Technical Assistance Report

Project Number: 42455
Regional Capacity Development Technical Assistance (R-CDTA)
January 2009

Partnership for Good Governance and Knowledge on Urban Water Management

(Financed by the Republic of Korea e-Asia and Knowledge Partnership Fund)

Asian Development Bank

ABBREVIATIONS

ADB	–	Asian Development Bank
K-water	–	Korea Water Resources Corporation
NRW	–	nonrevenue water
TA	–	technical assistance
WSS	–	water supply and sanitation

TECHNICAL ASSISTANCE CLASSIFICATION

Type	–	Regional capacity development technical assistance (R-CDTA)
Targeting Classification	–	General intervention
Sector	–	Water supply, sanitation, and waste management
Subsector	–	Water supply and sanitation
Themes	–	Sustainable economic growth
Subthemes	–	Promoting economic efficiency and enabling markets

NOTE

In this report, "$" refers to US dollars.

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I. INTRODUCTION

1. The UN-HABITAT *2006 Annual Report* projected that Asia's urban population will increase from the current 40% of the total to 55% by 2030 and will be the driving force of the global economy in the 21st century.[1] More than half of the world's megacities will be in Asia, with small and medium-sized cities growing at a faster rate than large ones. Population growth in Asia's urban areas during this period will be unprecedented. Achieving the Millennium Development Goal of halving the proportion of people without sustainable access to safe drinking water or basic sanitation by 2015 is getting more challenging in Asia's urban areas. Urban water supply and sanitation (WSS) improvement has consistently been at the center of the international development agenda. Typically, WSS capacity development programs are based largely on training individual staff members as the target unit for a selected WSS subtopic. However, water system improvements can hardly be achieved unless various interlinked factors are coordinated. Individual staff members often have no way to influence the entire WSS operation upon their return to duty, despite their enhanced skills and knowledge from various trainings. This regional capacity development technical assistance (TA) attempts to improve the effectiveness and sustainability of capacity development programs by targeting water operators as a training unit.

2. The concept of the TA was approved by the director general of the Asian Development Bank (ADB) South Asia Department on 26 September 2008. Financing of $500,000 will be from the Republic of Korea e-Asia and Knowledge Partnership Fund.[2] The TA Fact-Finding Mission was carried out during 7–13 November 2008. Korea Water Resources Corporation (K-water) has been consulted and has agreed to be the implementing agency of the TA.[3] The TA design and monitoring framework is in Appendix 1.

II. ISSUES

3. Although many urban areas in Asia are implementing reforms in their water and sanitation sectors, many problems persist. Service coverage in urban areas is still far from universal, the average nonrevenue water (NRW) level is 40% or higher for many utilities, source development is not keeping pace with population growth or demand projections, financial performance is weak, and customer relations are poor. Substantial portions of South Asia suffer poor water quality or groundwater depletion or salinization. Shortfalls of electricity production constrain continuous water pumping and aggravate prevailing problems caused by intermittent water supply. In addition, climate change has increased the frequency and severity of flooding and drought. Water-related disasters have added to urban water management the dimensions of climate change adaptation and protection.

4. These issues are systemically interlinked. Without fixing pipe leaks, one can hardly increase water pressure. Communities and politicians will not accept higher tariffs on inadequate water services, causing NRW to run up high revenue losses. This puts the financial sustainability of utilities' operation and management at risk, leaving inadequate funds to replace the leaking pipes at the top of this vicious cycle. However, capacity development and training programs are usually formulated by subtopic or technical area, rather than programmed for a holistic management perspective.

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[1] UN-HABITAT. 2007. *2006 Annual Report.* Nairobi.
[2] Approved by the Government of the Republic of Korea on 1 December 2008.
[3] The TA first appeared in the business opportunities section of ADB's website on 16 October 2008.

5. ADB's water supply projects have repeatedly incorporated various types of TA to strengthen water utilities' governance and develop technical capacity to, for example, improve the corporate structures of the utilities, promote tariff reform and NRW reduction, enable regulatory bodies, strengthen technical staffers' daily operation and management skills, raise public awareness, and improve customer services. Despite these efforts, achieving universal improvement has not been possible with limited resources. Training components are inadequate, and investments in capacity development have often become sunk costs, whose benefits are rarely shared with or replicated in other localities, despite the gains potentially achievable by providing the same training to those with similar problems.

6. Urban WSS improvement has consistently been at the center of the international development agenda and will continue be there in the context of rapidly urbanizing Asia. Needs are particularly urgent in South Asia, where achievements toward the Millennium Development Goals on WSS have been lower than elsewhere in Asia. In this regard, capacity development programs dealing with common problems in South Asian countries can be more efficiently provided if structured systematically and replicated widely, rather than repeatedly reinventing the wheel. In addition, ADB's recent initiatives, such as the (i) NRW training workshop in June 2008, (ii) twinning program between expert and recipient water utilities through technical assistance,[4] and (iii) best practices on urban water management demonstration through a study tour to Manila for 12 delegations from Nepal and Bangladesh in September 2008, have demonstrated that strong demand exists in South Asia for knowledge of good practices to improve urban water management and governance. Successful development aids require not only closing the resource gap but also bridging the knowledge gaps between the developed and developing countries in Asia.

7. In the context of a rapidly changing Asia, ADB's long-term strategic framework 2008–2020 (Strategy 2020) refocuses ADB operations on three development agendas: inclusive economic growth, environmentally sustainable growth, and regional integration.[5] Key drivers of change in operations are developing the private sector, encouraging good governance, supporting gender equity, and helping developing member countries gain knowledge. Strategy 2020 emphasizes ADB's commitment to collaborate with other development institutions and the private sector for a more innovative and effective development role. It points out that ADB must support improved governance and arrange partnerships with a broad range of institutions to continue to be effective in meeting the emerging challenges of Asia and the Pacific. Further, *Asian Water Development Outlook 2007* provides insights on managing water resources in Asia and suggests that there is enough knowledge, technology, and expertise in Asia to manage future water crises.[6] In this connection, using knowledge to improve development effectiveness becomes an increasingly important avenue of sustainable development. As the leading multilateral development institution in Asia and the Pacific, ADB should play a catalytic role to facilitate the sharing of knowledge, expertise, and lessons on good urban water governance and best development practices across regions in Asia. Developing a replicable and sustainable program of capacity development partnerships for urban WSS management is the right course in line with Strategy 2020.

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[4] ADB. 2007. *Technical Assistance for Supporting Water Operators' Partnership in Asia*. Manila (TA 6396-REG, $2.0 million, financed by the Japan Special Fund, March 2007–March 2009).

[5] ADB. 2008. *Strategy 2020: The Long-Term Strategic Framework of the Asian Development Bank 2008–2020.* Manila.

[6] ADB. 2007. *Asian Water Development Outlook 2007.* Manila.

8. The Republic of Korea e-Asia and Knowledge Partnership Fund, established in June 2006, aims to facilitate the creation and sharing of experience, information, and knowledge in Asia and the Pacific. The rationale, outcomes, and outputs of the proposed TA are in line with the knowledge partnership program under the Republic of Korea e-Asia and Knowledge Partnership Fund.

9. The potential for cooperation with K-water has been tested through a small twinning agreement in March 2008 (footnote 4). The twinning experience provides a good background for K-water's designing a training program that would be sustainable, as training is a core business area of K-water.

III. THE TECHNICAL ASSISTANCE

A. Impact and Outcome

10. The impact of the TA is improved capacity to manage and provide urban WSS services in South Asia. The expected outcome of the TA is to establish a sustainable capacity building and training program on WSS management and governance in partnership with K-water.

11. The TA aims to (i) build on K-water's existing WSS training programs, (ii) package a structured series of training programs on WSS management and governance targeting WSS operators and organizations as training units, and (iii) establish modular training courses involving water sector clients of ADB in South Asia. The innovative feature of the training program is its design identifying a WSS operator as the target training unit, rather than general capacity development for technical subtopics or for individual participants from various WSS operators. As the TA aims to establish a structured and sustainable WSS training program, only two WSS operators will be trained as demonstration cases, as financing under the Republic of Korea e-Asia and Knowledge Partnership Fund is limited.

B. Methodology and Key Activities

12. The framework for the training program will be drafted according to the primary objectives and intended outcomes of the TA. A detailed training program will be tailored for the two selected WSS operators and then executed. The framework of the training is a twinning arrangement between the K-water Academy and each recipient, with K-water as the expert that coaches the weaker WSS operator or organization on a continuing basis. Once a willing and committed water operator is screened and identified, the training team will be fielded to diagnose current operational conditions and assess the training needs in line with the framework. The contents of the training program may be adjusted, with modules flexibly combined to address field conditions. The TA will be implemented over 1.5 years in three components:

13. **Component 1.** The TA will explore K-water's existing training programs to assess their suitability to train WSS operators and organizations as target units. Two South Asian cities will be selected in connection with ADB's water projects. A team from K-water will conduct a full diagnosis of the water operator in each pilot city, covering organizational, financial, technical, management, and governance aspects. The analysis results will be used to prepare a structured training program suitable for improving the performance of the WSS utility operator. K-water's existing training programs will be the bases for further tailoring and supplementing the needs of the WSS utility operator concerned. The training program will be designed to target WSS utility service organizations as a single recipient, rather than individual participants from

different operators and organizations.

14. **Component 2.** The training framework, program, and modules will be implemented over 1 year for both operators. Training will begin with the senior management team in the WSS utility operator and address business planning, with training modules covering (i) organizational management aspects, (ii) institutional and legal reform requirements, (iii) financial management issues, (iv) technical skills improvement, (v) private sector participation in WSS business and services, and (vi) innovation and adaptation for climate change, if needed. Participants from the WSS operators will include staff from the top management team to the mid-level technical managers for day-to-day operations. If feasible, senor policy makers who may influence the countries' institutional legal framework for WSS—such as politicians; ministries of planning, public works, or finance; or budgeting offices—will be invited to top-level policy dialogues for formulating the necessary reform agenda. Training modules will include lectures, field visits, data preparation from the participating WSS operators, and hands-on practice and workshops. Based on what they have learned, training participants will prepare time-bound action plans by topic and include them in their business plans, which will be formulated with the top management team and assisted by K-water.

15. **Component 3.** This will be largely devoted to follow-up actions to monitor whether participating water operators have achieved the target improvements in the 1-year period and to refine the training program based on feedback from them. The entire cycle of the training module will be reviewed, modified, and adjusted accordingly. The last stage is expected to (i) finalize the training program, (ii) recommend actions to replicate it, (iii) disseminate it widely, and (iv) establish the sustainability of the training program in consultation with relevant parties.

C. Cost and Financing

16. The cost of the TA is $600,000, of which $500,000 will be financed as a grant from the Republic of Korea e-Asia and Knowledge Partnership Fund and administered by ADB. The grant will cover the costs of program development, training, and travel by trainees and trainers. K-water will finance the balance of $100,000 with such in-kind contributions as the training venue, equipment, and accommodation. Detailed cost estimates are in Appendix 2 and Supplementary Appendix A.

D. Implementation Arrangements

17. ADB will be the Executing Agency of the TA. ADB's South Asia Urban Development Division will be responsible for administering the assistance. K-water is selected to be the Implementing Agency for the TA in consideration of its unique expertise and capacity to manage a training program of this magnitude. The rationale for single-source selection and the profile of K-water is included in Supplementary Appendix B. No other consultants will be recruited for the TA. The TA is expected to begin in February 2009 and will be completed by September 2010. Municipal water operators or utilities should transmit a commitment letter to ADB for undergoing the training under this TA. Cities and towns with ongoing or upcoming ADB WSS projects will have priority. A no objection certificate will be obtained in writing from the government of participating countries before commencing or financing the proposed activities. The outline terms of reference (Appendix 3) and the draft framework of the training program (Supplementary Appendix C) were prepared in coordination with the K-water. A draft partnership agreement (Supplementary Appendix D) has been prepared for signing by the appropriate authorities of each party upon ADB's approval of the proposed TA. Under the

partnership arrangement, disbursement will be as a lump sum paid according to the schedule in the partnership agreement.

18. Appropriate information on TA activities, including the design of the training framework, progress in executing the training program, and effectiveness of this training approach, will be disseminated widely on ADB's website.

IV. THE PRESIDENT'S DECISION

19. The President, acting under the authority delegated by the Board, has approved ADB administering technical assistance not exceeding the equivalent of $500,000 to be financed on a grant basis by the Republic of Korea e-Asia and Knowledge Partnership Fund, for Partnership for Good Governance and Knowledge on Urban Water Management, and hereby reports this action to the Board.

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets and/or Indicators	Data Sources and/or Reporting Mechanisms	Assumptions and Risks
Impact Improved capacity to manage and provide urban water and sanitation services in South Asia	Improved access to safe drinking water by 7% and to sanitation by 9% by 2015 in South Asia[a]	Millennium Development Goal report and the progress report by the United Nations Children's Fund	**Assumption** South Asian governments are committed to the sustainable improvement of basic urban services. **Risk** Lack of interest by the Government of the Republic of Korea or recipient governments in establishing sustainable partnerships and financial agreements beyond the TA
Outcome Sustainable and effective capacity development and training program established on urban water and sanitation management and governance	Partnership agreement with K-water Sustainability of the training program secured by an optimal financing scheme agreed by partners and stakeholders	Annual report of K-water ADB project performance information system	**Assumption** Developing member country governments will nominate, in a timely manner, officials in relevant positions to attend the training sessions. **Risk** Lack of political will to improve water sector governance
Outputs 1. Needs assessment report 2. Training program designed 3. Training program executed 4. Dissemination	Diagnosis report Training framework developed Training of two WSS organizations carried out Train about 80 middle- and high-level managers from South Asia Dissemination regarding the innovativeness and availability of modularized training program	TA reports Attendance data on training sessions Feedback from the participants Back to office reports Report of K-water and ADB Urban and Water CoP web pages Event-related summary briefs	**Assumption** Basic underpinnings of technical and management issues are commonly applicable across the region. **Risk** Nominated participants sent by governments may be transferred to other jobs after training.
Activities with Milestones 1. Establish a partnership between ADB and K-water for knowledge sharing and training by the 1st month from commencement. 2. Conduct full diagnostic assessments on typical WSS conditions in a selected city in South Asia by the 2nd month. 3. Evaluate the results of the diagnosis and prepare a structured training program by the 3rd month. 4. Review the existing K-water training programs and build modularized training sessions according to the diagnosis results by the 4th month. 5. Execute training modules for a selected water operator, taking into account recipients' job levels and functions in their organization by the 6th month. 6. Start the training cycle of the second city during the 7th–12th months. 7. Refine the training program upon feedback from the participants and conduct performance monitoring 4–5 months after completing each training,			**Inputs** ▪ $500,000 grant by the Republic of Korea e-Asia and Knowledge Partnership Fund ▪ ADB staff inputs ▪ K-water's in-kind contributions equivalent to $100,000

Activities with Milestones	Inputs
or by the 11th to 16th month. 8. Adjust, refine, or modify the training program by the 16th month. 9. Prepare final report and transmit it to ADB. 10. Disseminate the program widely through web postings by the 18th month.	

ADB = Asian Development Bank, TA = technical assistance, WSS = water supply and sanitation.
[a] South Asia improved access to drinking water from 71% in 1990 to 84% in 2002, for an average coverage increase of 1% per year, and sanitation coverage grew from 20% to 37% in the same period (www.unicef.org/wes/mdgreport/progress.php).
Source: Asian Development Bank.

COST ESTIMATES AND FINANCING PLAN
($'000)

Item			Total Cost
A.	**Republic of Korea e-Asia and Knowledge Partnership Fund**[a]		
	1	Training, Seminars and Conferences	492.0
		Instructors and Diagnostic Team:	
		a. Remuneration and Per Diem	142.0
		b. International and Local Travel	30.0
		Training:	
		c. Others (participants' travel, accommodations, per diem)[b]	320.0
	2	Miscellaneous TA Administration and Support Costs	4.0
	3	Contingencies	4.0
		Subtotal (A)	**500.0**
B.	**K-water** (in-kind contribution; i.e., venues, facilities, meals)		**100.0**
		Total (A+B)	**600.0**

[a] Administered by the Asian Development Bank.

[b] Total 80–90 participants for training

Source: Asian Development Bank estimates.

OUTLINE TERMS OF REFERENCE FOR CONSULTANTS

1. The main objective of the technical assistance (TA) Partnership for Good Governance and Knowledge on Urban Water Management is to establish a sustainable and effective capacity development and training program dealing with the common problems of urban water supply and sanitation (WSS) management and governance in South Asia. In light of this, the Asian Development Bank (ADB) assumes a proactive role as a catalyst in sharing expert knowledge in Asia and the Pacific that is relevant for its developing member countries. To capture and translate urban WSS management experience into locally useful knowledge, ADB has initiated a partnership with Korea Water Resources Corporation (K-water) to carry out the assignment described in paras. 3–5.

2. ADB will communicate with relevant government offices in South Asia to identify the most suitable two cases for the assignment. Broadly, the selection criteria for the two cases will be the willingness and commitment of their leadership to undergo training similar to twinning and the presence in their service areas of WSS problems prevailing in South Asian developing countries, with priority given to urban areas with ongoing or planned ADB water projects.

3. **Objective and Scope.** The objectives of the assignment are to (i) develop an effective capacity development framework on urban WSS management and governance and (ii) establish a replicable training program for South Asian developing countries. The scope of work will be two selected pilot cities, one with a population of about 0.5 million and another with no more than 5 million. The draft framework (Supplementary Appendix C) will be further refined. In line with the framework, K-water will refine and conduct a training program fit for the selected case cities. The process will begin by fielding a diagnostic team. A follow-up monitoring stage should be included in the last phase of the training to assess the performance of the pilot cases. K-water may involve external experts as required in the field of WSS management and governance.

4. **Implementation Period and Indicative Schedule of the Activities.** The assignment will be implemented over 18 months. It is desirable to formulate a training program for each case sequentially, so that learning and experience from the first case can be reflected in the second case. It is expected that some of the activities for the first case may cascade into the second case. The indicative timeline of activities is in the Supplementary Appendix C.

5. **Activities.** The detailed terms of reference and activities of the assignment will include, but not necessarily be limited to, the following:

(i) **Developing the WSS capacity development framework.** K-water will build the framework based on its existing expertise and experience to be suitable for developing countries in South Asia.

(ii) **Fielding diagnostic teams to assess and record the baseline data.** K-water will field a team to each case area for initial diagnosis of WSS conditions and use this assessment to benchmark and refine the training program in line with the capacity development framework.

(iii) **Developing and conducting a tailor-made training program for each case.** Based on the diagnosis of the case recipient, K-water will refine the optimal training program. The training will be conducted through workshops, lectures, hands-on training, field visits, discussions, and some report writing by the participants to prepare their action plans.

(iv) **Helping recipient WSS operators to prepare draft business plans with time-bound actions.** At the end of the training, the recipient WSS operator should have its own business plan with specific actions for improving WSS operations and

management. Developing it will be part of the training program. Participants will be encouraged to suggest their action agenda based on what they have learned, and their short-term action items should be included in the business plan. The short-term action items will be part of performance monitoring toward the end of the training period. The business plan will be discussed, and senior management participants will be encouraged to carry it out. Any further assistance required for the plan to materialize should be identified for ADB's consideration.

(v) **Monitoring and following-up performance improvement.** K-water will conduct a monitoring and follow-up visit to the recipient WSS operator and evaluate its performance regarding management and governance in light of its immediate action plans as recorded in the draft business plan. Any necessary remedial measures, if deficiencies are found, will be identified and recommended. This monitoring visit will be scheduled for 4 months after training completion.

(vi) **Finalizing the capacity development framework and a model training program.** After conducting the two trainings, K-water will compile the following for the final report: training procedures, program arrangement and logistics, learning experience on refinement, issues critical for further improving the effectiveness of future training, suggestions for training programs, and recommendations for enhancing sustainability.