation has substantially increased. It seems the original plan to finance the project has not been working because of the expense. Originally, a new kind

of financing scheme was proposed: both the central and local governments would fund the project. In principle, the central government was to contribute only 20% of the total budget, while local governments in the beneficiary provinces and municipalities would be responsible for the remaining 80%.

But for the beneficiary provinces and municipalities, including Beijing, Tianjin, Hebei and Shandong, the price of the project has doubled and that doubling exceeds what the provinces and municipalities had allocated in their budgets for the project. Meanwhile, Beijing municipality officials complained to the press that the other provinces and municipalities have failed to construct their portion of the project while Beijing has completed its portion. But this accusation is far from fair and compelling: according to the original plan in fact, Beijing municipality was required not only to build its own canal, but also to contribute funding and share more financial responsibilities for the cost of relocation and environmental reconstruction in the areas from where the water is being diverted.

### **Tianjin: refused the water from south**

Like Beijing, Tianjin, the second largest city in north China, has been thirsty for water and its water shortage problem was one of the major reasons the South-North water diversion plan was approved. According to the original plan, once completed, the East Route would deliver as much as 500 million cubic metres, and the Central Route would deliver 863 million cubic metres of water annually to Tianjin.

But even as the projects began, Tianjin expressed strong objections to the water project in general, and to the East Route in particular. As Professor Xia Qing, who was in charge of the pollution treatment planning for the East Route project, told the reporter from the South Wind Window, “from the beginning of the project, both Hebei province and Tianjin municipality said they didn’t want the water from the East Route because they were deeply concerned that it would be seriously polluted, especially the section within Shandong province.”

On October 30, 2001, when the 70th anniversary commemoration of the China Water Conservancy Society was held in Beijing, Wang Shucheng, the national Minister of Water Resources, confirmed that the government of Tianjin municipality had refused the water through the East Route. Soon after that, Zhang Jiayao, the vice-minister of water resources, traveled to Tianjin to discuss the matter with municipal officials there who insisted that they did not want any water from the East Route because of the difficulty in solving the water pollution problem.

As the water diversion project started, Tianjin came up with its own plan to deal with its water shortage problem: seawater desalination. Indeed, the municipality has been developing desalination technologies since the year 2000, and this has been regarded as a more likely new source of water to meet the water supply needs of the municipality.

Currently, Tianjin is producing 150 million cubic metres of water annually through desalination by treating as much as 4 billion cubic metres of seawater. The Tianjin Xinquan Desalination Co Ltd., the largest in Asia, had a treatment capacity of 100,000 cubic metres/day in its first phase and expected to expand this by July 2009 to 150,000 cubic metres/day.

Another advantage of this alternative source of water is the sharp drop in the cost of seawater desalination: at present, the cost of desalination is less than 5 yuan RMB/cubic metres, compared to 20 yuan RMB/cubic metres estimated in the feasibility study for the south-north water project. And now, based on the cost accounting by the Ministry of Water Resources, the price of water transferred from the Yangtze River to Beijing and Tianjin through the South-North water diversion scheme will be at least 18 yuan RMB/cubic metres.

Over the past five years, Tianjin has become China's top city for water desalination capacity. And the municipality plans to become China's model city for the desalination of seawater by the year 2010 and a research and development center – a center of excellence for the development of desalinization equipment and operations with independent intellectual property rights. Along with Tianjin, Qingdao and Yantai in Shandong province, two other major urban areas that are intended beneficiaries of the East Route of the diversion water project,<sup>4</sup> are also using this alternative method to deal with their water shortage problem: building seawater desalination factories, using sophisticated desalination technologies.

After the announcement was made in May 2009 to postpone the delivery of water from the central route of the South-North water diversion scheme, a number of major desalination enterprises in China started developing plans to expand their desalination business, aimed particularly at solving Beijing's water problem. For example, the China National Offshore Oil Corporation has been working on a plan to build a seawater desalination plant with a capacity of 140 million cubic metres/day, and will be submitting a feasibility study to the government of Beijing. The Caofeidian New Development Zone in Tangshan city of Hebei province, also announced it will build a seawater desalination plant with an annual capacity of 400 million cubic metres, providing Beijing with fresh water. Even Tianjin, which has had its own water shortages, is also working on a long term plan to send water to Beijing. According to a Tianjin municipal government high tech plan to rapidly expand its desalination industry, Tianjin will be able to send extra fresh water to Beijing as early as 2020.

In 2005, three ministries -- the National Development and Reform Commission, Ministry of Finance, and State Oceanic Administration -- issued a joint plan on the use of seawater, in an attempt to encourage the development of the seawater desalination industry, particularly for near sea mega-cities, like Beijing and Tianjin, which are classified as having an extreme water shortage. The plan, issued by these three powerful governmental departments, can be seen as a major blow to the on-going south-north water project. A further blow is now coming from local governments in the cities with the water shortages: they now see seawater desalination as a lifeline to rescue their cities

from their water crises and have embraced it with a growing passion, in the same way they embraced the water diversion project years ago.

While the south-north water transfer scheme has been delayed for years, there seems to be no problem now for the scheme to deliver water by the new projected date of 2014. But a new problem has emerged and that is, will the great cities of Beijing and Tianjin need the water from the Yangtze River given its high cost and the environmental risk of delivering it.

### **An end to the era of mega-projects**

For those in charge of the south-north water diversion project, the shortage of money and delay in the project implementation is not that bad: questioning the very necessity and wisdom of it is, however, the most terrifying and worst development for their project.

For the last three decades, China has focused on constructing mega-projects to solve both water and energy issues, with colossal projects worth billions of dollars proposed and put into operation one by one, and year after year. For the water diversion projects alone, including the world's largest water diversion scheme – the South-to-North Water Diversion Project -- a number of other smaller projects are either under construction or are being planned: for example, the west-east water project in Shandong province; transferring water from the Songhua River to Changchun city in Jilin province; diverting water from the Yingna River in the Liaodong Peninsula to Dalian city in Liaoning province; transferring water from the Yellow River to Shanxi province and so on, and so forth, making China the country with the world's most water diversion projects.

But the dilemma faced by the south-north water diversion project could slow down the pace of development of other water diversion projects in China. No longer will the decision-makers, who are proposing more water diversion projects, be able to ignore the problems and difficulties faced by the giant south-north water diversion project.

Meanwhile, thanks to technological advances, globalization, and the development of the country's manufacturing sector, China is in a better position than ever to choose from a variety of alternatives to solve the country's water shortage and treatment problems. As China becomes increasingly open to the world, with more and more co-operation with other countries, it will be able to seek better solutions -- economically, technologically and environmentally -- than relying on mega-projects alone.

1. Officially known as "The Office of the South-to-North Water Diversion Project Construction Commission," and under the State Council.

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<http://www.probeinternational.org/beijing-water/why-south-north-water-project-being-postponed>