



Annex ■

**Proceedings of the Regional
Consultation Workshop on
Water in Asian Cities —
The Role of Civil Society**

14–16 October 2002
Asian Development Bank, Manila

PROCEEDINGS OF THE REGIONAL CONSULTATION WORKSHOP

Introduction

The Regional Consultation Workshop on Water in Asian Cities – The Role of Civil Society was held at the Asian Development Bank (ADB) in Manila on 14–16 October 2002. The purpose of the Workshop was to explore the role of civil society in developing water supply and sanitation services in Asian cities. The discussions were based on the findings of the Study on Water in Asian Cities covering 18 cities in the region and case studies of small-scale independent private water providers serving the urban poor in 8 of those cities. Group discussions focused on identifying key issues and proposing ways and means of resolving them. The outputs, which included advocacy for action, were presented at the Third World Water Forum held in Osaka, Japan in March 2003.

There were 110 participants and observers from 18 countries in the region including representatives of nongovernment organizations (NGOs), development institutions, international and regional organizations, and academe; and journalists, private contractors, and consultants. The Workshop program and list of participants are given in Appendix 1 and Appendix 2, respectively. The Workshop followed a format of presentations of related topics, followed by open plenary discussions. There were 28 presentations covering the study findings on water in 18 Asian cities and small-scale water providers; civil society views; case studies of 3 cities; private sector and the urban poor; water, human values, and culture; views from external support agencies; and preparations for the Third World Water Forum. Eight small groups were formed to further discuss specific issues and action plans to address the issues. From the results of the group discussions, a list of issues for consideration at the Third World Water Forum was presented.

Opening Address

The participants were welcomed by ADB Vice-President (Operations 1) Myoung-Ho Shin, who underlined the vast and unacceptable inequity in access to safe water supplies between the urban poor and the more affluent in Asia's cities. Increasing investments in technology and the public sector have not been able to address the needs of Asia's urban poor for access to clean water and sanitation. Mr. Shin added that those needs have developed so fast and on a scale so massive that the social, political, legal, and regulatory frameworks needed to meet the new challenges have not kept pace. ADB's Study on Water in Asian Cities seeks to increase the awareness of stakeholders of the challenges facing the urban water sector and, in particular, to provide policymakers with better strategies to improve the access of the urban poor to safe water and sanitation. Mr. Shin pointed out that central to the case studies is the role of the broader civil society including the private sector, NGOs, academics, journalists, and development institutions. He suggested two points for consideration by the participants: the role of small-scale private providers in meeting some of the unmet needs of the urban poor but at a significant cost, and that of large-scale private water providers who can deliver safe water reliably and with broader client outreach than many publicly operated water utilities when the proper legal and regulatory frameworks are in place. Mr. Shin ended his address by saying that to make ADB's theme of "Water for All" a reality, it is necessary to mobilize the resources of civil society and build new partnerships so that the urban poor—particularly children—have access to safe water and sanitation.

Keynote Address

Antonino T. Aquino, President, Manila Water Company, Inc. (MWCI), presented the privatization process of the Metropolitan Waterworks and Sewerage System (MWSS); what MWCI has achieved in the 5 years since privatization including serving the urban poor communities; and the major challenges ahead. He characterized the system before privatization in terms of high rates of illegal and spaghetti connections, leaks, poor network maintenance, poor supply conditions, and inadequate service in depressed areas. Mr. Aquino then described the regulatory environment under which the concessionaires started operating upon takeover of the system in 1997 with the MWSS Regulatory Office responsible for tariff rates and service standards, the Department of Environment and Natural Resources for pollution control standards, and the Department of Health for drinking water quality standards. Despite the major challenges including the Asian financial crisis in 1997 and the effects of El Niño, MWCI improved its performance through the adoption of a new corporate value of caring for customers and employees, the territory management approach, and employee empowerment and training. Mr. Aquino said that these resulted in the implementation of major capital programs, more water delivered and more households served, reduced water losses (from 63% to 54%), improved water availability (longer hours), consumer savings in water bills, and improvements in sewerage and sanitation. Water for the urban poor was provided through MWCI's *Tubig Para sa Barangay* (Water for

Communities) with 95,000 households or 570,000 people provided with piped water supply. He saw as major challenges ahead the expansion of coverage, new water supply sources, and sewer and sanitation projects.

Water in Asian Cities – The Challenge

Arthur C. McIntosh, ADB Principal Water Supply Specialist, presented the challenging issues facing the sector in the region; the root causes of the problems; why civil society should be involved; and the need for knowledge, awareness, and communication. He cited the problems of low coverage in Southeast Asia and intermittent water supplies in South Asia, resulting in dependence on water vendors or standpipe supplies with low availability, high costs, and dubious water quality. Mr. McIntosh traced the root cause of these situations to poor governance and inadequate tariffs. He said that government policies must address serving the urban poor and eliminating intermittent water supplies. Water operators require an independent regulator, autonomy, and incentives. Without adequate tariffs, operators cannot invest in new services or improve existing services. Civil society groups, such as NGOs, academe, and journalists can ensure that all the public are made aware of the issues. Mr. McIntosh also noted the value of regular and dedicated attention to improving knowledge, awareness, and communication on the subject among all stakeholders. He challenged the participants to find out how civil society can work with other stakeholders to resolve water problems.

Water Utility and Civil Society Findings

Geoffrey Bridges, international consultant for the Study on Water in Asian Cities, presented the initial findings of the study on water supplies in 18 Asian cities and a summary of the overviews from civil society in these cities.

Summary of Water Supply Reports: The water supply reports were summarized according to nine themes:

Water Resources

- Heavy reliance is placed on surface water, but sources are becoming more polluted because pollution control is poorly enforced by governments.
- There is a need to reduce leakage and to recycle treated effluent (e.g., Chengdu is planning to recycle 70% of wastewater by 2005); over-abstraction of groundwater is a major issue in some cities.
- Planned water resource developments are generally adequate for the next 5 years, but there are major deficits in Shanghai, Delhi, and Chengdu.

Policy and Regulation

- Water supply policies are widely based on the provision of a reliable, adequate, and safe water supply at reasonable cost.
- Most utilities are in the public sector and are self-regulated. Independent regulators exist in cities with private operators, such as Jakarta, Manila, and Kuala Lumpur, but are desirable even for public water utilities.
- Tariff policies are based on sustainability with little subsidy, but there is much sociopolitical influence on tariff levels in many cities.
- Transparency and public awareness are poor even where provision of data is obligatory. Water utility information is available through websites in Hong Kong, Osaka, and Seoul.

Operator Performance and Private Sector Participation

- While operators are mostly self-regulated public sector utilities, there is a trend for greater private sector participation (PSP). However, there are major concerns on job losses, higher tariffs, and loss of control over the utility.
- The existing types of PSP are concessions (Jakarta, Manila); outsourcing (Ulaanbaatar); build-operate-transfer (BOT) (Chengdu, Kuala Lumpur); and a joint venture stock company (Shanghai).
- In 2000, only 4 cities collected sufficient revenue to cover operation and maintenance (O&M) costs and capital expenditures, 5 cities covered O&M costs only, and 9 cities did not cover O&M costs (including Hong Kong, Kuala Lumpur, and Osaka).
- Staff per 1,000 connections ranged from 1.4 (Seoul) to 33.8 (Chengdu), with a mean ratio of 5.7; Manila's ratio decreased from 9.8 in 1997 to 4.4 in 2002.

- Nonrevenue water (NRW) ranged from 62.4% (Manila) to 6.8% (Osaka); 9 cities have NRW levels well above 30%, which is considered to be a reasonable international target. Phnom Penh reduced its NRW from 70% in 1993 to 26% in 2001.
- In most cities, more than 80% of the population has 24-hour water availability. Delhi, Dhaka, Karachi, and Kathmandu have almost no areas with continuous water supply.

Small-scale Water Providers

- Small-scale water providers (SSWPs), such as private networks, tankers, and water vendors delivering to homes, have little opportunity in cities with good coverage; the majority resell water from piped networks, but some draw water from private tubewells and springs.
- In Manila, 42.5% of the population are not served by piped water and rely on water vendors (23%), other SSWPs (19%), and small network operators (8%). Kathmandu's affluent population relies on tankers during dry months. In Chengdu, small operators serve 15% of the population; SSWPs in Phnom Penh and Vientiane supply untreated water.
- Annual revenue turnover is estimated to be US\$1.2 million for tankers in Kathmandu and US\$3.3 million for SSWPs in Chengdu. Typical unit costs for SSWP water supplies are US\$1.92/m³ from tankers (Phnom Penh), US\$4.17/m³ from vendors (Jakarta), and US\$985/m³ for bottled water (Osaka).

Tariffs and Subsidies

- Most cities have a rising block tariff with basic subsidized allowance for the poor and provision for regular tariff reviews. The tariff in Hong Kong has been unchanged since 1995; Kuala Lumpur revised its tariff in 2001 for the first time in 10 years.
- Although policies indicate low subsidies, they are not implemented because of political interference. Hong Kong, China has a large subsidy, which is used for O&M and capital expenses. Domestic tariffs in Delhi, Tashkent, and Vientiane are equivalent to less than US\$0.03/m³ for a monthly consumption of 20 m³.
- Collection efficiencies range from 52% in Vientiane to 100% in Chengdu, Hong Kong, and Phnom Penh (where it was only 40% in 1993).
- Water connection fees are high relative to monthly tariffs in some cities. The connection fee in Seoul and Ulaanbaatar is equivalent to 177 months and 192 months average tariff for 20 m³ consumption, respectively.

Service Levels

- The water supply is intermittent in some areas of Colombo, Ho Chi Minh City, Jakarta, Manila, Ulaanbaatar, and Vientiane; less than 5% of consumers in Delhi, Dhaka, Karachi, and Kathmandu receive continuous supply.
- Intermittent supply costs are US\$750–950 per household for inhouse storage and pump capital costs, and annual running costs of US\$50–150.
- Access to piped water supplies varies from 100% in Hong Kong, Kuala Lumpur, Osaka, Seoul, Shanghai, and Tashkent to less than 50% in Ulaanbaatar.
- Daily per capita domestic consumption is in the range of 68.0–328.3 liters in Tashkent. In Ulaanbaatar, it is 5.3 liters in the traditional settlements (*ger* areas) and 318 liters in apartments.

Wastewater and Sanitation

- Access to piped sewerage ranges from 100% in Hong Kong, Osaka, and Seoul to very low coverage in Ho Chi Minh City (11.7%), Jakarta (1.9%), and Manila (7%); Vientiane has no piped sewerage system.
- Individual or communal septic tanks are the main alternative to piped sewerage, serving 70% of the population in Kathmandu, 37% in Phnom Penh, and 30% in Jakarta.
- Septic tank desludging, which should be undertaken every 5 years, is only done when overflow occurs. Desludging costs are US\$25–50.
- Environmental conditions are generally poor because only part of the wastewater collected is treated, with most discharged directly to watercourses. Pollution from industrial effluent is increasing and policing of disposal difficult and rarely enforced.

Flood Management

- Susceptibility to flooding is high in cities where cyclones or hurricanes occur; there are regular floods in Dhaka, Jakarta, Manila, Phnom Penh, Ulaanbaatar, and Vientiane.

Water and Culture

- Water is viewed as God-given resource in most cultures. It is widely regarded as a symbol of purification, holiness, and blessing, and is used for cleansing rituals in the main regional religions. It is a symbol of power in the Republic of Korea.
- In many countries, water is used in festivals, often by dousing the participants.

Common Issues among the Cities

- There is heavy reliance on surface water sources, which are becoming increasingly polluted; many aquifers are being over-pumped.
- Although most tariff policies are based on principles of sustainability, many cities pay lip service to this for sociopolitical reasons, with tariffs set far too low for financial viability.
- NRW in most cities is well above internationally accepted norms. Where NRW is high, supply continuity is poor and system coverage often low.
- Where service coverage is low, high reliance is placed on small-scale water providers.
- In 11 of the cities, less than 50% of the population have access to piped sewerage.

Open Discussion Highlights

- On water as a social good: water becomes an economic good when it becomes a scarce resource.
- On universal standards for water quantity: the World Health Organization (WHO) regards a daily per capita consumption of 5 liters as the minimum, with 25 liters as the practical basic need.
- On arsenic in groundwater: there was no report on arsenic being a major problem in any of the 18 cities.
- On surface water sources: there were concerns on upstream water quality.

Summary of Civil Society Overviews: Participants from the cities in the study were asked to submit a one-page overview before coming to the workshop. Following is a summary of the major concerns from the overviews.

Governance, Policy, and Regulation

- There is usually no policy to regulate wastewater disposal or incentives to minimize and treat waste at source.
- A regulatory agency is needed to oversee policy implementation regarding PSP.
- Ways to control corruption in the sector are needed.
- Decentralization of water services would help to discourage population drift from rural to urban areas.

Water Resources Management

- Groundwater use should be controlled to prevent over-abstraction.
- Principles of integrated water resources management and long-term planning should be applied to protect the limited water resources.
- Pollution control in watersheds needs to be improved.
- Land development regulations are poor with regard to conservation of watersheds.

Operations and Service Levels

- Service coverage is limited, especially in poor peri-urban areas; it is necessary to improve demand management and efficiency (e.g., metering, water-saving devices, decreased irrigation).
- Leakage in distribution pipes should be addressed by rehabilitation of distribution systems and monitoring leaks.
- The intermittent supply and inequitable distribution of water could be alleviated through rainwater harvesting and improved demand management.
- Water quality could be improved by repairing leaks, improving water treatment operations, cleaning up rivers, and regulating the bottled water industry.
- The lack of civil society participation can be overcome by developing channels for dialogue.

Tariffs and Subsidies

- Tariffs are too high for the poor; the tariff structure should be adjusted to make water affordable for the poor.
- Increased funding for O&M and expansion can be obtained by increasing tariffs.
- Where connection charges are high, payment in installments should be allowed or subsidies for connection provided.

Impact on the Poor

- Business takes advantage of the poor—resold water costs more; engagement of civil society with relevant organizations should be developed.
- Privatization affects the poor most—loss of land and higher charges; increased participation of civil society and increased awareness through education/school programs are needed.
- PSP involves higher tariffs and reduction/removal of subsidies to the poor; again, increased participation of civil society and increased awareness through education/school programs are needed.
- The poor often resort to polluted water sources; community development projects should be developed with support from media and NGOs.

Common Concerns from Civil Society

- Pollution of water sources is increasing and their sustainability decreasing.
- Coverage of water services is generally low.
- Tariffs and connection fees in some cities are high, making municipal water supplies unaffordable to the poor.
- There is a need for greater civil society engagement and contribution, as takes place in advocacy for pro-poor policies in Kathmandu, and consumer meetings with regulators and the water company in Kuala Lumpur.

Open Discussion Highlights

- Water supply should be demand driven; there should be more demand management.
- There is a need to develop indicators for sustainability (security of supply, demand management, etc.). Water recycling is another option, now being considered in Dhaka.
- Civil society has major roles, such as NGOs in advocacy, but such groups must be well trained and resourced.
- There are still problems of autonomy and accountability.
- Water is often underpriced and this leads to nonviability.
- PSP should not be a substitute for resolving the inadequacies of governments.

Civil Society Presentations

S. Jaganathan of Larsen and Toubro, Ltd., Bangalore, presented the Sri Sathya Sai Drinking Water Supply Project as an example of a private initiative with its innovative turnkey contract arrangements, the creation of an autonomous water board, and contracts for O&M. The project covers 731 villages in Anantapur District in Andhra Pradesh State and serves about 900,000 people from 23 water supply schemes, using both surface water and groundwater sources. Funding was provided by the Sri Sathya Sai Central Trust. The construction company, Larsen and Toubro, Ltd., is also responsible for O&M. The State created an autonomous board to oversee the O&M.

Kulwant Singh of the Housing and Urban Development Corporation, New Delhi, described the Sri Sathya Sai Drinking Water Supply Project, a unique project between an NGO and the private sector that resulted in the reduction in the drudgery of carrying water, thus improving women's quality of life. He said that it also resulted in increased attendance in school. The same group undertook a sanitation project in Pune where communal toilets were provided at 40% of normal costs and covered 80% of the population. The community pays a monthly charge for use to cover O&M expenses.

Guna Raj Shrestha of NGO Forum, Kathmandu, presented the water supply situation in Kathmandu and how the NGO Forum was formed in March 2001; membership has grown from 4 to 30 NGOs. The main objectives of the NGO Forum are to ensure water access to all, ensure long-term performance and sustainability, and ensure that the environment is maintained. The Forum meets monthly and has organized civil society groups to meet government, aid agencies, utilities,

private companies, and other stakeholders. Feedback from the meetings is relayed to the Government, which, as a result, is now preparing by-laws on private companies.

Charles Santiago of Stamford College, Kuala Lumpur, stated that under the Dublin Principle, access to water must be within market rules. He expressed concern that a human right has, therefore, been made an economic commodity; a free good has been turned into market profit and water equity is skewed toward people who can pay for it. He said that the State has a duty to safeguard water supply access to all.

Jese Sikivou of the Pacific Islands Broadcasting Association, Suva, stressed the importance of ownership of land and resources in the Fiji Islands because this can affect the way water is distributed. He also added that gender is another important issue, especially the role of women in the distribution of water.

Shiao-Shing Chen of the National Taipei University of Technology, Taipei, China, presented critical issues for drinking water safety and water resource protection. He said that source waters need to be protected by setting standards, removing polluting sources, and making polluters pay. These actions lead to rapid recovery of water source quality. He emphasized the need for a system to monitor water quality.

Manu Bhatnagar of the Indian National Trust for Art and Cultural Heritage, New Delhi, stressed the importance of water resources management at all levels of project planning. He noted that many cities have laws on water harvesting that are not implemented. He added that it is better to protect and improve raw water quality than to treat increasingly contaminated water—prevention is better than cure. Mr. Bhatnagar further stated that the view that “NGOs are meant to be seen and not heard” must change; the efforts of NGOs at local levels are gaining ground.

D. C. H. Senarath of the University of Moratuwa, Sri Lanka, stated that policy and regulation need to be socially acceptable. NGOs and media have an important role to play, but they tend to emphasize the negative aspects.

Cecilia Soriano of Ateneo de Manila University, Metro Manila, said that while the analytical framework for water resources development highlights the need to maintain water quantity, water quality is also important and needs to be maintained by treatment and, wherever possible, preventing pollution.

The presentations were followed by a short video entitled *Delhi – The Receding Waters*, on the water crisis in Delhi; it was made by Krishnendu Bose with Earthcare Films, New Delhi.

Case Studies Presentations

Rainwater Harvesting in Chennai

K. R. Gopinath presented different methods of rainwater harvesting and case studies on how they were used in Chennai. He said that rainwater could be collected for drinking purposes (individual households or community supplies) or for artificially recharging aquifers by augmenting the natural filtration of surface water into aquifers by some unique systems and techniques. Rainwater collected from roofs, the ground, or other collection systems is directed to percolation pits that lead to aquifers. Another alternative mentioned was the use of abandoned wells and boreholes as conduits for recharging after infiltration. Mr. Gopinath enumerated examples of artificial recharging done by KRG Rainwater Harvesting Foundation for Hindustan Coca Cola Beverages in Kerala and for a number of households in Chennai.

Open Discussion

It was pointed out that in Bangladesh, an NGO is promoting rainwater harvesting during the monsoon season in rural areas as an alternative to arsenic-affected wells. Also, in the Pacific Islands, governments are removing import duties on rainwater catchment systems.

Greater Colombo Water Supply – A Financial Perspective

Premakumar Fernando described the problems with Greater Colombo's water supply: high NRW (35%), low tariffs for domestic consumers who are highly subsidized by industrial/commercial consumers (1:7.7) and the Government, and high per capita daily consumption (140 liters). The high NRW and high demand is affecting the water utility's ability to extend its

service to more consumers. Mr. Fernando proposed reducing NRW and per capita consumption through consumer awareness and tariff adjustment. He said tariffs can fund expansion; water can be saved through consumer awareness; NRW can be reduced through minimal investment; and needed investments can be halved through proper asset management.

Open Discussion

During the open discussion, there was agreement on the importance of awareness and the role of journalists in voicing the concerns of the poor and acting as catalysts. The media also have a role in promoting the value of water and getting high-income groups to conserve water.

Phnom Penh Water Supply Authority – 1993 and Now

Ek Sonn Chan presented the dramatic improvement in Phnom Penh's water supply from 1993 to 2002; how this was achieved through cultural change, target setting, revenue generation, and investment; and how the poor are being reached. He cited improvements in staff/1,000 connections (reduced from 22 to 5), coverage (increased from 50% to 100%), supply duration (from 10 hours to 24 hours daily), metering (from 12% to 100%), collection (from 50% to 99%) and NRW (from 72% to 22%). Mr. Chan described the restructuring of the Water Supply Authority, training, motivation and discipline, and teamwork as part of the cultural change. Revenues were increased through improved collection, NRW reduction, improved services, and tariff revision. The measures had government and donor support, and public acceptance. These were accompanied by network rehabilitation and increased supply capacity. Affordable and adequate direct connections were made for the poor.

Ownership and Partnership for the Improvement of Water Supply in Phnom Penh City

Keiko Yamamoto described how the master plan for the Phnom Penh water supply system was established through coordination among multilateral and bilateral donors in providing assistance for both structural measures and technology transfer. Japan provided assistance in the latter and in O&M training. She noted that the plan had been successful because of strong ownership of the project by the utility, good partnerships with donors and aid agencies, the combination of structural and technological measures, metering and tariff recovery systems, and improved staff working conditions.

Open Discussion

It was pointed out in the discussion that consultation with the poor was clearly a major factor in the Phnom Penh success—32 of 38 poor communities gained a piped water supply and the remaining 6 received stand posts. In rehabilitating old lines, more expensive but more durable materials were used. Also, some politicians responsible for illegal connections were made to abide by the rules and there is now far less political interference in the Water Supply Authority.

Private Sector and the Urban Poor

Water for All – Providing Water Services to Low-income Communities

Mai Flor presented Ondeo Services' program for providing water services to low-income communities by showing the principles of action, examples in several cities, and the lessons learned in the program. Ondeo has 125 million customers, of whom 8.8 million are low-income consumers in developing countries. The key challenges in serving the urban poor include rapid population growth, high proportion of urban populations that live in slums without adequate social services, urban poverty, need for large investments, and lack of replicable models. Alongside the challenges are the realities of water supply—the poor pay more than their fair share for water services; subsidies mainly benefit the nonpoor; investments are far too great a burden on governments; the poor are willing to pay given the right conditions; sanitation for the poor is feasible and demand is higher than expected; and private operators will serve all their customers. The principles adopted by Ondeo in serving the poor are involving local communities in the decision-making process and in subsequent construction and operational management; creating strategic partnerships with governments, NGOs, and international organizations; optimizing technical standards to make them suitable; and providing real services, not only connections but also technical and financial support, training, health and hygiene education, and special tariffs.

Ms. Flor then cited Ondeo's experiences in Buenos Aires (Argentina), Casa Blanca (Morocco), La Paz (Bolivia), and western Manila (Philippines). Based these experiences, the lessons learned were the value of including low-income communities in business plans; services have to be adapted to suit local conditions; development of services should be

demand driven; development of services must be profitable for the community and the company; and “Water for All” can become a reality for existing and future cities.

Privatization and Services to the Poor

Jacques Bret cited the global problem of rapid growth of population, an increase of 5.5 million each month; there are currently 1.5 billion who do not have satisfactory access to water. Global urbanization is a major problem. The key players are local governments, local water authorities, and private operators. While there are technical initiatives from the technologically advanced north that can be adopted in the south, social initiatives are also required. He said there is a need to better understand user needs. Policies should be drawn up with full public participation. He cited projects in Durban and Pietermaritzburg in South Africa that involved the local community and were set up by Business Partners in Development.

Small-scale Independent Private Water Providers – A Significant Role for Water Supply in Cities

Herve Conan summarized the involvement in South America, Africa, and Asia of small-scale independent private water providers (SSIPWPs). Citing the scope of their services and their niche in the market, he pointed out the need to recognize and legalize them so that they can be part of the public-private-community partnership. SSIPWPs provide more water to consumers than large international private companies; more than 25% of urban residents are served by them. He gave examples of consumers served by SSIPWPs in South America – Santa Cruz (100%), Guatemala (50%); and Africa – Abidjan (75% of households), Kampala (35%), and Dar Es Salaam (31%). In Asia, piped systems are emerging among the SSIPWPs, as in Cebu in the Philippines. In all these examples, the businesses are generally considered risky and are operating in unfriendly political and legal environments.

SSIPWPs are normally informal family businesses that are commercially driven and use low-cost technology. They are a niche market, being responsive to customer demand, technically innovative, and flexible toward customers (SSIPWP staff live within the community they serve in most cases). The role of the SSIPWPs is often not recognized—they operate in an illegal or uncertain legal framework—but they will play an important role in the long term, as long as formal water utilities fail in providing services to their service areas. SSIPWPs need to be recognized and legalized because a competitive environment is more efficient to avoid high and excessive tariffs than control by local authorities.

Small-scale Independent Water Providers Study in the Philippines

Andrew Whillas presented the initial findings of the study on the five types of SSIPWPs in the Philippines: those owned by real estate developers, home owners’ associations, local entrepreneurs serving poor communities, water truckers and haulers, and water cooperatives. Access to water for the poor is greatest with local entrepreneurs (40%), followed by cooperatives (32%) and water truckers (25%). Nonpipied consumers spend about 16% of household income on water compared with 6.1% for those connected. These expenditures are much higher than those of consumers connected to either of the two Manila concessionaires—1.0–1.7% of household income. The study also showed that SSIPWPs are sustainable, with the oldest being 50 years old. Preliminary findings of the study are: most SSIPWPs are likely to stay in business; the poor tend to pay the highest price for water, but the burden can be reduced through rationalization of bulk rates, improved efficiencies provided by concessionaires and the SSIPWPs, and changes in connection fee policy; there is no immediate need for economic regulation of SSIPWPs; there is potential for collaborative partnerships between concessionaires and SSIPWPs (bulk supply for distribution); and official pricing by the formal utilities affects the pricing of water from SSIPWPs and their market structure.

Experiences of External Support Agencies

Philippines Water and Sanitation Sector Assistance Strategy Note and Experiences

Maya Villaluz presented the water and sanitation sector assistance strategy of the World Bank for the Philippines. There is an inadequate and eroding capability of existing sectoral institutions to expand and improve service delivery under existing financing procedures. The sector assistance strategy, therefore, aims to improve efficiency and accountability of water utilities to consumers, facilitate PSP, and leverage private financial flows into the sector. Ms. Villaluz then outlined the focus, activities, timing, outputs, and responsible agencies for each strategy theme. These include technical assistance grants and investments in the sector through government financing institutions to local government units and water districts, while improving the financing framework for local government units and supporting public-private partnerships and

regulatory reforms. The strategy also includes emphasis on partnerships with NGOs in public consultations, and academe for research in such areas as best practices and water demand.

Lessons Learned from ADB's Operations Evaluation

K. E. Seetharam presented the results of an ADB impact evaluation study that looked at the longer-term real impacts achieved by its projects in the water sector, for which ADB has invested US\$4.4 billion or 5% of its total lending. Among the main lessons learned from the study were that utilities should aim for full cost recovery—people are willing to pay for continuous supply and direct connections—with PSP helping to reduce cost. Sanitation, hygiene, and health promotion should be included (water supply in isolation is not enough to maximize health benefits). NRW can be reduced (25% to 30% is possible), and leakage detection is only one aspect; others include a caretaker approach to providing service management. Demand-side management should be used. There are alternatives to distribution through taps—some consumers are prepared to pay up to 7,000 times the normal cost of tap water for a small volume of bottled water. Beneficiaries should be involved at all stages of rural water supply projects; often one committed person makes all the difference. Finally, projects should be implemented expeditiously (within 2 years) because people will not wait long before they seek alternative sources.

Water for Asian Cities: Pro-poor Investments in Water and Sanitation to Support the Millennium Development Goals

Kalyan Ray presented the proposed Water for Asian Cities Program as part of the efforts to achieve the Millennium Development Summit goals of improving the lives of 100 million slum dwellers by 2020; and halving by 2015 the proportion of people without access to safe drinking water and sanitation. He explained the United Nations-Habitat's strategy and response of programmatic and institutional strengthening; delivery mechanisms through programs, partnerships, and alliances; and the use of the water and sanitation trust fund. Mr. Ray cited the learning experience from the Water for African Cities Program, which has a strong demand-side focus. The program has enhanced institutional and human resource capacity, enhanced political will and awareness, created an enabling environment for new investments and city-to-city cooperation, and created a flexible framework for regional cooperation and interagency collaboration. Based on the New Delhi Consultation, the Water for Asian Cities Program should provide greater attention to sanitation, hygiene promotion, and urban demand management; and give highest priority to the peri-urban poor for future investments in urban basic services. In partnership with local governments, the urban poor can improve their living conditions and income opportunities through local initiatives.

Lessons from Japan Bank for International Cooperation Water Supply Projects

Motonori Tsuno presented lessons from the experience of the Japan Bank for International Cooperation in relocation of shanty communities using the concept of community action planning that was developed with national housing authorities in Sri Lanka. He said that the conditions that are considered essential for improving the living conditions in resettlement areas are support from external agencies and previous experience in residents' associations. The project in Badowita is considered sustainable; it has a strong link to the University of Sri Lanka, which will continue supporting and monitoring the community. The project model is also considered transferable.

Operation and Maintenance Network Activities

Kazuaki Mori presented the activities of the Operations and Maintenance Network, one of the groups under the Water Supply and Sanitation Collaborative Council (WSSCC). The network was established during the Fourth Global Forum of the WSSCC in Manila in 1997 to address the issue of poor management and inadequate operation and maintenance in water supply and sanitation projects. The network's objectives are to support information provision on O&M by regional or national resource centers; to promote available O&M tools; to revise, upgrade, and adapt (to local context) O&M tools; to promote country-level policy formulation for O&M and its sustainability; and to contribute to a more efficient and effective use of limited resources. Tools include guidelines, manuals, training packages, and case studies as sources of information for decision makers, planners, economists, consultants, and sector professionals. Collaboration with regional groups will be supported through network development.

Open Discussion

A major issue discussed was the importance of water awareness and the important role of media. It was mentioned that in Africa, a media network and journalists' workshops are being organized. The media often focused on problems rather than the options and solutions. Sometimes, there is no media strategy to encourage people to support a project. On

tariffs and privatization, it was stated that tariff increases are governed by contract and that there is a review and approval process as a safeguard to excessive tariff increases when contractors are not performing well.

Water and Human Values and Culture

Mantra Pushpam – A Presentation on Water

S. Vaidhyasubramaniam presented a multimedia presentation on water in a Vedic hymn usually sung during offerings with flowers. It deals with the relationship of water with fire, wind, sun, moon, stars, clouds, and the seasons, and the energies involved.

Water and Human Values and Culture in India

Jagadiswara Rao presented ancient knowledge and practices about water in India and the problems brought about by unsustainable population levels in modern India. He described new ways of developing water sources to meet the growing demand for water by utilizing all sources from rivers to groundwater, interlinking rivers, and desalinating seawater. Mr. Rao presented lessons from droughts in Karnataka, Andhra Pradesh, and Tamil Nadu where surface water sources were depleted and only deep groundwater saved drinking water and irrigation supplies. He advocated the use of groundwater both from shallow and deep aquifers with recharging and proper development. Mr. Rao saw the need for rainwater harvesting and groundwater recharging including artificial means to sustain development.

Water Education in African Countries

Kalyan Ray presented examples in Africa of problems needing value-based solutions. He cited situations where illegal tapping of water lines is widespread; farmers in Africa have even tapped sewer lines for irrigation, resulting in pollution of water sources; and there were riots in Johannesburg over a water tariff increase several years ago. Mr. Ray mentioned some value-based solutions including attitudinal change. People should be willing to pay higher tariffs by cutting back on entertainment expenses in order to supply water to poor neighborhoods. To combat corruption, they should be willing to pay the full bill and not avoid payment. Conservation should be encouraged by stopping watering during dry periods. A new water ethic is needed, for which children and the young are the best ambassadors. Mr. Ray added that when included in the educational curriculum, it has been found that the value-based approach does not overload the current curriculum, and is cost effective because no additional investment is required.

Open Discussion

There was wide support for value-based approaches to solutions to water problems and environmental concerns. It was pointed out that in Africa, some 170 lesson plans have been developed and that these are available to others. On groundwater abstraction, concern was again expressed about arsenic problems in shallow wells in Bangladesh. It was pointed out that the Global Water Partnership is encouraging the use of inflatable dams in Karnataka and Bangladesh to retard river flows and encourage recharge in the dry season.

Preparations for the Third World Water Forum

Masahiro Kobayashi presented the preparations being made for the Third World Water Forum. In the ensuing open discussion, the participants were worried that the high cost of participation would exclude the poor and NGOs from speaking out in the forum. Mr. Kobayashi replied that there was a special rate for NGOs and this would possibly be extended to representatives from low-income countries. Concerning indigenous/grassroots inputs, some representatives would be invited to present their inputs.

Group Discussion

Following the presentations, the participants broke up into groups, each of which discussed one of the eight topics selected in the plenary sessions: governance/policy development, conservation/water demand management, water awareness/education, private sector participation, small-scale water providers, tariffs, pollution control, and water and the urban poor.

Before the group discussion session, Mr. Yosuke Yamashiki and Ms. Keiko Wada made a brief presentation on Water Supply in Osaka from the Lake Biwa–Yodo River Basin. They described the basin, the need for advanced water treatment, and the role of civil society in addressing issues affecting the basin. Eutrophication of water upstream from Lake Biwa and treated wastewater discharge from upstream cities including Kyoto necessitated the use of advanced water treatment for Osaka. Environmental concerns for the basin are being addressed by journalists and NGOs who are raising awareness and promoting transparency, and by academe who are providing scientific data through such studies as a 3-dimensional eutrophication model for Lake Biwa.

Presentation of Group Discussion Outputs

Group 1: Governance/Policy Development

- Make civil society stakeholders effective partners with government in the policymaking process at the national, regional (river basin), and local levels.
- Assist government in its role of enabler to implement integrated water management policies as promoted by the Global Water Partnership using participative river basin management techniques.
- Make policies equitable and inclusive of all sectors of society, but with a bias towards pro-poor support, and respecting the four fundamental areas of water—people, food production, industry, and environment.

Group 2: Conservation/Water Demand Management

- Establish a dedicated working group within ADB to focus on resource conservation, in particular aquifer recharge and recycling. The group could also consider undertaking or funding research.
- Develop hydrological land-use plans, including rainwater harvesting and treated wastewater recycling, and prepare water budgets in cities.
- Promote water saving devices, making them compulsory for new developments.
- Encourage improved management of local watersheds.

Group 3: Water Awareness/Education

- Promote cultural, environmental, functional, and economic values of water, sanitation, and hygiene behavior.
- Develop equity and pro-poor policies.
- Promote school sanitation and hygiene.
- Re-balance budget allocations between sanitation and water supply.
- Promote social marketing of sanitation and hygiene through messages and activities.
- Organize forums of water professionals (water experts, media, academe).
- Develop indicators for impact monitoring.
- Periodically review achievements to ensure Millennium Development Goals are achieved.
- Establish public information centers at the national or regional level to ensure easy access to information for all.

Group 4: Private Sector Participation

- Remove political interference in utility operation, for example through corporatization.
- Give national companies priority over international companies, and encourage involvement of community-based companies in water service provision.
- Develop strong regulatory organizations with specific guidelines to ensure pro-poor emphasis and to incorporate an exit strategy in PSP contract documents.
- Remove water services from the General Agreement on Trades and Services of the World Trade Organization.

Group 5: Small-scale Water Providers

- Facilitate their regulation within the water sector.
- Facilitate recognition/legalization of SSWPs.
- Clarify the utility network development plans.
- Define regulations at the lowest possible level.
- Develop good local governance.

Group 6: Tariffs

- Water is not free, so aim for reasonable full cost recovery (operational costs + depreciation + debt servicing) and invest for future system replacement.
- Free water supply through standpipes should be given to unemployed people, with the cost of infrastructure borne by the government.
- Apply tariff increments progressively, not in large infrequent steps.

Group 7: Pollution Control

- Ensure that WHO water quality standards are established in low-income countries.
- Site water intakes should be sufficiently far upstream of industrial/domestic sewage discharges.
- Reduce contamination by industrial/domestic sewage in rivers.
- Control eutrophication of surface water sources.
- Reduce contamination of groundwater by infiltration of contaminated surface water.
- Control discharges and pollution from upstream countries affecting water quality in downstream countries.

Group 8: Water and the Urban Poor (merged with Water Awareness Group)

- Ensure valid representation of the urban, peri-urban, and rural poor in service provision.
- Ensure that the poor have access to services adequate to meet their needs and adopted living standards.
- Establish the cost to society if the poor are denied access to water services, e.g. disease, crime, pollution, social unrest, and compare it with the cost of providing them with subsidized water and sanitation.

Summary of Workshop Findings

The main findings of the workshop, reflecting the views of civil society as articulated by the participants, were as follows:

Governance/Policy Development

- There is an ongoing debate on the social versus economic good of water, which has major implications regarding privatization.
- Governance and tariffs are key issues; socially acceptable policies and regulations are essential.
- Donors are working with local government units to provide local financing.

Conservation/Water Demand Management

- Rainwater harvesting is vital for the future sustainability of the cities.
- There are success stories of vastly improved water coverage, establishment of continuous supply, and major reductions in NRW, but discipline, leadership, and donor coordination are required for these to occur.
- Demand-side management is very important.
- Utilities should produce bottled water.
- ADB evaluations show that direct connections, continuous water supply, and sanitation are essential to improve the quality of life.

Water and the Urban Poor

- Take care of the poor and disadvantaged first through improved access to water services, specifically targeting the desperately poor through needs mapping, etc.
- Include women in access and distribution consultations.
- Involve the poor in managing water services.
- Civil society can give a voice to the poor.
- Community participation is essential, including that of local government.
- Flexibility and social recognition are required—there is no universal solution.

Water Awareness and Education

- All stakeholders need to raise their awareness and understanding of all the issues as well as the views of other stakeholders.
- NGO forums or city forums (coalitions of civil society groups including the private sector) should be used to improve dialogue and lobbying.
- Water and human values and culture are important; attitudes and values may have to change, overcome “resistance to change,” and adopt value-based approaches to education.
- Films are a powerful tool, but the message must be correct.
- Journalist networks and the media can play an important role.

Private Sector Participation

- Involve the private sector in the delivery of “Water for All” services.
- Reassess the role of and partnerships with SSWPs, which already provide 20–50% of water in many cities.
- Human rights views on PSP conflict with access, private commodities, and the concept of making a profit from water services.
- Improve public utilities before embarking on PSP.
- PSP is helping the poor and reducing connection fee obstacles.
- Property titles are not required in order to provide water services.
- Operators must have a social dimension—they need to involve customers.

Tariffs

- Full cost recovery is not impossible; demand management is required.
- The rich and middle class receive subsidies, but not always the poor.
- Consider subsidizing connection fees rather than the tariff.

Pollution Control and Sanitation

- Standards and their enforcement are essential for good water quality.
- Remove the biggest polluters from cities.
- Watersheds need to be protected and a water levy imposed on users.
- UN-Habitat emphasizes the key role of sanitation in achieving the Millennium Development Goals; also, political awareness, demand management, capacity building, education, and a focus on the poor are critical.

Closing Statement

Bradford R. Philips, Director of the Agriculture, Natural Resources, and Social Sectors Division of the Regional and Sustainable Development Department of ADB, stated that the workshop had been unique; it was the first time that ADB had actively targeted civil society for sharing information about water supply and sanitation. He said that because civil society was a special stakeholder in the development process, ADB wanted to develop better ways of working with civil society groups as full partners in solving development issues. Further, as the workshop confirmed, there was a great need for awareness of water issues and civil society needed to play a central role in creating such awareness. In this regard, he said, ADB was working at the international level through the Third World Water Forum to bring the issues and actions to everyone’s attention. While ADB was working at the regional level through workshops such as this, the workshop had shown the need to do more on awareness at the national and local levels. The workshop also highlighted how water supply and sanitation problems varied from country to country as pointed out by participants coming from different countries and institutions with different political, social, and economic perspectives. Hence, there was a need for understanding and flexibility by ADB in promoting reforms in this sector. Mr. Philips also noted the endorsement of the participants on the need to give the urban poor access to clean water and sanitation and the issues of affordability and willingness to pay. He said that ADB would consider these issues. He then assured the participants that their efforts in the workshop would make a difference because ADB would provide the participants’ governments with the findings of the workshop for review and comment. Those governments would articulate their proposed actions to deal with civil society concerns at the Third World Water Forum. Finally, he asked the participants to keep in touch with ADB and other development partners so they could work together for their common goal.

WORKSHOP PROGRAM

Regional Consultation Workshop on
Water in Asian Cities – *The Role of Civil Society*

Asian Development Bank
Manila, Philippines
14–16 October 2002

Monday, 14 October

08:00 - 08:30

Registration of Participants

08:30 - 09:15

Opening Session

Chairperson: B. R. Phillips, RSAN, ADB

- Song and Dance on Water
School Children from Casa Del Niño Science Schools
- Opening Address
Myoung-Ho Shin, Vice-President, ADB
- Keynote Address
*Antonino T. Aquino, President
Manila Water Co., Inc.*

09:15 - 09:45

Coffee Break and Group Photo

09:45 - 10:00

Workshop Arrangements

Cesar E. Yñiguez, Consultant, RSAN

10:00 - 12:00

Session 1: Water in Asian Cities

Chairperson: Allen Williams, RSAN, ADB

- Challenge
Arthur C. McIntosh, RSAN, ADB
- Presentation – Geoffrey Bridges, Mott McDonald
*Water Utility Findings
Civil Society Findings*
- Discussion

12:00 - 13:30

Lunch Break

13:30 - 15:00

Session 2: Civil Society Presentations

Chairperson: David Dole, EREA, ADB

- *S. Jaganathan, Sri Sathya Sai Project, Bangalore*
- *Guna Raj Shrestha, NGO Forum, Kathmandu*
- *Charles Santiago, Stamford College, Kuala Lumpur*
- *Jese Sikivou, Pacific Islands Broadcasting Association, Suva*
- *Shiao-Shing Chen, National Taipei University of Technology, Taipei, China*
- *Manu Bhatnagar, INTACH, New Delhi*
- *D. C. H. Senarath, University of Moratuwa, Sri Lanka*
- *Cecilia Soriano, Ateneo de Manila University, Quezon City*

- *Kulwant Singh, HUDCO, New Delhi*
- *Short Video "Delhi – The Receding Waters", Krishnendu Bose, Earthcare Films, New Delhi*

15:00 - 15:15 **Coffee Break**

15:15 - 17:00 **Session 3: Case Study Presentations**
Chairperson: Charles Andrews, SESS, ADB

- Chennai
K. R. Gopinath, KRG Rainwater Harvesting Foundation
- Sri Lanka
Premakumar Fernando, NWSDB
- Phnom Penh
Ek Sonn Chan, PPWSA
Keiko Yamamoto, JICA
- Discussion

Tuesday, 15 October

08:30 - 10:00 **Session 4: Private Sector and the Urban Poor**
Chairperson: Ma. Teresa Kho, PSIF, ADB

- Privatization and Services to the Poor
Mai Flor, Ondeo Services
Jacques Bret, Vivendi Water
- Small-Scale Private Water Providers
Herve Conan, BURGEAP
Andrew J. Whillas, WSP-EAP
- Discussion

10:00 - 10:15 **Coffee Break**

10:15 - 12:00 **Session 5: External Support Agencies' Experiences**
Chairperson: David Edwards, OED2, ADB

- Water Supply and Sanitation Strategy
Maya Villaluz, World Bank, Manila
- ADB Post Evaluation
K. E. Seetharam, OED, ADB
- Lessons from the Water for African Cities Programme
Kalyan Ray, UN-Habitat
- Lessons from JBIC Water Supply Projects
Motonori Tsuno, OED, JBIC
- O&M Network Activities
Kazuaki Mori, WSSCC and NIPH
- Discussion

12:00 - 13:30 **Lunch Break**

13:30 - 14:00 **Session 6: Issues for Group Discussion**
Chairperson: Geoffry Bridges, Mott MacDonald

- Plenary Discussion

14:00 - 15:30 **Session 7: Group Discussion**

15:30 - 15:45 **Coffee Break**

15:45 - 17:00 **Session 7: Group Discussion** (*continuation*)

Wednesday, 16 October

08:30 - 10:00 **Session 8: Water and Human Values and Culture**
Chairperson: K. E. Seetharam, OED2, ADB

- Multi-media Presentation on Water and Culture
S. Vaidhyasubramaniam, SASTRA, Thanjavur
- Water and Human Values and Culture
R. Jagadiswara Rao, Tirupati, India
- Water Education
Kalyan Ray, UN-Habitat

10:00 - 10:15 **Coffee Break**

10:15 – 10:45 **Session 9: Preparations for the 3rd World Water Forum**
Chairperson: K.E. Seetharam, OED2, ADB

- Framework and Progress on the 3rd World Water Forum
Masahiro Kobayashi, 3WWF Secretariat
- Asian Cities water supply issues to be taken to 3WWF

10:45 - 11:30 **Session 10: Presentation of Group Discussion Outputs**
Chairperson: Geoffry Bridges, Mott MacDonald

11:30 – 12:00 **Session 11: Summary of Workshop Findings**
Chairperson: Arthur C. McIntosh, RSAN, ADB

12:00 - 12:30 **Closing Program**

- Closing Statement
Bradford R. Philips, Director, RSAN

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