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ADB's Contribution to Pollution Control in the Songhua River Basin

The Songhua River Basin

The Songhua River Basin (SRB) is the third largest river basin in the People's Republic of China (PRC) after the Yangtze and Yellow river basins. With an area of 557,000 square kilometers and a population of 62 million, the SRB is home to major cities, such as Changchun and Harbin, and to the PRC's largest oil fields. Agriculture and industry are also well developed in the SRB. The Songhua River catchment covers portions of Heilongjiang, Jilin, and Liaoning provinces, as well as the Inner Mongolia Autonomous Region. Two headwaters feed into the Songhua River: the Nenjiang River and the Second Songhua River. These converge to form the Songhua River at Sanchakou, on the border separating Heilongjiang and Jilin provinces.

The current picture: a threatened river basin

The Ministry of Environmental Protection (MEP) acknowledges that the SRB is one of the four most polluted river basins in the PRC. Water pollution issues in the SRB, especially those relating to drinking water in the municipality of Harbin, have received increased national and international attention because of a widely publicized pollution incident in the SRB in November and December of 2005. The Songhua River contains a number of known and suspected trace organic chemicals, metals, and conventional pollutants. Thus, the Government classifies the river as a class IV¹ body of water and is thus unsuitable for domestic water purposes. Further, during the 6-month low-flow winter season, Songhua River's classification falls even below class V.



The Songhua River in summer

The vision: a source of clean water supply

The Asian Development Bank (ADB) has closely partnered with the Heilongjiang and Jilin provincial governments on integrated water resource management and pollution control issues in the SRB for about 10 years. Policy dialogue with the central Government regarding water quality issues of the Songhua River first began in 1999 during preparation of the project preparatory technical assistance for the Heilongjiang Water Supply Project.²

In March 2003, ADB approved the Harbin Water Supply Project³ in an amount of \$100 million. The purpose of this project was to address the water supply requirements of Harbin, a city with a population of 3 million. At that time, Harbin obtained

¹ PRC water quality standards differentiate among five classes of water quality and include about 40 pollution parameters. Class I water is considered pristine, while class V water is suitable only for industrial uses. Class III is the minimum allowable level of water quality considered suitable for municipal water uses.

² ADB. 1999. *Technical Assistance to the People's Republic of China for Heilongjiang Water Supply*. Manila.

³ ADB. 2003. *Report and Recommendation of the President to the Board of Directors on a Proposed Loan to the People's Republic of China for the Harbin Water Supply Project*. Manila.



its drinking water from the Lalin River because of high levels of pollution in the Songhua River. In fact, because of high pollution levels in the Songhua River, this project was completed a year ahead of schedule.

During processing of the Harbin Water Supply Project in 2002, extensive policy dialogue was held with the Government on SRB pollution control issues. As a result of these discussions, ADB provided technical assistance (TA) for water quality and pollution control in the Songhua river basin.⁴ This highly successful TA⁵ gave rise to a number of positive impacts. First, the TA facilitated development of a long-term strategic plan for the SRB, the components of which included the identification of water quality objectives, strengthening of existing river basin and pollution control management practices, and a proposed a long-term investment program.

Second, the TA strengthened the capacity of the agencies responsible for pollution control and management at both the river basin and regional levels, and ultimately led to development of a river basin management framework for the PRC. Third, the TA identified knowledge gaps relating to nonpoint pollution sources, water quality assessment (notably micropollutants), and water quality inventories.

Fourth, under the TA an overall strategic plan for the SRB that brought together the plans previously developed by a number of institutions at both the river basin and provincial levels was formulated; this strategic plan included a 15-year investment program. Finally, the TA assisted the Government in developing a long-term water pollution control plan for the SRB beyond 2010, and provided policy inputs to the 11th Five-Year Plan (FYP) and the Songhua River Basin Pollution Control Master Plan (SRBPCMP). Approved by the State Council on 29 March 2006, the SRBPCMP (2006–2010) set pollution control targets for 2006–2010, and required that urban environmental pollution and ecological damage be controlled by the latter

year. The SRBPCMP also specified that a minimum wastewater treatment rate of 70% be achieved by 2010 for large and medium-sized cities.

The increased emphasis given to improving water quality in the SRB during the current 11th FYP and the two successive 5-year planning periods is apparent from the target that the Government has set for achieving class III water quality standards in the area by 2020. Upgrading of the State Environmental Protection Administration, which took the lead in preparing the SRBPCMP, into the Ministry of Environmental Protection will further strengthen this effort. With support from the National Development and Reform Commission, the ministry will take lead responsibility for achieving the above target, with each province implementing the portions of the SRBPCMP for which it is responsible.

The Jilin Water Supply and Sewerage Development Project, approved in 2005, in an amount of \$100 million⁶ was the first major ADB investment to directly address pollution control issues in the SRB. The Jilin Urban Environmental Improvement Project, approved in 2007, also in an amount of \$100 million⁷ was the second, the latter project being included in the list of priority investments under the SRBPCMP. The proposed Songhua River Basin Water Pollution Control and Management Project in an amount of \$200 million, which is currently being processed for approval before the end of 2008, will be the third major ADB investment in the SRB. This project likewise forms part of the SRBPCMP. This strategic approach of the SRBPCMP in addressing pollution control in the SRB is to serve as a model pollution control program for replication elsewhere in the PRC. ADB's long-term strategic partnership with the Government in addressing pollution control in the SRB is expected to strengthen over the medium to long term, as additional investments are proposed for implementation over the coming years.

⁴ ADB. 2002. *Technical Assistance to the People's Republic of China for Songhua River Water Quality and Pollution Control Management*. Manila.

⁵ ADB. 2006. *Technical Assistance Completion Report Songhua River Basin Water Quality and Pollution Control Management*. Manila.

⁶ As of 21 May 2008, cumulative contract awards and disbursements amounted to \$63.67 million and \$27.94 million respectively.

⁷ The loan agreement was signed on 26 February 2008 and was declared effective on 28 May 2008.