An 'Essential' Project

Prof. Xia Jun, president of the International Water Resources Association and director of the Chinese Academy of Sciences' Center for Water Resources Research, gave an overview of the importance of the South-North Water Diversion project (SNWD), in an interview with China Dialogue on Aug. 28, 2012, in the run-up to World Water Week in Stockholm.

"The ability to move water around is essential, to distribute the water more evenly," he said. China needs such water transfer because while it has "a high global ranking on overall water resources, on a per capita basis we're much weaker. China has a large population, and while the economy has being doing well in recent years compared with the rest of the world, there are still lots of deeper issues." Prof. Xia's Center focuses on the unique challenges posed by managing water for the "high intensity" of human activity in China, including research on the impact of cross-basin water diversion projects, specifically the SNWD.

"China lies in the monsoon zone, and most of its precipitation comes during flood season—it is very unevenly distributed both geographically and over time. This leads to differences across regions, and you often have floods in the South while the North suffers drought. The North and Northeast of China produce two-thirds of its grain, and those areas have huge plains and excellent light, but lack water. The water and soil aren't in the right places. And in some sense climate change is worsening these problems. So China's water issues are quite complex, and there are significant pressures."

"China needs to figure out how to save the excess water of the flood season and use it in the dry season," he said. "In the recent droughts in the Southwest, we saw just how lacking drinking water infrastructure is in some places. And even if the infrastructure catches up, there's still a need to be able to transfer water during a drought. . . .

"Of course you need to work in coordination, to balance the ecological impact. But you can't store and transfer water without dams and reservoirs, can you? Lessons have been learned since the US was building dams in the 1960s, and the ecological impact is better understood. The question now is making environmental improvements and shifting attention from construction to overall coordination, to gain benefits from unified management. . . .

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Prof. Xia Jun said that competently managed and coordinated water projects are essential for China: "As the old Chinese saying goes, you can't expect a horse to gallop but not to graze."

"Do we want to go back to a primitive state of nature? Nobody does. As the old Chinese saying goes, you can't expect a horse to gallop but not to graze. The overall aim of economic development is the right one, but there's a need to minimize the ecological impact. We need more high and new technology, and extremely good planning."

Water management on a national scale is vital, he said. "There's an urgent need for reform, for unified consideration of water for cities and the economy, for the ecology, for agriculture. China urgently needs to study effective coordination mechanisms." During the entire decade of the 1990s, he said as an example, so much water was being extracted from the Yellow River that it dried up downstream for about 100 days every year, never reaching the sea. Since then, management of the river has greatly improved.

"In 2030, China's population will reach about 1.6 billion, and more water use will be inevitable. Pressure on water resources will continue in the long term, and increase. The overall management of water quantities, quality, and the ecology are major challenges for any developing nation," he emphasized.