UNIVERSAL ACCESS TO AFFORDABLE HOUSING, SOCIAL SERVICES & PUBLIC UTILITIES: WATER & SANITATION, TRANSPORT, ENERGY, AND WASTE MANAGEMENT

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ACKNOWLEDGEMENTS

This draft has been nourished and reviewed by the kind contributions of:

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EXECUTIVE SUMMARY

Over half of the world’s population now lives in cities, a share likely to reach 70 percent in 2050. 90 percent of the growth in urbanization comes from developing countries as a result of rapid economic growth and increasing migration from rural to urban areas. This unprecedented pace of urbanization is a major shift since the Millennium Development Goals were adopted, and this is placing heavy demands on urban services for transport, energy, water and sanitation, housing, and solid waste management. It is also creating severe challenges of inadequate and unequal access to these services across urban populations, particularly the urban poor. Although cities are engines of economic growth, their institutional and financial capacity to handle this growing demand is often limited. A post-2015 sustainable development goal (SDG) that focuses on these urban challenges is therefore, essential to mobilize all urban stakeholders from the public, private, and civil society sectors to take action towards improving universal access to high quality and affordable public services in urban areas.

Key trends across sectors show worsening outcomes with respect to universal access. The number of urban slum dwellers lacking access to affordable housing and basic urban services has increased by over 100 million since 2000. Projections indicate that the over one billion motor vehicles in the world and 1.2 million traffic fatalities will double by 2030, worsening the negative economic and public health impacts disproportionately borne by the urban poor. In 2012, an estimated 780 million people lacked access to safe drinking water and 2.5 billion people lacked access to basic sanitation services worldwide, with diarrhea resulting from poor sanitation causing 800,000 deaths of children under five each year. Among urban populations, 700 million lacked access to clean fuels in 2005, with 279 million lacking electricity. The amount of municipal solid waste generated worldwide will increase by almost 70 percent by 2025, requiring enhanced financing and capacity to manage it.

1 In this paper we use the terms “cities,” “city-regions,” “urban areas,” and “urban regions” interchangeably to denote metropolitan areas that are centers of population and economic activity. Our use of these terms is also intended to include the important links to surrounding ecosystems and rural areas. The term “regions” or “subnational governments” when used alone reflects the intermediate level of government between the local municipal level and the national one, which can take the shape of regions, states, or provinces.
Evidence shows that common challenges in universal access to affordable urban services relate to financing, limited capacity, lack of data, few integrated policies, and governance issues, including high levels of corruption in the delivery of basic services. Moreover, women’s poor access to services is linked to their political exclusion from decision making. Unsafe public spaces and transport impede their mobility and connectivity to urban resources and services and markets. Policy approaches to enable and improve universal access must include international, national, local, and community-driven actions. Access to international financing, technology transfer, and knowledge sharing for cities is important, along with national policies that empower subnational and local institutions and create infrastructure financing programs for universal access. Local sectoral policies and integrated city level planning must be guided by data, including community-collected data on informality and poverty.

Five key points emerge to guide policies and programs - (i) urban land use and spatial planning has significant long term impacts on access to urban services; (ii) universal access to housing and services in cities determines economic, health, inclusion and environmental outcomes; (iii) localized or distributed models for urban service delivery, involving local communities partnering with governments, civil society organizations, and the private sector, enhance universal access, save costs, and are often more resource efficient; (iv) achieving universal access to housing and urban services requires strong institutional support and empowerment of subnational and local authorities; and (v) an agenda for inclusive urban services will depend on the ability to collect and mainstream data that inform planning decisions.

Drawing on the experience of cities and regions in both developed and developing countries, the following quantitative targets for universal access to housing and basic services in cities, along with related targets to improve governance, are proposed for consideration within a stand-alone urban SDG and as part of sector-based SDGs.

**QUANTITATIVE TARGETS**

(1) Safe affordable drinking water and basic sanitation available to ALL urban households by 2030.
(2) Doubling of investment in green technologies (e.g. renewable energy, smart energy meters, etc.) and ICT applications to improve universal access to urban services by 2030.

(3) Per capita consumption of fossil fuel-based energy and water is halved in the Global North by 2030.

(4) By 2030, nearly all urban households are able to access jobs, goods and services within 30 minutes by public transport and/or walking and cycling.

(5) Air pollution from passenger and freight transport is halved by 2025 and GHG emissions from transport peak globally latest by 2020 with an ultimate vision of 40-60% reductions by 2050 compared to 2005 levels.

(6) Traffic related deaths are cut in half by 2025 with an ultimate vision of near zero fatalities.

(7) By 2030, 100 percent slum dwellers and the urban poor have access to affordable and adequate housing served by basic services.

(8) By 2030, sufficient financing mechanisms are available to 100 percent of urban poor to support housing and livelihoods.

(9) By 2030, metropolitan density is increased and conversion of additional greenfield land for urban development is limited in cities worldwide to less than half of current rates.

(10) Increase women’s access to safe public spaces and transport that facilitate their mobility and connectivity to public resources, services etc.

Additionally, to improve Governance:

(11) By 2030, city-level baseline data across sectors is produced for all cities with population greater than one million, to understand resource consumption and monitor performance.

(12) Greater coordination is achieved across all levels of government and agencies responsible for key services such housing, transport, water & sanitation, and energy to deliver integrated low carbon solutions (e.g. renewable energy in low-cost housing).

(13) National, subnational, and local agencies are accountable against performance outcomes related to sustainability (measured by how well they are achieving the triple bottom line - environmental protection, economic development, and social equity).
(14) Enhanced community-collected data on the nature and scale of poverty and informal workers is available, encouraged and used to guide policy, planning, and program development for universal access to services.

(15) Ensure that slum dwellers and grassroots women’s organizations have formal roles in planning, implementing and monitoring the delivery of public services.
OVERVIEW

“Cities are where the battle for sustainable development will be won or lost.”
Report of the UN High-Level Panel of Eminent Persons on the Post-2015 Development Agenda

Between 2011 and 2050, the world population is expected to increase from 7 billion to 9.3 billion, an increase of about 33 percent. Over half of the world’s population now lives in cities, a share likely to reach 70 percent in 2050. Combined, cities around the world occupy only 2% of land mass yet account for about 70 percent of global gross domestic product (GDP), 67% of global energy consumption, and nearly 70% of global greenhouse gas (GHG) emissions. Economic growth and resource consumption are inextricably linked and both are primarily concentrated in cities. In particular, 90 percent of the growth in urbanization comes from developing countries as a result of rapid economic growth and increasing migration from rural to urban areas. This unprecedented pace of urbanization is placing heavy demands for housing and for transport, energy, water & sanitation, housing, and solid waste management services.

The institutional and financial capacity of cities to handle this growing demand for housing and urban services is often limited. As a result, systemic citywide planning approaches that

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2 United Nations, Department of Economic and Social Affairs, Population Division: World Urbanization Prospects, the 2011 Revision.
3 In this paper we use the terms “cities,” “city-regions,” “urban areas,” and “urban regions” interchangeably to denote metropolitan areas that are centers of population and economic activity. Our use of these terms is also intended to include the important links to surrounding ecosystems and rural areas. The term “regions” or “subnational governments” when used alone reflects the intermediate level of government between the local municipal level and the national one, which can take the shape of regions, states, or provinces.
ensure synergies among transport, land development, buildings, energy, waste management and other urban sectors are often missing, even though these are critically necessary. Further, this is occurring in a context of growing inequity in access to housing and basic services for the urban poor, who are particularly vulnerable to negative health and economic impacts.

Universal access to affordable housing and urban services implies equitable access for all segments of the population, regardless of income, gender, age, social status, and so on. Large numbers of the urban poor in many countries face severely limited access to affordable housing, good quality drinking water and sanitation infrastructure, and reliable energy supply. Affordable transport services and safe and secure transport infrastructure can often boost access to these and improve connectivity between lower cost housing and otherwise inaccessible employment and education opportunities. In some countries, caste and social status lock people into professions such as manual sanitation, with poor livelihoods and low quality of life. Gender issues related to mobility and safety for women on public transport affect girls’ and women’s access to basic education and employment opportunities. Prospects for children to thrive may be limited due to the repeated incidence of diseases resulting from poor water and sanitation, the lack of sustained electricity for studying, clean energy for cooking and overall negative health effects of living in sub-standard shelter.

At the same time, as concentrated population centers, cities offer an opportunity to accommodate growing urbanization by providing basic services and public utilities in a much more resource-efficient and equitable manner. A wide range of urban stakeholders from the public, private, and civil society sectors have a role to play in collectively shaping the programs and policies to ensure that quality housing and services are universally accessible and sustainable. Strategies and choices made now can have significant lock-in effects that show impacts over several decades. Policy-making and capacity building support to develop key competencies at sub-national and local levels, devolution of authority cities and regions, and financing support from national and sub-national governments to local governments will be important to achieve this. A post-2015 sustainable development goal (SDG) that specifically focuses on these urban challenges is therefore, essential to mobilize all urban stakeholders and levels of governments
to take action towards improving universal access to high quality and affordable housing and public services in urban areas.

The UN Sustainable Development Conference, Rio+20 in June 2012 advocated that poverty reduction be placed within the broader context of sustainable development. Its Outcome Document “The Future We Want” emphasizes the need for “sustainable development at all levels integrating economic, social and environmental aspects and recognizing their interlinkages.” Moving forward from the focus of the Millennium Development Goals (MDGs) on poverty alleviation, an urban SDG will help frame how economic competitiveness, increased efficiency in resource use, inclusive access to housing, services and infrastructure, better health outcomes, and improved quality of life can be achieved together through sustainable urban development.
EXISTING CONDITIONS

Although the MDGs paid much needed attention to reducing extreme poverty and gender inequality and achieved some successes, there are several targets that are yet to be achieved or that must be reframed in light of changes seen worldwide since the MDGs were adopted. The report An Action Agenda for Sustainable Development\(^8\) describes five shifts that will mark the 2015-2030 period -- (i) ending extreme poverty is now more feasible, (ii) human impact on the planet is drastically higher and climate change is a real, impending threat, (iii) rapid technological change, (iv) increasing inequality, and (v) growing governance challenges. A sixth major shift that must be added - **increasing urbanization** - has important linkages with all of the above. The intent of an urban SDG is to highlight and operationalize this.

The MDGs do not differentiate between rural or urban issues in identifying goals and targets or benchmarks for the targets. As the world becomes increasingly urban, the SDGs need to take into account global common challenges seen in urban, peri urban and metropolitan areas - and their connections to the development of rural areas - with respect to universal access to housing, urban services and infrastructure. Some current trends, projections, and challenges in key urban sectors where access must be improved are described briefly below.

HOUSING AND SLUMS

The MDG target of improving the quality of life for at least 100 million slum dwellers has been met; however, owing partly to the rapid pace of urbanization, the absolute number of slum dwellers continues to increase. Although the share of urban population in slums in the developing world declined from 46 percent in 1990 to 33 percent in 2010, the absolute number of slum dwellers increased by 26 percent over the same period.\(^9\) For example, in India alone, the

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\(^8\) Sustainable Development Solutions Network (2013), "An Action Agenda for Sustainable Development," Report for the UN Secretary General, available at:  

http://www.unep.org/geo/pdfs/keeping_track.pdf
number of slum dwellers in cities has increased from 28 million to 93 million in the 30 years from 1981 to 2011 - an increase of over three times.\textsuperscript{10} There were 863 million slum dwellers in the developing world in 2012, up from 760 million in 2000.\textsuperscript{11}

The urban poor who live in these slums face several institutional challenges, such as land tenure insecurity; limited availability of affordable housing; limited incentives for the private real estate sector to add to the supply of affordable housing; lack of alignment of national affordable housing policies with local development plans and realities, and lack of access to credit.

While government is actively involved in the building of housing in some countries, it is far more common that housing is planned, built, owned, and financed by those who occupy it. This is usually done informally without government oversight and incrementally as funding is available; or by private developers, investors and contractors building units for sale or rent. In fact, incremental building accounts for an estimated 50-90 percent of residential construction in cities in the developing world.\textsuperscript{12} Local and regional authorities have an important role to play as facilitator and regulator, including establishing rules and policies to shape and regulate housing, but such systems are not usually enforced in informal areas and slums. The public sector may also provide incentives to produce housing such as land, infrastructure, capital grants, subsidies or tax benefits.

The complexity of housing development means that efforts to improve the housing conditions of the urban poor will be challenging and require major initiatives to address a wide range of national and local policy and regulatory constraints, mobilize large amounts of capital, create support systems and financial incentives to encourage self-built, investor-built and developer-built housing, and developing targeted and efficient subsidies to assist the very poor.


\textsuperscript{11} United Nations (2013), The Millennium Development Goals Report 2013

\textsuperscript{12} Ferguson, B., Smets, P., Finance for incremental housing; current status and prospects for expansion, Habitat International (2009), doi:10.1016/j.habitatint.2009.11.008
Access to affordable and quality housing is critical to ensure that low-income people and informal workers who migrate to cities have better shelter, better access to opportunities, and a life of dignity. In many rapidly growing cities of the developing world, master planning is either non-existent, very limited in scope and public participation, or is subverted by private interests wanting to profit from higher land values. This pushes the poorest to locations with minimal access and urban service provision. Limited institutional and financial capacity in local agencies and lack of enforcement result in the establishment of illegal or informal developments, often occupied by large numbers of the urban poor who are subject to forcible eviction. These conditions result in the pervasive exclusion of the poor from urban economies and political structures, locking them into a category of ‘non-citizens’.\(^\text{13}\)

For policymakers to develop effective and innovative housing policies, the far-reaching impact of adequate housing must be fully understood and successfully communicated. More than four walls and a roof, adequate housing includes sufficient space, tenure security and access to basic services such as water and sanitation. Studies have shown the positive impact adequate housing has on individual households. Overcrowded rooms, dirty floors, poor ventilation, unsanitary living conditions and doors that don’t lock all take their toll on one’s health.\(^\text{14}\) Sufficient light, a quiet space to work and stable occupancy have been linked to educational outcomes. Furthermore, the housing sector comprises 7 to 20 percent of a country’s gross domestic product, according to UN-Habitat. Experience has demonstrated the broader implications housing has on the health of our planet, the global economy and a neighborhood’s ability to develop into a strong, vibrant community.\(^\text{15}\)

\(^{13}\) Shack/Slums Dwellers International

\(^{14}\) Modest and inexpensive improvements in housing have demonstrated important outcomes for other development goals like health. In Mexico, a program called Piso Firme replaced dirt floors with concrete ones in roughly 30 minutes at a cost of $150 USD per home. The program resulted in a 20 percent reduction in parasites and children under six reported a 13 percent reduction in diarrhea and a 20 percent reduction in anemia. (See Cattaneo MD; Galiani S; Gertler PJ; Martinez S; Titunik R, 20070, "Housing, Health and Happiness", World Bank Policy Research Working Paper 4214, April 2007.)

\(^{15}\) Habitat for Humanity International
TRANSPORT

The transport sector has a crucial impact on the economy, environment, health and well-being of people and as such, it is intricately linked with sustainable development. Rapid rates of urbanization and economic activity in countries of the developing world are creating immense demands on the transport sector. Rising incomes are increasing motorization at unprecedented rates, causing serious challenges related to traffic congestion, air pollution, human and environmental health, and traffic-related injuries and deaths. These pressures on the transport sector are also leading to unsustainable trajectories of energy consumption and climate change.

The ill effects of current unsustainable transport development strategies are disproportionately borne by the poor and lower middle classes, by women, by the disabled, and by others displaced by the rising use of motor vehicles by those who are more affluent. While there are slightly more than one billion motor vehicles in the world today, by 2030 this is projected to double. Even then, three-fourths of the world’s population will not own motor vehicles. Sustainable development will be greatly impeded unless efforts are made now to guarantee universal access to safe, clean, and affordable transport.

The transport sector is a main contributor to greenhouse gas emissions leading to climate change, accounting for 23 percent of global CO2 emissions and approximately 15 percent of overall greenhouse gas emissions. Although transport emissions per capita in developing countries are relatively lower than in OECD countries, close to 90 percent of the increase of global transport related CO2 emissions is expected to occur in developing countries, mostly from private vehicles and freight. The economic costs of transport-related air pollution, road accidents, and worsening congestion in many cities of the developing world is believed to range from 5-10 per cent of GDP. Throughout most of the developing world, there is also a rise in traffic fatalities closely mirroring the growth in motorization and deaths related to vehicle

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travel around the world are projected to double from 1.2 million to 2.4 million annually between 2011 and 2030\textsuperscript{18} with nearly half of these occurring in urban areas.\textsuperscript{19} Yet, despite the staggering health and economic impact, governments have typically given less priority to road safety and the poor and lower middle classes are more vulnerable to the negative public health effects of unsustainable transport.

Transport access has a significant impact on economic and social cohesion, as transport costs are high for low income households because of heavy reliance on informal modes and limited connectivity by public transit. The urban poor in developing countries spend relatively more time and a larger proportion of their disposable income (25-35 percent) on transport for commuting to work.\textsuperscript{20}

Quite often, the urban poor live in locations that are in peripheral areas of cities (such as the informal settlements described above) or otherwise distant from employment centers, as they are unable to afford housing in more accessible locations and more affordable housing choices are limited to the periphery of cities. They are also unlikely to own motorized vehicles and predominantly walk or cycle for most trips, using public mass transit for longer trips, where available. Although the majority of trips in many developing country cities are made through non-motorized modes, urban infrastructure investments do not take this into account and focus on road building to cater to private vehicles. High vehicle speeds, lack of safe pedestrian infrastructure, and design negligence related to roads cause high rates of road fatalities among the poor. By bringing focus on transport safety, affordability, efficiency and accessibility to opportunities for the urban poor and for the interconnection of rural and urban areas, transport investments are thus critically linked to goals of poverty reduction and sustainable development.

\begin{thebibliography}{99}
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WATER & SANITATION

Access to safe and affordable sources of drinking water and adequate sanitation services, covering disposal of human waste, garbage, and wastewater, is essential to preventing disease and maintaining health and wellbeing. Data from the UNICEF shows that in 2012 an estimated 780 million people lacked access to safe drinking water and 2.5 billion people lacked access to basic sanitation services worldwide. Of these, 1 billion people defecate in the open, largely as a result of poverty and inability to build separate toilets due to space and land constraints, which are particularly acute in urban areas. Diarrhea is directly a result of poor sanitation and is the biggest cause of death in children under five in the world, responsible for 800,000 deaths each year - around 2,000 children every day, with repeated incidence leading to stunted growth. Gender responsive access to sanitation for girls who are developing into young women is linked to continued schooling and education for girls.

The MDGs targeted access to improved sanitation for at least half the urban population by 2015, but much more needs to be done in this regard. While more than 2.1 billion people have gained access to improved water sources and almost 1.9 billion additional people have access to sanitation facilities since 1990, the deficit of the urban unserved remains high. The poor in urban areas pay high prices for small amounts of often poor quality water. The number of people with access to an improved sanitation facility needs to increase by another 1 billion by 2015 - extending access to a further 660,000 people a day, every day, between 2011 and 2015 - to meet the MDG sanitation target.

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ENERGY

It is estimated that about 1.3 billion people in the world do not have access to electricity and among urban populations, 700 million lacked access to clean fuels in 2005, with 279 million lacking electricity. Universal access to affordable, reliable, efficient, and low-carbon energy services is essential for the poor to have similar opportunities and quality of life as others. For some parts of the world, such as urban South Asia and sub-Saharan Africa, access to energy is a fundamental challenge linked to sustainable human development.

Further, the direct link of energy consumption with global greenhouse gas emissions must be addressed with urgency in the 2015-2030 period, with greater emphasis on issues related to energy sources and energy consumption in urban areas. Global energy-related emissions increased by 10 per cent from 1990 to 2000 and 33 per cent from 2000 to 2010, with developing areas primarily contributing to the acceleration in emissions growth. Emissions in developing areas grew by 48 per cent between 1990 and 2000 and by 81 percent from 2000 to 2010. Fulfilling the growing demand for energy presents several opportunities related to harnessing renewable sources and scaling up adoption. In many developing country cities, for instance, rooftop solar power through distributed generation may actually be a more feasible option than trying to expand grid-based access.

How the need for urban energy consumption is met has a direct correlation with greenhouse gas emissions and the issue of climate change mitigation. If business-as-usual reliance on conventional fossil-fuel based energy sources continues, the climate consequences could be disastrous, with the dangerous threshold of a two degree Celsius rise in temperature being reached much sooner than expected. With 30-50 percent of urban settlements in developing countries located in environmentally fragile areas, where the quality of housing is poor and basic serv-


ices are lacking, low-income urban households are particularly vulnerable to flooding and climate-related disasters.

WASTE MANAGEMENT

By 2025, one billion people are expected to enter the global “consuming class,” of which 60% will live in 440 cities in emerging countries that are expected to generate about half of global GDP growth.\(^\text{27}\) This growth in the consuming class will have enormous implications for waste management, as growing urbanization and rising incomes increase the consumption of plastics, paper, glass, aluminum and other manufactured materials. The World Bank estimates that the amount of municipal solid waste generated will increase by almost 70 percent from the current 1.3 billion tons per year to 2.2 billion tons per year by 2025, with developing countries accounting for much of the increase.\(^\text{28}\) Waste management in many city-region areas of developing countries is also an informal employment sector that must be recognized and integrated into waste recycling and composting programs so that waste from urban households to landfills is reduced. The global cost of managing this waste is expected to increase from $205 billion to $375 billion by 2025, which will particularly impact low-income cities because a large part of their budget is often dedicated to waste management.\(^\text{29}\)


\(^{29}\) Ibid.
POLICY APPROACHES

Four broad categories of policy approaches are applicable to improving universal access to urban services. These relate to international, national, local, and community-driven actions.

(1) INTERNATIONAL FINANCING, TECHNOLOGY TRANSFER, AND KNOWLEDGE SHARING FOR CITIES

Access to climate and other green finance mechanisms (such as the UNFCCC Green Climate Fund) allow cities to finance projects that can achieve significant lifetime reductions in carbon footprints and energy costs. In this regard, ensuring a national policy framework that allows the utilization of these funds is important. Emerging economies have the potential to leapfrog traditional development patterns by learning and applying technological innovations in city-regions that better fit their context and help achieve goals of climate action. For example, Bus Rapid Transit (BRT) is a means of providing affordable transit access in cities that was pioneered in Brazil and Colombia and has since, spread to a large number of countries across the world. City to city knowledge sharing networks like ICLEI and C40 promote resource efficiency and climate friendly policies that are consistent with economic objectives of generating employment and income. For example, a BRT Standard has been developed to help spur development of higher quality BRT that learns from global best practices.

USE OF GREEN FINANCE IN BANGKOK

In Bangkok, the Clean Technology Fund (CTF), one of the financing instruments under the Climate Investment Funds, is providing $70 million for urban transformation to co-finance the development of a Bus Rapid Transit (BRT) system for the city, in addition to other energy efficiency investments in municipal facilities. The success of BRT development in Bangkok would demonstrate viable low carbon transport solutions and models for replication to fast-growing secondary cities in Thailand that are facing increasing congestion.

(World Bank (2011). Cities and Climate Change: An Urgent Agenda)
NATIONAL POLICIES AIMED AT EMPOWERING SUBNATIONAL AND LOCAL INSTITUTIONS AND CREATING INFRASTRUCTURE FINANCING PROGRAMS FOR UNIVERSAL ACCESS

It is crucial to empower subnational and local institutions so that they can take action towards universal access. For example, in Brazil, city mayors have considerable authority to address urban issues and a Ministry of Cities exists to focus on and provide support related to urban issues. Such an agency is important to achieve the integrated planning and capacity building required at the local level. It also needs to coordinate with other agencies such as those responsible for economic development, industries, environment, and so on.

In India, for example, while the ambitious national JnNURM program for financing urban infrastructure and basic services for the urban poor exists (see box), the capacity of cities to fulfill the required conditions and use the assistance to implement programs is often limited. Key challenges often relate to limited guidelines for funding, a one size fits all approach across city-regions of different types, and lack of capacity at subnational and local levels to effectively utilize funding or leverage it with other private or local sources.

NATIONAL FUNDING FOR CITIES IN INDIA

In India, a national funding program called the Jawaharlal Nehru National Urban Renewal Mission (JnNURM) invested US$20 billion in urban infrastructure and basic services for the urban poor between 2005 and 2012, across 63 cities. The program is an ambitious attempt to invest in renewing infrastructure, while reforming the political, institutional and financial relationships between national, state, and city levels of government that have hampered sustainable urban development in the past.

The program combines financial support for infrastructure projects, under a cost-sharing arrangement with states and local governments, linked to a carefully structured governance model, that includes both central assistance and mandatory and optional reforms at the state/local level. According to JnNURM regulations, the Indian Ministry of Urban Development requires cities to develop citywide development plans, comprehensive mobility plans, and detailed project reports to become eligible to receive financial support.

(3) LOCAL SECTORAL POLICIES AND INTEGRATED PLANNING

While national policies exist in some countries that support sectors important at the urban scale (e.g., transport, housing, energy), conflicting interests and lack of coordination among agencies and between the city and state, along with the lack of local capacity, often inhibit effective implementation at city-region scale. Cross-sectoral, integrated planning approaches, with buy-in and ownership from all involved agencies, are important. For instance, PlaNYC, New York City’s visionary cross-sectoral sustainability plan prepared by the Mayor’s office brought all sectoral agencies together around a common set of goals and performance outcomes.

(4) STANDARD GRASSROOTS COMMUNITY-COLLECTED CITY-WIDE DATA ON INFORMALITY AND POVERTY IN CITIES

Data about informal neighborhoods in cities worldwide has been difficult to obtain for the purpose of planning and research. In order to achieve more inclusive development trajectories in cities of the South, in terms of access to land, infrastructure, housing, and livelihoods, we need to know our cities better, in quantitative and verifiable ways. In this context, there is a need for formal institutions to legitimize and commission grassroots data collection, while also allowing grassroots communities to continue to own the data. Using the data at the meaningful city scale requires technical support, as well as a consensus core set of questions, so as to make the data comparable across settlements and cities. Ultimately, the data has to produce the institutional and political outcomes that can incentivize people-led data collection processes to go forward, which means institutionalizing partnerships between community networks and formal authorities, especially local government. It also means using the data as a benchmark for evaluating development changes over time, which serves as a fundamental monitoring and evaluation tool for subnational and local authorities.
DATA ON THE URBAN POOR

The experience of Shack/Slums Dwellers International (SDI) indicates that, where tried, standard grassroots community-collected city-wide data not only enables the transfer of knowledge between places, but also a much faster track to effective and sustainable urban planning. SDI federations are now utilizing innovative tools to compile, for the first time ever, standard grassroots community-collected city-wide data on informality and poverty in cities across the developing world, with a particular focus on experiences in African contexts. Institutional outcomes of community-collected data include revised approaches to development-related large-scale relocation, such as in the project to upgrade the railway line in Mumbai, India, and Nairobi, Kenya, and the development of inclusive institutions for financing slum upgrading, such as in Harare, Zimbabwe, and Kampala, Uganda. At a more general level, the institutional outcomes of such activities include the building of community organizations and city-wide networks of such organizations, as well as creation of inclusive spaces of deliberation for land, shelter, and infrastructure planning in partnership with local government.

USE OF DATA IN TRANSPORT SECTOR

In a growing number of cities, including Nairobi, Dhaka, Manila, Mexico City, and Jinan, the General Transit Feed Specification (GTFS), which defines a common format for public transportation schedules and associated geographic information, is being used with crowd-sourced data from smart phones to develop publicly available maps and schedules of public transport and paratransit services for the first time. This information empowers customers, operators, and governments to collaborate and improve such services at a modest cost.

Countries face different political and urbanization challenges and the above mentioned policy approaches must be contextualized to each country. In some countries, states may play a larger role in city-level access and in others the metropolitan region may be autonomously responsible for decision making. In most cases, particularly in the Global South, the four policy approaches outlined above must be effectively integrated in order to improve universal access to urban services.
PRACTITIONER EXPERIENCE

Across urban service sectors, evidence shows that common challenges relate to financing, limited capacity, lack of data, limited integrated policies and governance issues.

‣ Financing problems are of three types: (i) Current financing is often not targeted to sustainable or green infrastructure or service improvement, rather to costly, high energy consuming infrastructure (e.g., roads and highways in transport, fossil-fuel based power plants); (ii) limited use of innovative and local financing sources, that makes cities dependent on other levels of government to make local investments; and (iii) lack of incentives for private sector engagement in affordable inclusive housing, innovative mobility solutions, renewable energy development, provision of credit to the poor, and so on. Partnerships between governments and the private sector are crucial to achieving universal access across sectors.

‣ Limited institutional and technical capacity at state and local levels. Challenges relate to limited awareness of options and best practices, lack of technical capacity and financial resources, poor management and integration across sectors and projects applicable in the same geographic areas, and lack of enforcement of regulations often due to corruption.

‣ Lack of data and performance measurement on sustainability indicators. These include lack of baseline data to measure outcomes, lack of familiarity with analytical tools, and limited consideration of the full economic, social and environmental costs and benefits of planned programs. In particular, in urban areas of the Global South, there is a significant gap in data about informal neighborhoods, informal workers and migrants. This is essential for planning and management of the severe inequities associated with informal settlements in the rapidly urbanizing cities of Africa, Asia, and Latin America.
Governance challenges include lack of accountability, transparency and participation of stakeholders and the public in decision making; as well as insufficient decision making authority at local level and lack of coordination across agencies, sectors and government levels, with the resulting lack of integrated policy approaches.

COMMUNITY EMPOWERMENT FOR PROPERTY RIGHTS IN BOLIVIA

In the wake of a new constitution in 2009, Bolivia adopted a new regulatory framework that recognizes property entitlements, secures land access for women, promotes citizen voices in public policy, and encourages accessible mechanisms for land use, planning and registry. Although the framework appeared promising, female residents in District 9 of Cochabamba City did not feel empowered to act on the new constitution’s promises of enfranchisement. Cochabamba, the fourth largest city in Bolivia, is home to about 500,000 people and 70% of the city’s inhabitants live without secure land tenure. Because of high urban migration, staggering population growth in Cochabamba’s District 9 has resulted in nearly 10,000 homes — about 90% of the population — having no legalized property rights, only notes or handwritten receipts to prove ownership, and most are in the male’s name. Habitat for Humanity International, engaged in a strategic partnership with Bolivia, Ciudadanía and The Gregoria Apaza Center for the Promotion of Women which resulted in the Women’s Leadership School for Security of Urban Land and Housing, where Bolivian women can receive training in legal rights, citizenship, secure tenure, Bolivian law, political advocacy and awareness-raising. In March 2012, a group of women from the network joined with social leaders to present to the Plurinational Assembly in La Paz a gender-focused proposal to supplement the Urban Property Owner Regularization Law. The proposal was incorporated into the final version passed by President Evo Morales on June 5, 2012. Among additional provisions, a precedent-setting historic achievement was: “In the case of marriages and free or proven unions, the legal title to the urban property destined for housing will be registered in favor of both spouses or partners, mandatorily consigning with complete names.”

Based on evidence from developed and developing countries, the following five key points emerge to guide policies and programs related to universal access to affordable urban public services:
i. Urban land use and spatial planning has significant long term impacts on universal access to urban services – Urbanization in developing countries is marked by two key trends: (i) the number of large cities is growing fast, and (ii) the land area occupied by cities is also growing. It is crucial to plan for the use of limited urban land and provision of urban networked infrastructure and services in an integrated way. Land use policies and plans influence employment and housing locations, their affordability, and the access they provide to transport, water and sanitation, energy, and other public utilities and the integrated and balanced connections between urban and rural development. How land development occurs in cities thus strongly impacts the demand and supply of these utilities and the ongoing costs of service provision. Development largely focused in peri-urban areas often implies lesser access, particularly for the urban poor, and higher ongoing public costs. At the state and local level, integrated, cross-sectoral master planning with institutional coordination across agencies responsible for provision of various services is essential. (See the Communitas Issue Paper on “Integrated urban design and planning... for additional information.)

ii. Universal access to services in cities determines economic, health, inclusion and environmental outcomes – In urban areas, limited access to housing and public services directly translates to limited economic opportunities, negative health outcomes and perverse environmental impacts. Conversely, improving access, particularly for the poor and informal workers in cities, can galvanize the informal sector, which has a strong and growing economic contribution in local and national economies. Therefore, there are significant benefits and co-benefits from improving access to housing and urban services in terms of reducing inequality, enhancing employment prospects for the poor, increasing economic competitiveness of cities, improving public health, and reducing air pollutants and greenhouse gas emissions. Evidence shows that more compact and connected urban development reduces future negative lock-in effects and the carbon footprint of cities, while yielding significant regional economic, equity, and environmental benefits - i.e., the triple bottom line.
iii. Localized or distributed models for urban service delivery enhance universal access, save costs, and are often more resource efficient – Successful solutions to urban services often involve local communities partnering with subnational and local governments, civil society organizations, and the private sector. For instance, programs for ward-based community rain water harvesting to conserve water and waste segregation at source to enhance recycling are showing good results in the Indian city of Bangalore. The city has gone from being named the “garbage city,” to mounting a successful campaign (Kasa Muktha or Garbage Free) at the level of each urban ward to reduce the quantities of waste destined for landfills and encourage reuse and recycling. In the energy sector, evidence from several developed and developing countries shows that distributed renewable energy generation, partly incentivized by subsidies, has led to greater adoption that has enhanced access and reduced the price of renewable energy, while generating economic benefits from the growth of a new industry in green technologies. In transport, working with local bus agencies to improve operations, integrating the local informal sector, improving non-motorized access, managing parking and street space to favor public transport and non-motorized modes, and considering lower cost mass transit such as Bus Rapid Transit (BRT) as an alternative to investing in more capital intensive rail infrastructure, can bring the benefits of access much sooner for the majority of people in urban areas.

iv. Achieving universal access to urban services requires strong institutional support and empowerment of subnational and local authorities – It cannot be emphasized enough that the type of integrated planning required to achieve universal access requires development of stronger institutions at all levels. State and local capacity to do technical studies that guide decision making, to raise finance, and enforce regulations must be increased and coordinated. National governments must support cities by setting policy guidelines to enhance universal access and establishing supportive financing mechanisms. These mechanisms should not only allow access to external international funding but also provide incentives for the private investment in improving access.
v. An agenda for inclusive housing and urban services in the developing world will rise or fall on the ability to collect and mainstream data also from informal neighborhoods to inform planning decisions – Standard grassroots community-collected city-wide data on informality and poverty in cities can ensure institutional outcomes that foreground the role of urban poor communities in working with local government to address major deficits of basic services, security of tenure, and shelter. Community-collected data processes should be mainstreamed and used as monitoring benchmarks. A significant principle behind this approach is the recognition that it is not just the goals themselves, but also the ways in which we evaluate progress towards achieving these goals, that define the institutional mechanisms by which these issues are addressed.
PROPOSED TARGETS FOR A STANDALONE SDG

The targets from the MDGs that have a relationship with universal access to services in urban areas are:

- Target 7A: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources – mentioning reduction in loss of farmland and reduction in GHG emissions
- Target 7C: Halve by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation
- Target 7D: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers
- Target 8F: In cooperation with the private sector, make available the benefits of new technologies, especially information and communications

As mentioned earlier, the adopted MDGs did not differentiate between rural or urban issues. As urbanization increases, an urban SDG can greatly help achieve poverty alleviation and sustainable development by incorporating specific targets related to access and governance. Suggested targets related to universal access to urban social services and public utilities within are listed below. The following step required is to identify which targets would fall under a standalone urban SDG and which would be inter-linked with other SDGs areas.

QUANTITATIVE TARGETS

1. Safe affordable drinking water and basic sanitation available to ALL urban households by 2030.
2. Doubling of investment in green technologies (e.g. renewable energy, smart energy meters, etc.) and ICT applications to improve universal access to urban services by 2030.
(3) Per capita consumption of fossil fuel-based energy and water is halved in the Global North by 2030.

(4) By 2030, nearly all urban households are able to access jobs, goods and services within 30 minutes by public transport and/or walking and cycling.

(5) Air pollution from passenger and freight transport is halved by 2025 and GHG emissions from transport peak globally latest by 2020 with an ultimate vision of 40-60% reductions by 2050 compared to 2005 levels.

(6) Traffic related deaths are cut in half by 2025 with an ultimate vision of near zero fatalities.

(7) By 2030, 100 percent slum dwellers and the urban poor have access to affordable and adequate housing served by basic services.

(8) By 2030, sufficient financing mechanisms are available to 100 percent of urban poor to support housing and livelihoods.

(9) By 2030, metropolitan density is increased and conversion of additional greenfield land for urban development is limited in cities worldwide to less than half of current rates.

(10) Increase women’s access to safe public spaces and transport that facilitate their mobility and connectivity to public resources, services etc.

GOVERNANCE-ORIENTED TARGETS

(11) By 2030, city-level baseline data across sectors is produced for all cities with population greater than one million, to understand resource consumption and monitor performance.

(12) Greater coordination is achieved across all levels of government and agencies responsible for key services such housing, transport, water & sanitation, and energy to deliver integrated low carbon solutions (e.g. renewable energy in low-cost housing).

(13) National, subnational, and local agencies are accountable against performance outcomes related to sustainability (measured by how well they are achieving the triple bottom line - environmental protection, economic development, and social equity).
(14) Enhanced community-collected data on the nature and scale of poverty and informal workers is available, encouraged and used to guide policy, planning, and program development for universal access to services.

(15) Ensure that slum dwellers and grassroots women’s organizations have formal roles in planning, implementing and monitoring the delivery of public services.

Along with the potential complimentary targets identified in other Communitas Issue Papers, these targets provide a framework for operationalizing an urban SDG. Once a unified set of urban SDG targets has been prioritized, indicators and metrics for each target will be identified. The Communitas Coalition will consult with national, regional and local authorities as well as civil society organizations to identify an approach for universal benchmarking that accommodates differential interpretations of targets along regional and/or national lines.

**LINKS TO OTHER POSSIBLE SDGS**

Apart from an urban SDG, different sources, entities and coalitions are suggesting SDG themes for consideration in the post-2015 development agenda. Highlighted below are the urban linkages for each of these, and how the proposed urban targets above might contribute. Related targets from the list above are included in parentheses.

(1) *Eradication of extreme poverty and hunger* – Efforts to reduce poverty, hunger, child stunting, and malnutrition in urban areas can be supported by the economic and health benefits resulting from universal access to housing, water and sanitation, energy, and transport infrastructure. (Proposed Targets #1 and #7)

(2) *Sustainable human development within planetary boundaries* – This goal is particularly relevant for cities, given their importance as natural resource consumers and engines of economic activity. It is clear that for countries to assess their contribution to planetary

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30 This is the approach articulated by UN-Habitat in its Proposed Sustainable Development Goal, Sustainable Cities & Human Settlements, 21 December 2012.
boundaries in terms of shares of resource consumption and economic, social, and environmental indicators, cities will be the first unit for assessment, from which countries may aggregate to come up with national figures. (Proposed Targets #2, #3, #5, #9, #10, and #11)

(3) *Universal education* – Reliable access to shelter, water, energy and transport services for the urban poor and informal migrants are essential to enable access to employment and educational opportunities in cities. (Proposed Targets #4, #7, and #13)

(4) *Human rights, social inclusion and gender equity for all* - Gender equality and universal access to education can be facilitated by improvements in universal transport access to employment and educational opportunities, ensuring safety and security for women using public spaces and public transport, and ensuring safe and attractive conditions for walking and cycling. (Proposed Target #4, #7, and #13)

(5) *Healthy livelihoods* - Reduction in road fatalities and transport-related air pollution through an emphasis on public and non-motorized transport modes, reduction in open defecation (please keep this language which is common in intergovernmental discussions) and associated diseases through improved access to sanitation, and reduction in diseases through improved water supply, access to sanitation services, and better housing conditions – all have a strong relationship to the health and wellbeing of children and adults. (Proposed Targets #1, #5, #6, and #13)

(6) *Linkages between urban and rural development* – The rapid conversion of farm land for urban development in many rapidly growing cities of the developing world is threatening food security in metropolitan areas and rural livelihoods. Further, continuously sprawling patterns of urban development encroach on valuable farmland and create several other challenges related to an increasing energy and carbon footprint. (Proposed Target #9)

(7) *Climate change reduction and sustainable energy for all* - The increased use of sustainable energy sources such as renewable energy and enhancing energy efficiency in the delivery of urban infrastructure such as housing, transport, and power can play an important
role in mitigating greenhouse gas emissions – 70% of which are concentrated in cities. Sustainable energy also enhances the energy security and resilience of cities to energy supply shocks and future disruptions in energy supply related to natural disasters, which directly affects access to energy. (Proposed Targets #2, #3, #4, #9, and #10).

(8) Environmental sustainability – With respect to ecosystem protection, the threat of serious climate change is becoming all the more apparent with severe weather events and rising temperatures becoming more frequent. The effects of climate change on sea level rise, natural disasters, and severe weather are particularly pronounced in many coastal cities of the developing world. Resilience in the face of increasing natural disasters and adaptation to climate change in terms of managing existing water resources are crucial for these cities to ensure that access to water and other infrastructure services are not disrupted (Proposed targets #2, #3, #4, and #5).

(9) Governance for sustainable development – Finally, the need for improved multi-level governance is particularly seen at city-region scale, where institutions typically lack capacity and authority. City-level institutions must be strengthened with clear feedback loops to the regional/state and national decision makers. Experience shows that without the strengthening of city-region level institutions, national policies do not get successfully implemented and enforced at the local level. In addition to improved multi-level governance, institutions at all levels must be strengthened to create a greater role and incentives for the private sector to participate in the effective delivery of urban infrastructure services to enhance universal access (Proposed targets #10, #11, #12, and #13).

In summary, most of the themes that are likely to be addressed in the SDGs ultimately adopted have a clear and direct urban dimension, representing unique issues relating to cities. Whether urban issues are considered as a standalone SDG or as a key component of the other SDG themes, these issues merit urgent attention in the post-2015 development agenda.
MOVING FORWARD

To manage the growing wave of urbanization across the world in a way that maximizes equity, resource efficiency, and economic benefit, this paper makes the case for emphasizing urban issues in the dialog on SDGs. In particular, it shows how universal access to housing, infrastructure and basic urban services can help achieve this triple bottom line of economic development, social equity and environmental protection for cities and nations.

In order to achieve the potential environmental, economic, and social benefits of sustainable urbanization, this paper supports the adoption of an urban SDG that incorporates quantitative targets for universal access to housing and a range of urban services, as well as a set of governance targets. Achieving such access for urban populations is closely linked to positive economic, health, inclusion and environmental outcomes, particularly for the poor.

Once there is consensus within the UN intergovernmental Open Work Group on SDGs on a set of urban SDG targets, the next steps will be to identify which targets fall within a stand-alone urban SDG and which should be linked with other sector-based SDGs, and then to develop and propose specific indicators to measure progress towards these targets, identifying potential data sources and methodologies for consistent measurement across cities and regions.

The Communitas Coalition will consult with national, subnational and local authorities as well as civil society organizations to identify an approach for universal benchmarking that accommodates differential interpretations of targets along regional and/or national lines.\(^{31}\)

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