

# COMMENTARY

## Provincial Impacts of Multilateral Cooperation: The Greater Tumen Initiative and Environmental Protection in Jilin

By See-Won Byun

Plagued by political tensions within a complex security environment, Northeast Asia has historically lacked an effective mechanism for regional cooperation. The Greater Tumen Initiative (GTI) is the only existing intergovernmental effort for cooperation in Northeast Asia, evolving from the Tumen River Area Development Programme (TRADP) launched by the United Nations Development Programme (UNDP) in 1991 to facilitate trade and investment and promote sustainable economic development. With a membership of five countries including China, Mongolia, North Korea, South Korea, and Russia, many experts regard the Tumen project a failure as both a regional economic scheme and a mechanism to protect the Tumen River Basin's ecosystem.

This economically attractive yet politically complicated project has brought some development to the region. However, the environmental impact of this growth, particularly within China, has raised concerns among environmentalists given the prevalence of rare species in the river basin's ecosystem and potential devastation from unchecked development. This concern is ironic considering that the environment was one of the first focus areas of Tumen cooperation, attracting 85 percent of total program funding by 2004 and serving as the cross-cutting sector among the priority areas of energy, trade and investment, transportation, and tourism (Tumen Secretariat, 2005).

Jilin Province has been the key participant in the GTI on the Chinese side. The idea of Tumen cooperation first unfolded in Jilin in the 1980s as a result of collaboration among experts and officials at Changchun's Northeastern Normal University, the China Center for International Studies, the East-

West Center in Hawaii, and the State Science and Technology Commission (Cotton, 1996). Despite the weaknesses of the Tumen project, regional cooperation has clearly benefited the provincial economy through dynamic interactions between central, local, and regional efforts to attract foreign trade and investment. The province is also cooperating with domestic and regional "green" nongovernmental organizations (NGOs). As further growth puts greater pressure on the environment, Jilin's economic outreach also has involved progressive environmental initiatives that reflect this central-local-regional dynamic.

### DEVELOPMENT VERSUS POLLUTION

China is the main source of pollution in the Tumen River area, with 70 percent of the watershed located in the Yanbian Korean Autonomous Prefecture in Jilin. Two state-owned pulp and paper mills in Yanbian account for over 90 percent of the river pollution from Chinese sources but also importantly support Yanbian's town economies (Tumen Secretariat, 2002a). Water pollution is the most serious problem, threatening the health of the 2.2 million local Chinese who rely on downstream water for farming and drinking, destroying fish stocks across the region, and affecting coastal waters of North Korea and Russia. In 2006, the China's Ministry of Environmental Protection (MEP) indicated the water quality of 75 percent of the Tumen River as Class V, unsuitable for natural reserves or drinking, or domestic, industrial, and agricultural use (SEPA, 2007).

Pollution of surface water had already reached high levels in the early phases of Tumen coopera-



The Tumen River as the China-North Korea-Russia Border.  
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tion, mostly from industrial sources (Zhu, Li, & Lu, 1997). According to Chinese researchers, the development of urban infrastructure, especially water treatment facilities, have lagged behind rapid urbanization and industrialization in the Tumen region (Wang, Wang, & Yang, 2002). Further commercialization is likely to drive local growth while exacerbating the environmental challenges. The Hunchun Border Economic Cooperation Zone in Yanbian was established in 1992 without an environmental impact assessment, which was undertaken seven years later amid the pressures of rising investment (CRAES, 2000). A joint study by South Korean and Chinese environmental organizations in 2001 found that large-scale development projects have led to significant deterioration in water quality, with up to 80 percent of the river unsuitable for even industrial use and a decline in wildlife in the river area (“Tumen River polluted,” 2001).

Since the Tumen River is a border river between China, Russia, and North Korea, the key constraint to environmental protection has been the lack of sustained political support from all participating governments. Although Russian water quality monitoring data has indicated some progress over the years, further regional cooperation is required to address Tumen River pollution in a more comprehensive and integrated manner (MOE, 2002).

## MULTILATERAL ENVIRONMENTAL COOPERATION

The GTI addresses common environmental concerns throughout its focus sectors, integrating such issues as clean technology, ecologically sustainable tourism, and climate change into its development projects. Environmental work is led by the TumenNet initiative of the Global Environmental

Facility (GEF), jointly financed by the World Bank, UNDP, and the United Nations Environment Programme (UNEP) (UNDP, 2002). TumenNet’s Strategic Action Programme (2006-2015) sets the basic foundation for long-term regional environmental cooperation, with a particular focus on biodiversity and water issues.

This action plan remains unsigned due to disagreements among some member states. However, several important initiatives have continued under the broader GTI framework. Most notable are public-private partnerships in clean production and the modernization of waste treatment facilities. Current efforts in this direction include a Feasibility Study on Tumen River Water Protection, a multinational project for 2008-2010 launched by Japan’s Economic Research Institute for Northeast Asia to monitor water quality in the Tumen River and develop corresponding policy tools for water protection (Tumen Secretariat, 2007a). As an initial step to clean up the Tumen River, the Finnish government in 2002 funded two pre-feasibility studies on upgrading Yanbian’s pulp and paper plants, in collaboration with the United Nations Office for Project Services and the China International Center for Economic and Technical Exchanges (Tumen Secretariat, 2002b). Given the wide inconsistencies in environmental data within and between the five member countries, the GTI Environmental Cooperation project proposed in November 2007 aims to harmonize data collection methods and transboundary environmental criteria, build national and local assessment capacity, and promote multilateral cooperation on development planning (Tumen Secretariat, 2007b).

To coordinate the various environmental efforts of the GTI, the 2007 Consultative Commission meeting produced the Cooperation Framework on Environment (CFE), including a coordination unit

and functional working groups (UNDP, 2007). As a formal mechanism for regional environmental cooperation, the CFE is important for strengthening existing initiatives while negotiations continue for a long-term action plan.

## JILIN'S ENVIRONMENTAL OUTREACH

The inaugural meeting for the TumenNet action plan in 2002 recognized China's progress in addressing water pollution of the Tumen River (MOE, 2002). While many environmental groups have pointed to the risks of developing the region, environmental protection has depended on the local response to Tumen cooperation and development. In addition to the regional efforts of the GTI, Jilin's environmental outreach has been complemented by central policies, local initiatives, bilateral and international cooperation, and public participation.

Under the TumenNet program, the Jilin Provincial Institute for Environmental Protection leads the regional effort to develop an Environmental Information System, designed to manage regional data on international waters and biodiversity. A series of meetings on environmental issues concerning offshore oil and gas development, the mining sector, and other areas have been held to build capacity among local experts and raise awareness among government officials. Along with TumenNet, the United Nations Educational, Scientific and Cultural Organization (UNESCO); and Green Yanbian (a Jilin-based NGO); the Yanbian prefectural government has held workshops on north-east Asian environmental cooperation focusing on conservation and development in the Tumen River area (Korean National Commission for UNESCO, 2001). These workshops have served as an important forum for discussing international approaches to environmentally-sustainable development.

Provincial laws and regulations in Jilin have followed developments in national environmental legislation establishing maximum levels of pollutants for wastewater and solid waste. Completed and ongoing projects include sewage treatment facilities for the Kaishantun chemical fiber pulp plant and Shixian paper mill—the two plants responsible for the bulk of the water pollution—and municipal wastewater and garbage treatment plants in the cities of Yanji, Hunchun, and Longjing, Yanbian's major economic centers.

Bilaterally, the Yanbian prefectural government and the Korea Environment Institute have been

cooperating on personnel exchanges and joint research for the protection of the Tumen River in recent years ("South Korea says," 2003). Jilin's environmental concerns have also attracted financial and technical assistance from international donors, addressing the funding inadequacies of the GTI. The Asian Development Bank (ADB) is extensively involved in Jilin's water resource management and urban infrastructural development through projects that aim to improve the water quality of Tumen and other river basins in the province (ADB, 2006). At the local level, the ADB is also supporting the Yanji municipal government and the Yanji Municipal Sewerage Treatment Company to expand the wastewater treatment capacity in Yanji city (ADB, 2007). ADB involvement is important not only for funding but also for its experience in fostering cross-border economic cooperation through the Greater Mekong Subregion (GMS) initiative in Indochina.

Finally, the environmental implications of Tumen development have prompted regional cooperation among environmental NGOs. South Korean and Chinese environmental groups including Green Korea United (GKU) and Greenpeace China have launched a joint campaign to protect the Tumen River and Changbai Mountain on the Sino-Korean border ("Environmental groups," 2000). Green Yanbian in Jilin has actively promoted Tumen protection since its establishment in 2000 by ethnic Koreans returning from South Korea (Awaji, 2006). Modeled on South Korean environmental NGOs, the group is 80 percent ethnic Korean and leads the exchanges between Chinese and Korean NGOs on the Tumen region. Sponsored by TumenNet, the two NGOs Green Yanbian and GKU worked together in summer 2001 to monitor the environmental situation along the Tumen River and raise awareness both locally and in South Korea (GKU, 2001). Green Yanbian has now expanded contact with other Chinese NGOs and environmental experts in Beijing and Northeast China.

Greater international contact especially between Chinese and Korean NGOs could strengthen the role of local environmental groups like Green Yanbian. However, NGO activities in Northeast Asia have often been hampered by diplomatic considerations, furthering the already significant restrictions on NGOs in China. When Green Yanbian conducted a month-long environmental study along the Tumen River in May 2001, Chinese authorities did not allow the group to release their

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findings on the extent of river pollution and watershed damage arising from activities in the North Korean side (Awaji, 2006).

### SUSTAINABLE COOPERATION

Despite the challenges faced over a decade of engagement, member countries in 2005 extended the period of Tumen cooperation for ten more years, taking full ownership of the project with continued support from UNDP. The GTI has now evolved into a geographically larger, country-driven, and private sector-focused effort. Although the Tumen project has suffered from limited high-level political support and a lack of funding, cooperation in energy, trade, transport, and tourism has increased substantially from nonexistent levels in 1995 (Meyer, 2004).

Each member country joined the GTI for different reasons. Having first conceived the idea of Tumen cooperation, China is primarily driven by the need to boost its stagnating northeast region. Domestic policies have played a major role in shaping the course of both economic and environmental cooperation in Northeast Asia. With transboundary implications, environmental protection in the Tumen region requires both domestic and regional action. Just as the GTI has dynamically shaped Jilin's economic strategies, continued development has also demanded coordinated environmental adaptations at central, local, and regional levels.

The GTI has progressed against a unique historical setting where political tensions have undermined any cooperative programs. Although geographically and ethnically the Tumen region presents significant advantages, sensitive political issues weigh heavily on the prospects of cooperation. Given its volatile geopolitical situation, the Tumen River Basin is among the world's 17 river basins identified by UNESCO as potential conflict zones for water disputes in the near to long term ("Agency will mediate," 2003). The GTI's success depends critically on sustained political commitment from all member countries to make the Tumen project both a feasible and necessary effort. While the GTI as a whole faces considerable political obstacles, Jilin's response suggests that multilateral cooperation may positively shape provincial environmental efforts in China.

*See-Won Byun is a master's candidate in international affairs at the George Washington University and is assisting research for the Freeman Chair in China Studies at the Center for Strategic and International Studies. She can be contacted at Byunsw@gwmail.gwu.edu.*

### REFERENCES

- "Agency will mediate in water disputes." (2003, March 21). *BBC*.
- Asian Development Bank. (2006, June). *People's Republic of China: Preparing the Jilin Urban Infrastructure Project. Technical Assistance Report*, Manila.
- \_\_\_\_\_. (2007, June 20). "Jilin urban environmental improvement project: Yanji effluent reuse and sewerage upgrade and expansion." Resettlement Action Plan Document prepared by Yanji Municipal Sewerage Treatment Company and China Northeast Urban Infrastructure Engineering Design and Research Institute, Manila.
- Awaji, Takehisa. (2006). *The State of the Environment in Asia 2005/2006*, New York, NY: Springer.
- Chinese Research Academy of Environmental Sciences, Center for Environmental Impact Assessment. (2000, January 18). *Environmental Impact Statement for Hunchun Border Economic Cooperation Zone*, Beijing.
- Cotton, James. (1996, November). "China and Tumen River cooperation: Jilin's coastal development strategy," *Asian Survey*, Vol. 36, No. 11.
- "Environmental groups from South, China to mount joint campaign." (2000, November 17). *Yonhap News*.
- Green Korea United. (2001, October 29). *Tumen River pilgrimage report: Environmental values and threats in the Tumen River Area*.

- Korean National Commission for UNESCO. (2001, October 29). The Second Workshop on Environmental Peace in Northeast Asia: Trans-boundary Conservation Cooperation in the Tumen River Area.
- Ministry of Environment of the Republic of Korea. (2002, June 6). *Memorandum of Understanding of TumenNet SAP TRZ Meeting*. Changchun, China.
- Meyer, Renaud. (2004, September 25). "Regional cooperation to revitalize Northeast China." Speech delivered at the "International Conference on Revitalizing Northeast China and Promoting Regional Cooperation in Northeast Asia," Dalian.
- "South Korea says North mines, China mills polluting Tumen River." (2003, October 30). *Yonhap News*.
- State Environmental Protection Agency. (2007). *Report on the State of the Environment in China 2006*.
- "Tumen River Found Severely Polluted." (2001, July 23). *Korea Times*.
- Tumen Secretariat. (2002, July 19). "Environment Information." [Online]. Available: <http://www.tumenprogramme.org/news.php?id=173>.
- \_\_\_\_\_. (2002, September 15). "Pulp and paper mill prefeasibility study." [Online]. Available: <http://www.tumenprogramme.org/news.php?id=304>.
- \_\_\_\_\_. (2005, September 2). *Greater Tumen Initiative: Strategic Action Plan for the Period 2006-2015*. Changchun.
- \_\_\_\_\_. (2007, December 19). "Feasibility study on Tumen River water protection." [Online]. Available: <http://www.tumenprogramme.org/news.php?id=490>.
- \_\_\_\_\_. (2007, December 19). *GTI Environmental Cooperation*. [Online]. Available: <http://www.tumenprogramme.org/news.php?id=489>.
- United Nations Development Programme. (2002). *Preparation of a Strategic Action Programme and Transboundary Diagnostic Analysis for the Tumen River Area, Its Coastal Regions and Related Northeast Asian Environs*. [Online]. Available: <http://www.undp.org/gef/05/portfolio/writeups.html>.
- \_\_\_\_\_. (2007, November 15). "9<sup>th</sup> Consultative Commission Meeting of the Greater Tumen Initiative." Meeting Report, Vladivostok.
- Wang Shi-Jun, Wang Dan, & Yang Xiang-Hua. (2002, September). "Urbanization and Its Impacts on Water Environment in Tumen River Basin." *Chinese Geographical Science*, Vol. 12, No. 3.
- Zhu Yanming, Li Jinsong, & Lu Xueqiang. (1997, June). "A study on quality of aquatic environment in Tumen River Area." *Chinese Geographical Science*, Vol. 8, No. 2.