

Providing Basic Services Sustainably and Equitably in Urban Areas



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Key Messages

- Access to urban services is characterized by increasing inequality: despite advances in urban coverage across the region, the poor and other marginalized groups are still disproportionately excluded, due to physical isolation, limited funds and lack of recognition of slums.
- Lack of effective service provision is a major source of climate vulnerability: inadequate sanitation, waste disposal and clean water access in vulnerable urban areas can significantly increase the threat of contamination and spread of disease as a result of flooding, typhoons and other climate related impacts.
- Climate change is creating further challenges, especially for the urban poor: rising sea levels, higher temperatures and more frequent extreme weather have increased the exposure to climate change hazards which cause damage or destruction to infrastructure and service systems, particularly in slums in risk prone locations, meanwhile ground water availability and quality is in decline.
- Prioritizing low-carbon infrastructure investment provides multiple opportunities for cities: Infrastructure development which supports service delivery and climate change adaptation can potentially accelerate the emission of greenhouse gases.
- Investment in resilience and basic services go hand in hand: prioritizing access, affordability and climate change adaptation in city programming and urban development will produce mutually reinforcing benefits, especially for those who are currently the most underserved and most vulnerable to climate change.

I. Basic Services for Asia-Pacific's Urban Poor

Asia-Pacific region is host to half of the world's urban population, and has been urbanizing rapidly¹.

A key feature of inclusive and harmonious cities is access to basic services. Better access to clean water, sanitation, health care, transportation, education and other basic needs are central to securing an 'urban advantage' for many city dwellers, and continues to be an important factor driving rural migration in Asia and the Pacific.

The benefits of high quality, inclusive access to basic services helps reinforce and consolidate development gains in other areas. In particular, the important role that cities have played in poverty reduction across the region has been underpinned by rising levels of service coverage. Adequate health care, sanitation and educational access all provide a basis for low-income urban households to secure better opportunities, improve livelihoods and boost personal savings. Therefore, for millions of poor city dwellers across Asia and the Pacific accessing basic services is central to enhancing their lives.

¹ UN-HABITAT. 2013. *State of the World's Cities 2012/13: Prosperity of Cities*. Nairobi: UN-HABITAT.

Table 1: Proportion of Asia and the Pacific urban population living in slums (per cent), 1990 - 2012

Major region or area	1990	1995	2000	2005	2010	2012
Pacific Islands	24.1	24.1	24.1	24.1	24.1	24.1
West Asia	22.5	21.6	20.6	25.8	24.6	24.6
East Asia	43.7	40.6	37.4	33.0	28.2	28.2
Southeast Asia	49.5	44.8	39.6	34.2	31.0	31.0
South Asia	57.2	51.6	45.8	40.0	35.0	35.0

Source: United Nations Department of Economic and Social Affairs (UNDESA). Statistical Division, Millennium Development Goals Indicators. Available at <http://mdgs.un.org/unsd/mdg/Data.aspx>

In aggregate terms, despite evident shortfalls, overall urban access rates appear to suggest that cities are progressing in the right direction. This is particularly the case for clean water, an area where cities across the region have made remarkable strides towards universal access (Table 2). In Cambodia, for instance, urban access to an improved drinking water source was only 47 per cent in 1990. However, coverage has rapidly expanded and by 2012 had extended to 91 per cent of the urban population.²

Table 2: Proportion of the urban population using improved drinking water sources (per cent), 1990 - 2012

Major region or area	1990	1995	2000	2005	2010	2012
East Asia	96.0	96.0	96.7	97.2	97.7	98.0
Pacific Islands	94.0	94.4	95.1	95.7	96.5	96.6
South Asia	83.5	85.4	88.1	91.1	93.8	95.0
Southeast Asia	82.6	83.6	86.1	90.0	93.6	94.8
West Asia	96.1	95.8	95.5	94.9	92.1	94.5

Source: UNDESA. Statistical Division, Millennium Development Goals Indicators. Available at <http://mdgs.un.org/unsd/mdg/Data.aspx>

There is no doubt that Asia-Pacific cities still have a considerable distance to go in terms of adequate management, waste disposal and sanitation.³ Even so, the trend seems to be moving gradually towards improved outcomes (Table 3). In India's cities, for instance, where sanitation challenges are particularly acute, the proportion of the urban population that has access to improved sanitation facilities has nevertheless risen from 50 per cent in 1990 to 60 per cent in 2012. In rural India only 25 per cent of the population has access to improved sanitation facilities.⁴

2 United Nations Department of Economic and Social Affairs (UNDESA). Statistical Division, Millennium Development Goals Indicators. Available at <http://mdgs.un.org/unsd/mdg/Data.aspx>

3 UN-HABITAT. 2010. *State of Asian Cities 2010/2011*. Fukuoka: UN-HABITAT.

4 UNDESA. *Op. cit.*

Table 3: Proportion of the urban population using improved sanitation facilities (per cent), 1990 - 2012

Major region or area	1990	1995	2000	2005	2010	2012
West Asia	93.5	94.0	95.1	96.4	96.8	96.8
Southeast Asia	67.6	70.1	74	79.1	83.4	85.3
Pacific Islands	74.8	76.4	78.8	81.3	82.9	83.4
East Asia	67.5	69	72.7	77	81.2	81.7
South Asia	60.9	62.1	64.2	66.8	69.3	70.3

Source: UNDESA. Statistical Division, Millennium Development Goals Indicators. Available at <http://mdgs.un.org/unsd/mdg/Data.aspx>

However, at the same time urban inequality across Asia and the Pacific is on the rise. Even as cities have experienced rapid economic growth, the divide separating poor and affluent residents has widened. Consequently, even as service access has, on average, risen in many urban areas, for low-income households in slums or peri-urban areas, the deficit has become even more pronounced. Yet such disparities are often obscured by city or country level averages that conceal significant inequalities between groups and income levels. In many cases, in fact, marginalized communities may not even be included in official censuses as slums and squatter settlements are often classified as unregistered or illegal settlements.



Yangon, Myanmar © Bernhard Barth

This lack of visibility has real consequences, as urban poverty has been entrenched by the exclusion of the poor from essential services. The urban poor are frequently overlooked when government funds are allocated and basic functions such as sanitation or waste management may be sidelined in favour of costly infrastructure that benefits high-income residents.

In Metro Manila, for instance, residents in non-serviced areas pay between 9 and 13 times more for clean water than serviced households⁵. In some cases, for the poorest in many developing cities, even these options may not be available. In India, for instance, 40 per cent of the urban population lack access to improved sanitation⁶, and more than

5 David, C., A. Inocencio, R. Clemente, R. Abracosa, F. Largo, G. Tabios, and E. Walag (2000). *Urban Water Pricing: the Metro Manila and Metro Cebu Cases*, Philippine Institute for Development Studies (PIDS) Policy Notes No. 2000-09 (Makati City, PIDS). Cited in Ballesteros, M. 2011. Why Slum Poverty Matters, PIDS Policy Notes No. 2011-02 (Makati City, PIDS).

6 UNDESA. *Op. cit.*

51 million city dwellers defecate in the open⁷. In the dense and overcrowded context of informal urban areas, the impact of this lack of access on human health and development are significant. Under-five mortality in Bangladesh, for example, is 44 per cent higher in slums than in rural areas⁸.

Furthermore, poverty can also intersect with other forms of marginalization, meaning that certain groups such as women, migrants and ethnic minorities face even greater barriers to access basic urban services. This in turn can undermine other developmental opportunities. Lack of adequate sanitation for women and girls, for instance, may constrain their ability to access education and place them at greater risk of sexual assault. Similarly, the absence of locally available health care will impact disproportionately on elderly residents and persons with disabilities - precisely those groups most in need of these services.

Irregular tenure, ill-defined responsibilities for payment, and low consumption, can account for the deficiencies of energy utilities with regards to poor urban communities. Access to modern and sustainable energy resources is critical for the poor if they are to improve living standards. The International Energy Agency estimates that one billion people in Asia-Pacific countries still have no access to electricity. The disparities in access to power grids are wide across the region, from 20 per cent of the population in Cambodia to 5 per cent in India and 99 per cent in China⁹.

Transportation is also a serious issue for the urban and peri-urban poor in Asia Pacific. People need safe, convenient, low-cost mobility options to access workplaces, education facilities markets and other amenities. Ridership of public and non-motorised transportation rates is low in many large cities in Asia-Pacific (Table 3). These challenges are likely to be exacerbated by climate change.

Table 4: Transportation in Asian Cities – Modal Breakdown

City	Walking	Cycles	Public Transport	Two-Wheelers	Car	Para-transit	
						Motorized 3-Wheel Taxi	Cycle Rickshaw
Delhi	14	24	33	13	11	1	-
Mumbai	-	-	88	-	7	5(taxi)	-
Ahmedabad	40	14	16	24	0	5	0
Beijing	14	54	24	3	5	-	-
Shanghai	31	33	25	6	5	-	-
Manila	-	-	29	-	30	41	-
Jakarta	13	-	-	-	-	-	12
Dhaka	62	1	10	4	4	6	13
Bangkok	16	8	30	-	46	-	-

Source: UN-HABITAT. 2010. *State of Asian Cities 2010/2011*. Fukuoka: UN-HABITAT.

7 WHO and UNICEF estimates for 2000-10. Cited in Mathur, O.P. 2013. *Urban Poverty in Asia*. Philippines: Asia Development Bank.

8 2009 household survey data. Cited in UNICEF. 2012. *State of the World's Children 2012: Children in an Urban World*. New York: UNICEF.

9 UN-HABITAT. 2010. *Op. cit.*

Inadequate access to basic services can increase a city's greenhouse gas emissions. Similarly inefficient modes of transport, particularly private cars, cause higher rates of emissions. Road transportation alone causes approximately ten percent of global greenhouse gas emissions¹⁰

Inadequate solid waste disposal and collection, as well as inadequate dumping sites result in higher emissions of methane, greenhouse gas whose potency is around twenty-times higher than carbon dioxide¹¹.

Quezon City , the Philippines – Reducing Emissions through Better Waste Management

In Quezon City, an urban area of Metro Manila with a population of 2.86 million people, a combination of formal and informal waste management has strengthened the city's services while also supporting climate change adaptation. While some of the recyclable waste is collected by private collectors, contracted to take on full responsibility for a particular area, a significant portion is also collected informally by itinerant garbage crews and waste-pickers, who then sell it on to private recyclers. In total, more than 240,000 tonnes of recyclable waste is recovered; almost three quarters of this total is gathered by informal waste collectors. Biodegradable waste such as food is also collected and processed into compost or animal feeds. The Quezon City Controlled Disposal Facility has also been redeveloped, through its Biogas Emission Reduction Project, into a pioneering disposal facility that converts biogas from composted garbage into electricity. The project is registered under the Clean Development Mechanism (CDM) and it is projected that it will lead to a reduction of 1,162,000 tonnes of CO₂ emissions. Together, these different elements of the waste management system have not only helped upgrade Quezon City's waste management and provided local livelihoods, but also enhanced its resilience by creating a more sanitary urban environment while mitigating its contribution to climate change through lower emissions.

II. Access to Urban Basic Services and Climate Change

The current challenges facing cities across Asia and the Pacific are rooted in historic underinvestment. This neglect has been compounded by the speed of recent urban growth, much of it unregulated, placing an additional burden on already overstretched infrastructure. Significant proportion of urban growth in the region is occurring informally. In a number of Pacific Island states, in particular, rapid and unplanned growth in what were until recently rural areas has brought about an 'unfinished' form of urbanization with little or no basic services for the population. This development frequently occurs on environmentally sensitive or degraded land - for example, canal banks and landfill sites - where the need for effective waste management is especially strong. As a result, urban life for millions of people across the region is defined by the absence or low quality of basic services, with the poor and other marginalized groups being affected the most.

10 UN-HABITAT. 2014. Planning for Climate Change - A Strategic, Values-based Approach for Urban Planners. Nairobi: UN-HABITAT

11 United States Environmental Protection Agency (EPA). Overview of Greenhouse Gases. Available at <http://epa.gov/climatechange/ghgemissions/gases/ch4.html>



Lami Town, Fiji © Bernhard Barth

This situation is exacerbated by government policies towards underserved settlements, particularly those located in areas without secure land tenure. As a large number of these are officially unacknowledged or illegal, authorities are often unwilling or unable to ensure basic services are in place. Furthermore, slums and other low-income communities may even be excluded from survey data collection, adding to their invisibility and further reducing the likelihood of an effective public intervention. This further reinforces inequality as the urban poor, besides having the lowest levels of service access, may also become an unrecognized part of a city's population and excluded from future investments as a result.

Finally, these pressures are occurring at the same time that the effects of climate change are becoming increasingly apparent. As in other areas, the costs of these impacts are not borne equally. In the event of disaster greater loss of life is in the slum areas due to their weak structures. As many of these settlements are also located in highly vulnerable locations, residents are left even more exposed to health risks and environmental damage¹². Climate change is therefore deepening existing inequalities, leaving poor communities even more vulnerable than before.



Tacloban, Philippines © Ilija Gubic

12 Jha, A.K. and Z. Stanton Geddes, eds. 2013. *Strong, Safe and Resilient: A Strategic Policy Guide for Disaster Risk Management in East Asia and the Pacific*. Washington DC: World Bank.

While natural disasters such as typhoons can have an immediate and often devastating impact on urban systems, slow onset changes such as higher temperatures, rising sea levels and disrupted rainfall are also exerting significant long-term impacts that threaten to undermine the viability of existing services. At the same time, underdeveloped or non-existent urban services typically amplify the negative effects of climate change. Growing service gaps are in fact a major factor in the increasing levels of damage and loss of life caused by natural disasters in urban areas across Asia and the Pacific.

III. Towards Inclusive and Climate Resilient Urban Basic Services Delivery

Effective and pro-poor service delivery in urban areas must address three key dimensions:

- *Access*: shifting towards to a rights-based approach to delivery, focusing on the poorest and most marginalized urban residents. In particular, service design should consider and address the different barriers - physical, economic, social, institutional - to ensure that the most excluded are effectively reached;
- *Affordability*: given the financial constraints facing local governments and poor communities, a shift towards alternative funding models is required, tapping into a range of credit sources and based on multi-stakeholder frameworks. In addition to Public-Private Partnerships (PPPs) with businesses and investors, these may also include grants, affordable loans and cost sharing with poor communities to encourage viable funding mechanisms for developing urban services¹³;
- *Adaptation*: 'climate proofing' services and infrastructure in cities is an essential element in ensuring access to clean water, sanitation and other basic needs, particularly for slum dwellers. Resilient design and emergency preparedness measures can reduce the risk to basic services from climate change impacts.

Namely, to achieve better urban services, cities must first establish a solid evidence base to guide and inform decision-making. This should include reliable data in areas where existing gaps, focusing in particular on those groups that have been excluded due to social, physical or institutional barriers - slum dwellers, women, migrants, minorities and other marginalized groups. Through comprehensive vulnerability assessments and hazard mapping, drawing where possible on community involvement, local authorities will gain a clearer picture of where their efforts should be concentrated. In this regard, the primary lens for policy makers must be qualitative and rights based, focusing on inequality and exclusion rather than averages and net targets.

Governments must also ensure that the measurable benefits of improved services are factored into their value assessments. This is especially true of climate change. Once climate projections are factored in, the business case for improved services becomes even more compelling. As elsewhere, these calculations must incorporate pro-poor considerations to be effective as climate change itself can be a driver of inequality in cities.

More inclusive access to basic services not only supports poverty reduction, economic development and social well-being, but also plays a critical element in boosting urban resilience to climate change.

¹³ For more information, see the forthcoming publication produced by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), UN-Habitat and Rockefeller Foundation, *Quick Guide on Pro-poor Urban Climate Resilience in Asia and the Pacific*.

Many Asian cities have also benefited from South-South partnerships and knowledge sharing initiatives. Besides developing skills and capacity, these collaborative efforts also offer the potential for more sustainable financing for service delivery. Local authorities can leverage resources through public-private partnerships, cost share with local communities, obtain grants from central government and also secure international grants or loans. This should include mechanisms such as scaled subsidies and loans to provide poor households and communities with access to affordable credit.

Urban programmes are often more locally appropriate, cost effective and inclusive when residents are allowed to contribute to their development. There are many ways that urban communities can be actively engaged in different aspects of service delivery. These include:

- *Scoping and assessment:* community led data collection such as participatory enumerations and hazard mapping can produce comprehensive profiles of urban areas, which can be particularly helpful for informal settlements. Gathering this information is the first step towards more inclusive service access that actively prioritizes the poorest households.
- *Fund raising and cost sharing:* communities can play a supportive role, once funds for developing infrastructure have been made available, by contributing some or all of the user costs and overseeing aspects of the service management themselves. Nevertheless, urban programmes must ensure that the 'poorest of the poor' are not excluded due to high and unaffordable user costs.
- *Operational management:* services in some urban areas may be delivered most effectively by involving community members in their design and delivery. If the process is well managed, outsourcing some of these functions to residents can result in a less costly and locally owned service that may also create livelihoods. Authorities can assist this process through professional development programmes and other forms of support. However, devolving some of these functions to residents should not become a means for governments to evade their responsibilities toward poor urban communities.
- *Resilience strengthening:* community-based responses, such as flood level monitoring teams and hazard alerts using alarms or SMS technologies, are not only an effective way of reducing casualties in the event of a natural disaster, but also in ensuring services for emergency health, water and sanitation if the existing systems are disrupted.
- *Education and outreach:* developing local knowledge and understanding the negative impact and effects of climate change through awareness raising campaigns and other initiatives is an effective way to engage community efforts in improving the quality and resilience of basic services. Good practices can also be promoted through local leaders, schools and other platforms. In Delhi, for instance, 'eco clubs' have been established to promote environmentally friendly activities among children, including tree planting, water conservation and responsible waste disposal¹⁴.

Many of the successful initiatives of recent years, building on the achievements of pioneering programmes have managed to extend basic services to previously neglected areas by employing a mix of these approaches. These are approaches that urban authorities will also need to develop themselves if the challenges facing their cities, against a backdrop of rapid climate change, are to be addressed.

14 Government of National Capital Region of Delhi. Last updated 25 November 2013. "Eco clubs in schools and colleges." Available at www.delhi.gov.in.

Dhaka, Bangladesh – Addressing Service Shortfalls and the Growing Impacts of Climate Change

Around 4 million people in Dhaka do not even have legal access to basic water and sanitation services¹⁵. While the city is struggling to alleviate its chronic service deficits, its population continues to increase at an extraordinary rate. Its population, estimated at around 14.65 million in 2010, is projected to rise to as much as 18.72 million by 2020¹⁶.

The situation in Dhaka is reflective of the challenges facing urban areas across the country, as towns and cities struggle to improve access to basic services and resilience in the context of limited resources and worsening climate change. Nevertheless, the government and collaborating organizations such as UN-Habitat and the United Nations Development Programme (UNDP) are attempting to improve access through a range of ambitious community based programmes, such as the Urban Partnership for Poverty Reduction (UPPR).

A key aspect is the use of participatory and locally managed systems of support to include traditionally marginalized residents in the process of upgrading. Across the country, there are now over 800,000 households and around 2,500 urban committees actively engaged in community development. So far, its achievements have been considerable, with access to clean water extended to 166,000 households while 143,000 households have been provided with new sanitary facilities through the programme¹⁷. The UPPR therefore offers a promising alternative model of pro-poor development that could also be adapted to other cities in the region to improve basic service access.

The need for better urban services is more acute than ever as climate change is felt in cities across Asia and the Pacific. Those most affected are also the poorest and most vulnerable members of the population - yet all too often this is not reflected in urban decision making. Prioritizing these groups will not only provide poor urban communities with the opportunity to escape poverty, but also enhance their long-term resilience to the effects of climate change.

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15 Pulitzer Center on Crisis Reporting. 29 August 2010. "Dhaka's challenge: A megacity struggles with water, sanitation and hygiene". Available at <http://pulitzercenter.org>.

16 UN-HABITAT. 2010. *Op. cit.*

17 UNDP. Undated. "Urban Partnerships for Poverty Reduction: What is the project about?". Available at www.undp.org.

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