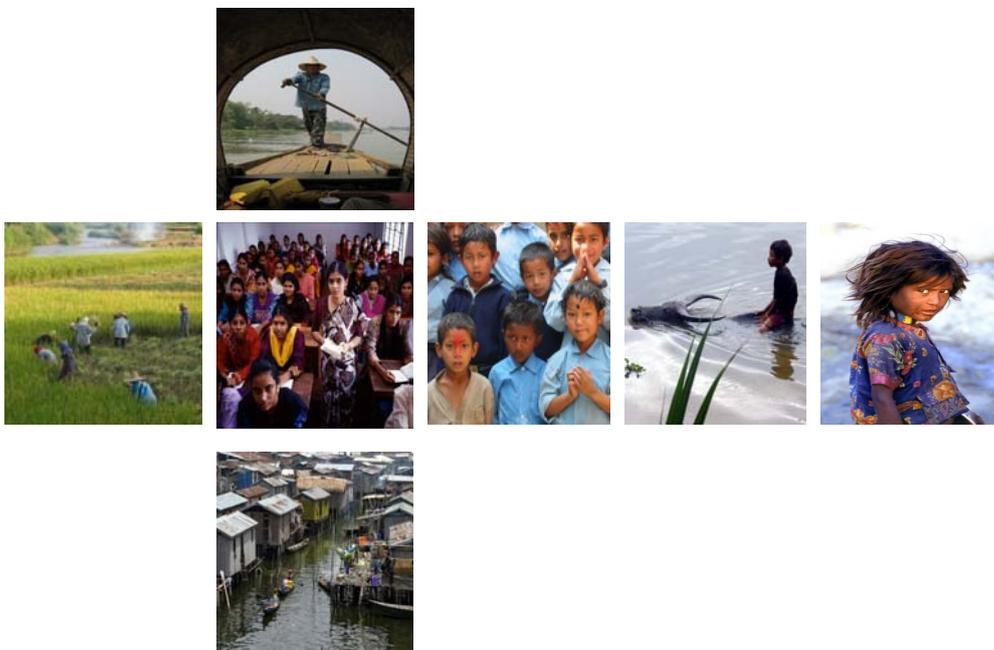


# UNESCAP Working Paper

## *Towards a New Model of PPPs: Can Public Private Partnerships Deliver Basic Services to the Poor?*

Miguel Pérez-Ludeña



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Public Private Partnerships Deliver  
Basic Services to the Poor?***

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**Towards a New Model of PPPs: Can Public Private  
Partnerships Deliver Basic Services to the Poor?**

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Abstract

The views expressed in this Working Paper are those of the author(s) and should not necessarily be considered as reflecting the views or carrying the endorsement of the United Nations. Working Papers describe research in progress by the author(s) and are published to elicit comments and to further debate. This publication has been issued without formal editing.

Public-private partnerships (PPPs) are often advocated as an effective mechanism for delivering water and sanitation services. At the same time it is argued that in developing countries the private sector lacks the incentives to extend services to the poor and that PPPs may only be able to improve services for the better-off. This paper briefly analyses the difficulties of reaching the poor through PPPs and tries to define a model of PPPs that are specifically designed to serve the poor. Based on a series of case studies documented by ESCAP, it observed that these types of PPPs often incorporate some of the strategies and methods of the informal sector, and include community organizations and non-governmental organizations (NGOs) among their partners. Governments should adapt regulations to accommodate these arrangements and encourage the participation of private companies, NGOs and community organizations. The analysis concentrates on the water sector but its implications can be applied to the delivery of other basic services as well.

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## 1. Introduction

Globally, millions of people lack access to water and other basic services: 2 out of every 10 persons in developing countries have no access to safe drinking water, 5 out of 10 no adequate sanitation and 9 out of 10 have no treatment for their waste water (ESCAP, 2006). In Asia 691 million people (every sixth person in the region), do not have access to safe, sustainable water supplies and almost half the population do not have access to decent sanitation (ESCAP, 2006). This situation brings hardship into the daily life of millions of people, constrains their income-earning opportunities and retards the economic growth of the developing world. Environmental degradation is another important consequence of inadequate waste water treatment, and its consequences are suffered disproportionately by the poor, who live in the worst affected areas. Within the poor it is the most vulnerable groups (women, children and the elderly) who bear most of the costs of under-provision, in terms of time queuing for water at public taps, loss of public spaces or health hazards.

While millions of people are underserved today, the demand for water and other public services across Asia and the developing world is expected to grow fast, driven by population growth, urbanization and modernization. As people move to cities, treating their waste and providing them with water becomes more complex and challenging. Fast economic growth, as experienced in many Asian countries, speeds up this process.

Water and sanitation services are usually delivered through state-owned utilities, but most of them are inefficient, under-funded and unable to expand services as required. In this context, developing countries around the world see PPPs as a viable strategy to reform the utilities and improve service delivery. PPPs combine the public interest of the Government with the efficiency of the private sector and have the capacity to increase the quality of the service while reducing government expenditures. However, PPPs have not always been successful, especially in relation to the extension of the services to poor people, and as a result private participation in the water sector is often treated with suspicion if not with open political hostility.

This paper argues that PPPs can be useful to deliver basic services to the poor if they are designed with this objective in mind. It proposes a definition of pro-poor PPP and briefly discusses its characteristics while proposing policy recommendations for governments and non-state actors alike. The concept and the examples expressed in this paper are derived from a number of case studies in various sectors documented as part of the ESCAP project on Pro-Poor Public Private Partnerships.<sup>1</sup>

The structure of the paper is as follows. A simple definition and typology of PPPs is proposed in section 2, with a short analysis of their advantages and limitations. Section 3 argues that institutional constraints prevent most PPPs from reaching the poor. Section 4 extracts the main lessons learned from case studies to define a new model of pro-poor PPP that includes the poor themselves in the design and implementation of the scheme and draws policy implications. Section 5 presents the conclusions.

## **2. Public Private Partnerships (PPPs)**

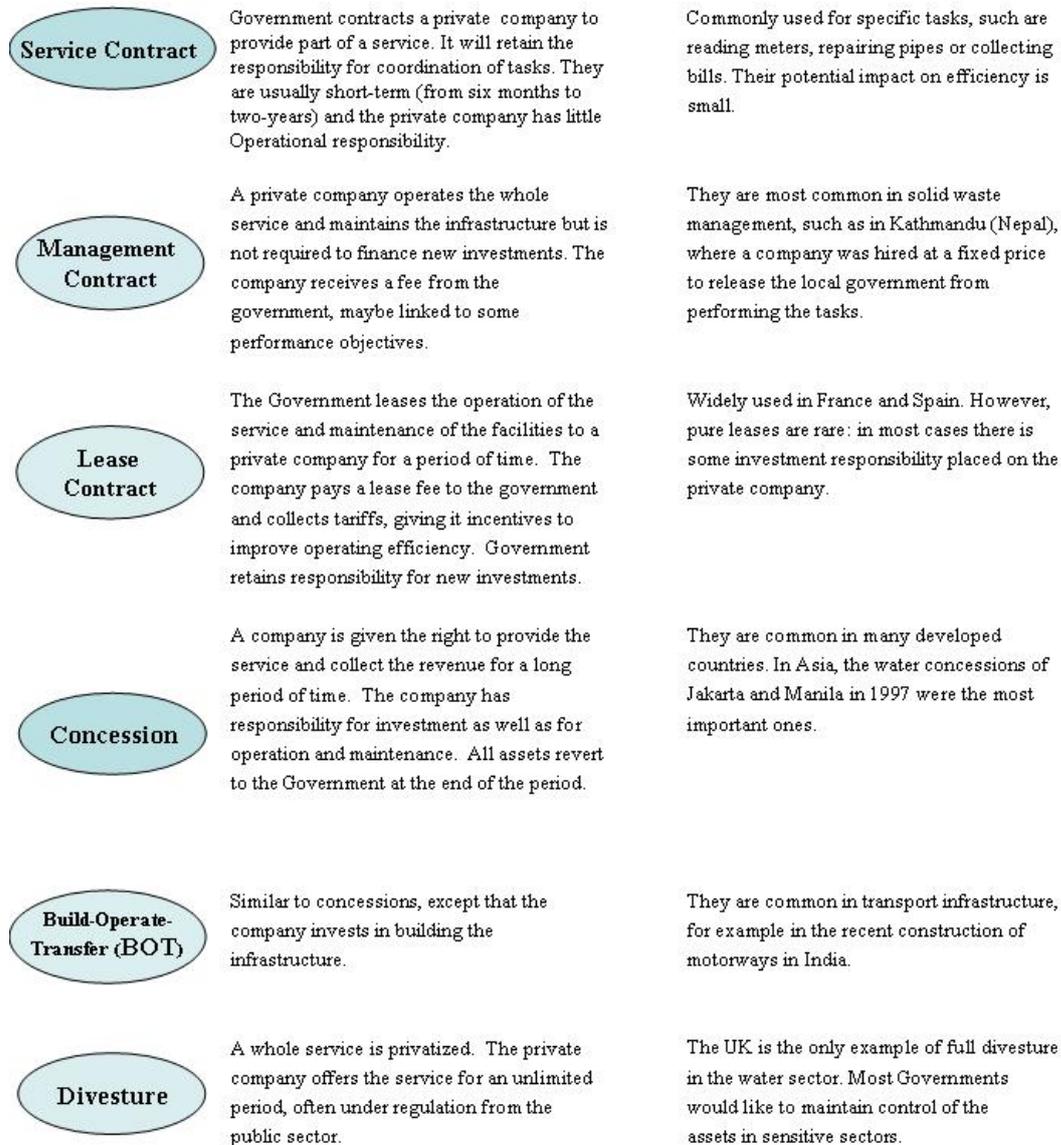
### **2.1 Definition and typology**

A PPP is an agreement between the public and the private sector for the construction of public infrastructure or the delivery of a public service in which resources, risks and responsibilities are shared among both partners. The partnership can take different forms, with the risks (and potential rewards) distributed according to the capacity of each partner to bear them. Figure 1 lists the most common types of PPPs ranked according to the level of risk assumed by the private partner.

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<sup>1</sup> Four of these case studies have been published in ESCAP (2005). Others are available at [www.unescap.org/pdd/water](http://www.unescap.org/pdd/water)

**Figure 1. Types of PPPs**



Source: UNDP (2004)

In any of these forms, participation of the private sector in the provision of basic services and infrastructure is now common in most developing countries. The Private Participation in Infrastructure Project Database<sup>2</sup> has identified 3,793 of these projects amounting to US\$1,091 billion during the period 1990 to 2006. Latin America has received more investments than any other region, but these have also been very common in Asia. However in both regions new investments have declined since 1997 due to macroeconomic crisis, unfinished reforms or the underdevelopment of local capital markets, and have only picked up again since 2004. This recent rise has concentrated in transport and telecoms while in the water sector new private investments focuses in smaller projects. Still, it is estimated that over 20 percent of all investment in infrastructure in developing countries is now done by the private sector.

## **2.2 Advantages**

The main reason for the popularity of PPPs is the perception that governments in developing countries are failing to meet the growing demand for public services such as water services and that private companies could deliver these services more efficiently (Megginson et al, 2001). In most countries in Asia water is still delivered through heavily subsidized state-owned monopolies, like the National Water Supply and Drainage Board of Sri Lanka (see Box 1) or the boards run by the different States in India. In China, even after the reforms, water production and distribution is still 87 per cent controlled by the state (OECD, 2005).

These utilities are typically inefficient in their operations and more respondent to political agendas than to the needs of their customers. They often charge subsidized tariffs for those that are connected to their service (mostly urban middle income customers) and have no resources (or incentives) to extend the service to those not yet connected. The amount of subsidies for urban water supply can be substantial: in India it reaches 0.5 per cent of GDP (OECD, 2007). Unaccountable management also

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<sup>2</sup> <http://ppi.worldbank.org>

contributes to wastes and inefficiencies. Annual losses in water, railroads, roads and electricity due to inefficiencies and mispricing in the early 1990s were almost as high as total investments in these sectors (World Bank, 2004b).

While in the long run private participation is expected to boost efficiency, in the short run Governments expect that the private contributions can alleviate the burden of infrastructure investment on public budgets. More than US\$30 billion is estimated as the investment needs in water and sanitation annually (ESCAP, 2006). Financing these investments exclusively through the Government will push public expenditure beyond what most countries can afford. Another reason to favour private investments is the superior technology that private companies, especially foreign ones, can bring. In China, companies like Veolia or Suez of France can raise most of the capital locally, but are requested by the local governments to bring the best level of technology in the world.<sup>3</sup>

Finally, introducing private companies in the delivery of basic services can help to increase the transparency of these sectors because it forces the Governments to acknowledge and account for the total costs of the services rather than hide them behind multiple layers of subsidies. Accountability to the public can also increase, especially when private provision allows customers to choose between different companies, although this is difficult for water distribution and other natural monopolies. Market competition by repetitive bidding can be a form to introduce competition in these cases, but it may not be applicable when long concessions are required because of the substantial investments needed.

### **2.3 Limitations**

PPPs can also have disadvantages. Compared with direct public provision, PPPs are complex deals that need to distribute carefully responsibilities and ownership of assets between the partners over a long period of time. The allocation of risks and rewards is always difficult and may result in conflicts that de-rail the project and may

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<sup>3</sup> “Returns flow on liquid assets”, Financial Times, 17 November 2004.

end up in litigation. By 2003, 40 per cent of private investments in water and wastewater done during the 1990s were either cancelled or under international arbitration (World Bank, 2004c). Most of this figure corresponds to the concessions of Buenos Aires and Manila, but there are many examples of conflict between partners in small PPPs as well that very often lead to the total collapse of the project.

These conflicts are often caused or worsened by an inadequate investment environment, including unstable macroeconomic conditions, insecure property rights, poor infrastructure and weak financial markets. The two largest water concessions in Asia, signed in 1997, never recovered from the financial and political turmoil brought by the financial crisis of that year. In Manila (Philippines), one of the two concessionaires declared bankruptcy after its foreign debt doubled in value because of currency depreciation. A similar problem affected the concession in Jakarta (Indonesia), where the 25 year contract with Thames Water was finally suspended in 2006.

While overall investment climate in many developing countries is still poor, regulating water and other public services is especially difficult and challenging because of some especial characteristics of these sectors: a) they have substantial economies of scale, that inhibit competition and increase the need for regulation; b) they require large sunk costs that impose considerable risks on investors and deter new entrants; and c) the services provided are considered essential, making their provision and pricing politically sensitive (Spiller, P. and W. Savedoff, 1999).

Taking into account the difficulties outlined above, it is admitted that many governments have allowed private sector participation in water provision before establishing the legislation and institutions needed to regulate the markets properly. The potential for conflict and regulatory needs vary depending on the type of arrangement. In general, the risk of conflict is higher when the investment requirements of the private company are higher, as in concessions, BOT or privatizations (Figure 1).

Although most developing countries have the basic regulations in place by now, they may still lack capacity for implementing them. This perception make investors

feel vulnerable and as a result they reduce their investments, demand a higher risk premium or both. Private investment in water in recent years has focused on bulk facilities such as water treatment plants, and avoided direct service provision to the public, where the potential for conflict is larger. Alternatively, they take management or lease contracts that require little investment and thereby reduce risk (Kerf and Izaguirre, 2007).

Another problem is the effect on poor people of the introduction of market principles and private sector operators in public services. If private companies bring fresh capital and technology and improve management of the utilities, service may be extended and quality improved to everyone, including the poor. In Argentina, 25-30 percent of the network expansion that resulted from the privatization of water services in the 1990s was targeted at the lowest 20 percent of the income distribution (World Bank, 2003),<sup>4</sup> but it is too often the case that the benefits of PPPs do not reach the poor. This is usually because profit oriented companies target the segments of the market where risks are lower and revenues are easier to generate. These are invariably the urban middle classes, which will see an improvement in the services they consume. On the other hand, the potential customers who are not connected to the service are perceived as a difficult and risky market and, in the absence of strong public policy guidelines to extend the coverage, they may be left out. In some cases the poor may loose-out from the withdrawal of subsidies that usually follows privatizations. Although subsidies are often poorly designed and targeted,<sup>5</sup> many poor people may suffer when phased-out if they are not appropriately compensated.

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<sup>4</sup> Although this may not be an isolated case, there were probably some especial conditions that facilitated this outcome: Argentina was a middle income country, in a moment of fast economic growth following a long period of neglected public services.

<sup>5</sup> Poor households received only a quarter of the state subsidies for water services in India in the late 1990s (World Bank 2004b)

### **3. Basic services for the poor and PPPs**

#### **3.1 Market failures**

Millions of people still have no access to water despite the fact that many of those are willing and able to pay an adequate price for the services. In fact, many of the poor are already paying high prices for their water, either in cash through the informal market or in kind through time wasted and foregone income opportunities. Very few private companies have identified this market as a growing business opportunity. Prahalad (2005) has argued that corporations need to change their strategies in order to service this large and expanding market and an increasing number of large companies are starting to do so, particularly in the consumer goods industry (Hammond et al 2007).

Although there is effective demand for water services among the poor, there is no market on which formal companies can operate because many of the institutions needed for a well-functioning market are missing or are not working properly. Companies may find more difficult to estimate demand or assess risks because information about customers and competitors at the lower end of the market is not available or not reliable. Property rights are not well-defined so if the company has to install physical infrastructure its ownership would be uncertain. Finally, the enforcement mechanisms are not effective, so they would not be able to pursue customers who fail in their obligations. These problems raise transaction and enforcement costs and increase the risks, forcing companies to charge more than what the customers are willing and able to pay. The result is a market failure in which institutional constraints prevent the formation of mutually beneficial transactions between private companies and the poor.

One of the most important institutional barriers that prevent the development of a water market for the poor is the legal status of the customers. The fact that many poor people have no legal title over their houses and are often threatened with eviction increases the risks of investing in installing pipes and other fixed assets. In some cases

the potential customers can have an illegal status in the place where they are living, which prevents any company to enter into formal agreements with them. Illegal immigrants are the most clear example, but in some countries internal migrants also need official permits to live in cities.

Some other times the barriers relate to cultural aspects or life styles, which may provoke mistrust between the community and the private company. More important can be the way the business practices of a formal company may clash with the habits and priorities of poor citizens. For example, many water utilities collect payments in large installments (to reduce collecting and processing costs), while people who rely on daily incomes would prefer smaller and more frequent payments. In the case of the Halgahakumbura water distribution system (Box 1), the company ensured that the payment mechanism was adequate for the needs of its customers and this fact was critical in the acceptability of the scheme.

### **3.2 Informal sector solutions**

When the government and the formal companies cannot provide water despite effective demand, community organizations or informal entrepreneurs may step in. Informal organizations can operate in these environments because they have low entry costs, are close to the community and can rely on informal mechanisms of enforcement for their operations. Informal entrepreneurs are normally poor people from the same community that they serve. They operate on a small scale, with minimum investments in fixed capital, which minimizes the risks of operating in uncertain environments. Because they have close knowledge of their customers (and because they are not concerned with official regulations) they can tailor their services to the exact needs of the community, including aspects such as the working hours or payment methods. They operate entirely in an informal environment, where customers, providers and the community follow informal mechanisms of accountability, so they are not affected by ineffectual formal enforcement mechanisms.<sup>6</sup> In many slums and peri-urban areas

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<sup>6</sup> Informal companies are still concerned about policy uncertainty, but at a significantly lower rate than formal sector firms (World Bank, 2004)

across Asia informal entrepreneurs transport water in trucks and sell it to households without pipe connections.

However, provision of water and other services through the informal sector has important limitations:

- Some services are simply out of reach to the informal sector with its little capital and low technology. This is the case of large scale waste water treatment. In most other cases, quality is invariably lower than what the formal sector can offer. In The Philippines, informal water providers reach 50% of households but their services are inconsistent and many of them do not survive a change in management.
- Even when the informal sector is able to deliver a service, it may charge higher prices than formal companies do. This is because its low fixed costs often translate into higher marginal costs. The clearest example of this is the provision of water through trucks, rather than through pipes, which requires a modest initial investment but has higher operating costs.
- Because informal entrepreneurs operate like any other business, they will under-provide services than benefit the general public more than the individual customers, such as waste water treatment. Community organizations can provide some public sector perspective within the informal sector, but sometimes their area of interest is too narrow for certain problems that need a broader view.
- Because the informal sector is by definition unregulated, sometimes it may be also unreliable and unaccountable to its customers, who lack any formal route of complaining. Users can be empowered through various means to prevent this, but in some cases, only the introduction of formal procedures can prevent abuses.

The limitations of the informal sector should not be an excuse to restrict its ability to operate. Instead, formal private companies and public organizations can replicate some of the strategies and practices that community organizations or informal entrepreneurs follow to reach the poorest customers.

## **4. Creating pro-poor PPPs: policy implications.**

Several experiences exist of PPPs that have combined the capital, technology and managerial capacity of formal companies with the informal sector's ability to reach the poorest customers. The practices documented and mentioned in this paper fall under this category, and are referred to as pro-poor PPPs.

We can call them pro-poor because they target the poor, with specific mechanisms to deliver water and other basic services to them and because poor people are included in the design and management of the operations.<sup>7</sup> Another important feature is that they are partnerships that go beyond an agreement between a private company and a government agency, including as well NGOs, community organizations and even informal entrepreneurs.

The following sections will look at the roles of government, private companies and civil society organizations in these partnerships, and suggest policy implications to improve the role of the Government and encourage the participation of the private sector.

### **4.1 Role of Governments**

The function of the public sector partner in a PPP is to look at the broader interest of the community and defend the long-term public interest, including environmental concerns and equal access to the service. In pro-poor PPPs a community organization or a NGO can be the public partner or perform some of the roles traditionally played by Government agencies. Community organizations that engage in these partnerships often benefit from them as an empowering experience that builds up their profile and capacity to engage in other activities. A case study of a water service in Yogyakarta (Indonesia) revealed how the community organization was

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<sup>7</sup> In this context the poor are defined not necessarily in terms of income but as those who have no access to a specific service.

empowered by its success and has expanded its reach in neighbouring communities and develop plans for other unrelated services.<sup>8</sup>

It is almost always the case that some government agency, at either national or local level, will be involved in the partnership. Most interventions require administrative permits from central or local governments, although many operate with informal or tacit agreements only, such as the Community Sanitation Centres described in Box 3. In many cases the local governments provide land for the operations, but the two most important roles for Government agencies are as regulators and providers of subsidies.

#### **4.1.1 Regulations**

As was referred above, lack of an adequate regulatory framework is probably the main reason for failures of PPPs in developing countries. Ideally the regulatory functions should be with an independent government agency, separated from the one delivering the service and this has been the tendency in many countries: since the early 1990s more than 200 independent regulatory agencies have been set up in developing countries (World Bank, 2004a). However, many countries still lack independent regulators in crucial sectors. In the case of the water distribution system in Colombo (Sri Lanka), the Water Board was at the same time partner and regulator. Situations like this generate insecurity in the private partners, who feel that in case of conflict there is no guarantee of a fair and equal treatment.

Even when Governments have efficient systems in place to regulate PPPs, there are regulatory issues specifically affecting pro-poor schemes that are usually overlooked. For instance, the existence of a progressive water tariff which penalise higher consumption and is supposed to benefit low-income households will discourage small-scale initiatives to buy water in bulk and distribute it in areas that are not served by the public utility. In these situations Governments should have the flexibility to

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<sup>8</sup> “Water Supply Management in Cokrodiningratan Community, Indonesia” in [www.unescap.org/pdd/water](http://www.unescap.org/pdd/water)

adapt the water tariffs accordingly, offering these private suppliers a business opportunity to extend water coverage.

### **Box 1. Water Distribution in Colombo (Sri Lanka)**

In Halgahakumbura, a squatter settlement in Colombo, Sri Lanka, 600 families used to receive their water through public stand posts. Because the water was free, the service generated no revenue for the National Water Supply and Drainage Board (NWSDB) and encouraged wasteful use by the population. The quality of the service was poor and people wasted time queuing and carrying water home. The NWSDB considered that establishing house connections was too costly and risky, because the capacity and willingness of the residents to pay was unknown.

In 2004, ESCAP forged a partnership between the NWSDB, the community, a local NGO and a small private company without experience in water distribution. The NGO organized consultations to assess the willingness to pay for the water and to develop the community's ownership of the scheme in order to reduce the risk of non-payment. The private company won a concession to lay pipes in the settlement, install individual water connections and distribute water to the households.

The company sells water at the official price and buys it in bulk from the NWSDB at a lower price set at the bidding process. Because the company is small and has low operating costs, it can make profit on small margins. It has opened an office close to the community to facilitate payments and deal with customers. Nevertheless, there have been several conflicts between the community and the company, which were only overcome through the mediation of the NGO.

The scheme required a change of attitude by all partners. The community has learned that it is beneficial to pay for the water it receives. The private company discovered that there is a market for water among the poor. The NWSDB is paid for the water it supplies without having to collect individual charges, and sees a reduction in the wastage of water.

There are other examples in other countries of informal water pipe networks, often working on similar principles of low-cost investment and community participation and ownership. In Manila (Philippines), the water utility has designed a programme to encourage these schemes, of which over 400 have been implemented so far.

*Source: ESCAP (2005)*

Moreover, pro-poor PPPs often take into account informal arrangements that have emerged outside the formal law and governments regulating these markets must have the flexibility to respect them. The most important example relates to tenancy agreements. Since many of the poor have no legal title to their houses governments

will have to accept these informal agreements while regulating pro-poor PPPs. The Water for the Poor initiative in Manila (Philippines) waived the legal tenure requirement to serve the households, and this was probably the most important condition that allowed the programme to offer piped water services to over 100,000 households in the slums (ESCAP, 2005).

#### **4.1.2 Subsidies**

Another crucial role of governments (often shared with foreign donors) is to provide subsidies to ensure that the services reach the poorest customers. Pro-poor PPPs in the water sector rest on the assumption that the poor can pay for water and that are willing to do so, if it is provided in ways that fit their needs, but still a large segment of the population (the poorest of the poor) may be completely unable to pay the full cost of it. For these cases, a well-thought system of subsidies needs to be designed, preferably subsidizing connection rather than consumption, since the poor are the ones who are not connected and providing a one-off payment is easier to administer than a permanent subsidy. In any case, this requires technical capacity and independence from political interference.

Pro-poor PPPs, with their decentralised approach and their emphasis on community participation are well placed to avoid misappropriation of subsidies. Because the subsidies are designed at the community level, the risk of mistargeting the poor is lower. Informal procedures with the participation of everyone can determine who is eligible for subsidies and how to monitor compliance with the conditions. In the case of the electrification project at Cinta Mekar village in Indonesia (Box 2), the community decided a set of criteria for households to be considered poor and benefit from subsidies. These criteria were: has no land, has no education, has no job and has no capital to start a business.

The cases described in ESCAP (2005) have all benefited from some form of external aid, but this was typically provided as an initial grant to help start the operations. In the Community Toilets practice in Indonesia or the Solid Waste Management practice in Dhaka, foreign donor assistance was necessary to acquire

land or built infrastructure. In the Water Distribution practice in Colombo, foreign assistance was provided directly as an initial subsidy to the private investor. In any case, the practices are designed in a way that their sustainability relies exclusively on local resources, mostly on the fees paid by the users.

### **Box 2. Micro-hydropower plant in Indonesia**

Electricity generation through micro-hydropower has great potential in Indonesia, and is being promoted by many development agencies. However, the expected financial returns from these small plants are usually too low to justify their construction and operation by private companies, and communities do not have the financial and technical capacity to implement them on their own. Furthermore, the impact of the plants on the local environment (including the use of water) can be a matter of confrontation between companies and communities.

A project of ESCAP in the village of Cinta Mekar, in Subang District, West Java, tried to overcome these obstacles through a partnership between the community and a private company. The company provided the technical assistance and financial capacity, while the Cooperative provided local ownership of the project and the human resources needed to construct and run the plant. The plant is now owned by a joint venture between the local cooperative and the private company, who share the profits generated. The capital share of the community was provided by ESCAP as a grant.

The power plant has a capacity of 120Kw and has been operating normally since its inception. It generates monthly revenue of Rp 25,920,000 (US\$ 2,749) and a monthly profit of Rp. 10,420,000 (US\$ 1,105). The Cooperative uses its share to implement its Social Development Plan.

The partnership mechanism has been key to overcome two obstacles. The first one is the running cost of operating the plant, which is reduced because it is done by community. Staff from the private company only need to intervene if major technical problems occur. The second one is the use of natural resources, in this case water, for which there are special provisions in the partnership agreement that specify under which conditions irrigation has priority over electricity production.

*Source: Project documentation by ESCAP*

Subsidies can also ensure adequate waste water treatment. Although inadequate waste management causes serious environmental degradation and health hazards for people living in affected areas, it is difficult to charge individual users for these services. Subsidizing the schemes can be one way of ensuring the services are delivered. Another one will be to strengthen the enforcement mechanisms through community participation, so individual users will face pressure from neighbours to pay for the service. This is common practice in many development initiatives such as the community-led total sanitation, and can be adapted to PPPs.

Some schemes have found imaginative ways of generating revenue without recurring to subsidies: in Dhaka, this is done through recycling of organic waste into valuable compost that is sold to farmers; in Bhubaneswar (India) an area previously polluted by untreated waste water was turned into a recreation park that generates fees and covers the cost of waste water treatment.

#### **4.2 Role of private sector**

If private companies are to be attracted to the provision of water to the poor, they will need to be convinced of the profitability. As we have seen, an adequate investment climate is necessary and it will be the role of public institutions to create the needed conditions. Even when this is in place and a business opportunity exists, the public partners may have to promote the case actively to the private companies, especially when the schemes are innovative and have not been tried before. In most of the documented cases foreign donors or public agencies have pro-actively motivated the private companies to participate, sometimes with open subsidies or other advantages. The water distribution system in Colombo provided an up-front grant to the private company. Other possibilities are guarantees, subsidised loans, performance requirements (you have to serve the poor areas in order to be able to work in the wealthy areas) etc. Investment promotion agencies can play this role, helping to attract both foreign and national companies to PPPs designed to serve the poorest customers.

Corporations that want to explore these opportunities must be aware that their business practices and cost structures are often inadequate to serve these markets. Two strategies can be pursued: one is to engage in pro-poor PPPs small local companies with low cost structures and proximity to the communities being served, the other is to break-down the operations so that a large company can work together with smaller companies, or even informal sector institutions. The former was done in the water distribution system in Colombo, where a small construction company could extend the pipes inside the slum at lower costs than the national utility. The later was

the approach of the Water for the Poor scheme, part of the Manila Water concession. In this scheme the large private company sells water in bulk to community organizations who distribute it inside their own communities. Some public services require capital investments or sophisticated technologies and may not be within the scope of small companies but the tendency is to increase the possibilities of unbundling the service delivery in components, some of which can be performed more efficiently by small companies, communities or even informal service providers.

Beyond the short-term profitability, private companies, especially large ones, should also keep in mind the growing potential of these markets. A successful experience in delivering water to a community, although small, may have a big potential for replication in other similar communities for the company who initiated it. Furthermore, in fast-growing economies, entering the lower-income markets of today can be seen as investing in the middle income markets of tomorrow. Some large companies are already implementing specific strategies to serve the market of poorer customers in developing countries. The best examples, such as Unilever and Procter and Gambler, are in the consumer goods industry, rather than in water and other basic services.

### **4.3 Role of Communities and NGOs**

The most effective way to ensure that a PPP in water will benefit the poor is to engage the poor themselves in the design and management of the practice. This is often done through community organizations (either existing ones or newly created for the occasion) who may participate as active partners or may be at least consulted in the process. Community organizations will typically have very little capacity to deal with the procedures involved in even a simple PPP. To cover this gap, the participation of a local NGO is often required (Box 3). NGOs can have sufficient resources to understand the legal and technical aspects of the schemes to be implemented but at the same time can be close enough to the community to break the barriers and bring the partners together. The costs of the intervention of the NGO should be taken into account when designing these schemes, and either covered by the revenue or be part of a subsidy. In a case study of the SANIMAS programme in

Indonesia, these costs are clearly reflected in the budget and covered at 50% by the municipality and the NGO itself.<sup>9</sup>

### **Box 3. Community Sanitation Centres in Tangerang**

Tangerang City is a neighbouring city of Jakarta, the capital of Indonesia. It is a fast growing industrial area, providing jobs and incomes to migrants from the rest of the country. However, national and municipal authorities have been unable to provide many basic services, including water and sanitation. Only 22 per cent of the population has access to clean water provided by the utility.

A local NGO has constructed a series of centres to provide water and sanitation in these areas. These centres are built in the middle of the community and are maintained and operated by a local family, who runs them as a concession. They sell water by the bucket and provide toilet, shower and washing facilities. Treatment of the wastewater produces biogas that is used locally for cooking. Each centre services about 350 - 500 users per day.

The initial cost to build one centre ranges from US\$ 15,000 to US\$ 18,000 and this is provided by international donors through BEST. The average annual operation costs range from US\$ 1,600 to US\$ 2,400 and is covered by user fees.

*Source: ESCAP (2005)*

Community participation is also important for securing monitoring and enforcement mechanisms. When many of the formal mechanisms for monitoring and enforcing agreements are not functioning properly, the practice will need to rely on informal ones, for which it is important the active participation of the community and its ownership over the practice. Microfinance institutions across the world have understood this and routinely rely in these informal mechanisms to select the best customers and ensure loan recovery. Similarly, to avoid free raiding from water services, a community may apply peer pressure to non-paying households in a much more effective way than a Government or private company would.

In many of the cases documented an NGO has developed the idea and convinced other partners to join. In many instances this role is even centred on a

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<sup>9</sup> See "Sanitation by the Community in Denpasar, Indonesia (SANIMAS)" in <http://www.unescap.org/pdd/prs/ProjectActivities/Ongoing/Water/CaseStudy.asp>

single person. The presence of such a “champion” is often required because these PPPs are still outside the usual practices for both public and private partners. Unfortunately this is one of the major obstacles for replicating and upscaling these initiatives.

## 5. Conclusions

PPPs are a way of combining the social responsibility and public interest of the Government with the efficiency, management and financial resources of the private sector. Since the early 1990s they have been frequently implemented in many developing countries but at the same time their effectiveness is questioned, especially regarding their capacity to bring water and other basic services to the poor and their popularity with Governments (and voters) is generally low.

The regulatory framework to accommodate PPPs in most countries has been perceived as inadequate or inconsistent and this has deterred investors to these industries. Since the Asian financial crisis ten years ago, private investment in water and sanitation infrastructure has decreased. Despite the benign macroeconomic environment of the past years, and the substantive capital flows to emerging markets, there has been only a modest upturn in this tendency and it has concentrated on the less conflicting segments of the market (waste water treatment plants). At the same time, policies and regulations have failed to provide the necessary incentives to extend the delivery of water to the poor. Although private companies are increasingly aware of the size of the market for serving poor customers in developing countries,<sup>10</sup> private investment in services and infrastructure to serve this market is not expanding.

The model of pro-poor PPPs defined in this paper can serve to overcome the constraints to reach poor customers. Although most of the cases have benefited from some external aid or subsidy, this was typically provided as a start-up grant; they all

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<sup>10</sup> The water market for customers at the “bottom of the pyramid” has been estimated at US\$6.4 billion annually only in Asia (Hammond et al 2007).

rely on the principle that the poor can pay for the services and that the practices can be sustainable in this way. Another distinctive feature of these models is the attention given to alternative arrangements, often informal, to the delivery of basic services, which are adapted and sometimes incorporated into the new formal agreements.

These practices have introduced new institutional arrangements that extend the market for basic services to areas which were previously served through imperfect informal mechanisms or not served at all. The main challenge is to expand the coverage of initiatives like these, mainstream them into national policies and implement them at a wider scale.

**Table 1. Key institutional innovations identified in pro-poor PPPs**

<b>Area of innovation</b>	<b>Key benefits</b>
<ul style="list-style-type: none"> <li>○ Involve poor people in the design and management of the scheme (usually through community-based organizations)</li> </ul>	<ul style="list-style-type: none"> <li>○ Increased ownership of the practice among its customers, reducing non-payments.</li> <li>Better targeted subsidies for the families that need them</li> </ul>
<ul style="list-style-type: none"> <li>○ Incorporate methods and procedures from the informal sector</li> </ul>	<ul style="list-style-type: none"> <li>○ Increased capacity to reach the poor, for instance by recognizing informal tenancy</li> <li>Lower operating costs</li> </ul>
<ul style="list-style-type: none"> <li>○ Accept role of NGOs</li> </ul>	<ul style="list-style-type: none"> <li>○ Improved communications; conflict resolution</li> </ul>
<ul style="list-style-type: none"> <li>○ Discover the market at the bottom of the pyramid</li> </ul>	<ul style="list-style-type: none"> <li>○ Companies reduce costs and adapt to serve poorer customers</li> </ul>

The pro-poor PPP cases that have been tested and proved to be efficient and sustainable should be disseminated in a way that their lessons can be understood by communities, local governments and relevant stakeholders in other places. More important, these local actors must be given the space to pursue this initiatives. National governments would have the responsibility to create a conducive environment for pro-poor PPPs by improving the general investment environment and

by adapting the regulations of the water sector to the conditions of small-scale providers and poor users.

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