

Water Pricing and Cost Sharing for Water Resource Protection in Korea

Hyun-Joo Moon
Research Fellow
Korea Environment Institute

There is an emerging problem of water scarcity in growing cities. It is associated with population growth; pollution increase; failure in demand-side management of water use as well as in management of water availability, among others.

Water pricing is one of the efficient and effective measures to manage the water demand as well as for management of water resources.

This paper provides practices in water pricing and cost sharing for water resource management in Korea and its implications to countries in EAS region.

Pricing Policies and Practices of Public Water Supply

Pricing policies of water supply in Korea are based on the 'user pays principle' so as to encourage water saving and reflect both costs and social considerations.

Water pricing in Korea has the strong structure for inducing water conservation – increasing block rate for consumption. But the price level that does not cover the production cost decreases the incentive of water saving as well as affects the financial accountability of water utilities.

The full cost pricing is encouraged and the water prices have been continuously increasing to cover production costs and to give users the right signal of service value. The national average tariff for domestic water supply rose from KRW 316 to 604 per cubic meter during the period 1997-2007. Despite the increase, tariffs remain low, with an average household bill amounting to about one half of a percent of the average wage.

Even with this low price level, there could be the people not affordable for enough water use for life. For social considerations of affordability for water, there are life-line tariffs and municipalities pay the water bills for some households on welfare. In order to guarantee stable access to water supply services for citizens, a support scheme was implemented for lower income users.



23-27 November • Manila, Philippines

Cost Sharing for Water Resource Protection

In Korea, river basin laws were passed in the period 1999-2002 to set up river basin authorities financed by 'water use charges'. Those charges are in turn passed on to consumers through the public water supply. The 'Water Use Charge' was introduced for supporting residents around water source area and promoting water quality improvement projects.

Recent annual revenue came to the equivalent of 470 million Euro in one year, and roughly 60% of this was used for infrastructure and other water quality improvement projects, 20% on land acquisition (e.g. for example purchase of riparian zones for conservation purposes) and 20% on community support programs related to water.

The community support programs are in the form of 'payments for environmental services (PES)'. Under the principle of compensation recognized under Korean law, revenues collected from downstream beneficiaries are used to compensate upstream residents for losses due to land use regulation with beneficial impacts on water sources.

The water use charge system is both to collect revenue via a levy and to achieve a win-win situation for both upstream and downstream users through two major policy measures: increasing infrastructure investment in wastewater treatment and providing subsidies to upstream residents to compensate for the losses imposed by environmental regulations.

The case of water use charges in Korea indicates the possibility of a cooperative solution to the conflict between upstream and downstream residents under the consensus of a cost-sharing principle. The central government played a key role in resolving the conflict, aiming to both strengthen environmental regulations and provide a cross-subsidy for affected residents.