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ENABLING WATER SERVICES DELIVERY FOR THE URBAN POOR IN ASIA

BEST PRACTICES REVIEW AND WORKSHOP

This publication was produced for review by the United States Agency for International Development. It was prepared by USAID's Regional Environmental Cooperation-Asia (ECO-Asia) Program.

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ACRONYMS

ADB	Asian Development Bank
AMC	Ahmedabad Municipal Corporation (India)
BRI	Bank Rakyat Indonesia
BWSSB	Bangalore Water Supply and Sewerage Board (India)
CBO	Community-based Organization
ECO-Asia	Environmental Cooperation-Asia
MDG	Millennium Development Goals
MWCI	Manila Water Company, Inc. (Philippines)
NWSDB	National Water Supply and Drainage Board (Sri Lanka)
O&M	Operations & Maintenance
PPWSA	Phnom Penh Water Supply Authority (Cambodia)
PSP	Public Service Provider
PUB	Public Utilities Board (Singapore)
PWA	Provincial Waterworks Authority (Thailand)
SEAWUN	Southeast Asian Water Utilities Network
SNP	Slum Networking Project (India)
SODECI	Societe des Eaux de Cote d'Ivoire
USAID	The United States Agency for International Development

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SUMMARY

As is well documented, most of the urban poor in Asia do not have access to piped water, and spend considerable time collecting water from private vendors. In addition, the urban poor pay many times more than those with connections to public utilities. Lack of access to safe water places slum dwellers at risk to waterborne diseases, such as infectious diarrhea, and also impacts nutrition and food security. More children die each year from lack of access to safe water and sanitation than from almost any other cause.

Connecting the urban poor is a difficult challenge for water service providers in Asia. Due to weak institutional capacity, governance systems and financial arrangements, most water service providers lack the ability to connect the urban poor. Most utilities impose low tariffs or subsidies that limit their ability to invest in new systems and services for urban poor communities. Many are not even aware that the urban poor are both willing and able to pay for piped water.

ECO-Asia: Connecting the Urban Poor

The United States Agency for International Development (USAID) regional environment program for Asia, Environmental Cooperation-Asia (ECO-Asia), implements water and sanitation initiatives that demonstrate innovative strategies for expanding and improving water and sanitation service delivery to cities and communities in Asia.

As part of its safe water access activities, ECO-Asia works with poor communities to pilot and replicate innovative community-based approaches that demonstrate appropriate and sustainable strategies for expanding access to water services. In working with underserved poor communities, ECO-Asia employs an approach that enables counterparts from different Asian countries to share experience and identify regional commonalities.

Best Practices Review and Workshop

To support pilot project development, ECO-Asia conducted a best practices review on strategies for expanding water service to the urban poor. The review identifies key constraints and model solutions developed by public and private service providers throughout Asia and other parts of the world.

ECO-Asia organized a regional workshop on September 20-21, 2006 in Bangkok, Thailand to share these review findings, to obtain feedback from the practitioners and to stimulate further discussion that would help focus ECO-Asia country and regional activities. The objectives of the workshop were to:

- Present findings from the best practices review;
- Exchange views among practitioners on constraints and successful models; and
- Recommend country-level actions in support of ECO-Asia pilot projects, and develop a regional action agenda.

Workshop participants included representatives from government agencies, water utilities and target communities from Cambodia, India, Indonesia, the Philippines, Sri Lanka, Thailand, and Vietnam.

Key Constraints to Service

In many urban communities, low tariff and subsidy policies limit investment in new systems and perpetuate the myth that the poor are unable or unwilling to pay for piped water services. Other factors that inhibit access by the poor include land tenure constraints, weak corporate governance and incentives, poor communication between interested parties, and ineffective service models. While many of these constraints are inter-related, it is possible to organize them into three major categories, namely:

- Limited awareness among key decision-makers and service providers regarding the ability or willingness of the poor to pay for piped water;
- Weak enabling conditions, such as land tenure requirements, pro-poor policies, and service models; and,
- Limited access to financial resources.

In addressing these constraints, communities worldwide have developed innovative solutions that ECO-Asia pilot cities have considered in devising their own pro-poor initiatives.

Conclusions and Regional Action Agenda

Workshop presentations and discussions made clear that there is no single method or system that water service providers can apply in connecting the urban poor. Each service provider must develop its own approach that addresses limitations in awareness, enabling conditions and financial conditions. The best practices review and practitioner feedback confirmed that to affect change, decision-makers must reach out to poor communities, evaluate conditions on the ground, devise new pro-poor solutions, and then maintain discipline during implementation, often in the face of political pressure.

As part of the workshop, participants signaled their support for regional cooperation as a useful tool in expanding services to the urban poor. Whether through focused pilot demonstration projects, toolkits, training or regional activities, ECO-Asia and other development partners are well positioned to facilitate the exchange of best practices and information between water service providers, local governments and civil society groups.

The table below presents a summary of key regional and country actions. Combined with implementation support strategies and tools, these findings serve as a regional action agenda for ECO-Asia, other partner organizations and individual water service providers for use in developing country and regional pro-poor initiatives.

Regional Action Agenda

Solutions	Key Regional and Country Actions
Increase awareness among key decision-makers and service providers regarding the ability or willingness of the poor to pay for piped water	1. Increase awareness of water service provider staff about affordability, service satisfaction and expectations of existing and potential customers in poor communities 2. Inform and educate service provider staff about potential solutions to expanding service to the urban poor 3. Increase awareness of senior decision-makers about the ability and willingness of the urban poor to pay for water 4. Establish formal and informal mechanisms for the urban poor to participate in decision-making
Strengthen enabling conditions, such as land tenure requirements, pro-poor policies and service models	1. Reduce barriers for the urban poor to obtain service connections (e.g., property ownership, settlement status) 2. Recognize informal sector water vendors as potential partners and intermediaries who can help expand access by the poor 3. Create manageable zones to bring water managers closer to their customers 4. Mainstream pro-poor policy at national and municipal levels
Promote improved access to financial resources	1. Subsidize connection fees for low income customers and reform overall tariff structures and guidelines from a "pro poor" policy point of view 2. Develop and implement flexible payment schemes that meet the needs of urban poor customers

INTRODUCTION

The United States Agency for International Development (USAID) works worldwide to ensure accessible, reliable, and economically sustainable water and sanitation services for health, security and prosperity. The USAID regional environment program for Asia, Environmental Cooperation-Asia (ECO-Asia), implements water and sanitation initiatives that demonstrate innovative strategies for expanding and improving water and sanitation service delivery to cities and communities in Asia. ECO-Asia's water and sanitation focus areas include:

- Safe water access;
- Basic sanitation;
- Water and sanitation policy and governance; and
- Sustainable financing for water and sanitation services.

Through targeted pilot activities, ECO-Asia works with water utilities, national and local governments, civil society groups and financial institutions to pilot innovative technical, institutional and financial solutions for increasing access to water by the urban poor. ECO-Asia also works to disseminate and replicate pilot findings and best practices through partnerships with regional organizations and networks.

ECO-Asia Safe Water Access Pilot Projects

As part of its safe water access activities, ECO-Asia works with poor communities to pilot and replicate innovative community-based approaches that demonstrate appropriate and sustainable strategies for expanding access to water services. For example, ECO-Asia helps communities establish community- or entrepreneur-operated small-scale distribution systems supplied with bulk water by water utilities. Arrangements like these benefit the poor through lower connection costs, more reliable service, and flexible payment options. As a result, water utilities expand their service to new customers while reducing the administrative complexities and costs associated with new connections.

In working with underserved pilot communities, ECO-Asia employs a step-by-step approach that enables counterparts from different Asian countries to share experience and identify regional commonalities (see box above). For example, in the preparation stage of the pilot projects, it is particularly important to involve senior officials and decision-makers to assist in site selection and evaluation, identification of technical and financial challenges, and development of a replication and expansion strategy.

ECO-Asia Methodology for Working with Underserved Urban Communities

1. Prepare Pilot Project
Identify a pilot project area though consultation with senior policymakers and stakeholders. Survey the pilot area to establish baseline data.

2. Engage the Community
Conduct social marketing through awareness campaigns and mobilize the community through partnerships with local NGOs and community-based organizations.

3. Address Enabling Conditions
Identify appropriate entry points for addressing weaknesses in enabling conditions that reflect stakeholders needs and critical inputs for design of water service delivery and identify sources of funding.

4. Implement
Work with partners to complete engineering designs, procurement and other project implementation requirements. Provide ongoing support for operations and maintenance (O&M) by identifying O&M operators and conducting on-the-job and off-site training.

5. Replicate
Document processes, outcomes, impacts and successes. Share results with partner organizations and interested stakeholders.

Best Practices Review and Workshop

To support pilot project development, ECO-Asia conducted a best practices review on strategies for expanding water service to the urban poor. The review identifies key constraints and model solutions developed by public and private service providers throughout Asia and other parts of the world (Table 1).

ECO-Asia organized a regional workshop on September 20-21, 2006 in Bangkok, Thailand to share these review findings, to obtain feedback from the practitioners and to stimulate further discussion that would help focus country and regional activities (see workshop agenda in Annex 1). The objectives of the workshop were to:

- Present findings from the best practices review;
- Exchange views among practitioners on constraints and successful models; and
- Recommend country-level actions in support of ECO-Asia pilot projects, and develop a regional action agenda.

Workshop participants included representatives from government agencies, water utilities and target communities from Cambodia, India, Indonesia, the Philippines, Sri Lanka, Thailand, and Vietnam. Thailand's Provincial Waterworks Authority (PWA) hosted the regional workshop, while the Southeast Asian Water Utilities Network (SEAWUN) assisted through regional dissemination of best practices and program outcomes. Annex 2 lists workshop participants.

Report Outline

This report provides a brief summary of the results of the best practice review, the workshop outcomes, and the regional action agenda in four sections:

1. **Background**
   Provides the context to the best practices review and workshop.
2. **Best Practices Review**
   Summarizes key constraints to delivery and the model solutions developed by selected service providers in developing countries in Asia and in other regions.
3. **Workshop Proceedings**
   Summarizes presentations and discussions on constraints and practitioner solutions and presents lists of actions that practitioners agreed need more attention within each country.
4. **Conclusions and Regional Action Agenda**
   Identifies areas where ECO-Asia is best able to assist countries in implementing their recommended actions and improving access to water in poor communities.

1. BACKGROUND

As is well documented, most of the urban poor in Asia do not have access to piped water. They spend considerable time collecting water from public taps or must buy water from private vendors at a price many times higher than what public utilities charge their connected customers. Lack of access to safe water places slum dwellers at risk to waterborne diseases, such as infectious diarrhea, and also impacts nutrition and food security. More children die each year from lack of access to safe water and sanitation than from almost any other cause.

Connecting the urban poor is a difficult challenge for water service providers in Asia. Due to weak institutional capacity, governance systems and financial arrangements, most water service providers lack the ability to connect the urban poor. Most impose low tariffs or subsidies that limit their ability to invest in new systems and services for urban poor communities. Many are not even aware that the urban poor are both willing and able to pay for piped water.

Millennium Development Goals

Set by the world's leaders at the United Nations Millennium Summit in 2000, the Millennium Development Goals (MDGs) aim at halving the proportion of people without access to safe water and sanitation by 2015 (Target 10). To achieve this goal, the world's poorest countries will need to make several hundred thousand new connections each day.

In Asia, more than 84 million urban dwellers have no access to clean drinking water and 255 million are without basic sanitation. While approximately 220 million people in South and East Asia have gained access to improved water supplies since 1990, rapid population growth in urban centers remains a significant challenge to further progress. Asian cities will need to make substantial investments to close these gaps.

> ***"While we can be proud of our accomplishments in working to provide water to our cities and towns, we still face many challenges in putting into practice sustainability policies and practices that will ensure the well-being of all our citizens, especially the poor."***
>
> **Acting Governor Mr. Nakorn Jirasavetakul, Provincial Waterworks Authority of Thailand**

Paul Simon Water for the Poor Act

In 2005, the United States Congress passed the Paul Simon Water for the Poor Act, which requires the Secretary of State, in consultation with USAID and other U.S. Government agencies, to develop strategies and programs "to provide affordable and equitable access to safe water and sanitation in developing countries" within the context of sound water management (see box next page).

Increasing access for the poor is a priority issue in implementing the Paul Simon Water for the Poor Act. According to the Report to Congress on the Act for 2006, the U.S. Government focuses in part on promoting "policies that provide incentives to specifically include poor beneficiaries, improved institutional governance to improve service quality and access, and financing for infrastructure and service expansion." The U.S. Government, including USAID and the ECO-Asia program, are working to pilot specialized business and technical service models addressing key areas that enable expansion of services to poor consumers on a sustainable basis.

Water Service Providers

Water utilities in urban Asia operate under a range of institutional models, including public providers, private providers, and community organizations. While each type of provider is faced with different constraints unique to their national and municipal legal and institutional systems, all have some flexibility in devising more effective strategies for providing water to the urban poor.

Public Service Providers As part of a general decentralization trend in Asia, local governments are taking on increasing responsibility for water service delivery. Local governments provide water services either through their own departments or through government-owned water utilities. Some public sector entities, such as Phnom Penh Water Supply Authority and the Bangalore Water Supply and Sewerage Board, have developed innovative solutions for expanding service to the poor. These models include regular consultations with poor constituents to understand their needs, partnerships with non-governmental and community-based organizations to create flexible community billing and collection systems, and changes to legal requirements that focus on land tenure and ownership to enable service connections.

Private Service Providers In some Asian countries, national or local governments contract with private firms to operate all or part of a water utility. Some of these private companies, such as Manila Water Inc., have been successful in reaching the poor with a range of strategies that include cooperating with community organizations to raise awareness of the benefits of piped water and to manage tariff payments; developing flexible upfront connection payment schemes; mandating staff to "walk the line" to better understand the needs of poor residents; and devising incentive and performance measurement systems to increase staff motivation to work with poor communities. In various Asian cities, public providers cooperate with private small-scale water service providers to serve areas that are not yet served, particularly urban slums".

Communities In some cities, community-based organizations (CBOs) and NGOs serve as intermediaries between water utilities and local communities in facilitating water service delivery. Progressive communities have initiated innovative solutions such as: setting up community boards to approach local government for services; developing transparent community-managed billing and collection schemes; and creating awareness-raising campaigns about the benefits of piped water.

Paul Simon Water for the Poor Act of 2005

Some key objectives of the Paul Simon Water for the Poor Act relevant to connecting the urban poor are as follows:

- Use a range of grants, loans, contracts, loan guarantees, and other assistance to increase affordability and equity of access to safe water and sanitation for the very poor;
- Ensure that water and sanitation assistance reflect an appropriate balance between urban, peri-urban, and rural areas;
- Ensure that water and sanitation assistance supports national poverty reduction strategies;
- Promote community-based approaches in the provision of affordable and equitable access to safe water and sanitation; and
- Mobilize the financial and technical capacity of businesses, governments, non-governmental organizations, and civil society in the form of public-private alliances.

Additional information on the Act, including the 2006 Report to Congress, is available on the U.S. Department of State website at http://www.state.gov/g/oes/water/.

2. BEST PRACTICES REVIEW

ECO-Asia conducted a review of best practices from public and private water utilities and community groups from developing countries in Asia and other regions to identify constraints and model solutions for improving access to safe water by the urban poor. In particular, ECO-Asia reviewed research papers, reports, and guidelines prepared by practitioners and experts, as well as projects funded by international development agencies. ECO-Asia also reviewed case studies prepared by the regional practitioners who participated in the September 2006 workshop.

To summarize findings, ECO-Asia prepared a table that organizes best practices as implemented by public service providers, private sector service providers and community groups in response to major constraints (see Table 1). To illustrate key constraints and solutions, ECO-Asia also prepared synopses of presentations and of selected case studies (see Annex 3). In addition, some selected documents reviewed as part of this effort are listed in the Bibliography in Annex 4.

MAJOR CONSTRAINTS

In many communities, low tariff and subsidy policies limit investment in new systems and perpetuate the myth that the poor are unable or unwilling to pay for piped water services. Other factors that inhibit access by the poor include land tenure constraints, weak corporate governance and incentives, poor communication between interested parties, and ineffective service models. While many of these constraints are inter-related, it is possible to organize them into three major categories, namely:

1. Limited awareness among key decision-makers and service providers regarding the ability or willingness of the poor to pay for piped water;
2. Weak enabling conditions, such as land tenure requirements, pro-poor policies, and service models; and
3. Limited access to financial resources.

Limited awareness. Misconceptions about urban water service can be attributed to a lack of information and poor communication among stakeholders. Service providers, for example, are unaware that the urban poor are both able and willing to pay for water services. Service providers generally do not recognize the potential economic and political benefits of serving the urban poor. The urban poor, meanwhile, often lack the social, organizational or political skills needed to approach providers or government officials to negotiate access to the services that are so vital to their social and economic well-being. Limited awareness and information on both sides contributes to mistrust between providers and their poor constituents.

Weak enabling conditions. Ineffective government policies and weak human and institutional capacity within service provider organizations are a significant constraint to access for the urban poor. In addition to ineffective pro-poor policies, prohibitive land tenure requirements, weak governance structures and ineffective or non-existent regulatory systems severely limit a service provider's ability to serve the urban poor.

Affordability constraints. There is a widespread and entrenched belief that the poor cannot afford to pay for piped water and that providers cannot afford to serve them. In fact, in some communities that lack access to piped water, the poor actually pay more than the current domestic tariff rates for households with piped water.

MODEL SOLUTIONS

Public and private sector service providers and community organizations have developed innovative solutions for connecting the urban poor. What follows is a summary of selected model solutions designed to overcome major constraints by: (1) increasing awareness; (2) strengthening enabling conditions; and (3) ensuring affordability.

INCREASING AWARENESS

Many residents in poor urban communities are not aware of the benefits of piped water. Slum residents often do not know how or where to apply for water services, or they lack effective access to decision-makers who can help them. At the same time, many providers are mainly concerned with serving their existing, and more affluent, customers. Moreover, many service providers and local authorities face little or no pressure to target the poor. As a result, it is not surprising that few service providers have a comprehensive understanding of their potential customer base, or have limited capability to reach out to slum dwellers.

The best practices review identified four key factors that limit awareness:

a. Limited awareness among the poor of tangible benefits and procedures for obtaining services;

b. Lack of trust between the poor and water service providers;

c. Lack of awareness among providers that the poor are willing and able to pay; and

d. Limited understanding among providers of the benefits of providing wider coverage.

A. LIMITED AWARENESS AMONG THE POOR OF TANGIBLE BENEFITS AND PROCEDURES FOR OBTAINING SERVICES

Challenges. The unconnected urban poor are often unaware of the benefits, costs and application procedures for securing access to piped water. They have little or no opportunity to learn of the advantages of piped water, since they often do not own property, cannot pay upfront connection fees, or live in areas where there are no pipes. Complicated regulations and traditional practices (such as "tipping" provider personnel), and strict certification requirements (e.g., land and residence certificates, building permits) often prevent the poor from gaining access.

Best Practices. CBOs and NGOs can play an instrumental role as intermediaries between water companies and consumers, especially in poorer communities where there is generally a low level of mutual understanding and trust. Intermediaries act as "honest brokers" and facilitate the creation and adoption of innovative solutions, such as "after hours" bill collection or bulk metering. These intermediary organizations are also able to understand both sides of a discourse (engineering/technical versus community/personal benefit), which otherwise can be a barrier to effective communication.

Examples. Manila Water Company, Inc. in the Philippines and the Bangalore Water Supply and Sewerage Board (BWSSB) in India have both established special units to work with slum residents and have engaged CBOs to facilitate customer relations. The BWSSB also introduced a simplified application form for obtaining new connections.

Also in India, the Ahmedabad municipal government partnered with NGOs to support community participation in developing household water supply distribution networks.

In the Nepalese town of Dhulikhel, a community self-help group mobilized citizens and civil society groups to voice community needs to local government authorities.

B. LACK OF TRUST BETWEEN THE POOR AND PROVIDERS

Challenges. The urban poor are typically under-represented in local government or water utility decision-making. Mutual suspicion between the poor and government organizations can make cooperation difficult.

Best Practices. A number of successful water utility providers have set up special units within their organizational structure to work with poor communities. This has proven to be an effective means of establishing trust between providers and the poor and allows for meaningful and productive community participation in decision-making. In addition, in the absence of overall reform in government procedures, CBOs and NGOs can serve as intermediaries between communities and water service providers.

Examples. The city of Porto Alegre, Brazil pioneered active citizen participation in budgetary decision-making. The city's Social Development Unit "sensitized" utility staff via frequent visits to slum areas in an effort to build community trust.

The Phnom Penh Water Supply Authority (PPWSA) in Cambodia improved customer orientation by directly communicating with slum dwellers and helping them apply for new piped water connections. The PPWSA established several customer service and complaint resolution centers.

Both the Manila Water Company and a concessionaire in Cote d'Ivoire, Africa used CBO contacts to build positive relationships with their urban poor customers. Manila Water Company established contracts with CBOs to work with communities in maintaining service connections and in collecting user charges.

C. LACK OF AWARENESS AMONG PROVIDERS THAT THE POOR ARE WILLING AND ABLE TO PAY

Challenges. There is a general misconception by service providers and elected local officials that they cannot serve the poor on a cost-recovery basis. In fact, the urban poor are often willing and able to pay tariffs for piped water. Moreover, surveys consistently show that the unconnected poor pay many times more than the connected non-poor. Further complicating the issue is the fact that elected local officials often must cope with well-organized protests about service deficiencies from connected consumers and are unaware of the plight of the unconnected poor.

Best Practices. Direct contact between water providers and poor communities via special units or intermediary organizations can help providers better understand the needs of poor communities, as well as their willingness and capacity to pay for services. As a result, water utilities are better able to create programs and policies of practical benefit to urban poor communities.

Examples. In Ahmedabad, India, the municipal government collaborated with NGOs who helped map poor communities to determine, among other things, their true ability to pay. Government officials consulted directly with residents in poor communities to match the water service connection fees and other charges to the communities' ability to pay.

The Women's Bank, a CBO in Sri Lanka, conducted surveys in poor communities to determine payment capacities and then used the survey results to negotiate user charges and payment schemes with the local service provider.

D. LIMITED UNDERSTANDING AMONG PROVIDERS OF THE BENEFITS OF PROVIDING WIDER COVERAGE

Challenges. elected local officials and policy makers often lack awareness of the basic needs of the poor, the costs of providing water, and the benefits that accrue from providing legal piped water connections. Piped access to water can transform the lives of poor urban dwellers.

Best Practices. Communities, with support from CBOs and NGOs, are working directly with local decision-makers to share information on their conditions and concerns, which helps build consensus on innovative solutions for serving poor communities.

Examples. In Porto Alegre, Brazil and Dhulikhel, Nepal, citizen participation in planning and budgeting of development efforts prompted universal coverage.

In Indonesia, an inter-ministerial working group on water supply and sanitation led by the National Development Planning Agency is actively developing a national policy on water supply and sanitation to raise overall awareness and to guide the development of local policies, while addressing improved service provision to marginalized citizens.

Manila Water Company discusses tariff adjustments openly with its concessionaire authority to capture actual service provision costs and projected increases.

STRENGTHENING ENABLING CONDITIONS

In many Asian cities, the water supply infrastructure and systems are outdated. Even though Asian governments have committed themselves to serving the urban poor better through the Millennium Development Goals, many governments face challenges in making significant regulatory changes or undertaking significant policy reforms.

The five key constraints related to enabling conditions identified in the best practices review are:

a. Prohibitive land tenure requirements;

b. Overly restrictive technical standards;

c. Limited outreach capacity of providers;

d. Lack of financial incentives; and

e. Ineffective enforcement of regulations that limit monopolistic behavior.

A. PROHIBITIVE LAND TENURE REQUIREMENTS

Challenges. Many of the urban poor in Asian cities lack residency status. Most local governments in Asia are reluctant to repeal prohibitive land tenure requirements that prevent the landless poor from applying for in-house water connections. As a result, the unconnected poor are compelled to obtain water from the relatively more expensive informal water market.

Best Practices. Local governments can provide temporary or special property titles to enable the urban poor to receive in-house connections.

Examples. In Bangalore, India, the local government replaced public hydrants with house connections and provided lease-cum-ownership documents that qualified slum dwellers for house connections.

In Manila, Philippines, the local government allowed the Manila Water Company to waive property ownership requirements as a prerequisite for receiving piped water.

B. OVERLY RESTRICTIVE TECHNICAL STANDARDS

Challenges. Overly restrictive technical standards for equipment (e.g., requiring underground pipes, minimum pipe diameters, valve and meter standards, etc.) can increase the cost the urban poor pay for water. In addition, providers often assess minimum consumption standards or charge high monthly fees for meter maintenance.

Best Practices. Public providers can relax consumption standards for the urban poor, while small-scale private providers can offer flexibility in technical standards to provide temporary service. Rather than relax technical standards for their utilities, local governments have been more inclined to relax them for concessionaires and for small-scale providers.

Examples. Inpart Engineering in Manila successfully delivers water to customers through above-ground hoses managed by community members. Also in Manila, the concessionaire, Manila Water Company, offers a menu of options for communities to select water distribution and measurement schemes (e.g., individual connections, clustered connections, and bulk supply).

In the case of minimum consumption standards, the Bangalore Water Supply and Sewerage Board in India reduced the assumed minimum consumption for service and lowered the monthly amounts paid by the connected poor.

C. LIMITED OUTREACH CAPACITY OF PROVIDERS

Challenges. Public providers, particularly local government authorities, often lack the human and institutional resources to reach out to the poor and involve them in decision-making. The lack of trained personnel and efficient systems and procedures is related to the absence of a pro-poor agenda and related implementation strategies.

Best Practices. Providers divide poor communities into manageable areas, or zones, and work with appropriate third parties with demonstrated outreach capability, such as NGOs and CBOs.

Examples. In Bangalore and Manila, special units dedicated to serving poor areas conduct outreach programs through CBOs in small and easily administered areas.

In Ahmedabad, the government contracts with NGOs directly to conduct activities like poverty mapping to locate urban poor and better understand local conditions.

D. LACK OF FINANCIAL INCENTIVES

Challenges. Service providers lack financial incentives to develop solutions for serving the poor. MDG targets have not yet translated into government mandates targeting the poor. Often there is a financial disincentive for providers to serve the poor, who tend to consume less water and thus pay lower monthly water bills.

Best Practices. Public providers set financial incentives for utilities and use private sector participation contracts to establish incentives for service coverage improvement in poor communities.

Examples. The Manila Water Company concession agreement motivated the company to expand connections to achieve connection targets.

In Uganda, the national water company established internally-delegated management contracts to provide incentives for managers to achieve greater efficiency and provide better service.

E. LACK OF EFFECTIVE ENFORCEMENT OF LEGAL REQUIREMENTS LIMITING MONOPOLISTIC BEHAVIOR

Challenges. The lack of legal requirements or the lack of enforcement of legal requirements limiting monopolies can lead to the exploitation of the poor who have no choice but to pay above-market prices for piped water. External forces may operate outside the normal market by limiting supply at local sources (such as public hydrants). Corruption remains an obstacle to effective pro-poor policies and positive action.

Best Practices. Informal and illegal monopolies are brought into the formal sector by recognizing and licensing small-scale providers or converting public taps to formal house connections.

Examples. In Manila, the government formally recognized local service providers that paid guarantee deposits.

Bangalore Water Supply and Sewerage Board replaced public hydrants with hoses or shared connections to minimize interventions and limit local monopolies.

ENSURING AFFORDABILITY

Many people in poor urban communities cannot accumulate savings, and therefore cannot afford to pay upfront water supply connection fees. In addition, many local governments assume that providing universal piped water coverage is an impossible goal, since they have more pressing governmental priorities and lack access to sufficient financing. Five key constraints related to affordability were identified:

a. Upfront connection fees;

b. Inflexible payment terms;

c. Low or subsidized tariffs;

d. Over-dependence on connection fees; and

e. Limited access to alternative financing.

A. UPFRONT CONNECTION FEES

Challenges. Prohibitively high upfront connection fees, often combined with unreliable service, prevent the urban poor from connecting to piped systems. The poor are unable to accumulate savings or unwilling to risk pooling funds to connect to unreliable water networks.

Best Practices. Providers can reduce or eliminate connection fees through targeted subsidies or tariff surcharges. Administratively, it can be more straightforward and cost-effective to provide free connections as an incentive to new customers. For the utility, the income from these new customers will offset the investment needed to provide connections in the medium- to long-term. Water utilities can also allow new customers to pay for their house connections with monthly installments

Examples. Providers have found positive results from reducing or subsidizing connection fees in cases where the general quality of service has been consistent. In Cote d'Ivoire, for example, the service connection fee is based on the number of taps in the household, enabling poorer households to connect at a reduced cost.

The Manila Water Company provides potential consumers a range of connection options, such as sharing connections at a reduced connection fee. Inpart Engineering, also in Manila, offers lower upfront fees by having customers pay for the meter and its installation.

When replacing public taps with household connections, the Bangalore Water Supply and Sewerage Board reduced connection fees in slum areas, resulting in a drastic reduction of water losses.

Flexible payment schedules that allow for installment payments (e.g., up to 20 months in Phnom Penh) are a popular relief scheme for low-income customers.

The water utility in Tanah Datar municipality, Indonesia, cooperated with a prominent micro-credit bank to develop a micro-credit scheme for new connections. The utility guaranteed the credit and assisted new customers in applying for the new connections, as well as micro-loans.

B. INFLEXIBLE PAYMENT TERMS

Challenges. Typical water supply payment terms preclude the urban poor from paying fees. For example, most cities calculate water bills on a monthly or bi-monthly basis, which precludes daily-wage earners who have difficulty in saving money from paying. As a result, many of the unconnected poor are forced to buy water on a cash-on-delivery basis from vendors at high unit prices.

Best Practices. Providers charge lower tariffs to the poor or establish flexible payment terms that are more convenient to poor customers.

Examples. Inpart Engineering in Manila engages selected community members to read meters and collect user fees on a daily basis. Although this method increases the user charges, consumers still pay less than they would pay to vendors.

The Women's Bank in Sri Lanka employs a similar approach, involving communities in daily billing and collection, and then paying the monthly user charges to the service provider.

In Bangalore, the BWSSB charges a lower rate in slum areas for the "life-line block." These life-line rates are for an initial block of water consumption at the basic need level, which varies between 40 to 60 liters per person, per day.

In Porto Alegre, Brazil and Phnom Penh, Cambodia, disconnection is avoided until all other options have been exhausted.

C. LOW OR SUBSIDIZED TARIFFS

Challenges. Low or subsidized tariffs offer no incentives to service providers to expand services to poor communities. In some countries, utilities operate as units of the local government and finance service expansion using government funds. In countries where utilities are required to make a profit or operate on a cost-recovery basis, no-profit, or no-loss basis, low tariffs make it impossible to fund expansion based on tariff income alone.

Best Practices. Offering targeted subsidies for service connections rather than subsidizing user charges can enable the utility to increase the number of customers and connect the poor.

Examples. In Phnom Penh, Cambodia, the provider charges an increasing block tariff with the lowest consumption block partially subsidized by the higher blocks.

The Singapore Public Utilities Board provides targeted subsidies directly to those who need it.

To fund expansion, in Dhulikhel, Nepal, the community decided to pay a higher tariff as opposed to a high connection fee.

D. OVER-DEPENDENCE ON CONNECTION FEES

Challenges. Due to low tariffs throughout the region, providers are generally over-dependent on connection fees for financing service expansions, rather than relying on other sources of revenue, such as improving operational efficiencies.

Best Practices. Providers obtain funds for financing expansion from means other than connection fees.

Examples. In Uganda, the national government provides grants to utilities to fund service expansion.

For the Manila Water Company, the terms of the concession contract encourage the concessionaire to find expansion funds from sources other than connection fees.

Cote d'Ivoire applies a surtax of about 10 percent on all water bills, which is deposited into a special fund, partly for subsidizing new connections for the middle and lower classes, and partly for paying for new infrastructure.

E. LIMITED ACCESS TO ALTERNATIVE FINANCING

Challenges. Having limited access to finance is a significant constraint for service providers, thus affecting service delivery to poor communities. As a result of low tariffs, service providers direct revenues to operation and maintenance, and not service expansion. Government subsidies are often the only means for utilities to continue operating. Subsidies are clearly not sufficient to finance the required investments, but providers lack access to alternative financing from sources such as commercial banks or the capital market to support expansion and improve service levels.

Best Practices. Governments prepare a regulatory framework to enable various sources of financing like bonds, revolving funds, or public-private participation schemes. At the same time, service providers strive to become more creditworthy, by improving their operational and financial performance, to qualify for private financing.

Examples. Well-managed, ring-fenced and autonomous utilities, such as in Porto Alegre and Phnom Penh, raise capital largely on their own, despite low tariffs.

In the Indian state of Tamil Nadu, the state government established a pool-funded expansion through a bond to support water supply and sanitation improvement efforts in medium and small towns.

Table 1: Model solutions that address key constraints to connecting the urban poor

Key Constraints	Model Solutions		
	Public Service Providers	Private Service Providers	Community Groups
1. Limited Awareness			
a. Urban poor unaware of benefits and procedures	• Communication Unit dedicated to reaching out to the poor (e.g., Bangalore) • Simplified application form for obtaining new connections (BWSSB) • Partner with NGOs to support community participation in developing supply networks (Ahmedabad, India)	• Cooperate with CBOs in reaching out/educating poor communities on benefits of piped water (Manila Water)	• Cooperate with CBOs in reaching out/educating poor communities on benefits of piped water (Manila Water)
b. Lack of trust between the poor and providers	• Sensitizing utility staff by having them visit slums (Bangalore) • Complaint resolution counter at utility (Uganda, Phnom Penh) • Institutionalize citizen participation in budget decision-making (Porto Alegre) • Direct communication with slum -dwellers, assist applications for new connections (Phnom Penh)	• Customer outreach section strengthens ties with consumers via CBOs (Manila Water, Cote d'Ivoire)	
c. Providers unaware of ability of the poor to pay and potential benefits of servicing the poor	• Partnering with NGOs to map slum areas (Ahmedabad) • Consulting with poor communities directly to tailor fees (Phnom Penh)		• Women's Bank conducted surveys, negotiated payment schemes (Sri Lanka)
d. Politicians/policymakers unaware of benefits of providing universal coverage	• Active national awareness campaigns (Indonesia)	• Open discussions re: tariff adjustments (Manila Water)	• Citizen participation in planning and budgeting of development efforts (Porto Alegre, Dhulikhel)
2. Weak Enabling Conditions			
a. Prohibitive land tenure requirements	• Lease documents issued based as proof of residence (Bangalore)	• Forego ownership requirements (Manila Water)	
b. Overly restrictive technical standards (underground pipes, specifications, valves, etc.)	• Reduced assumed minimum consumption, lowered monthly payments (Bangalore)	• Appropriate materials used by provider (Inpart Engineering) • Empower provider with f lexibility (Manila Water)	
c. Limited outreach capacity of providers	Contracts with NGOs to help provide services (Ahmedabad)	• Divide service area into small zones for demand monitoring (Manila Water) • Establish "we care" corporate culture (Manila Water)	• Outreach through community-based organizations in small, manageable areas (Bangalore, Manila)
d. Lack of financial incentives for service providers	• Internal management contracts with employees to share in profit (Uganda)	• Contracts push company to achieve connection targets	
e. Ineffective enforcement of regulations limiting local monopolies	• Replace standpipes with house/shared connections (Bangalore)	• Formally recognize local service providers as valuable partners (Manila Water)	

Key Constraints	Model Solutions		
	Public Service Providers	Private Service Providers	Community Groups
3. Affordability Constraints			
a. Upfront connection fees prevent some urban poor from connecting	• Management contracts provide management incentives to increase efficiency, service quality (Uganda) for connections fees (Phnom Penh) • Reduced connection fee for low income consumers (Uganda, Phnom Penh, Cote d'Ivoire, Bangalore) • Employ micro-financing schemes (PDAM Tanah Datar)	• Provide flexible packages and options for payments (Manila Water)	
b. Inflexible payment terms that fail to consider the inability of the poor to save	• Disconnection avoided even if consumers do not pay bills (Porto Alegre) • Lower minimum monthly block consumption (Bangalore)	• Daily collection of bills (Inpart Engineering)	• Women's Bank collects bills daily, pays bills monthly on behalf of users (Sri Lanka)
c. Over-dependence on connection fees for financing service provider expansions	• Lifeline block tariff for basic needs with higher tariffs for higher levels of consumption (Phnom Penh) • Targeted subsidies to poor communities while having all other customers pay normal tariffs (Singapore PUB)		• Community pays to expand service (Dhulikhel)
d. Low/subsidized tariffs do not enable service providers to expand services to poor communities	• Targeted subsidies to utilities (Uganda) • 10% surtax on water bills directed to infrastructure improvement funds (Cote d'Ivoire)	• Contract provision for income from other sources such as sold water (Manila Water)	
e. Lack of access to alternative financing	• Improve financial health through accountability and transparent budgeting (Porto Alegre, Phnom Penh) • Pool-funded expansion through bond support (Tamil Nadu, India)		

3. WORKSHOP PROCEEDINGS

As part of its regional program on expanding services to the urban poor, ECO-Asia, in collaboration with the Thailand Provincial Waterworks Authority (PWA) and the South East Asia Water Utilities Network (SEAWUN), organized a regional workshop in Bangkok on September 20-21, 2006 in Bangkok, Thailand. The objectives of the workshop were to:

- Present findings from the best practices review;
- Exchange views among practitioners on constraints and successful models;
- Recommend country-level actions in support of ECO-Asia pilot projects, and
- Develop a regional action agenda.

In preparation for the workshop, ECO-Asia reviewed relevant publications and reports to identify common constraints, model solutions and best practices for extending water services to the urban poor. At the workshop, ECO-Asia presented the results of the best practices review as the basis for practitioner discussions on country actions and a regional agenda for improving the delivery of water services to the urban poor. The detailed agenda of the workshop is in Annex 1.

Workshop participants included representatives from water service providers, government agencies and civil society groups from Cambodia, India, Indonesia, Philippines, Sri Lanka, Thailand and Vietnam (see Annex 2: List of Participants). Workshop participants presented best practices, shared experiences, and explored strategies for overcoming constraints. Through facilitated discussion, participants identified country actions in support of ECO-Asia pilots, and shared ideas on a regional agenda.

PRACTITIONER PRESENTATIONS

ECO-Asia invited practitioners to present experience and best practices on developing and implementing practical solutions in poor communities in the region. Presenters provided information on constraints and solutions to improving safe water access for the urban poor. Six practitioner presentations are summarized below.

> ***" Water service providers, private companies and community groups in cities throughout the region have been joining hands to develop new solutions for connecting the urban poor. In these innovative approaches, service providers view citizens of poorer communities not as liabilities, but as valued customers who can pay for piped water"***
>
> **Mr. Winston Bowman, Regional Environment Director, U.S. Agency for International Development, Regional Development Mission/Asia**

Raising Awareness to Support Improved Service Delivery

Raising Awareness and Interest to Connect to Water Service - A Community Perspective
Ms. Rupa Manel, Honorary President, The Women's Bank, Sri Lanka

Consisting of 35,000 members in 135 branches throughout Sri Lanka, The Women's Bank (WB) is a community-based organization that actively promotes savings and credit for urban poor families. Aside from cultivating the habit of savings, the WB also works to raise community awareness of the benefits of having piped water and the importance of timely payment of water bills.

In Narahenpitta, a tenement garden near Colombo, the WB partners with Sevanatha, a local NGO, and liaises with the Sri Lankan national water service provider, National Water Supply and Drainage Board (NWSDB). The aim of this partnership is to improve water services provision by replacing ineffective public stand pipes with household connections. In this partnership, Sevanatha provides seed funds to purchase piping materials for connections, the NWSDB supplies bulk water and supervises activities to install pipes and

ABOVE: Participants at the regional workshop on Enabling Water Services Delivery to the Urban Poor.

meters, and the WB negotiates tariffs and organizes community billing and collection to pay the NWSDB.

The WB also fosters active community participation in managing water supply by creating community groups and initiating surveys and consultations. The WB trains community members to read meters, collect monthly payments, and do minor repairs. As a result, about 60 households now benefit from this partnership scheme.

A key factor in the success of the WB's initiative is advocacy for the benefits of obtaining direct household water supply. As a trusted organization within the Narahenpitta community and aware of its political and social dimensions, the WB undertakes community surveys to identify community needs for improved water services and also conducts public awareness campaigns on health, costs, and payment collection. The WB emphasizes the importance of educating women on the improved income opportunities and the convenience associated with household water connections.

Partnering with NGOs to Deliver Service - A Service Provider Perspective *Mr. Anand Patel, Additional City Engineer, Ahmedabad Municipal Corporation, India*

With 24 percent of its 3.6 million residents living in urban slums, the Ahmedabad Municipal Corporation (AMC) in Ahmedabad, India launched the Slum Networking Project (SNP) to improve overall slum conditions, including water supply and sanitation services, solid waste disposal, storm drains, and community development. Key to SNP's success is its multi-stakeholder approach involving communities, NGOs, and the private sector. The SNP clearly delineates partner roles, responsibilities and contributions. The AMC funds approximately 70 percent of the construction investments, while communities, NGOs and private sector contributions account for the remaining. To date, through the SNP, the AMC has enhanced conditions in 31 slums affecting nearly 25,000 people and is targeting 120 more slums in the next five years. Impacts include improved community empowerment and awareness about access to services, better health, higher status and greater respect, and an increase in overall productivity.

The cornerstone of the SNP's effectiveness is the active involvement of NGOs in helping to mobilize slum dweller involvement. Considered more accountable and acceptable than private contractors, NGOs help build trust within communities by interacting regularly with slum dwellers and conveying the need for users to pay for services. The AMC recognizes that NGOs are uniquely positioned to inform communities about the importance of having adequate services (e.g., water supply) and establishing flexible payment schemes. In working with NGOs, the AMC also notes that it needs to invest resources and time to build relationships with NGOs and slum dwellers, since NGOs have different working styles and capacities. According to the AMC, NGOs are critical to the success of pro-poor initiatives.

Enabling Sustainable Service Delivery to the Poor

Motivating Staff to Improve Service Delivery to the Poor *Elizabeth M. Cruz, Area Business Manager, Manila Water Company, Inc., Philippines*

Serving water to 23 cities and municipalities in the eastern part of Metro Manila, Manila Water Company, Inc. (MWCI) is a concessionaire that strives to balance its business objectives with social commitments. After becoming a private concessionaire, MWCI improved service delivery to meet both service coverage and profit targets in part by expanding to poor districts. Through its Tubig Para Sa Barangay (Water for the Poor) program, MWCI implements key strategies to serve the poor by prioritizing pipe replacement activities in urban slum areas, offering a menu of service options (e.g., through individual or clustered metering), adopting a territory management approach, and building community relationships.

To implement the program, MWCI focuses on improving the capacity of its staff. For instance, MWCI requires all staff to "walk the line" within a territory or a small sub-division of its service area. The intent of this initiative is to allow staff, including frontline and management levels, to see first hand actual field conditions, monitor service delivery, and meet and consult with customers, especially people in poor communities. As part of this effort, MWCI also engages CBOs and NGOs in slum areas to better understand service levels and demand. By bringing staff into the field, MWCI empowers its employees to recognize and address the challenges of delivering effective service. MWCI's approach encourages the "we care" value system for all customers, including low-income residents. Other MWCI success factors include on-going training programs, as well as employee recognition programs that reward efforts to increase customers in poor communities.

MWCI's model of incorporating pro-poor policies and encouraging staff to work with poor communities enables improved water services delivery to nearly 150,000 households or about 900,000 people. Associated benefits include reduced water losses and increased overall revenues.

Enabling Water Services Delivery for the Urban Poor in Phnom Penh *Dr. Visoth Chea, Assistant General Director, Phnom Penh Water Supply Authority, Cambodia*

In the past, about 20,000 poor families residing in the state-owned Phnom Penh Water Supply Authority (PPWSA) service area received water services from retailers who stole water from PPWSA's distribution network. To address such rampant illegal connections and expand legal water services to poor communities, PPWSA proposed and instituted a broad reform program in 1998. As part of the program, PPWSA prepared project teams to work specifically with poor communities and provided incentives for poor residents to connect by allowing installment payments (up to 20-months) for all new connections.

This initial program, however, achieved limited success due to PPWSA's inadequate outreach. As a result, PPWSA decided to establish more teams and include more activities to map out unserved poor areas, such as incentive programs, education programs on the health and benefits of piped water, and interactive surveys to identify customer needs. To further build trust among its new customers, PPWSA launched a customer orientation program to help poor residents prepare applications for new connections on-site and expanded the number of customer centers. It also targeted subsidies for new connections to the poorest households (ranging between 30% to 100% subsidy) and adjusted tariffs to lower basic consumption block and increased rates.

ABOVE: Practitioners identify common challenges and solutions based on ECO-Asia's best practices review.

PPWSA's program increased the number of connections in poor areas from 575 in 2000 to nearly 12,800 in 2006. PPWSA attributes this dramatic service increase to establishing an effective pro-poor policy, which allows installment payments and targets subsidies for new connections, as well as builds trust with constituents. Most importantly, PPWSA cites its policy of treating the poor as valuable customers as the key principle behind its success.

Mobilizing Innovative Finance

Providing an Alternative Business Model to Serving the Poor Elsa *D. Mejia, Operations Manager, Inpart Engineering, Philippines*

Inpart Engineering, a small-scale independent water provider, serves nearly 34,000 families in Manila, Philippines via an innovative approach tailored to the needs of poor communities. To provide flexibility and ensure affordability, Inpart works closely with community members in the management, billing and collection of water service. In particular, Inpart consults directly with its customers on setting tariff rates, selecting payment frequency (e.g., daily, weekly, or monthly) and identifying caretaker or "aguador" managers from the community to maintain adequate service levels and collect payments.

One example is in the high-rise Santa Ana Tenement in Manila, where Inpart identified a demand for water supply and distribution, purchased water at bulk rates from the main supplier (Manila Water Company, Inc.), installed a bulk storage tank, and pumped water into a roof tank. Inpart then consulted with existing residents to select aguadors who help manage the flexible charging and collection of payments, and distribute the water using low-cost technologies (e.g., flexible hoses and commercial meters). Inpart also involved residents in setting water supply tariffs based on different service qualities. The agreed tariffs actually exceed the normal rates charged by the main supplier, but they remain below the rates charged by water vendors; this result clearly demonstrates that residents are willing to pay for improved access and service levels, and with flexible payment arrangements. As a result, Inpart now effectively serves 1,200 families (6,000 people) in the tenement.

Inpart's service delivery model in the Santa Ana Tenement is typical of its approach in other service areas, balancing entrepreneurship with social responsibility. The model's success relies on regular dialogue between Inpart and aguadors, and frequent meetings with consumers to discuss water rates, billing and collection, and flexible payment terms. Despite its successes, Inpart realizes that it provides only a temporary solution, since there is no legal or regulatory driver for change, and formal water service providers and local governments have not recognized the importance of community partnerships.

Linking with a Local Bank to Finance Household Connections *Gusril Bahar, Municipal Finance Specialist, USAID-Environmental Services Program, Indonesia*

Prohibitively high upfront household connection fees required by water utilities often prevent low-income residents from connecting. In addition, water utilities that are willing to pre-finance new connections often lack the necessary capital. To address this constraint, a water utility in Tanah Datar District, Indonesia, known as PDAM Tanah Datar, pioneered a new program involving a micro-credit lending facility financing new household connections in partnership with Bank Rakyat Indonesia (BRI), an established micro-credit bank.

Having idle capacity, PDAM Tanah Datar planned to increase service delivery to residents, including many low-income communities, which constitute nearly 30 percent of residents in its service area. The relatively small PDAM approached BRI, a reputable bank with about 4,000 branches throughout Indonesia, to develop a micro-credit product to enable increased access to water supply. With BRI, the PDAM defined the loan terms, such as maximum loan ceiling, loan repayment period (two years), interest rates, incentives, and guarantees. The PDAM also agreed to provide the guarantees for all loans, while BRI agreed to offer incentives for new customers.

Under their collaboration arrangement, both BRI and the PDAM developed procedures to ensure water service delivery and minimize risks of non-repayments. For instance, the PDAM initially conducted a technical and financial feasibility study to ensure water can be delivered with adequate service levels. At that point, the PDAM helped the customer apply for a small loan at BRI, and provided information on interest rates and service disconnection policies. BRI then reviewed the customer profile for capacity and willingness to pay and, upon approval, offered payment options on an installment basis and a customer savings account. As a next step, BRI transferred the necessary funds to the PDAM to allow for connection installation, and initiated a repayment scheme.

ABOVE: Workshop participants share and exchange ideas.

COUNTRY-LEVEL RECOMMENDATIONS FOR OVERCOMING KEY CONSTRAINTS

To support ongoing and planned ECO-Asia pilot projects, workshop participants from India, Indonesia, Sri Lanka and the Philippines worked in separate small groups to identify actions or interventions that could enable service providers in each country to overcome constraints in awareness, enabling conditions, and affordability. According to country participants, these actions and interventions could support efforts to scale up and replicate pro-poor initiatives within their own countries, and within the region. Table 2 (see next page) provides a summary of participant recommendations for country actions.

Limited Awareness

Workshop participants from all four countries identified the lack of awareness and understanding of policymakers and local elected officials on the urban poor's willingness and ability to pay for water services as a principal constraint to the provision of water services to slum areas. To build greater awareness and understanding of the situation, participants recommended that utilities and local governments work to collect information about poor communities, including "poverty mapping." In partnership with an NGO or CBO who understands the local conditions, poverty mapping efforts enable decision-makers to determine quickly and accurately the level of services, resident profiles, infrastructure, population density, and other relevant information.

Participants also recommended that utilities document their "success stories" to highlight effective service delivery. Using this information, service providers and local governments can then develop and implement targeted awareness campaigns and initiate regular dialogue involving policymakers and people from poor communities.

Weak Enabling Conditions

Participants from the Philippines and Sri Lanka identified the limitation in human and institutional capacity of service providers and local governments in reaching out to poor communities as the key stumbling block for adequate service delivery. To overcome this constraint, participants recommended that utilities establish smaller, more manageable zones within a service area to enable better control and management of service delivery and to improve customer outreach. Providers could also set up additional service points as platforms for dialogue with their low-income customers. Participants also recommended that providers who lack outreach capacity to work with NGOs and CBOs to facilitate dialogue with underserved communities.

For participants from Indonesia, the absence of a clear pro-poor agenda among utilities is one of the main obstacles for extending services to poor communities. Participants agreed that raising awareness is a crucial first step in developing a pro-poor agenda, but service providers and local governments should also refer to existing national or regional poverty alleviation strategies and adapt them locally to include water services provision. In the process, participants suggested that local governments develop performance indicators for service delivery to urban slums and offer awards to providers who effectively improve or extend their services to poor communities. Lastly, workshop participants noted that policy reform initiatives must eliminate service providers' obligations to share revenues with local governments.

For Indian participants, the primary constraint is prohibitive land tenure requirements. They recommended accelerating the process of legitimizing illegal settlements to make them eligible for municipal water services.

Affordability Constraints

Workshop participants from Indonesia and the Philippines agreed that high upfront connection charges coupled with restrictive payment arrangements for service fees create serious disincentives for low-income communities to connect to water utility services. For participants in Indonesia, the disincentive also extends to payment of user charges and tariffs. They highlighted the need for service providers to adopt new policies that allow for flexible payment arrangements and targeted subsidies to encourage low-income communities to connect and become regular customers. Where utilities lack the capacity to collect payments, they can collaborate with third parties, such as NGOs, CBOs, or private water providers, in devising innovative billing and collection systems.

According to Indonesian and Sri Lankan participants, low and subsidized tariffs are a significant obstacle to effective service delivery to poor communities. To revise tariffs and tariff setting procedures, they recommended broad stakeholder participation including utilities, policymakers, customers, and other national and local government officials, as appropriate, in negotiating rates that at least cover the cost of production.

Table 2: Practitioner Recommendations for Country Action

Recommended Key Actions for Service Providers to Overcome Constraints	India	Indonesia	Philippines	Sri Lanka
Limited Awareness				
Conduct poverty mapping to determine the existing levels of service and infrastructure in slum communities in collaboration with NGOs and CBOs.	✔			✔
Implement awareness raising programs to inform decision-makers on the willingness and ability of the poor to pay, and on the benefits of providing service to the poor.	✔	✔	✔	✔
Share and exchange information on the urban poor among local service providers.	✔			
Establish dialogue platform for stakeholders on improving provision of service to poor communities.	✔	✔		✔
Implement targeted awareness programs to inform poor communities on the benefits, costs and requirements of piped water service.	✔		✔	
Document and disseminate success stories to promote awareness.	✔			✔
Weak Enabling Conditions				
Evaluate and re-designate legal status of slum communities on a temporary or permanent basis to overcome obstacles for service eligibility, such as property rights.	✔	✔	✔	✔
Harmonize national, regional and local policies on poverty alleviation and service provision.		✔		
Establish performance indicators on service delivery to the poor for service providers to monitor and reward progress.		✔		
Eliminate the obligation of service providers to share revenues with local governments.		✔		
Create management zones within the distribution network to enable more effective delivery through improved customer services.	✔		✔	
Outsource water service distribution to small-scale providers (e.g., NGOs, CBOs, private operators).	✔	✔	✔	✔
Establish special units to administer service delivery to urban poor communities and to liaise with decision-makers.	✔			✔
Affordability Constraints				
Develop flexible options for payment of user charges.		✔	✔	
Establish installment payment schemes to pay for connection fees.		✔	✔	✔
Partner with third parties to assist in financing up-front connection fees, and in collecting payment.		✔		✔
Formulate a tariff policy that reflects willingness and ability of the poor to pay.		✔	✔	✔

4. CONCLUSIONS AND REGIONAL ACTION AGENDA

Workshop presentations and discussions made clear that there is no single method or system that water service providers can apply in connecting the urban poor. Each service provider must develop its own approach that addresses limitations in awareness, enabling conditions, and financial conditions. The best practices review and practitioner feedback confirmed that to affect change, decision-makers must reach out to poor communities, evaluate conditions on the ground, devise new pro-poor solutions, and then maintain discipline during implementation, often in the face of political pressure.

As part of the workshop, participants also signaled their support for regional cooperation as a useful tool in expanding services to the urban poor. Whether through focused pilot demonstration projects, toolkits, training or regional activities, ECO-Asia and other development partners are well positioned to facilitate the exchange of best practices and information between water service providers, local governments, and civil society groups.

REGIONAL ACTION AGENDA

As one activity at the regional workshop, participants engaged in interactive small group discussions aimed at identifying key regional implementation support strategies and tools for connecting the urban poor in the region. Priority solutions focused on the same three areas:

(1) Increasing awareness;

(2) Strengthening enabling conditions; and

(3) Improving affordability.

Table 3 presents a summary of key regional and country actions and possible support strategies and tools for implementation by partners with assistance from ECO-Asia and other development partners. Possible implementation support strategies and tools include country or regional lessons-learned workshops, targeted counterpart exchanges, specialized country or regional training, demonstration pilot projects, sustained utility-to-utility exchanges ("twinning"), publications and websites. Taken together, these findings serve as a regional action agenda that ECO-Asia, other partner organizations, and individual water service providers can use in developing regional and country pro-poor initiatives.

Table 3: Regional Action Agenda

Solutions	Key Regional and Country Actions	Possible Implementation Support Activities and Tools
Increase Awareness	1. Increase awareness of water service provider staff about affordability, service satisfaction and expectations of existing and potential customers in poor communities	• Tool kit and training on site and community surveys on needs, affordability and constraints • Pilot demonstration projects on poverty mapping • Technical exchanges to learn about management practices such as "walk the line" pioneered by Manila Water Company
	2. Inform and educate service provider staff about potential solutions to expanding service to the urban poor	• Regional workshops on innovative solutions for connecting the urban poor • Publications and websites
	3. Increase awareness of senior decision-makers about the ability and willingness of the urban poor to pay for water	• Technical exchanges and study tours for senior decision-makers • Utility-to-utility twinning forming regional links • Regional workshops
	4. Establish formal and informal mechanisms for the urban poor to participate in decision-making	• Pilot demonstration projects with service providers and civil society groups • Regional workshops
Strengthen Enabling Conditions	1. Reduce barriers for the urban poor to obtain service connections (e.g. property ownership, settlement status)	• Pilot demonstration projects on innovative policy reform strategies • Peer-to-peer technical exchanges and study tours • Regional publications disseminating findings
	2. Recognize informal sector water vendors as potential partners and intermediaries who can help expand access by the poor	• Pilot demonstration projects with twinning component • Technical exchange/study tours • Publications and websites
	3. Create manageable zones to bring water managers closer to their customers	• Pilot demonstration projects with twinning component • Tool kits and training on developing and implementing management zones
	4. Mainstream pro poor policy at national and municipal levels	• Technical exchange/study tours • Pilot demonstration projects • Regional publications disseminating findings
Improve Affordability	1. Subsidize connection fees for low income customers and reform overall tariff structures and guidelines from a "pro poor" policy point of view	• Pilot demonstration projects for micro-finance schemes • Publication on lifeline block tariffs for basic needs • Publication on subsidized house connections versus tariffs
	2. Develop and implement flexible payment schemes that meet the needs of urban poor customers	• Pilot projects demonstrating role of intermediary organizations • Regional workshop to disseminate results

ANNEX 1: WORKSHOP AGENDA

AGENDA

Enabling Water Services Delivery for the Urban Poor in Asia
Setting an Action Agenda for Developing and Replicating Model Solutions

Four Seasons Hotel, Montathip 3 Room
Bangkok, Thailand
September 20-21, 2006

DAY 1: SEPTEMBER 20, 2006

9:00 - 9:10 **Welcoming Remarks**
Mr. Nakorn Jirasavetakul, Acting Governor
Thailand Provincial Waterworks Authority (PWA)

9:10 - 9:20 **Introductory Remarks**
Mr. Winston Bowman, Regional Environment Director
USAID Regional Development Mission/Asia

9:20 - 9:30 **Workshop Objectives**
Mr. Niels van Dijk, Deputy Chief of Party
Environmental Cooperation-Asia (ECO-Asia)

9:30 - 10:00 **Water for the Urban Poor: What are the constraints? What are the successful models and key lessons for overcoming those constraints?**
Mr. Jim Woodcock, Senior Water Specialist
ECO-Asia

10:00 - 10:15 **Q&A**

10:15 - 10:30 Coffee Break

10:30 - 11:00 **Plenary: How to Enable Sustainable Service Delivery to the Poor?**
Moderator: Mr. Cesar Yniguez, Senior Water Specialist
ECO-Asia
Speakers: Ms. Elizabeth Cruz, Area Business Manager
Manila Water Company, Philippines, Motivating staff to improve service delivery to the poor
Dr. Chea Visoth, Assistant General Director
Phnom Penh Water Supply Authority, Cambodia, Instituting appropriate tariffs and targeted subsidies to provide access for the poor

11:00 - 12:00 **Small Group Discussion 1: Addressing Constraints on Enabling Sustainable Service Delivery**
Moderator: Mr. Cesar Yniguez, Senior Water Specialist
ECO-Asia

12:00 - 13:00 **Lunch**

13:00 - 14:00 **Report Out and Q&A on Small Group Discussion 1**
Moderator: Mr. Cesar Yniguez, Senior Water Specialist
ECO-Asia

14:00 - 14:30 **Plenary: How to Promote Increased Awareness to Enable Service Delivery?**
Moderator: Mr. Sher Singh, Water and Sanitation Team Leader
ECO-Asia
Speakers: Ms. Rupa Manel, Honorary President
The Women's Bank, Sri Lanka, Raising awareness and interest to connect to water service - a community perspective
Mr. Anand Bholabhai Patel, Additional City Engineer
Ahmedabad Municipal Corporation, India, Partnering with a NGO to provide water - a service provider's perspective

14:30 - 15:30 **Small Group Discussion 2: Addressing Constraints on Awareness Raising**
Moderator: Mr. Sher Singh, Water and Sanitation Team Leader
ECO-Asia

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

15:45 - 16:45 **Report Out and Q&A on Small Group Discussion 2**
Moderator: Mr. Sher Singh, Water and Sanitation Team Leader
ECO-Asia

16:45 - 17:00 **Wrap-up and Plans for Day 2**
Mr. Niels van Dijk, Deputy Chief of Party
ECO-Asia

17:15 - 19:00 **Welcome Reception**
Montathip 4 Room, 1st Floor

DAY 2: SEPTEMBER 21, 2006

9:00 - 9:05 **Recap Day 1 and Introduce Day 2**
Mr. Niels van Dijk, Deputy Chief of Party
ECO-Asia

9:05 - 9:15 **Importance of Regional Cooperation in the Water Sector**
Mr. Kumala Siregar
President, Southeast Asian Water Utilities Network (SEAWUN)

9:15 - 9:45 **Plenary: How to Mobilize Innovative Financing to Deliver Service?**
Moderator: Mr. Niels van Dijk, Deputy Chief of Party
ECO-Asia
Speakers: Ms. Elsa D. Mejia, Operations Manager
Inpart Engineering, Philippines, Providing an alternative business model to deliver service
Mr. Gusril Bahar, Municipal Finance Specialist
USAID Environmental Services Program, Indonesia, Linking with a local bank to finance household connections

9:45 - 10:45 **Small Group Discussion 3: Addressing Constraints to Provide Affordable Service**
Moderator: Mr. Niels van Dijk, Deputy Chief of Party
ECO-Asia

10:45 - 11:00 **Coffee Break**

11:00 - 12:00 **Report Out and Q&A on Small Group Discussion 3**
Moderator: Mr. Niels van Dijk, Deputy Chief of Party
ECO-Asia

12:00 - 12:15 **Introduce Next Steps (Small Group Discussion 4)**
Mr. Niels van Dijk, Deputy Chief of Party
ECO-Asia

12:15 - 13:30 **Lunch**

13:30 - 14:45 **Small Group Discussion 4: Drafting Country-Based Action Agendas to Enable and Replicate Services Delivery**
Moderator: Mr. A. Mahendra, India Country Coordinator
ECO-Asia

14:45 - 15:45 **Report Out and Q&A on Small Group Discussion 4**
Moderator: Mr. A. Mahendra, India Country Coordinator
ECO-Asia

15:45 - 16:00 **Coffee Break**

16:00 - 16:30 **Next Steps: Setting a Regional Agenda**
Mr. Niels van Dijk, Deputy Chief of Party
ECO-Asia

16:30 - 16:45 **Wrap up and Conclusions**
Mr. John Pasch, Regional Water Policy Advisor
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ANNEX 3 : CASE STUDIES

Bangalore, India

BACKGROUND

Total population	6,500,000 people
Urban poor population	592,000 people in 367 recognized slums (Karnataka Slum Clearance Board 2004 data)
Service provider	Bangalore Water Supply & Sewerage Board (BWSSB)
Service provider status	Parastatal utility
Service provider mandate	Responsible for providing water supply and sanitation services to residents, including managing public taps in urban slums

ACTIVITY SUMMARY

- In 2000, BWSSB implemented a program to deliver service through household connections to 46 low-income settlements.
- BWSSB initially received donor funding to pilot service delivery schemes to households in three slum areas.
- Successful pilot results and ensuing external events prompted BWSSB to institute a program.
- External events included the municipality's decision to cease payments/subsidies to BWSSB in providing water through public taps and to fund extensive network expansion to new and partially-served regions, which included most slum areas.

KEY CONSTRAINTS	KEY MODEL ACTIONS
Limited Awareness	
Urban poor unaware of benefits/costs of piped water	BWSSB staff conducted frequent community outreach with help from NGOs to build awareness
Lack of trust between urban poor and water service provider and/or local government	BWSSB staff conducted frequent community outreach and consultations with help from NGOs to build trust.
Water service providers unaware of willingness of urban poor to pay for water services, and potential benefits of serving the urban poor	Through these outreach activities, BWSSB sensitized its staff to poor communities and their actual willingness to connect and pay for services
Weak Enabling Condition	
Prohibitive land tenure requirements	BWSSB issued "lease-cum-ownership" documents as the basis for getting new connections and they allowed shared taps.
Overly restrictive technical standards (underground pipes, specifications, valves, etc.)	BWSSB provided menu of options in service delivery.
Service providers and/or local governments lack the human and institutional capacity to reach out to the poor or enable effective access to decision-making	BWSSB established a dedicated unit to facilitate expansion to poor communities.
Service providers lack financial incentives to create innovative solutions for serving the poor	BWSSB partnered with NGOs to reach out to communities.
Lack of or ineffective enforcement of legal requirements preventing operation of local monopolies	Senior engineers received higher revenue targets, and they saw the slums as potential new markets
Limitations to Affordability	
Prohibitively high up-front connection fees prevent urban poor from connecting to piped systems	BWSSB reduced initial connection charges depending on plot size.
Periodic (monthly) payment terms or payment systems prevent urban poor from paying fees	
Low/subsidized tariffs do not enable service providers to expand services to poorer communities	BWSSB revised tariff structures by lowering minimum volume requirements but maintaining unit volume fees based on meters.
Service providers over-dependence on connection fees for financing service expansions	

KEY OUTCOMES

- By end of 2005, 26 of 46 slum communities participating in the program (about 4500 households) successfully connected to the BWSSB network and continued to receive bills and make payments.
- Slum dwellers receive improved quality water supply and could now engage directly with service providers.
- The program enabled recognition of slum dwellers as true customers among BWSSB staff and raised awareness that the poor communities can pay. Of the 11 engineers who participated in the program in at least one slum, five went on to connect 13 slums.

KEY CRITICAL FACTORS OF SUCCESS AND LESSONS LEARNED

Factors of Success

Policy reforms allowing:

- Simplified proof of tenure requirements and application process to get new connections
- Flexible service options to include shared connections
- Reduced connection fees
- Modified tariff structures with lowered minimum consumption rates
- Establishment of a dedicated unit, led by a reputable champion of pro-poor reform, to be responsible for delivering service to the poor and interfacing with key staff to implement

Lessons Learned

- Incentive schemes to increase revenue targets and decrease illegal connections helped influence key frontline BWSSB staff to consider slums as potential markets
- Staged approach to deal first with smaller slums and with slums that have adequate water availability helped sensitize and motivate frontline BWSSB staff to work with slum dwellers
- Visible and frequent participatory consultations between BWSSB staff and slum dwellers, and the involvement of established NGOs as intermediaries, built trust and raised awareness of the benefits of improved access to water to encourage slum dwellers to connect.

Cote d'Ivoire

BACKGROUND

Total population	About 7 million people
Urban poor population	More than 380,000 people
Service provider	SODECI (Societe des Eaux de Cote d'Ivoire)
Service provider status	Private company with affermage concession contract since 1956
Service provider mandate	To serve all legal urban customers in Cote d'Ivoire with water

ACTIVITY SUMMARY

- The Government's Water Directorate manages the concession
- SODECI normally charges $150 for new connections, but they charge $40 to all houses that will have less than five water taps.
- SODECI charges a low tariff for the initial block of an increasing block tariff
- SODECI cannot directly serve informal settlements (in 1990 there were 72 such settlements with 380,000people)
- A government body, FDE, collects a surtax on water bills to subsidize new connections and network expansion.

KEY CONSTRAINTS	KEY MODEL ACTIONS
Limited Awareness	
Urban poor unaware of benefits/costs of piped water	SODECI company policy promotes household connections for its customers
Lack of trust between urban poor and water service provider and/or local government	
Water service providers unaware of willingness of urban poor to pay for water services, and potential benefits of serving the urban poor	
Weak Enabling Condition	
Prohibitive land tenure requirements	More than 1,000 re-sellers were licensed to sell water to informal settlements
Overly restrictive technical standards (underground pipes, specifications, valves, etc.)	
Service providers and/or local governments lack the human and institutional capacity to reach out to the poor or enable effective access to decision-making	As a private company, SODECI has the technical and financial resources to reach out
Service providers lack financial incentives to create innovative solutions for serving the poor	The concession contract provides an incentive to SODECI to sell more water
Lack of or ineffective enforcement of legal requirements preventing operation of local monopolies	
Limitations to Affordability	
Prohibitively high up-front connection fees prevent urban poor from connecting to piped systems	Internal cross-subsidy provides reduced fee for dwellings having less than 5 taps
Periodic (monthly) payment terms or payment systems prevent urban poor from paying fees	
Low/subsidized tariffs do not enable service providers to expand services to poorer communities	SODECI has financial resources
Service providers over-dependence on connection fees for financing service expansions	30% of surtax on tariffs is used for network expansion in small towns and peri-urban areas.

KEY OUTCOMES

- Household connections more numerous in Cote d'Ivoire which has highest connection rate in sub-Sahara Africa.
- Only 0.5% of Abidjan's consumption is from public taps.

KEY CRITICAL FACTORS OF SUCCESS AND LESSONS LEARNED

Factors of Success

Efficient partnership between government (social motive) and concessionaire (profit motive):

- Efficient regulatory function and collection and distribution of surtax funds
- Strong policy encouraging household connections
- Government sanction of on-selling to licensed small scale providers for informal settlements
- Large customer base paying surtax subsidizes annual expansion needs

Lessons Learned

- Financing from surtax on large number of water bills subsidizes thousands of new connections per year.
- Increasing block tariff provides low tariff to low-volume consumers
- On-selling to licensed providers enables informal settlements to receive water despite prohibition of concessionaire dealing directly
- A financially strong company does not need to rely on outside funds that it cannot control

Manila, Philippines

BACKGROUND

Total population	5.3 million people in service area
Urban poor population	About 500,000 people in service area
Service provider	MWCI (Manila Water Company, Inc.)
Service provider status	Concessionaire for 25 years beginning 1997
Service provider mandate	To expand coverage and supply 24-hour water at an agreed pressure with 5-year targets

ACTIVITY SUMMARY

- Tubig Para Sa Barangay" (water for the Barangay) program provided water through small piped networks and community involvement.

KEY CONSTRAINTS	KEY MODEL ACTIONS
Limited Awareness	
Urban poor unaware of benefits/costs of piped water	Provision of menu of options to connect
Lack of trust between urban poor and water service provider and/or local government	• Work through Community-Based Organizations (CBOs) and Non-Government Organizations (NGOs) • Organization of communities to form water committees
Water service providers unaware of willingness of urban poor to pay for water services, and potential benefits of serving the urban poor	Staff are trained to contact CBO and study willingness to pay in their service area
Weak Enabling Condition	
Prohibitive land tenure requirements Overly restrictive technical standards (underground pipes, specifications, valves, etc.)	Waiver of policy of requiring a certificate of land title Water provided through small piped networks because of flexibility of main contract
Service providers and/or local governments lack the human and institutional capacity to reach out to the poor or enable effective access to decision-making	Decentralized service area into 8 business areas and each business area to Demand Monitoring Zones managed by a team including customer service and contact with CBOs
Service providers lack financial incentives to create innovative solutions for serving the poor Lack of or ineffective enforcement of legal requirements preventing operation of local monopolies	Contract provides revenue incentives for sales to low income groups
Affordability Constraints	
Prohibitively high up-front connection fees prevent urban poor from connecting to piped systems	Shared connections with a metered master connection Bulk supply with clustered meters
Periodic (monthly) payment terms or payment systems prevent urban poor from paying fees	
Low/subsidized tariffs do not enable service providers to expand services to poorer communities	The private company is strong enough to recover costs while expanding service
Service providers over-dependence on connection fees for financing service expansions	

KEY OUTCOMES

- 24-hour water supply from 25% in 1997 to 95% in 2005
- Cost of water per cubic meter reduced up to 97% for poor
- 200 standpipes constructed. Each serving 50 families
- Water for Barangay program has helped 850,000 people, most of whom pay only 10% of what they paid endors for a cubic meter of water
- Willingness to disconnect resulted in increase in payment compliance from 86% to 99%
- Population served went from 67% in 1997 to 89% in 2003
- 100% metering of connections

KEY CRITICAL FACTORS OF SUCCESS AND LESSONS LEARNED

Factors of Success

Provision of micro-finance and capacity building.

- Sweeping for illegal connections
- Waiver of policy of requiring a certificate of land title
- Payment of connection charges by installment

Lessons Learned

- Proper targets in private sector participation (PSP) contract ensure that poor will be connected
- Flexibility in contracting allows concessionaire ability to reach the poor in non-traditional ways
- CBO should be involved from the beginning for community organization
- Public service provider must take the initiative in approaching CBO

Manila, Philippines

BACKGROUND

Total population	153,000 people (17,000 households) served
Urban poor population	About 150,000 (17,000 households)
Service provider	Inpart Engineering
Service provider status	Private BOT contractor to the city of Manila
Service provider mandate	To provide piped water in 14 areas, mainly in squatter settlements

ACTIVITY SUMMARY

- In the first 6 months, Inpart Engineering invested $134,000 for connection to the water utility, a water tower, mother meters, pipes, and booster pumps.
- Inpart established pyramidal distribution system whereby 287 aguadors are responsible for one main distribution line, selling to about 100-200 households, and reading meters and collecting daily.
- Inpart pays the local government 10% of receipts

KEY CONSTRAINTS	KEY MODEL ACTIONS
Limited Awareness	
Urban poor unaware of benefits/costs of piped water	
Lack of trust between urban poor and water service provider and/or local government	• Local government contracts to private company, and water provider provides bulk water
Water service providers unaware of willingness of urban poor to pay for water services, and potential benefits of serving the urban poor	
Weak Enabling Condition	
Prohibitive land tenure requirements	• Land tenure rights are waived
Overly restrictive technical standards (underground pipes, specifications, valves, etc)	• Above-ground pipes and hoses are useful for ensuring there are no illegal connections
Service providers and/or local governments lack the human and institutional capacity to reach out to the poor or enable effective access to decision-making	• Pyramid system involves at least 287 people in delivery at lowest level
Service providers lack financial incentives to create innovative solutions for serving the poor	• Each aguador keeps 20% of total day's sales as his salary
Lack of or ineffective enforcement of legal requirements preventing operation of local monopolies	
Affordability Constraints	
Prohibitively high up-front connection fees prevent urban poor from connecting to piped systems	No connection fees, but consumer provides his own meter and plumber ($12-15)
Periodic (monthly) payment terms or payment systems prevent urban poor from paying fees	Collection daily
Low/subsidized tariffs do not enable service providers to expand services to poorer communities	Inpart has a fixed number of customers
Service providers over-dependence on connection fees for financing service expansions	Inpart borrows from various sources at high rates of interest

KEY OUTCOMES

- Tariffs are 10 times more than utility's piped water tariff, but consumers are paying 25% less than before
- Provision of water to squatter communities is sustainable and affordable
- 17,000 households served with piped water and illegal connections reduced

KEY CRITICAL FACTORS OF SUCCESS AND LESSONS LEARNED

Factors of Success

Government provides flexibility to meet terms of contract.

- Concessionaire provides reliable flow of raw water
- Daily collection makes payment easier by the poor and guards against illegal connections

Lessons Learned

- Most local governments should be able to contract with similar small scale BOT entrepreneurs
- Even without access to commercial capital a small business can provide water to the poor

Phnom Penh, Cambodia

BACKGROUND

Total population	1 million people total; 532,000 people in service area in 2001
Urban poor population	At least 27,000 people in service area
Service provider	Phnom Penh Water Supply Authority (PPWSA)
Service provider status	State-owned autonomous body
Service provider mandate	To provide clean and safe water to all of the people in service area

ACTIVITY SUMMARY

- Only 50% of Phnom Penh was being served, so Director approached Prime Minister with a plan to reform the utility and raise tariffs to serve all of the poor.
- Staff salaries were raised by a factor of 10, meters installed, sweeping for illegal connections, rehabilitated the whole distribution network

KEY CONSTRAINTS	KEY MODEL ACTIONS
Limited Awareness	
Urban poor unaware of benefits/costs of piped water	
Lack of trust between urban poor and water service provider and/or local government	Information campaign for poor as well as non-poor
Water service providers unaware of willingness of urban poor to pay for water services, and potential benefits of serving the urban poor	PPWSA has sought out and consulted with poor communities
Weak Enabling Condition	
Prohibitive land tenure requirements	Small scale providers allowed to operate
Overly restrictive technical standards (underground pipes, specifications, valves, etc)	On-selling of water is allowed
Service providers and/or local governments lack the human and institutional capacity to reach out to the poor or enable effective access to decision-making	
Service providers lack financial incentives to create innovative solutions for serving the poor	
Lack of or ineffective enforcement of legal requirements preventing operation of local monopolies	
Affordability Constraints	
Prohibitively high up-front connection fees prevent urban poor from connecting to piped systems	• Installment payments for reduced price house connections allowed up to 20 months • Resales from houses with connections to non-connected houses
Periodic (monthly) payment terms or payment systems prevent urban poor from paying fees	Low tariffs for low consumption with increasing block tariffs
Low/subsidized tariffs do not enable service providers to expand services to poorer communities	PPWSA raised tariffs in three phases
Service providers over-dependence on connection fees for financing service expansions	

KEY OUTCOMES

- Coverage in service area from 1993 to 2005 up from 25% to 95%
- Bill collection increased from 50% to 99%
- NRW was reduced from 72% in 1993 to 11% in 2005
- Increased 3,046 new connections in 31 poor communities in Phnom Penh by 2002

KEY CRITICAL FACTORS OF SUCCESS AND LESSONS LEARNED

Factors of Success

Prime Minister gave full support to PPWSA's efforts.

- 100% metering
- Full cost recovering
- Extensive public education program explaining why bills should be paid
- Building of internal team
- External support from development agencies

Lessons Learned

- Support of local government is critical
- Consumers are willing to pay bills if they know how the funds are being spent
- Cost recovery is compatible with serving the poor because it leads to universal coverage
- A champion and a protector can result in universal coverage and better service

Porto Alegre, Brazil

BACKGROUND

Total population	1.3 million people
Urban poor population	140,000 people in 2000
Service provider	DMAE (Municipal Department of Water and Sanitary Sewerage)
Service provider status	Publicly owned utility, since 1961 ring-fenced no-profit/no-loss autonomous center
Service provider mandate	To serve 100% of the citizens with piped water and sanitation

ACTIVITY SUMMARY

- In 1989 a new government held town meetings that evolved into a deliberative council, open to anyone. Now the deliberative council, composed of representatives of 15 diverse civil society groups, picked by the mayor, controls all major decisions. A social communication unit is directly under the Head Director.
- Since 1961, by law 25% of DMAE revenues have to be reinvested
- Participation in the participatory council, which deliberates on budgets and planning, is voluntary and universal. All decisions, all minutes are published.
- Municipality government is in the background throughout the open decision-making process

KEY CONSTRAINTS	KEY MODEL ACTIONS
Limited Awareness	
Urban poor unaware of benefits/costs of piped water	Universal water coverage
Lack of trust between urban poor and water service provider and/or local government	• Budget hearings and all major decisions are open and transparent • NGOs sit on deliberative council • Customer service phone line handles 1,500 calls daily
Water service providers unaware of willingness of urban poor to pay for water services, and potential benefits of serving the urban poor	• Urban poor representatives attend participative council meetings • DMAE conducts customer satisfaction surveys
Weak Enabling Condition	
Prohibitive land tenure requirements	
Overly restrictive technical standards (underground pipes, specifications, valves, etc.)	
Service providers and/or local governments lack the human and institutional capacity to reach out to the poor or enable effective access to decision-making	• DMAE has strong technical and financial capacity
Service providers lack financial incentives to create innovative solutions for serving the poor	• Employees have performance incentives
Lack of or ineffective enforcement of legal requirements preventing operation of local monopolies	• Transparent administration does not shield local monopolies
Affordability Constraints	
Prohibitively high up-front connection fees prevent urban poor from connecting to piped systems	
Periodic (monthly) payment terms or payment systems prevent urban poor from paying fees	• DMAE negotiates and makes every effort to make payment easy when bills are not paid.
Low/subsidized tariffs do not enable service providers to expand services to poorer communities	• 70% of new investment is from tariff income
Service providers over-dependence on connection fees for financing service expansions	• DMAE is creditworthy and can borrow funds without government guarantee

KEY OUTCOMES

- Urban poor served by universal coverage
- Between 1989 and 1996 coverage rose from 80% to 98%. In 2002 it was 99.5% and it is 100% with one of the lowest tariffs in Brazil,
- Over 80 cities in Brazil following Porto Alegre's budgeting system, and neighboring city of Viama voluntarily became a region of Port Alegre
- Porto Alegre has one of the highest living standards among Brazilian cities
- Customer satisfaction is very high

KEY CRITICAL FACTORS OF SUCCESS AND LESSONS LEARNED

Factors of Success

- No profit/no loss provides financial discipline
- Participation of all classes of society in budget hearings ensure that all classes are served sooner or later
- Increasing block tariff provides demand management

Lessons Learned

- Open and accountable management makes possible cost recovery accompanied by universal coverage and low tariffs
- Transparent and participative governance provides for successful customer satisfaction, profitability, tariff-setting, and demand management.

ANNEX 4 :
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