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Why is Access to Basic Services Not Inclusive?  
A Synthesis with a Special Focus on Developing Asia

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Guanghua Wan and Ruth Francisco

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Guanghua Wan<sup>1</sup> and Ruth Francisco<sup>2</sup>

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<sup>1</sup>Mr. Guanghua Wan is Senior Economist in the Regional and Sustainable Development Department of the Asian Development Bank (ADB)

<sup>2</sup>Ms. Ruth Francisco is a PhD candidate at the University of the Philippines School of Economics (UPSE).

**Asian Development Bank**

Asian Development Bank  
6 ADB Avenue, Mandaluyong City  
1550 Metro Manila, Philippines  
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## **Abstract**

This paper synthesizes factors that could contribute to the failure of basic service delivery to the poor. It also highlights successful projects and good practices from developing Asian countries which may help promote inclusiveness in providing basic social services in developing countries. While both demand and supply factors are discussed, special attention is given to noneconomic factors including institutional deficiencies, the lack of information or awareness, and the multiplicity of basic services.

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## **ACRONYMS**

LGU	local government unit
NGO	nongovernment organization
PPWSA	Phnom Penh Water Supply Authority
PRC	People's Republic of China
QIDS	Quality Improvement and Demonstration Studies
SBA	skilled birth attendant
SMC	school management committee
TBA	traditional birth attendant
WHO	World Health Organization



# 1. Introduction

It is widely accepted that the provision of basic social services, such as schooling and health care, represents both ends and means of economic development. For example, educational attainment is commonly viewed as an important dimension of human quality in Asia. On the other hand, shortage of skilled labor is often cited as one of the growth constraints for a country or a particular sector. Recognizing its importance, delivery of basic services has attracted considerable attention from national governments, development agencies, nongovernment organizations (NGOs), and the research community.

Despite increased supply of basic services in developing Asia and beyond, evidence show that the poor failed to gain sufficiently from such increases. This is rather regrettable because the ultimate goal of any development effort is to help the poor. Consequently, there is a need to explore the causes of such failures. And this is precisely the objective of this paper. Section 2 provides a brief account of the current state of service delivery in developing economies with a special focus on Asia. This is followed in Section 3 by a synthesis on barriers faced by the poor for accessing various services. To facilitate learning from past and ongoing interventions, good practices in pro-poor service delivery efforts in developing countries will be highlighted in boxes in this section. Finally, Section 4 presents the summary and concluding remarks.

## 2. Unequal Access to Basic Services: A Brief Account of the Current State

The past two decades saw increasing efforts by developing countries and development institutions to improve quality and accessibility of basic social and infrastructure services and to make them more inclusive. However, the outcomes of these interventions are mixed. While some interventions have been successful, others have benefited the rich more than the poor. In many communities in the developing world, basic services still fail the poor (O' Donnell et al. 2007).

### 2.1 Primary Education

Because the poor are usually the last to be covered, deficits in enrollment are mostly accounted for by the poor. Poor children are less likely to start school and are more likely to drop out from school (World Bank 2004a). In India, the poorest half of the rural population accounts for 72% of the deficit in grade 5 completion among the 15–19 year olds (World Bank 2004b). In Pakistan, Philippines, and Bangladesh, the gap in school attendance and dropout rate between the poorest and richest income quintiles remains high (Table 1).

**Table 1.** Proportion of girls and boys attending school among the poor and richest quintiles (%)

Country (survey year)	Poorest		Richest	
	Boys	Girls	Boys	Girls
Bangladesh (2004)	71	77	90	88
Nepal (2006)	83	78	95	94
Pakistan (2006/07)	49	32	88	88
Philippines (2003)	69	75	90	91

Source: Demographic and Health Surveys. Available: [www.measuredhs.com](http://www.measuredhs.com) (Accessed: 17 November 2008)

Note: Values reflect primary school children aged 6–10 (5–9 for Pakistan).

### 2.2 Health Services and Public Spending on Health Care

Health services fail to reach majority of the poor, who share a greater burden of disease. Poor households are five times more likely to become sick than richer households (Dalton and Peacock 2005). Also, they are less likely to receive basic health services (Barat et al. 2004, Pillai et al. 2003, Peters et al. 2002, Mahal et al. 2000, Demery 2000, Makinen et al. 2000). Poor children, for instance,

are usually less likely to be fully immunized even in countries where national immunization programs are in place (Yazbeck et al. 2005, Wagstaff 2002). According to Koenig et al. (2007), pregnant women belonging to the poorest quintile in Bangladesh are eight times less likely to have skilled birth attendant (SBA)-assisted delivery and nine times less likely to have facility-based delivery.

Significant gaps in the proportion of facility-based deliveries exist between the poor and the rich, particularly in South and Southeast Asia (Figure 1). The figure indicates that publicly provided maternal and neonatal health services largely benefit the rich although they are intended for the poor. Based on data from 21 countries, Filmer (2003) concluded that there is a big gap in the share of total health expenditures that benefit the poorest and richest income quintiles. While 25% of subsidies benefit the richest income quintile, only 15% of health subsidies benefit the poorest income quintile.

### 2.3 Water and Sanitation

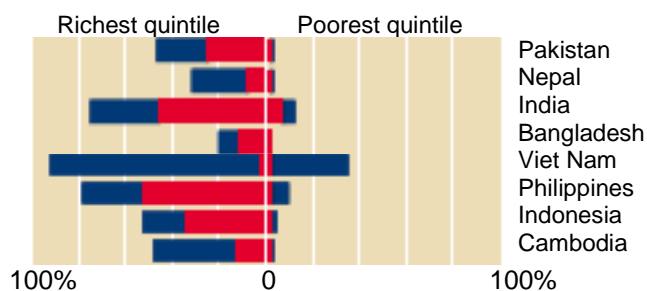
Two thirds of Asian population still lack access to adequate sanitation, majority of which are poor (Bridges 2007). Over the period 1990–2006, the use of improved sanitation (including flush toilet, pour-out toilet/latrine, ventilated improved pit latrine, pit latrine with slab, and composting toilet) is significantly lower among the poor (WHO/UNICEF 2008). Recent data drawn from *Multiple Indicator Surveys* (MICS) and *Demographic and Health Surveys* (DHS) in 38 developing countries indicate that the poorest quintile is three times less likely to use improved sanitation than the richest quintile (Figure 2).

Defecation in open spaces such as fields, forests, bushes, and bodies of water is an indication of lack of access to sanitation. Due to limited coverage of sewerage systems, the proportion of people practicing open defecation is notably high in both urban and rural areas of South Asia, 15% and 63%, respectively (WHO/UNICEF 2008).

In Nepal, while 79% of the richest income quintile has access to improved sanitation, only 10% of the poorest quintile has access (UNICEF 2006). In the Philippines, the proportion of low-income households with access to sanitation is at least 22% lower than high-income households (DOH 2008a). Needless to say, the gap in access to sanitation between urban and rural residents is significant (Pretus et al. 2008, Table 2). In Cambodia, 56% of urban households have access to improved sanitation. This percentage is only 16% in rural areas. In Jakarta, Indonesia, a big gap also exists between low- and high-income households with access to sanitation (World Bank 2004a).

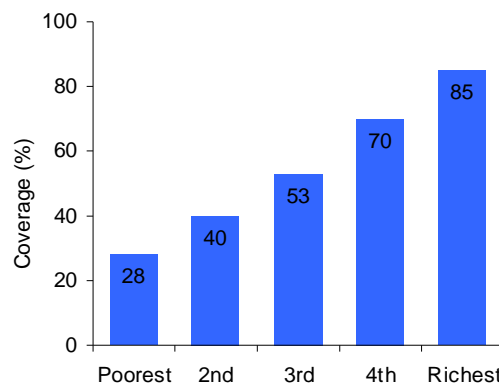
Waterborne diseases represent a common health problem in developing countries because of poor water supply. As of 2000, coverage of urban water supply in Asia is below 30%. In areas with access

**Figure 1. Proportion of births delivered in public and private facilities**



Notes: BLUE – public; RED – private.  
Source: World Bank. 2004.

**Figure 2. Improved sanitation coverage in 38 developing countries by wealth quintile**



Source: WHO/UNICEF. 2008.

to safe water and sanitation, service is below par. In the Philippines, for example, at least one half of local government unit (LGU)–operated water systems do not meet drinking quality standards (DOH 2008b). Surveys indicate that waterborne diseases rank as the second leading cause of morbidity (DOH 2008b).

The proportion of South Asian population with access to safe water is low—Bangladesh (74%), Bhutan (62%), and Sri Lanka (79%). There is also inequity in water access. In India, the poor are often confined to daily water consumption of below 15 liters per capita, while the rich consume up to 300 liters per capita per day (ADB 2006). The situation is similar in Indonesia—more than 30% of poorest households have no water at residence. For the rich, this percentage is less than 10% (World Bank 2004a).

## 2.4 Electricity

For South Asia, electricity coverage has expanded from around 41% in 2001 to 52% in 2005 (IEA 2002, 2006). Nevertheless, it remains to be the second region with the least electricity coverage in the world. In addition, the rural–urban difference in coverage rate is high. More than 80% of those who have no access to electricity reside in rural communities (Komives et al. 2005, IEA 2006).

# 3. Barriers to Service Delivery and Cases of Successful Interventions

Generally speaking, the failure of effective service delivery to the poor is driven by a combination of demand- and supply- side factors. On the one hand, use of basic services, even when available and adequate, would be low if demand constraints are binding. On the other hand, if the quantity or quality of supply is inadequate or uncertain, access would remain limited even though households can afford the services. When both supply and demand factors are met, access may still be hampered by a set of noneconomic barriers, including institutional deficiencies.

## 3.1. Demand Factors

The best-understood access barrier to service is lack of affordability. However, as argued below, even when a service is provided free or at low cost, poor households may still be unable or decide not to use them.

### 3.1.1. Although water/electricity tariffs are low in most developing Asian countries, the cost of connections can be high.

The high connection cost is one major factor explaining why many poor households do not have access to water service and electricity. In some areas, water connection can cost as much as \$200, while the tariff can be as low as \$0.05 per cubic meter (McIntosh 2007). In the Philippines, water connection fee represents 25% of annual household income for the poorest quintile (UNDP 2006). In this case, poor households may not afford reliable water supply even if installment payment option is

**Table 2. Proportion of households with access to improved sanitation facilities (%)**

Country (survey year)	Urban	Rural
Cambodia (2005)	56	16
India (2005/06)	53	18
Indonesia	65	27
Nepal (2006)	37	20
Pakistan (2006/07)*	76	36
Philippines (2003)*	77	54

Source: Demographic and Health Surveys, see [www.measuredhs.com](http://www.measuredhs.com) (Accessed: 17 November 2008).  
Note: Except for Indonesia and Philippines, data for improved (unshared) sanitation facilities include any flush toilet facility, ventilated improved latrine, and pit latrine with slab. Data for Philippines cover households with own flush toilet only.

available. This is why illegal connections are so widespread, especially in the poor areas of Manila (Bridges 2007).

The average domestic tariff in Asia is only \$0.18 per cubic meter (ADB 2006). However, such a low tariff means little to the poor because they cannot afford the connection fees and they have to turn to alternative suppliers. These suppliers usually charge much higher tariffs than the water supplied by service utilities (ADB 2006). In Manila, for instance, while the poor pay \$15 a month to get water from intermediaries, connected users pay only \$5 per month (ADB 2006). This clearly indicates a mismatch in the pricing and the institutional structure of water service delivery (Davis et al. 2008). Aside from ability to pay, willingness to pay varies across communities (Box 1). Hence, for installment option to make an impact in the poorest communities, water connection subsidy or deferred payment option may also be required. Box 2 provides additional insights as to how some Asian cities have made water services more affordable to the poor.

**Box 1. The willingness to pay for in-house access to water supply varies across communities**

- In water project sites in Sri Lanka, even the poor are willing and able to pay for connection (ADB 2002).
- In Dalian, People's Republic of China, affordability of water connection and supply is not an issue despite large increases in domestic tariff rates (ADB 2002).
- In Hyderabad, India, many poor households are willing to invest in water network, as well as sewerage system, if provided with financing at market rates (Davis et al. 2008).
- In the Philippines, of those who use hand pumps and standpipes and without in-house connection, only less than half are willing to pay to get connected. Nonetheless, more households are willing to pay to connect if installment payment is an option (ADB 2002).

**Box 2. Making water services accessible and affordable to the poor**

- Phnom Penh, Cambodia—more than 80% of residents enjoy 24-hour supply of clean water at only \$0.25 per cubic meter (10 cents below the recommended tariff for Asian cities). Despite the low tariff, the Phnom Penh Water Supply Authority generates enough revenue to fully cover operations and maintenance because of high collection rates.
- Malé, Maldives—Residents agreed to pay \$5 per cubic meter to operate seawater desalination plants and provide 24-hour water supply, at the time when the groundwater lens was heavily damaged by pollution. To afford the high tariff, Malé residents consume only 34 liters per person per day (6 liters below the average consumption in other Asian cities).
- Katmandu, Nepal—City leaders segmented the city into individual water supply zones. The tariff is raised one zone at a time, as the city's water system is being upgraded.

Source: ADB (2006)

### 3.1.2. High cost of latrine construction

Lack of financial resources is one major factor preventing the poor from building their own latrine. For most Nepalese households, they have to borrow from private moneylenders for this purpose, with an interest rate of around 12%–36% (Pretus et al. 2008). Leaving credit availability aside, loan repayment is a major concern, especially for the poor. For household already burdened with debts, it

requires more than just providing loans with low interest rate or hardware subsidies (Box 3). ADB encountered this problem during the start-up of the Community-Based Water Supply and Sanitation Programme in Banskhor, Kapilvastu district in Nepal. Because of the low uptake of revolving loan funds, the project was forced to distribute funds on a first-come, first-serve basis (Pretus et al. 2008). In Ramghat (Surkjet), Nepal, despite having access to hardware subsidies, households still avail informal loans to construct latrine as 70% of Nepalese households have outstanding loans that need to be repaid (UNICEF 2006).

### **Box 3. Financing options for better sanitation outcomes**

Various models have been adopted to improve sanitation coverage in Nepal. They include one or a combination of hardware subsidy, loans, and support for community awareness. The results indicate that

- Hardware latrine subsidy is resource intensive. It does not encourage ownership among recipients and is often unsustainable. Examples of fully subsidized projects include: CARE's Accessing Services for Households program and World Bank's Poverty Alleviation Fund.
- Minimum subsidies and revolving loans require less program funds and promote ownership but can be ineffective in reaching the poorest households. Unavailability of necessary materials may prevent latrine construction and maintenance. Because of these, it can be ineffective in improving sanitation outcomes. Examples of nongovernment organizations that provide minimum subsidies include Rural Reconstruction in Nepal and Community Forest.
- Community-led latrine subsidies that raise community awareness and encourage collective action to adopt safe hygiene and healthy behaviors can better target program resources and promote sustainable sanitation outcomes. Examples of successful community-level programs in Nepal include ADB's Community-Based Water Supply and Sanitation Programme and Nepal Water for Health's Community-Led Basic Sanitation for All. The programs encouraged households to build latrines from self-initiation by creating community awareness. These programs also provided financial and hardware subsidies to the very poor households and revolving loans for low- and middle-income households.

Source: Pretus et al. (2008)

### **3.1.3 Unaffordable education and health services**

Except in Sri Lanka and Bangladesh, South Asian public schools charge tuition fees. In Cambodia, such fees account for 80% of total household expenditures on primary education for the poorest quintile while in Thailand the percentage is almost 50% (World Bank 2004b). Even in the People's Republic of China (PRC) and Nepal, the figure amounts to 29%.

Relatively few seek basic maternal care in Bangladesh primarily due to concerns about medical costs (Koenig et al. 2007). On average, only one out of three sought care in a facility even among women who reported having one or more life-threatening pregnancy complications. In Cambodia and India, the decision to treat children among poor households is deterred mainly by the lack of financial resources (Annear et al. 2008, Pillai et al. 2003).

### **3.1.4. Opportunity cost and out-of-pocket expenses**

Although many countries have attempted to abolish tuition fees, there still exist other costs deterring poor children from attending school. School attendance entails opportunity cost, especially among the poor. Moreover, this cost increases with children's level of schooling or ability. Going to a health

facility to receive even the most basic maternal and child health services also entails opportunity cost to both the mother and the patient.

Aside from the opportunity cost, there are other direct and indirect costs for school attendance or facility visit. Poor families could be burdened with the cost of medicines, laboratory tests, and room and board (for in-patients), as well as transportation and food. They also pay for compulsory uniform, school supplies, compulsory/voluntary contributions, and transportation allowance. Many public schools in South Asia charge textbook fees and require parent-teacher association and other community contributions.

Table 3 shows that out-of-pocket expenses, as a proportion of health expenditures, remain high, especially in South Asia. Medicines account for 30%–50% of average total health care expenditures in developing countries (Whitehead et al. 2001). In the Philippines, the lack of capacity to pay, especially among the poor, severely hampers access to essential medicines (DOH 2008a). Out-of-pocket health expenditure can lead to indebtedness and impoverishment among the poor in Cambodia (Van Damme et al. 2004) and Viet Nam (Wagstaff and van Doorslaer 2003).

**Table 3. Out-of pocket expenditure on health, by region (2006)**

Region	Out-of-pocket expenditure (% of private expenditure on health)	Births attended by skilled health staff (% of total)
East Asia & Pacific	88	87
Europe & Central Asia	82	95
Latin America & Caribbean	74	88
Middle East & North Africa	90	77
South Asia	94	41
Sub-Saharan Africa	45	45

Source: World Development Indicators. Available: [www.worldbank.org/data/wdi](http://www.worldbank.org/data/wdi). Accessed: 2 November 2008.

### 3.2. Supply Factors

Needless to say, when supply is absent or limited, it becomes difficult for the poor to access any service. For example, the availability of teachers, classrooms, desks, and books obviously limits the number of children that can be enrolled in public schools. In Viet Nam, because of limited availability of teachers and classrooms, majority of children in rural areas attend school with two or more shifts a day, resulting in an average of only around 3 hour-class time per day (Glewwe 2004). In rural areas of Kazakhstan, there are only a few functioning sanitation systems and only a few districts have sewerage systems (Bridges 2007). In Indonesia sewerage systems serve only less than 3% of the urban population. Many of these systems lack maintenance and need repairs. Basic supplies are often scarce in remote rural communities. Thus, construction and maintenance of sanitation facilities could not be rendered even if financial subsidies or credit are provided (Pretus et al. 2008). Access to essential drugs in the Philippines remains limited, especially in the poorer regions such as the Autonomous Region for Muslim Mindanao and the Cordillera Administrative Region where the rates for morbidity and mortality from preventable causes are high (DOH 2008b).

### 3.2.1. Quality of service

Improved financial and physical access to basic services may not result in a corresponding increase in development outcomes if services are below acceptable quality. Quality of health and education is determined by the level of competency, effort, attitude, regular availability, and attendance of teachers and health professionals; the availability of adequate material inputs (e.g., instructional materials, medical supplies); and the availability of appropriate health and school facilities and infrastructure.

Evidence from Delhi, India showed that aside from having lower access to health services, low-income households usually end up with less competent providers than high-income households (Das and Hammer 2007a). The quality of care that many poor patients in India receive is below par either because of the presence of incompetent doctors or the lack of incentives among competent doctors to do what they know they should do (Das and Hammer 2004). The quality of care provided by qualified public doctors in poor communities is extremely low—worse than the quality of care offered by unqualified private sector doctors (Das and Hammer 2004, 2007a, 2007b).

In the Philippines, a survey in the province of Compostela Valley, which is characterized by poor use of maternal health services and high rate of maternal deaths, indicates that mothers prefer to have their deliveries assisted by *hilots* or traditional birth attendants (TBAs) than skilled birth attendants (SBAs), not only because of financial considerations but also because TBAs are usually more caring to their clients than SBAs (UPecon-HPDP 2008).

In most developing countries, poor people usually access health services in public health facilities that are substandard in quality, and with inconvenient schedules and long waiting time (World Bank 2004b, Serneels 2007). Such poor quality may result in negative perception which dampens the demand for use. For instance, pregnant women are more likely to choose to deliver at home and seek the assistance of traditional birth attendants if the quality of professional delivery services is perceived to be poor. Low use of maternal health services, in turn, results in higher rates of pregnancy complications, as well as maternal and neonatal deaths. As another example, parents may stop children from going to school if the school is seen to teach the children very little. Poor education quality naturally leads to poor education outcomes. According to the World Bank (2008), despite its exceptional success in achieving universal primary enrollment and retaining school-age children at school, the learning outcomes in Sri Lanka is appalling. Two thirds of primary school graduates still lack basic language and mathematical skills. Furthermore, only 80% of students finish elementary school.

Quality indicators for water and electricity services include frequency or regularity of service and availability of service personnel when needed. Service hours of most water systems in Bangladesh, India, and Pakistan are limited. Most water systems in Bangladesh, for example, provide only up to 4 hours of service daily. Also, while staffing-connection ratios in these countries are high, utility personnel who are dedicated to serving the concerns of the poor are lacking (Bridges 2007; McIntosh 2007). Nearly all of India's 5,161 cities or towns have piped water system but efficiencies of their operations are low (Bridges 2007). In Indonesia, many regional government-owned water enterprises are too small and inefficient (Bridges 2007).

### 3.2.2. Absenteeism

Absenteeism of service professionals is a serious problem in developing countries where voting-by-foot is nearly impossible because substitutes are rarely available and public-private market competition is limited. In the poor rural communities of Rajasthan, India, community health centers are closed 56% of the time during regular opening hours because of absenteeism of health professionals (Banerjee et al. 2004). Worse still, not only were facility closures unannounced but they also were unpredictable. Box 4 lists some causes of teacher and health professional absenteeism.

South Asia, which has the second lowest percentage of trained primary school teachers in the world, has a high rate of absenteeism. In Bangladesh, India, and Indonesia, absenteeism among health professionals is particularly high (Table 4). Absenteeism is negatively correlated with the level of local economic development and is higher among rural primary health clinic doctors than those in larger clinics (Chaudhury and Hammer 2004; Banerjee et al. 2004).

Analysis of nationally representative data from Indonesia revealed that absenteeism among teachers significantly affects student performance (Suryadarma et al. 2006). Since timing matters especially during health emergencies, even if doctors are qualified, partial availability of health services may not translate into health outcomes. Similarly, if well-trained teachers are available but absent, student attendance will not translate into better education outcomes.

Clearly, absenteeism is a crucial barrier that needs to be addressed to achieve better education and health outcomes, especially in rural communities in developing countries. An experimental intervention to reduce absenteeism was recently pilot-tested in rural India (Box 5). It succeeded not only in reducing absenteeism but also in improving education outcome.

### 3.2.3. Lack of devotion of service professionals

Kremer et al. (2005) reported that of those who were present at the time of their visit, on average, only half of the primary public school teachers in India were engaged in classroom activities. Similarly, Chaudhury et al. (2006) found that not all health workers in Bangladesh, India, and Indonesia who were present during the time of their visit were actually working. Such a lack of devotion is partly related to the administrative and noninstructional activities. A survey in rural public schools in Bangladesh revealed that these activities account for 19%–55% of total school days (Tietjen et al. 2004).

In spite of these problems, some success stories deserve mention. In the Philippines, a randomized field experiment found that national accreditation of doctors and insurance payments could improve quality of care in poor hospital districts (Box 6). In Cambodia, the use of participatory approach and performance-based resource management were found to be useful strategies in improving quality of education (Box 7). Box 8 discusses the lessons from the successful rehabilitation of the Phnom Penh Water Supply Authority (PPWSA), from a poor to an outstanding service provider.

#### Box 4. Causes of absenteeism and lack of motivation among teachers and health professionals in developing Asia

- Job dissatisfaction<sup>1</sup>
- Nonmedical duties<sup>1</sup>
- Poor facility/school infrastructure<sup>2,3</sup>
- Lack of monitoring by and credibility of facility administration<sup>3,1</sup>
- Low salary<sup>1</sup>
- Proximity of residence to the health facility/school and access to road<sup>2,3</sup>
- Rural electrification<sup>2</sup>

Sources:

<sup>1</sup> Hossain et al. (2007)

<sup>2</sup> Chaudhury and Hammer (2004)

<sup>3</sup> Kremer et al. (2005)

**Table 4. Estimated rate of absenteeism among primary school teachers and health professionals**

Country	Rate of absenteeism (%)	
	Teachers	Health professionals
Bangladesh	16	35
India	25	40
Indonesia	19	40

Source: Chaudhury et al. (2006)

**Box 5. Monitoring attendance and performance-based financial incentives can help reduce absenteeism and increase learning outcomes: Evidence from rural India**

As discussed in Box 4, the lack of incentives and poor monitoring are the primary reasons for the high rate of absenteeism. The impacts of salary level on attendance and learning outcomes are weak and limited (Chaudhury et al. 2006, Kremer et al. 2005, World Bank 2004a).

Monitoring by head teachers could be ineffective, as an earlier experiment in Kenya showed, as they may have personal motives to falsely report poor performance of staff (Kremer and Chen 2001). Using digital cameras to monitor teacher attendance reduced absenteeism by 50% in treatment schools—from 36% to 18% (Banerjee and Duflo 2006). A randomized experiment in rural India showed that monitoring observable effort and attendance of teachers and providing financial incentives accordingly can reduce absenteeism by 21 percentage points. Furthermore, teachers in treatment schools were more likely to be teaching when present. Consequently, both instruction time and student attendance increased. Also, a 10% reduction in absenteeism translates into 0.10 standard deviation improvement in test scores of students (Duflo et al. 2008).

### 3.2.4. Urban–rural gap in the endowment of health personnel

In many developing countries, such as the Philippines, Indonesia, and Thailand, human resources for health and education are inadequate and unevenly distributed (Dussault and Franceschini 2006, DOH 2008c, Chomitz et al. 1998, Wibulpolprasert and Pengpaibon 2003). Doctors and nurses in Indonesia are usually reluctant to relocate to remote communities, where a high concentration of the poorest is usually located (Chomitz et al. 1998). The Philippines has a high rate of international migration (DOH 2008a). Efforts to retain health workers to take part in public health service after training largely failed as they use different ways to evade the system (Hongoro and McPake 2004).

**Box 6. Accreditation and insurance payments could improve quality of care—Lessons from the Quality Improvement and Demonstration Study (QIDS) in the Philippines**

QIDS tested the effectiveness of two policy interventions in improving quality of care and health care use in 30 hospital districts in the rural areas of the Visayas islands. Of these hospitals, 10 served as the control group; another 10 were given bonus payments if they pass a certain quality-of-care index; and the remaining 10 served as “access sites” wherein insurance coverage of patients were expanded. Results indicate that both accreditation from a national insurance program and insurance payments strongly affect quality of care (Quimbo et al. 2008). This finding suggests that financial incentives could indeed motivate service providers to improve quality of services.

**Box 7. Capacity-building and performance-based resource management can help improve quality of education**

The Education Quality Improvement Project in Cambodia demonstrated that

- A small investment in teacher training can produce a large impact on student performance. A dollar per pupil investment in teacher training helps raise average achievement scores by 1% (World Bank 2005).
- Empowering local communities to identify their needs and propose changes and investments can lead to quality improvements in education, especially in post-conflict situations (World Bank 2002)
- Performance-based resource management can further the gains from universal access to education (World Bank 2004).

### **Box 8. Lessons from water utility reform in Cambodia**

From 1993 to 2006, the Phnom Penh Water Supply Authority (PPWSA) has successfully (i) reduced staff-connection ratio from 22 to only 4 staff per 1,000 connections; (ii) increased its production capacity by more than 3 times; (iii) expanded coverage area from 25% to 90%; (iv) increased supply duration from 10 to full 24 hours per day; (v) achieved almost 100% collection rate from only less than 50%; and (vi) achieved full cost recovery from being heavily subsidized.

Important lessons from PPWSA's experience include

- Water does not have to be provided for free to be accessible to all. Fee for service is important to sustain and expand good quality service. Also, poor households will be considerably better off paying for safe, piped water that they used to buy from private vendors with questionable water quality.
- It is possible to transform a deteriorating and poorly performing water utility into an outstanding service provider if it will be given sufficient administrative autonomy and strong support by the government.
- A water utility that is fully accountable and independent from political pressures can successfully meet clean water targets through a transparent environment where tariffs can cover costs and where service is equitable to all.

It is noted that the success of PPWSA would not be possible without its corporate investment in building the capacity of its staff and in instilling discipline and teamwork among them. It appears that the experience of PPWSA in Cambodia can be willfully replicated in other communities with the active involvement by the civil society and commitment of governments to make water services more inclusive.

Source: ADB website, [www.adb.org](http://www.adb.org)

### **3.3. Institutional Factors: Poor Governance and Corruption**

According to Rajkumar and Swaroop (2008), quality of governance—measured by the quality of bureaucracy and the level of corruption—affects the effectiveness of public spending in generating human development outcomes. In essence, absenteeism as discussed earlier is an indicator of poor governance. It can be viewed as an outcome of poor enforcement of civil service rules (e.g., poor monitoring).

Corruption in various public sectors in South Asia and Southeast Asia is not uncommon (Quah 2003). Davis (2004) documents corruption in water and sanitation service delivery in South Asia, where “rent-seeking” is present in many communities. Field personnel receive informal payments to either speed up water supply and sewer repair work, lower meter readings, or to provide and conceal illegal connections. Public water service agencies and politicians receive bribes from “predetermined” construction contractors to undermine competitive public bidding of contracts.

Azfar and Gurgur (2007) found that corruption reduces immunization rates; delays immunization of the newborns; increases waiting time in facilities, especially in rural areas where most of the population are dependent on public health services; erodes satisfaction in public health services and education; lowers performance of public schools; and discourages the use of public health facilities. They also found that corruption disproportionately affects the poor more than the wealthy.

Aside from raising income inequality by reducing taxation progressivity and making distribution of subsidies regressive (Gupta et al. 2002), corruption could undermine delivery of public services in various ways (Box 9). It is worth mentioning that a serious consequence of poor governance and corruption is low revenue generation from water and other utilities despite high connection fees. This is caused by unwanted leakages and illegal connections, low tariffs, and poor collection rate (Bridges 2007, McIntosh 2007). Most water systems in Bangladesh, Kazakhstan, India, Indonesia, Pakistan, and Philippines have high levels of nonrevenue water. In Bangladesh, nonrevenue water is typically around 40%–60% of total supply but can be as high as 70%. In Indonesia it is typically around 30%–50% (Bridges 2007).

#### **Box 9. Corruption adversely affects health care and education services**

Based on cross-country regression analysis, corruption is found to adversely affect delivery of public services by

- (i) increasing price of services and lowering the level of government output and services' including the provision and financing of health care and education (Shleifer and Vishny 1993)
- (ii) reducing human capital (Ehrlich and Lui 1999) and national expenditure on education and health (Mauro 1998, Rajkumar and Swaroop 2008)
- (iii) lowering government revenue (Hindricks, Keen, and Muthoo 1999) and reducing the quantity and quality of public services (Bearse, Glomm, and Janeba 2000)

Moreover, the poor quality of public services reduces the people's willingness to pay for and discourages them from using these services. Also, it encourages tax evasion.

Source: Gupta et al. (2001)

The low tariffs and poor rate of cost recovery in Bangladesh, Cambodia, Kazakhstan, Pakistan, Philippines, and Samoa undermine the development of the water sector as revenue covers only 90% of average operating costs (ADB 2006, 2007). Thus, it is hard to make services inclusive and sustainable.

### **3.4. Other Factors**

#### **3.4.1. Physical distance**

Transport expense and opportunity cost in terms of travel time increase with distance. Because of poor condition of roads and lack of transport services, the poor in remote communities are usually disadvantaged in accessing primary education and basic health services. Households that live far away from water and electric utilities are likely to be underserved or unserved. In addition to the transport and marketing costs, intermediaries serving the poor face higher tariff per cubic meter (UNDP 2006). This is because most water utilities adopt a rising block tariff system—a discriminatory pricing strategy wherein the block price increases progressively with the volume of water consumed. In turn, water intermediaries pass on the high tariff to their poor clients who cannot afford high water connection fees. Hence, those living in urban slums pay 5 to 10 times more per liter of water than wealthy residents (UNDP 2006). Further, rural communities outside formal water networks are faced with a bigger hurdle of organizing and managing their own water systems.

In Bangladesh and Nepal, physical distance to a health care facility significantly affects the use of maternal services in rural areas (Jamil et al. 1999, Hotchkiss 2001, Anwar et al. 2005). Pregnant women residing in Bangladeshi villages that are at least 2 miles away from outreach clinics are 20% less likely to receive tetanus toxoid shots than otherwise.

Not unrelated to distance, physical immobility of pregnant women often prevents them from receiving tetanus toxoid immunization, as occurred in Bangladesh (Jamil et al. 1999). This immunization helps reduce the risk of birth complications. Physical mobility of mothers may be restricted if nobody can stay at home to look after their younger children. In Bangladesh, both proximity to outreach clinics and the availability of home visits by reliable health workers have important bearings on the use of child immunization services, especially among poorer households (Jamil et al. 1999).

According to the World Health Organization (WHO), 75% of maternal deaths can be prevented through timely access to delivery-related care (WHO 2001). Recognizing the importance of transport and road networks in bringing health services closer to the poor, various transport-related interventions have been pursued not only in Asia but also in other developing nations (IDS 2007). These interventions include (i) different financing mechanisms for emergency transport, fuel costs, and drivers (e.g., cost sharing, community saving, and pooled insurance schemes); (ii) training community midwives on home deliveries and in emergency management and setting up maternity waiting homes; (iii) improvement of rural transport infrastructure; and (iv) improvement of referral network between and among health centers. However, these interventions have only been implemented mostly in small scales and rigorous assessments are yet to be made (Campbell and Graham 2006).

### **3.4.2. Lack of education and awareness**

Generally speaking, awareness campaign and education influence the demand for health care through one or a combination of the following: (i) health education affects behavior and practice, as discussed above; (ii) numeracy and literacy help future parents, especially mothers, recognize symptoms of sickness; (iii) formal education improves perception and behavior toward facility-based health care (Glewwe 1999).

On the other hand, lack of information about the danger signs or symptoms of health conditions and risks may delay decisions to seek treatments. In particular, maternal education is found to be negatively related to such delay in India (Pillai et al. 2003) and positively correlated with the utilization of health services in Bangladesh (Anwar et al. 2005; Chakraborty et al. 2003). Analysis of data from Bangladesh, Indonesia, Philippines, and three other countries indicate that poor maternal education is strongly associated with delivery by a traditional birth attendant (Bell et al., 2003). Mothers who did not finish high school are two to six times less likely to deliver with a health professional than those who finished high school. In Bangladesh, children whose mothers did not finish primary education are 70% less likely to be fully immunized (Jamil et al. 1999).

Lack of information about the costs and benefits of safe water affects households' willingness-to-pay and may lead to poor decision making. According to Bridges (2007), most rural households in Cambodia are unaware of the negative health effects of unsafe water. This, coupled with high connection fee, makes poor households turn to alternative water sources, which may be unsafe and more expensive. In India, lack of information about the government's campaign precluded poor and vulnerable households in remote villages from receiving subsidies (WaterAid 2006).

Lack of information and education is also a major barrier of access to sanitation. As indicated by a recent community-level financing for sanitation projects in Nepal, lack of awareness and education about sanitation and health practices led to having no sense of ownership among beneficiaries of latrine subsidies, which resulted in non-use or poor maintenance of latrines (Pretus et al. 2008). Open defecation, which implies health hazards, is remarkably high in South Asia as discussed in

Section 2. In rural PRC where significant progress has been made to improve the overall access to sanitation, open defecation also remains a common practice. This unhealthy practice, predominantly a rural phenomenon, can be greatly reduced with intensified education and awareness campaigns (Bridges 2007).

Box 10 cites examples of effective strategies for improving knowledge and awareness and promoting behavior change toward better health behaviors and practices.

**Box 10. Promoting behavior change through information, education, and communication (IEC) campaigns**

- In a rural community in India, sanitation campaigns led to a 30% increase in the adoption and use of latrines (Pattanayak et al. 2007).
- Evidence from a cluster-randomized efficacy trial in rural Uttar Pradesh, India revealed that community-based mobilization and education that is compatible with the local sociocultural landscape could improve household behavior in caring for newborns and reduce neonatal mortality in poor rural areas (Kumar et al. 2008).
- In Nepal, the SUMATA (“Care, Share and Prepare”) initiative, which urged mothers-in-law and husbands to care, share, and prepare for childbirth, has demonstrated that the use of communication channels through a participatory approach is highly effective in increasing community awareness about pregnancy complications (JHPIEGO 2004a).
- In Indonesia, the large-scale media campaigns of the project Suami SIAGA’s (“alert husband”) have significantly improved knowledge, attitudes, and practices regarding childbirth and pregnancy emergencies. Mothers who were exposed to the campaigns were more likely to seek assistance of skilled attendants during deliveries while husbands are more likely to take an active role during pregnancy (JHPIEGO 2004b, Nanda et al. 2005).

Many South Asian countries have recently adopted strategies to address the weakness of public service delivery and accelerate progress of human development. Box 11 highlights some prospects and challenges in scaling up initiatives to accelerate the progress of service delivery in Asia. Box 12 presents some lessons from rural PRC in expanding its water and sanitation services.

**Box 11. Accelerating progress in service delivery—some prospects and challenges**

In Dhaka, Bangladesh, devolution of management to the community and building their capacity, backed by a strong support of a nongovernment organization (NGO), proved successful in expanding water services to cover informal settlers (Ahmed 2003).

Bangladesh has been relying on its NGOs to provide many of its education and services to its poor. Results were impressive. However, if checks and balances are not installed, corruption may limit the effectiveness of private contracting (World Bank 2008).

The devolution of some 2,400 schools in Nepal to communities demonstrates positive results in reducing absenteeism of teachers. The devolution was intended to restore accountability of service providers. In this setting, school management committees (SMCs), composed of parents and influential local citizens, receive and allocate unconditional block grants for school administration from the government. SMCs can hire and fire teachers and pay them according to their performance.

Nonetheless, there are limits as to how much devolution of services to communities can achieve. In India, devolution has no effect on teachers’ absenteeism (World Bank 2008). A village education committee was tasked to certify a teacher’s attendance before he or she gets paid. However, most committees sign off regardless of whether or not the teacher was present.

**Box 12. Scaling up services for the poor: Lessons from rural People's Republic of China (PRC)**

The success of the PRC in expanding its water and sanitation services and making it more inclusive highlight the importance of the following:

- Strong and determined leadership, both at the national and local levels
- Simple, clear rules to enforce accountability
- Strong coordination between government departments and agencies
- Community participation to avoid failure of project implementation
- Commitment from users to contribute financially and allow utility to recover costs
- Building capacity at all levels for sustainability
- Sharing experience and knowledge to ensure mutual, common understanding of goals
- Integration of sanitation and health education with rural water supply

Source: Shuchen et al (2004)

### **3.4.3. Multiplicity of basic services**

It is important to point out that the availability and quality of one service, or the lack of it, can affect the effectiveness of the delivery of other services in many ways. In Nepal, for instance, social exclusion has limited the success of provision and management of emergency funds (IDS 2007). In Bangladesh, distance remains a binding concern, despite the availability of trained midwives, because midwives are not within a short and safe distance from the households.

Based on data from the Philippines, Ghuman et al. (2006) find that preschool health and nutritional status of children affect primary school enrollment and educational outcomes. On the other hand, parental education, especially maternal education, exerts intergenerational effects on birth spacing and health-seeking behavior of their children. It is not hard to understand that lack of clean water and electricity can undermine the quality of health services and help spread infectious disease. Also, absence of electricity supply may affect school attendance as lighting is important for reading and completing homework.

## **4. Summary and Concluding Remarks**

Because the deliveries of basic services are interrelated, it is important to ensure that the delivery of all services is inclusive. Making services affordable and accessible to all entails more than just providing free services. Identifying the constraints, as discussed in Section 3 of this paper, is an important first step in formulating appropriate strategies or an integrated approach to make services inclusive.

In what follows, we summarize important points for policy makers in order to help improve access to basic services, especially in the poor communities. It should be noted that since binding constraints vary across communities, what works for some communities might not work for others. Hence, undertaking baseline case studies to identify country-specific and location-specific barriers is crucial to make service delivery effective and equitable.

### **Making services available and affordable to the poor**

- Since resources are crucial for maintaining and expanding services, a user fee structure that is compatible with the ability and willingness to pay is encouraged. This not only promotes ownership but also increases revenue collection and cost recovery.
- To promote sustainability, subsidy programs could be linked with income-generating activities. Also, subsidies should be minimal and integrated with community mobilization and awareness-enhancing activities.
- The poor ought to be provided with assistance to reduce their out-of-pocket expenses. Higher insurance support for the poor could be financed by implementing innovative interventions, such as a progressive fee-for-service.

### **Removing physical barriers to improve access**

- Reliable road and transport networks are important for the poor and remote communities to afford and access health and education services. Farm-to-market roads not only help enhance farming productivity and profitability but also play a significant role in making basic social services accessible.
- Establishing emergency community-based transport and communication networks is especially crucial in remote communities where skilled birth attendants are scarce, birthing facilities are absent, and rate of maternal and neonatal mortality is high.

### **Promoting knowledge and awareness about what services to access and where these services could be accessed**

Better information and increased awareness raise the willingness of households to pay and access basic services. To this end:

- Various information, education, and communication strategies could be customized to the cultural and sociodemographic landscape of poor communities, such as the true costs and benefits of clean water, good sanitation, and healthy practices and behaviors, as well as the importance of education.
- Social programs must encourage school enrollment, especially among poor households. Improved education will have a lasting impact on the ability and willingness of future generations to access basic services,

### **Focusing efforts on quality of services**

Service quality determines willingness to access, willingness to pay and human development outcomes. In this context, the following are important:

- Investments are required to build the capacity of service workers and professionals so that they are skilled and responsive to the needs of clients.
- Performance-based incentives are needed to improve efforts and attitudes of professionals and their supporting staff, especially in areas where absenteeism is common, human resources are scarce and maldistributed, and development outcomes are poor.

### **Enhancing governance and addressing corruption**

To discourage corruption and achieve better outcomes:

- Public–private partnerships should be intensified. Both providers and users of services should assume full or maximum accountability of service provision and utilization.

- Government authorities should actively perform their regulatory functions to monitor and evaluate staff performance. This could be assisted by installing reliable and tamper-proof technology-aided tools. Similar tools can be used to monitor electricity and water consumption, help curbing corrupt and illegal practices.
- It is useful to assess and communicate client feedback to service providers. Aside from promoting quality improvement, this also helps ensure accountability and build clients' confidence in accessing the services.

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