

# Water and Sanitation Program

End of Year Report, Fiscal Year 2015

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# Message from the Manager

The Sustainable Development Goals (SDGs) have posed a challenge for the global water community to move beyond achieving basic access targets to the ambition of tackling the water crisis through economic, social, and environmental dimensions of sustainable development.

We face an increasingly thirsty world made worse by the alarming effects of climate change on water resources, exponential population growth, and competing water demands among agriculture, energy, and cities. Almost one-quarter of the world's population today faces water shortages. Over the next decades, demand for water is projected to increase while ground water supplies will continue to diminish. Given these trends, almost half of the world's people will live in water-stressed countries or regions by 2030.

The SDG water goal—Ensure availability and sustainable management of water and sanitation for all-recognizes that achieving universal, equitable, and sustainable access to water and sanitation requires a continued focus on reforming the institutions of service delivery, boosting sustainability of water resources, and balancing the demands of conflicting groups of water users, making sure to reach the poorest. Stronger institutions are critical for ensuring that physical investments in water infrastructure are effectively used to increase access, improve water quality, and use water efficiently. More importantly, institutional reforms that address financial and resource sustainability and inclusion issues are a key driving force for

providing innovative and low-cost water and sanitation services for the last mile to achieve the SDGs.

# Leveraging the Water Global Practice to Implement the SDGs

Achieving the vision of the SDGs requires a bold new approach that integrates the varied disciplines within the water sector under the common goal of achieving a water-secure world for all. The World Bank Water Global Practice (GP), which consists of world-renowned technical expertise, sector knowledge, and extensive in-country presence, has the potential to serve as an implementing arm of the SDGs.

WSP's integration into the Water GP brings a tremendous opportunity to leverage the World Bank's financial and global knowledge base to achieve these goals. The creation of the Water GP allows for an integrated water agenda, bringing together the World Bank's finance and knowledge systems under one management structure to turn global knowledge into implementation. The five Global Solutions Groups (GSGs) in the Water GP emulate the critical thematic areas that each is poised to tackle a set of global challenges in the sector: Water Supply and Sanitation and Water Quality, Water for Agriculture, Water Security and Integrated Water Resource Management, Hydropower and Dams, and Water Poverty and Economy. The World Bank brand also helps bring together leaders from diverse disciplines to share knowledge and coordinate efforts to help governments achieve the SDGs.

# Defining a New Partnership Framework for Future Collaboration

As we approach the end of the 2011–2015 Business Plan, WSP is working closely with its donors to develop a strategic partnership framework and governance structure to implement the vision laid out by the SDGs.

A historic agreement was reached with the donors in Stockholm on a new Water GP partnership framework that encompasses a single governance structure, a new multi-donor trust fund, and a common results framework. The proposed framework provides a holistic partnership approach at the Water GP level and offers donors a significant opportunity to address essential infrastructural needs alongside supporting global innovation, knowledge, and long-term institutional development to bring lasting change in the countries.

Work is currently underway to finalize this strategic partnership framework, including the three-year work plans for the GSGs and an integrated Water GP results framework with proposed results areas, measurement methodologies, output and outcome indicators, and performance targets. Upon agreement of the donors and completion of the legal requirements, the new structure will be operational before the expiration of the current WSP Global Core Multi-Donor Trust Fund at the end of December 2016. WSP with the Water GP seeks support from the donors to facilitate the transition to the new partnership approach and looks forward to working together to achieve the SDGs.

# Achieving Full-Scale Implementation to Expand Access to the Poor

Although discussions on the future of WSP continued throughout FY15, the program activities reached full-scale implementation with highest level of disbursements this year. Since the start of the current business plan, WSP has disbursed over US\$207 million, of which US\$55 million was spent in FY15, representing a 17 percent increase

from the previous year. Sustained financial support from donors has helped expand the geographic outreach of WSP activities from 22 to 38 countries over the last five years. WSP's program activities have supported governments to scale up access to sanitation services for approximately 43 million people and facilitated the private sector to expand water and sanitation services for nearly 3.4 million people during the business plan period. WSP has also influenced approximately US\$2.9 billion in investments for rural sanitation and US\$56.5 million in private sector investments.

# Influencing World Bank Lending Through Knowledge

WSP's increased role within the Water GP has already begun to impact World Bank lending. WSP is supporting the delivery of a US\$300 million World Bank rural sanitation and hygiene program in Vietnam by building capacity of implementing agencies in 19 provinces in the Northern Mountainous and Central Highlands to enable them to deliver sanitation services in remote areas. WSP helped design one of the first World Bank projects that focused on urban onsite sanitation in Lusaka, Zambia. The US\$305 million Lusaka Sanitation Program, being funded by a number of other development partners, will provide more than 200,000 people with improved sanitation. WSP is also suporting the design of a US\$1 billion lending and technical assistance program for sanitation in small towns in Egypt.

WSP's flagship knowledge initiatives played a pivotal role in informing the design of major lending projects in India and Indonesia. Analyses from WSP's Economics of Sanitation Initiative (ESI) and Water Supply, Sanitation, and Hygiene Poverty Diagnostic were used to inform the design of the US\$1.5 billion World Bank Swachh Bharat-Gramin Mission (SBGM) in India to identify the sanitation needs and economic impact of the unserved population. The SBGM draws on the rural sanitation approach developed at the district level to scale-up sanitation from four to 19 states. The ESI methodology is also being applied to support operations in Indonesia to help the government

estimate economic damages resulting from poor sanitation as part of its campaign to implement ambitious citywide sanitation goals in the city of Jakarta.

The Monitoring Country Progress in Water and Sanitation (MAPAS) for El Salvador, Honduras, and Panama identified the need for an additional US\$864 million in annual investments to help these countries meet their national goals for water and sanitation, revealing serious gaps between planned investments and actual funding needs. The findings from the reports are facilitating Honduran officials' use of equity criteria to direct investments toward populations that do not have access to drinking water and improved sanitation. The learning generated by WSP through implementation of the World Bank Emergency Rural Water Supply and Sanitation Project in Haiti is helping the introduction of volumetric billing and improved modes for

domestic private sector participation in the new US\$50 million IDA investment.

WSP's success depends directly on the support and partnership of our Council. WSP is grateful for the generous support of our donors over the years to help expand access to water and sanitation services for the poor all around the world. We look forward to their continued and scaled-up support and enhanced collaboration with partners in making meaningful strides toward achieving the SDGs.

Thank you,

Jyoti Shukla

Senior Manager,

for Simile

Water and Sanitation Program

Water Global Practice

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# Introduction



WSP progams are being implemented in 38 countries across the globe to bring affordable, safe, and sustainable access to water and sanitation services for the poor.

The Water and Sanitation Program is a multidonor partnership administered by the World Bank Group (WGB) as part of the Water Global Practice. The Programs works with governments, donors, academia, civil society, and the private sector to help secure affordable, safe and sustainable access to water and sanitation services for the poor. WSP works in 38 countries across Africa, East Asia, Latin America and the Caribbean, and South Asia.

Initially established in 1978 as a cooperative between the World Bank and the United Nations Development Program to explore cost-effective technologies and models for consumers, WSP has supported several advances in the water and sanitation sector over the past three decades. The focus of our work has evolved from looking at the technologies needed to expand access to a broader approach that addresses the needs of the sector from a more holistic perspective. With more than 130 staff, WSP works closely with World Bank operations and government clients to scale up innovative approaches, encourage policy reform, and build institutions, and plays a vital role in achieving WBG goals of eradicating poverty and boosting shared prosperity.

WSP works in six core global business areas under the 2011–2015 business plan. Each business area addresses critical global water and sanitation challenges to bring lasting solutions that improve access for the poor. All six business areas are not implemented in every WSP focus country. Specific activities at the country and regional levels are selected in accordance with client demand and WSP's overall country and strategic priorities.

# Scaling Up Rural Sanitation and Hygiene

Around 2.5 billion people, comprising 37 percent of the world's population, are still without an improved sanitation facility. Of these, approximately 1 billion practice open defecation, resulting in more than 750,000 deaths of children under age five each year. WSP addresses this challenge by supporting governments in strengthening enabling environment conditions to deliver at-scale and sustainable access to sanitation services for the

poor. With a focus on building a rigorous evidence base to support replication, WSP combines Community-Led Total Sanitation (CLTS), behavior change communication (BCC), and sanitation marketing to generate sanitation demand and strengthen the supply of sanitation products and services, ultimately resulting in improved health conditions of people in rural areas.

# Creating Sustainable Services through Domestic Private Sector Participation

With the increasing difficulty of the public sector to meet the service delivery needs of the poor, the private sector can play a pivotal role in bridging water and sanitation service delivery gaps by partnering with the public sector to provide innovative and low-cost water and sanitation solutions to the poor. WSP supports governments to strengthen the ability of the domestic private sector to provide the poor with sustained and cost-effective water supply and sanitation services.

# Supporting Poor-Inclusive Water Supply and Sanitation Sector Reform

Almost two in three people lacking access to clean water survive on less than US\$2 a day, with one in three living on less than US\$1 a day. More than 660 million people without sanitation live on less than US\$2 a day. WSP supports governments to implement poor-inclusive policies, strategies, and sector reform. WSP also works to strengthen the voice and capacity of citizens, including the poor, to demand greater accountability and responsiveness from public officials and service providers.

# Targeting the Urban Poor and Improving Services in Small Towns

More than half of the world's population lives in urban areas. This number is expected to grow to 66 percent by 2050. Urban growth rates are much faster in developing countries. On average, more than 5 million people migrate to cities each year, resulting in inadequate provision of water and sanitation services. WSP works with national and municipal governments to expand sustainable water and sanitation services for the poor residing in dense urban and peri-urban areas and small towns.

# Adapting Water Supply and Sanitation Delivery to Climate Change Impacts

Poor countries are the most vulnerable to the impacts of climate change. Changes in weather patterns and resultant weather-related disasters pose many risks for agriculture, food, and water supplies. WSP supports governments to manage risks associated with climate change and other natural disasters in the water and sanitation sector. WSP also aims to deepen knowledge on the links between water, sanitation, and climate change.

### Delivering Water Supply and Sanitation Services in Fragile and Conflict-Affected States

About 1.2 billion people live in countries affected by fragility and conflict. Poverty is also largely concentrated in fragile states. More than half a billion people are living in poverty in the 33 fragile states defined by the World Bank Group. Providers of water and sanitation services in fragile countries are in great need for strengthened policies, capacity, and infrastructure to provide sustainable access. WSP works with a wide variety of partners in fragile states to encourage governments to prioritize water and sanitation and develop solutions that work in these environments.

This report begins with the "Global Knowledge" section, which illustrates WSP's pioneering research and analytical work developed in fiscal year 2015. Next, the report details the approach, implementation status, results achieved, and lessons and opportunities for the six global business areas over the past fiscal year. The "Global Communications" section outlines WSP's strategic communication efforts. Lastly, the "Administration and Finance" section summarizes use of donor funds for fiscal year 2015.

# Bolivia Dominican Republic Ecuador El Salvador Haiti Bangladesh Cambodia India India Indonesia Laos Myanmar Pakistan Papua New Guinea Philippines Timor Leste Vietnam Burkina Faso DR Congo BR Congo Kenya Mozambique

FIGURE 1: WSP's GLOBAL FOOTPRINT

Honduras

Nicaragua

WSP works in 38 countries across Africa, East Asia, Latin America and the Caribbean, and South Asia. However, all six business areas are not implemented in every WSP focus country. Specific activities in countries and regions are selected in accordance with client demand and WSP's overall country and strategic priorities.

Niger

Senegal

Somalia Tanzania

7ambia

Nigeria

Uganda

7imbabwe

Sierra Leone

South Sudan

# Global Knowledge



WSP developed 123 knowledge products this year. The new knowledge products are increasingly being published in academic journals. Since 2011, WSP has produced more than 579 knowledge products.

WSP's knowledge work builds evidence to inform sector policies and strategies and supports design, implementation, and monitoring and evaluation of water and sanitation programs. WSP generates knowledge through rigorous analytics and research and is able to rapidly share this knowledge through its extensive network of partners and critical stakeholders spread across the world. As part of the Water Global Practice, WSP continues to generate research and evidence to offer governments and partners the know-how and tools to deliver at-scale and sustainable water and sanitation services for the poor. The integration of WSP's sector knowledge in the Water Global Practice is increasingly informing the design and implementation of World Bank lending operations, further enhancing the impact of our knowledge work.

The short perception survey carried out in fiscal year 2015 on a limited number of WSP's knowledge products delivered between 2011 and 2015 demonstrated a high level of acceptance of WSP products. From the sample of the products assessed, 85 percent of the respondents strongly agreed that WSP's knowledge products were accessible, well written, and easy to understand. Eighty-three percent of the respondents believed that the knowledge products were relevant to country and regional development priorities and were delivered in a timely manner. When provided with a list of five leading organizations in the sector, around 50 percent of the respondents identified WSP as their organization of choice when seeking knowledge in the sector. Emerging learning from the perception survey indicates that WSP needs to build on this knowledge and focus on innovative, diverse, and unconventional research to fill key knowledge gaps in the sector. WSP also needs to strengthen its role as a knowledge customizer and connector and improve packaging, dissemination, and delivery of the knowledge products to maximize the outreach and impact of its knowledge products.

This year, WSP's knowledge products continued to bring to the forefront complex water and sanitation

challenges plaguing the sector to support decision-making processes for governments, World Bank operational teams, and other sector stakeholders. A number of WSP knowledge products were also published in specialized journals. WSP's empirical work ranging from pricing municipal water and wastewater services to exploring cost-efficiency options for rural sanitation attempted to find innovative solutions for improving access to the poor.

### **Promoting Safe Sanitation for Children**

Safe disposal of children's feces is equally as important as disposing of adults' feces. Estimates based on households' primary sanitation facility often overlook practices for disposing of young children's feces. Although poor sanitation is measured by its impact on children, sanitation interventions tend to target adults. Often children are unable to access improved sanitation facility because of their age, stage of physical development, or the safety concerns of their caregivers.

To improve the evidence base, WSP partnered with the United Nations Children's Fund (UNICEF) to develop country profiles outlining the current child feces disposal practices of caregivers and existing interventions to improve these practices for 24 countries. The Management of Child Feces series provides an overview of the available data on child feces disposal. Each brief concludes with ideas to consider based on emerging good practices and provides guidance that can be adapted to local situations and contexts. The key findings of the series highlight that over 50 percent of households with children under age three were unsafely disposing of children's feces. Unsafe child feces disposal behavior was even noted in households with toilets or latrines. In almost every country, feces of children under age three are less likely to be safely disposed of than adult feces. The practice of unsafe child feces disposal was more pronounced in poor rural families, where other family members also defecated in the open. The analysis also highlighted that exposure to children's

WSP and UNICEF. 2015. Management of Child Feces: Current Disposal Practices. The series was conducted in Afghanistan, Bangladesh, Burkina Faso, Cambodia, Chad, Ethiopia, Haiti, India, Indonesia, Kenya, Lao PDR, Madagascar, Malawi, Mozambique, Nepal, Niger, Nigeria, Pakistan, Philippines, Senegal, Sierra Leone, Uganda and Zambia.

feces could be more risky than exposure to adults' feces. The series aims to develop relevant data and tools to fill knowledge gaps so eventually comprehensive, practical, evidence-based policy and program guidance can be made available.

# Measuring the Effectiveness of Health and Hygiene Promotion

WSP also investigated the effectiveness of mechanisms used for promoting health campaigns to eliminate open defecation. The meta-analysis compared sanitation and behavior change impact evaluations from India, Indonesia, Mali, and Tanzania to understand the different types of mechanisms being used for health promotion in these countries and their impact on stopping open defecation. The analysis found that health promotion generally worked by both convincing households to invest in home-based sanitation facilities and encouraging them to use these facilities. Given the linear relationship between villages' open defecation rates and the height of children under age 5, the study suggests that stronger interventions that combine intensive health promotion with subsidies for sanitation construction are needed to significantly reduce open defecation and make meaningful improvements in child health.2

### **Analyzing WASH Impact Evaluations**

WSP carried out a systematic review of Water, Sanitation, and Hygiene (WASH) interventions from around the world, ranging from improving access and quality of potable water to promoting hygienic behavior. A sample of 136 impact evaluations were selected from formal publications that adhered to the methodological and research protocols. Based on preliminary findings, the impact evaluations identified positive effects for diarrhea reduction and other waterborne diseases, particularly from handwashing campaigns and water treatment interventions.<sup>3</sup> However, the impact evaluations could not draw

concrete conclusions on the effects of "hardware" and "software" WASH interventions on diarrhea and other water-borne diseases. Many of the WASH interventions reviewed in the impact evaluations varied extensively in design and approach, making it difficult to find consistent results. More studies are needed to identify a pool of common WASH interventions to test their effectiveness through comparable interventions. Knowledge gaps were also found in terms of the rigor of impact evaluations covering infrastructure expansion programs and the effects of WASH interventions on socio-economic outcomes such as income, poverty, and education performance.<sup>4</sup>

### Understanding the Role of Fecal Sludge Management in Urban Sanitation

The global initiative on fecal sludge management (FSM) completed an initial study this year assessing the fecal flows and service delivery pathway for fecal sludge in 12 cities and went on to produce draft tools and guidelines to improve fecal sludge management services.<sup>5</sup> The tools and guidelines are based on an in-depth analysis of fecal sludge characteristics, service delivery components, service provider capacity, customer demand, economic and market assessments, and political economy issues. Although the analysis clearly demonstrates that a comprehensive citywide sanitation service chain that includes a variety of service options is required to hygienically manage fecal material, it also focuses on how to serve poor settlements. WSP is now generating countryspecific reports in several low- and middle-income countries to help governments integrate FSM in urban sanitation policies and strategies and support sector institutions to implement technically and financially viable FSM service delivery models. WSP's recent work with the Maputo Municipal Council (MMC) in Mozambique helped develop a basic-level service model for sanitation to improve pit emptying services in peri-urban areas not served by a sewerage system.

<sup>&</sup>lt;sup>2</sup> Gertler, Paul, Manisha Shah, Maria Laura Alzua, Lisa Cameron, Sebastian Martinez, and Sumeet Patil. 2015. How Does Health Promotion Work? Evidence from the Dirty Business of Eliminating Open Defecation. NBER Working Paper No. 20997. Cambridge, MA: National Bureau of Economic Research.

<sup>&</sup>lt;sup>3</sup> Individual randomized controlled trial studies reported significant reductions in dysentery, influenza, shigellosis, conjunctivitis, respiratory diseases, parasite infection, and impetigo. Strong reductions in enteric diseases were also found from water supply projects.

<sup>&</sup>lt;sup>4</sup> Andres, Luis, Christian Borja-Vega, and Ronald Gomez-Suarez. 2015. Evidence Mapping: Overview of Water, Sanitation and Hygiene Impact Evaluations The final report is in process of being published.

<sup>&</sup>lt;sup>5</sup> Blackett, I, P. Hawkins, and C. Heymans. 2014. The Missing Link in Sanitation Service Delivery: A Review of Fecal Sludge Management in 12 Cities. WSP research brief. Washington, DC: World Bank.

# Scaling Up Rural Sanitation and Hygiene



This year, WSP supported governments in scaling up access to sanitation for 4.9 million additional people and influenced US\$600 million in financing for the sector. WSP has helped governments expand access to sanitation services for 43 million people over the past five years and leverage US\$2.9 billion from governments and others.

Despite significant progress in expanding sanitation coverage over the past two decades, 2.5 billion people in the world still do not use an improved sanitation facility and 1 billion practice open defecation. At least seven out of 10 people without improved sanitation live in rural areas. Sanitation conditions are far worse for the poor living in Sub-Saharan Africa and South Asia. In Sub-Saharan Africa, only 44 percent of the population uses either shared or unimproved facilities and 26 percent practices open defecation. In South Asia, 39 percent of the population practices open defecation. Over 80 percent of diseases in developing countries are associated with the use of unsafe water and poor sanitation. Cross-country studies show that the method of disposing excreta is one of the strongest determinants of child survival and that improved access to sanitation can save the lives of up to 1.5 million children a year.

WSP's Scaling Up Rural Sanitation and Hygiene (SURSH) business area addresses challenges by providing critical knowledge and technical assistance to governments to make transformational changes to policies, institutions, and programs to achieve accelerated access to improved sanitation for the rural poor. The critical building blocks for the program include: (i) building demand for improved sanitation through behavior change communication (BCC) and a Community-Led Total Sanitation (CLTS) approach; (ii) strengthening the supply of sanitation products and services; and (iii) developing an enabling environment that meets the increased supply and demand and ensures at-scale delivery of sanitation services. The rural sanitation program activities are currently being implemented in 13 countries.

### **Key Program Results**

In fiscal year 2015, WSP supported governments in expanding sanitation services for 4.9 million people—2.7 million people gained access to

improved sanitation and 2.2 million people stopped practicing open defection. Since the baseline was established, WSP has helped governments increase access to sanitation services for 43 million people, of which approximately 22 million people gained access to improved sanitation and 21 million people stopped defecating in the open. WSP also influenced governments to leverage US\$600 million in financing for rural sanitation over the last fiscal year. To date, WSP's efforts to assist governments in strengthening the enabling environment for at-scale service delivery has helped leverage approximately US\$2.9 billion in investments for rural sanitation.

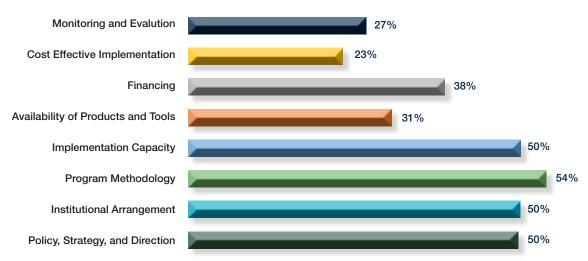
These achievements were made possible through incremental changes in enabling environment conditions to help govenments implement largescale sanitation programs. WSP measures improvements in eight enabling environment dimensions that are critical for scaling up and sustaining rural sanitation initiatives. These enabling environment dimensions are: (i) policy, strategy, and direction; (ii) program methodology; (iii) institutional arrangement; (iv) financing; (v) implementation capacity; (vi) monitoring and evaluation; (vii) availability of products and tools; and (viii) cost-effective implementation. Progress against the enabling environment dimensions is measured in 26 program locations across the 13 focus countries in an effort to separately monitor progress at the provincial level for countries such as India, Indonesia, and Pakistan.7

In fiscal year 2015, WSP made considerable progress in all eight enabling environment dimensions across the 26 program locations, with most notable progress in policy, strategy and direction, institutional arrangements, program methodology and implementation capacity. On average, 50 percent of the program locations made some progress against these four dimensions. WSP also made steady progress in financing and availability of products and tools, with more

<sup>&</sup>lt;sup>6</sup> The results framework for the program provides a method for determining the proportion of total access resulting from WSP's direct contribution. Based on estimates from the country monitoring tool, on average, the program contributes about one-third of the results achieved, with government clients responsible for the remaining increases. The proportion of contribution varies from country to country to depending on level and intensity of WSP engagement vis-à-vis other sector stakeholders present in the country.

<sup>7</sup> The rural sanitation program is being implemented in the following 26 locations: Cambodia, Ethiopia, India (states of Bihar, Jharkhand, Meghalaya, and Rajasthan), Indonesia (provinces of Bali, Central Java, East Java, Nusa Tenggara Barat, and West Java), Kenya, Lao PDR, Niger, Pakistan (provinces of Azad Jammu Kashmir, Khyber Pakhtunkhwa and Federally Administered Tribal Areas, Punjab, and Sindh), Philippines, Senegal, Tanzania, Uganda, and Vietnam. In India, Indonesia, and Pakistan, WSP is working at both the national and subnational levels.

# FIGURE 2: PERCENTAGE OF PROGRAM LOCATIONS REPORTING PROGRESS IN THE ENABLING ENVIRONMENT DIMENSIONS IN FY15



Percentage of Program Locations Reporting Progress

WSP's country monitoring tool tracks progress against the eight enabling environment dimensions across the 26 program locations in the 13 focus countries. Progress in each dimension depends on attainment of a number of sub-indicators. This graph indicates program locations that have achieved at least one sub-indicator for each dimension.

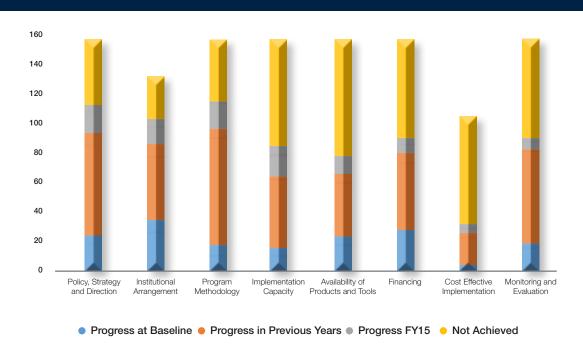
than one-third of the program locations showing progress. Improvements have been much slower in cost-effective implementation and monitoring and evaluation dimensions, with only 23 percent and 27 percent progress, respectively.

Comparing progress in the enabling environment dimensions across all program locations over time reveals similar trends. Improved progress in policy, strategy and direction, institutional arrangements, and program methodology across the different countries can be attributed to counterparts requesting to understand how CLTS and sanitation marketing can be combined along with the capacity building to implement these approaches. Clients also realize that program methodology and institutional arrangements need to be grounded in policy, strategy, and direction to enable atscale implementation. In contrast, it has been challenging to conceptually convey cost-effective implementation to counterparts and generate the

data to use for advocacy purposes, resulting in limited client demand.

on other enabling environment Progress dimensions, such as availability of products and services, implementation capacity, financing, and monitoring and evaluation, has been moderate over time. The availability of products and tools reflects the challenges of developing rural sanitation markets with the private sector. On average, progress in financing and institutional capacity has occurred at the national level, with inroads being made at the local level. As capacity at the local level improves, WSP expects to see improvements in budgeting and utilization of funds by local government. Progress on monitoring and evaluation varies between countries, but also between national- and local-level implemenation. Although good efforts have been made to agree upon indicators, implementation of data collection systems is a work in progress.





This graph shows progress achieved at baseline, over previous fiscal years, and current fiscal year and the number of indicators that are yet to be achieved under the different enabling environment dimensions. There are four to six sub-indicators per enabling environment dimension that are reported on by each program location. This graph indicates the total number of sub-indicators that could be achieved across all 26 program locations by each enabling environment dimension.

### Policy, Strategy, and Direction

A shared vision and strategy for sanitation, along with the political will and dedicated resources to implement an ambitious program, is the cornerstone for reaching nationwide scale. WSP works with governments to develop policies, strategies, and action plans that make rural sanitation a national and subnational priority and inculcates the political will and ownership to effectively implement large-scale sanitation programs.

In **Niger**, the Country Operational Strategy for Hygiene and Basic Sanitation (SOPHAB) was approved with support from WSP. The strategy outlines key principles that underpin activities and pathways to achieve scale. A memorandum of

understanding was also signed by eight federal ministries for leading sector coordination and dialogue on water and sanitation SDGs. An annual water, sanitation, and hygiene forum was also established between the Ministry of Hydraulics, the lead agency for sanitation, and local governments that have the legal mandate for sanitation service delivery to initiate policy dialigue and develop a common vision.

In India, WSP is supporting the design of the World Bank lending operation to the Government of India's Clean India or Swachh Bharat Mission-Gramin program, which focuses on rural sanitation. The program seeks to transform the national sanitation effort by taking a community-led and full-coverage approach focused heavily

on community mobilization and collective behavior change, including the adoption of hygienic practices and sustained use of sanitation facilities through well-designed BCC strategies, action plans, and tool packages. WSP is co-leading the initiative and providing technical assistance to develop key components of the program and support implementation primarily at state level. The initiative is part of the government's national campaign to accelerate efforts to achieve universal sanitation coverage, improve cleanliness, and eliminate open defecation in India by 2019. WSP led an extensive consultation process to develop guidelines for establishing a shared vision for the rural sanitation campaign. The program has also helped reinforce efforts to increase the availability of dedicated, skilled, and equipped staff at national, state, district, and subdistrict levels. The national government has a strong political will to invest in sanitation, as reflected in Prime Minister Modi's personal championing of the Clean India Campaign.

### **Institutional Arrangements**

Scaling up rural sanitation requires effective institutions with sufficient resources to carry out their roles, and regular opportunities for coordination and partnership between the government, private sector, and civil society. WSP supports the institutions responsible for rural sanitation in their development of adequate operational structures with dedicated budgets and coordination mechanisms to effectively carry out their roles and responsibilities and establish links with other sectors.

WSP has been working with the Ministry of Health in the **Philippines** as the lead institution for rural sanitation over the years, and the government's Department of Social Welfare and Development (DSWD) has also become a key client. DSWD oversees the government's social safety net programs that serve the poor. In working with DSWD, WSP is supporting the design and implementation of a WASH integration pilot into the existing conditional cash transfer (CCT) and community-driven development (CDD) program that integrates CLTS and BCC into these poverty-reduction programs. WSP worked with DSWD

to develop a WASH integration framework that was later used to conduct a rapid assessments in five provinces where CLTS and BCC were integrated into the CCT program's enhanced family development sessions. WSP will now support DSWD in rolling out the assessment to an additional 11 provinces in the next year. Evidence generated through these assessments will also help link local governments, schools, health centers, and DSWD's Sustainable Livelihoods Program with sanitation suppliers, financial services, and financing for WASH-focused subprojects. WSP support to this initiatve was closely coordinated with the World Bank Group's Social Development operations teams. The Sustainable Livelihoods Program aims to provide conditional cash transfers to more than 3 million poor households.

### **Program Methodology**

Program methodology describes the specific activities needed to achieve rural sanitation at scale. To be effective, a country's program methodology should be clearly articulated and supported by all stakeholders. WSP helps national and subnational insititutes adopt a clear program methodology to ensure at-scale service delivery of rural sanitation programs.

In **India**, WSP facilitated exposure visits, workshops, and meetings of high-level decisionmakers to advocate for community-led participatory approaches in the state of Rajasthan. WSP initially supported a small number of districts in adopting community-based approaches to achieve largescale open defecation free (ODF) outcomes. The state government is now encouraging all 33 districts in Rajasthan to adopt these approaches. WSP is providing technical assistance to replicate such approaches in 15 districts. WSP's work on promoting community participatory approaches has also influenced the state government of Jharkhand to allocate funds at the district level for strengthening local capacities. WSP is supporting district governments in adopting community-led approaches and fostering partnerships with other governments to extend outreach of the program.

In **Kenya** where CLTS was adopted as a program methodology in 2010, WSP supported

a consultation process with national and county governments and partners to take up sanitation marketing as a complementary approach. Specifically, during this reporting period, WSP facilitated the development of sanitation marketing and BCC tools for use by all counties and partners, and demonstrated the roll-out of the materials in four counties.

### Implementation Capacity

To implement large-scale sanitation programs, institutions must have the capacity to carry out their roles and responsibilities, including adequate human resources, systems, and procedures needed for program methodology, and the ability to continually monitor program effectiveness. WSP helps strengthen capacity of government institutions at all levels to effectively plan, implement, and monitor large-scale sanitation programs.

In Indonesia, WSP continued to support the Ministry of Health in the implementation of the national sanitation program, Sanitasi Total Berbasis Masyarakat (STBM). Through this support, the Ministry of Health embarked on a process to institutionalize capacity building on sanitation at a national scale by providing: (i) preservice training through integration of sanitation modules in the curriculum of 28 health schools in 27 provinces, reaching more than 1,500 students within one academic year; (ii) in-service accredited training with performance credits for existing government and project staff and linking the training program with an incentive system; and (iii) distance training through an interactive e-learning program accessible for all interested parties. To date, the e-learning courses have benefited more than 500 people and 700 people have been trained using the accredited training materials. WSP is also working with APPSANI, the East Java Association of one-stop entrepreneurs, to train local suppliers in five provinces in the country.

In **Vietnam**, WSP is suporting World Bank operations to deliver a Program-For-Results (P4R) on rural sanitation. WSP will be responsible for building capacity of implementing agencies across 19 provinces in the Northern Mountainous and Central Highlands regions to develop innovative

solutions for delivering improved sanitation services in remote areas with high rates of poverty and ethnic minorities. The capacity development will be geared toward BCC, business models, and low-cost product development. The technical assistance will also introduce a rewards program to encourage government institutions to support poor households and achieve village-level sanitation outcomes.

### **Availability of Products and Tools**

Availability of low-cost sanitation products and use of effective behavior change tools play an important role in encouraging people to invest in improved sanitation. WSP is working in a number of countries to increase the availability of new products that respond to consumer preferences with appropriate marketing and quality assurance controls; eliminate supply chain barriers; and develop evidence-based tools to encourage behavior change.

In Lao PDR, WSP is finding ways to increase the supply of low-cost upgradable toilets developed using a human-centered design approach. The toilet design was developed following extensive field studies of user demand and preferences. With support from the government, WSP is training sanitation suppliers on business development and marketing in 10 districts and facilitating an output-based pilot payment scheme to reach poor households.

WSP conducted a field study in **Uganda** to identify supply chain barriers and drivers to reach poor rural households. The study found that concrete slabs are a dominant sanitation product across the country. However, these slabs are only available in urban areas. Following the recent success in introducing plastic slabs in Kenya to increase diversity and availability of sanitation goods, WSP is now testing the potential of distributing low-cost plastic slabs in Uganda. Depending on consumer feedback, WSP hopes to develop sales and marketing strategies to address supply chain barriers.

In **Kenya**, WSP, jointly with the International Finance Corporation (IFC), played a market facilitation

role by supporting the development of low-cost but aspirational latrine slabs and strengthening the technical and managerial capacity of plastics producers to market them nationally. Approximately 14,000 slabs were sold over the last year, and private sector manufacturers have demonstrated their commitment to the product by investing more than US\$500,000 for new equipment, production, and distribution and marketing. The initiative aims to have spillover effects in Uganda, Tanzania, and other African countries where plastics manufacturers are present as they will be able to openly source all the promotional materials and technical specifications.

### Financing

Without sufficient financing for programmatic costs such as training, salaries, transportation, and supplies, rural sanitation programs are likely to be ineffective. WSP helps to improve financing conditions in the focus countries by supporting governments to develop appropriate funding plans that provide adequate funds for demand creation and supply improvement; ensure availability of these funds for national and subnational governments; achieve effective budget utilization; and promote fund expansion and sustainability. WSP also facilitates government clients in extending the outreach of rural sanitation programs by encouraging additional funds from governments and the private sector.

Over this last fiscal year, WSP has provided technical assistance in Cambodia and the Philippines to develop innovative financing solutions for households and private sector providers through microfinance institutions. In Cambodia, WSP provided technical assistance to develop a financing program that allows lowincome households to borrow from microfinance institutions to pay for their improved sanitation solutions in installments, thereby alleviating cash constraints. To date, 1,994 loans have been granted with no defaults. The financing institutions achieved 100 percent self-sufficiency ratios, indicating that costs of offering sanitation loans can be covered by the loan interest. To reach the poorest households, WSP, together with the East Meets West Foundation (EMWF) and other sector

partners, is studying the effect of partial subsidies on the uptake of sanitation on the poorest segments, as well as the potential negative dampening or positive multiplier effect on those households that are not eligible for the subsidy.

In the **Philippines**, with support from WSP, microfinance enterprises operating in the different provinces have also established funding mechanisms to provide toilet loans to households; support entrepreneurs in franchising sanitation products; and train masons in toilet construction. Seed funds will also be made available through the Department of Social Welfare and Development for conditional cash transfer grantees as part of the broader Sustainable Livelihoods Program to help construct toilets.

In **Pakistan**, institutions such as the Pakistan Poverty Alleviation Fund (PPAF) have helped finance rural sanitation interventions such as CLTS and sanitation marketing. The Fund has contributed to more than 400 villages becoming ODF and training more than 200 sanitary market entrepreneurs. WSP has played a facilitator role to integrate PPAF into the sector at the national level, where other national financing has been limited.

### Cost-Effective Implementation

With limited resources and competing demands in developing countries, rural sanitation programs must demonstrate cost-effective use of resources. WSP equips government institutions with adequate awareness of cost-effective implementation and builds their capacity to effectively collect and use cost data.

In Indonesia, inroads were made in Central and West Java with respect to cost-effective implementation. WSP is supporting the government in determining how to effectively use the national web-based monitoring system to better develop sanitation targets at provincial and district levels to allocate resource more effectively. In addition, WSP developed a benchmarking analysis instrument for provincial-level governments to assess provincial and district performance. One of the indicators in the benchmarking instrument includes cost-effectiveness. Early learning from implementing

this instrument with provincial governments reveals that data feeding into cost-effectiveness indicators such costs on training, sanitation promotion, and budget utilization is not consistently available, and thus remains a barrier to routinely assess cost-effectiveness. WSP continues to explore ways to better measure the relationship between financial inputs and outcomes.

### Monitoring and Evaluation

Large-scale sanitation programs require regular monitoring and periodic evaluation to effectively identify strengths and weaknesses in program methodology, implementation arrangements, and cost efficiencies. Policymakers must also be willing and able to use monitoring processes to make rapid adjustments to any program. Overall monitoring responsibility must be at the highest level of the program, but based on information collected at the local government or community level. WSP supports governments in developing and implementing robust monitoring and evaluation systems to help government officials make in-time course adjustments to programs based on real-time information from the ground.

The technical assistance provided by WSP in Indonesia is helping the government track ODF villages. The approach is now being implemented in 18,000 villages, of which 3,000 have been declared ODF. WSP supported scaling up the use of mobile and Web-based sanitation monitoring systems in 119 districts in five WSP intervention provinces to a national mechanism that was adopted by all 500 districts in fiscal year 2015. Dedicated staff have been assigned to manage the system at the district and provincial levels. Sanitation access data is being used as a basis for planning and budgeting. WSP is now supporting governments in their use of the data collected to identify districts and cities that should be targeted to become ODF.

In **Kenya**, progress was made this year on strengthening local government capacity in the use of the government's new monitoring and evaluation (M&E) system and in rolling out a third-

party verification system for ODF status. WSP supported a county benchmarking exercise that included an indicator on whether M&E officers had been identified to monitor sanitation, which helped raise the importance of monitoring sanitation improvements. Following that, WSP helped the government roll out training at the subnational level for the new M&E system. WSP's support of the third-party verification system for ODF has helped to speed up the certification and verification process. The county governments are also using the results generated through the monitoring process to inform micro-plans, which have been developed to help communities become ODF.

### **Lessons and Opportunities**

WSP's rural sanitation program takes an adaptive learning approach and recognizes that program activities need to evolve to help transform the sector. Based on the experience from the different countries, WSP has learned that strengthening the enabling environment is a precondition to scaling up rural sanitation programs and can pave the way for investments in rural sanitation. This can be achieved through dedicated long-term technical assistance. In **Tanzania**, although it has taken time to strengthen the enabling environment and set the stage for a national sanitation campaign, the government reports that some 400,000 households have gained access to improved sanitation since the launch of the National Sanitation Campaign. It is also import to note that while rural sanitation service delivery largely takes place at the local level, certain building blocks need to be put in place at the national and subnational levels to ensure that local actors are incentivized and receive appropriate funds.

Funding and technical support for rural sanitation programs need to advocate for and invest in behavioral insights of relevant behaviors to guide effective program design. WSP and sector partners need to continue advocating to government to invest public resources to gain behavioral insights for social change and to adopt the research practices used by the private sector to influence households' decisions. Although CLTS is a sound approach to stimulating collective action, shifting

norms around open defecation, and motivating households to build some form of toilet, there is a need to understand whether affordability or cash liquidity are barriers to behavior change among the poorest in order to develop appropriate interventions to reach them. Moreover, the gradations of poverty in different country contexts needs to be understood. Simply assuming social capital in communities will ensure that the poorest are not left behind may be oversimplifying the issue.

To accelerate access to the poor, knowledge on best rural sanitation practices should flow into programs that are already targeting the poor. WSP has started to work closely with World Bank operations to link sanitation programs

with national-level poverty and livelihood programs in Pakistan and the Philippines. WSP is also exploring opportunities in Laos, India, and Vietnam with nutrition, poverty reduction, and rural livelihood programs. The new Water Global Practice structure is well positioned to integrate sanitation into programs supported by Health, Nutrition, and Population; Labor and Social Protection; and Social, Urban, Rural, and Resilience Global Practices of the World Bank Group. This will be an area of learning in the coming years, and an opportunity as well as a natural bridge between the various sectors and global practices to innovate, take risks, and provide thought leadership in delivering multisector solutions to clients to reach the rural poor with improved sanitation outcomes.

# Creating Sustainable Services through Domestic Private Sector Participation



At the end of 2014, WSP's support to the domestic private sector helped 1.8 million additional people to benefit from improved water supply and santation. WSP also influenced over US\$26.3 million in private sector investments and leveraged an additional US\$25 million from governments and other development partners in the same time period.

The domestic private sector plays an important role in expanding access to water and sanitation services for the poor. It helps to contribute additional resources to fill gaps between funding available for service provision and the investment needed to expand coverage. The private sector is also better positioned to provide efficient, innovative, and sustainable service delivery. However, private sector services must be sustainable. At present, too few products and services desirable to the poor are offered at prices they can afford, due to limited competition and innovation and the high costs associated with serving these market segments.

WSP estimates that the market for sanitation is worth US\$2.6 billion per year. Of this market, sanitation for the poor alone represents US\$700 million.8 This provides an enormous opportunity for the private sector to deliver services to the poor. However, micro-entrepreneurs and small firms dominate 80 percent of this market. Few larger firms with more capacity have entered this space due to lack of information and limited business incentives. Financial institutions have shown interest in financing the water and sanitation sector; however, both large and small-scale service providers continue to face difficulties in accessing market finance. Many potential lenders perceive the water and sanitation sector as high risk. The public financing schemes may also crowd out market financiers, becoming disincentives for service providers to seek private finance.

WSP's Sustainable Services through Domestic Private Sector Participation (DPSP) works with governments to better understand and harness the domestic private sector to maximize its outreach to the poor, while improving the quality of water and sanitation services and reducing prices. By engaging new market entrants, supporting

appropriate public policies, and addressing the key bottlenecks driving up costs, WSP helps build markets that are better able to serve the poor. The domestic private sector program is presently being implemented in 14 countries around the world. <sup>9</sup>

### **Key Program Results**

By the end of 2014, WSP facilitated the local private sector to expand access to water and sanitation services for approximately 1.8 million people. This support has helped mobilize US\$26.3 million in direct investments from small and medium enterprises and influenced the project design of US\$25 million in water and sanitation funding by the World Bank and other development partners. Since the inception of the program, WSP's work with the domestic private sector has enabled more than 3.4 million people to gain access to improved water supply and sanitation services. WSP has also influenced US\$56.5 million in private sector investments and leveraged US\$171 million from a range of donors and development finance institutions over the last five years.<sup>10</sup>

WSP's work helps build evidence to support several key theories of change for bringing sustainable access to water and sanitation for the poor. Over the last several years, WSP has continued to refine the theory of change of its program and build a body of evidence through action learning and research. The DPSP theory of change outlines seven critical success factors that define the preconditions needed for pro-poor water and sanitation markets to scale up.11 Progress against these factors is tracked in the WSP country monitoring tool to learn about the theory of change in a systematic way. The rapid nonlinear growth in outreach, revenues, and investment now seen in many focus countries provides emerging evidence for the theory of change.

<sup>&</sup>lt;sup>8</sup> Sy, Jemima, Robert Warner, and Jane Jamieson. 2014. *Tapping the Markets: Opportunities for Domestic Investments in Water and Sanitation for the Poor.* Washington, DC: World Bank. The study was jointly conducted by WSP and IFC in 2013 in seven countries across Africa, East Asia, Latin America, and South Asia. It provides, for the first time, a systematic analysis of the investment climate and key challenges facing domestic private providers in these regions.

<sup>9</sup> These countries are Bangladesh, Benin, Burkina Faso, Cambodia, India, Indonesia, Kenya, Mozambique, Nicaragua, Niger, Peru, Philippines, Senegal, and Uganda.

<sup>&</sup>lt;sup>10</sup> The DPSP results are tracked directly from entrepreneurs and service providers through their financial statements and technical reports for the outgoing calendar period January–December. Therefore, there is a time lag in the ability of the program to report quantitative data. The annual report presently outlines progress for the periods of January–December 2014.

<sup>11</sup> These critical success factors include Market Opportunity, Business Environment, Viable Product and Value Chain, Firm-level Capacity, Access to Finance, Public-Sector Capacity, and Industry-Level Capacity.

An analysis of consolidated results from the country monitoring tool over time demonstrates an overall decline in the level of influence by WSP on the critical success factors, particularly the early-stage factors of market opportunity and viable product. This decline is aligned with the initial hypothesis that market-based approaches require an initial push, but then have the potential to expand and evolve independently. As the markets for water and sanitation in WSP focus countries continue to develop, WSP's role shifts away from direct support of firms toward efforts to address binding constraints in the sector.

This year, interventions related to the water sector saw a significant increase in indicators for both market opportunity and viable product, which had previously lagged behind sanitation program activities. This discrepancy could be due to the relative ease of conducting small-scale pilots and market research in rural sanitation, which typically involve transactions between households and small construction firms or individual masons. By contrast, interventions in the water sector tend to be more complex and involve much greater coordination with public agencies, requiring more time to clearly demonstrate the potential of the market and product.

Both water and sanitation activities saw an increase in the access to finance critical success factor. This increase could be due to the improved financial viability of firms supported by WSP. As the previous critical success factors in the theory of change are achieved, firms working in water and sanitation are more likely to seek and successfully obtain financing. There was also some development in public-sector and industry-level capacity for both water and sanitation. However, growth in these indicators has lagged behind other critical success factors-likely due to the sequential nature of the theory of change, which suggests that individual firms must first shape the market and demonstrate the viability of markets-based approaches before efforts to support the public sector and broader industry can succeed.

Based on this evidence, WSP has learned that the private sector is unlikely to succeed without the presence of a supportive business environment, stable political situation, and favorable public attitudes toward the private provision of services. Once the necessary business environment is in place, the second stage involves building confidence for buyers, sellers, and the public sector through smaller, handson trials that provide firms with appropriate products and business models to profitably meet the needs of low-income market segments. Firms also require a sufficient level of managerial and technical capacity to serve this market efficiently, and both households and firms need to be able to access financing. Finally, the market needs to be supported by stronger industry-level capacity and public-sector support.

### Expanding Access to Water and Sanitation with the Private Sector

Two hundred and twenty-five million people lack access to improved water, and 1.1 billion do not have access to improved sanitation in the DPSP focus countries. Based on global estimates, bridging this gap could cost hundreds of billions, if not trillions, of dollars. Donor funding alone cannot address these needs. Governments in these countries need to work with the domestic private sector to develop new opportunities to reach the poor through innovative and sustainable approaches.

From January to December 2014, WSP's support to the domestic private sector helped around 1.1 million people to benefit from improved water supply, far surpassing the annual estimated target. Since the start of the program, the work with the private sector has helped a total of 2.3 million people gain access to water services, exceeding the overall program target.<sup>12</sup>

Firms supported by this business area helped 740,000 people gain access to improved sanitation at the end of 2014. This brings the total number of people securing access to improved sanitation and handwashing facilities to 1.1 million over the

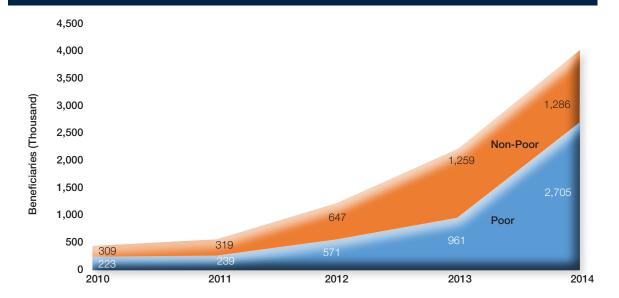
<sup>12</sup> Access to improved water services is measured by calculating the number of households served through additional piped water connections and standpipes in each of the tracked piped water systems and multiplying this figure by the average household size in the area covered by the piped water scheme.

last five years. This year's additional beneficiaries almost doubled the program's cumulative results from the previous years and exceeded the overall program target.<sup>13</sup>

With large gaps in meeting the water and sanitation needs of the poor, WSP strongly focuses on supporting the private sector in expanding water and sanitation services for this target group. From January to December 2014, 68 percent of people benefiting from improved water and sanitation services as a result of WSP's activities with the domestic private sector are estimated to be poor. This proportion surpasses the annual target of maintaining a share of at least 30 percent and is a significant increase on the proportion of poor people served in the previous year (44 percent).

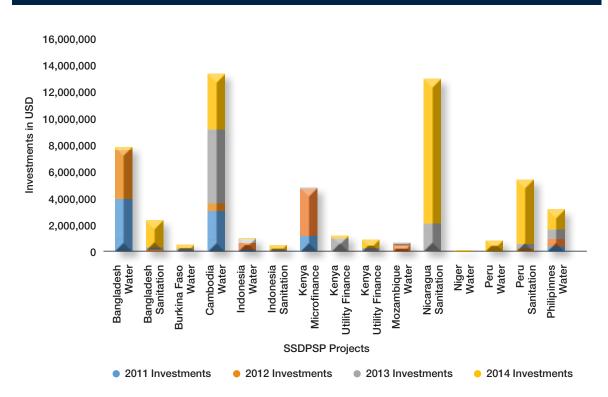
In Benin, WSP, in collaboration with IFC, helped develop public-private partnerships (PPPs) to extend water supply into rural areas to increase access for the poor. This is the first time that bankable long-term commercial agreements allowed private operators to raise funding from local commercial banks to undertake the necessary investments. Ten pilot rural water supply systems were selected in three different municipalities across the country and were grouped into four clusters. Each of the four clusters was tendered as a separate transaction by the respective municipalities. The tender process led to the award of four eight-year concession agreements for the design, partial financing, rehabilitation, extension, and operation of 10 rural water systems to three winning bidders.





The graph shows the proportion of outreach between poor and non-poor populations by DPSP-supported water and sanitation providers over the last five years. Since the start of the program, WSP-supported water and sanitation providers have helped more than 2.7 million poor people, out of the total 3.4 million people reached.

<sup>13</sup> Access to improved sanitation services is measured by counting the annual number of new households acquiring sanitation or handwashing facilities multiplied by the average household size in the area covered by the respective sanitation providers.



### FIGURE 5: PRIVATE-SECTOR INVESTMENTS IN WATER & SANITATION (US\$)

WSP influenced US\$26.3 million in new investments from small and medium-sized enterprises between January and December 2014, compared to US\$11.5 million mobilized in the previous year. The business area is well on track to achieving the program-end goal of influencing US\$34 million in direct private-sector investments.

### **Increasing Private-Sector Investment**

Increased investment by firms signals private-sector interest in the market. WSP measures private-sector investment by tracking investments from both public providers using private financing sources and private providers using any source of finance.

By the end of 2014, WSP support to private-sector firms helped mobilize US\$26.3 million in private investments from small and medium-sized enterprises, compared to US\$11.5 million mobilized in the previous year. Since the start of the program, WSP has influenced US\$56.5 million in private sector investments in water and sanitation.

In **Nicaragua**, WSP, IFC, and the Multilateral Investment Guarantee Agency (MIGA) are working together to increase investment to help households access improved sanitation. Influenced by WSP's rural sanitation markets work in the country, MIGA announced its support of the acquisition, expansion, and modernization of a bathroom ceramic ware plant in Nicaragua by a Colombia-based ceramics manufacturer, Corona. MIGA is guaranteeing US\$11 million to cover an equity investment and trademark license.

# Growing Market Served by the Domestic Private Sector

Although investment measures the willingness of the private sector to enter the market, growth in revenue demonstrates that the market is actually viable. WSP measures increased market share of private-sector service providers through the increase in publicly managed water schemes transferred to private operation or the growth in sales by firms providing sanitation services.

The volume of revenue generated by private-sector firms increased to US\$597 million by the end of 2014, compared to US\$18.8 million the previous year. The highest revenues were reported by water schemes supported under the Peru water project, accounting for US\$560 million of the turnover. All other firms generated around US\$37 million. To date, WSP has helped firms generate US\$630 million in revenues.

The number of piped water schemes coming under private management increased by 35 during the year. In total so far, 414 schemes are under domestic private-sector management. The number of business support service providers and financial intermediaries working on water and sanitation increased from 101 to 151 in 2014. These support service providers are estimated to provide assistance to 933 domestic businesses working on water and sanitation. To date, 1,182 business support service providers have entered the market.

In the **Philippines**, WSP continued to support implementation of the National Water Resources Board (NWRB), the Accreditation of Technical Services Providers Program. The program supports the accreditation and training of business development services providers and connects small water utilities with technical experts through a reliable and sustainable system. To date, 78 experts have been accredited and 61 water utilities have received consulting services, resulting in increased regulatory compliance and improved performance. Since its inception five years ago, the initiative has provided valuable lessons for NRWB that are now being applied to scale up the program to cover more than 500 small water utilities, roughly constituting 25 percent of the utilities in the country. Through this initiative, WSP has learned that private technical assistance providers can play an important role in improving utilities' performance by strengthening their ability

to comply with regulatory requirements. Moreover, accrediting technical assistance providers can help institutionalize capacity building for small utilities that are not served by project-based capacity-building efforts. Lastly, governments' commitment is critical to scaling up the training program at a national scale.

# Improving Operational Capacity of Service Providers

A key part of WSP's work in the private sector is strengthening the technical and managerial skills of firms that bring water and sanitation services to the poor. Improvements in the operational capacity of these service providers is assessed by analyzing technical performance data on nonrevenue water, metering and collection efficiencies, and the ratio of staff per connection that ultimately results in increased coverage and continuity of water and sanitation services.

Overall, 133 water schemes have reported a 3 percent reduction in nonrevenue water over the last two years. Apart from **Niger**, where the proportion of metered connections increased from 54 to 65 percent, all other schemes maintained a metering efficiency of 100 percent over the two years. The collection efficiency attained by the 95 piped water schemes over the two years remained at 95 percent of the amount billed. However, schemes in Bangladesh reported a 9 percent increase in average collection efficiency, while schemes in Cambodia, Kenya, and the Philippines reported no change in the collection efficiency. A reduction in collection efficiency was reported in Indonesia (-10 percent) and Niger (-3 percent). This is likely due to a new policy that discourages public standpipes for poor households, instead incentivizing them to install household piped water. However, poor households often have highly variable incomes and water operators may need to adjust billing to ensure that these customers are able to pay their water bills in a timely manner.

For the 119 piped water schemes that reported consistently on this indicator, the average of eight staff per 1,000 connections remained constant over the last two years. However, the proportion of schemes with more than 10 staff per 1,000

connections decreased by 6 percent last year. WSP-supported private water operators are significantly more efficient than the global average of 27 staff per 1,000 connections reported in the International Benchmarking Network for Water and Sanitation Utilities (IBNET) database.

The average coverage levels attained from 202 piped water systems remained at 54 percent in the last two years. However, schemes in individual countries reported increases in coverage. Moreover, 144 out of the 210 schemes supplied water for at least 16 hours per day. This is lower than the global average of 20 hours per day of water supply. Improved cost recovery through greater use of metered connections, as well as greater efficiency in staffing, should enable these operators to begin investing in improving continuity of coverage.

Despite large investment in the water and sanitation sector in Peru, serious management inefficiencies have resulted in insufficient coverage of water services, lack of sanitation and wastewater treatment, poor quality of service, and financial weaknesses that threaten the sustainability of systems—reflecting, in many cases, important weaknesses or failures in the country's water supply and sanitation markets. Feedback from customer surveys of utility clients and non-clients (mainly the unserved poorest 40 percent) have identified a need for innovative and nonconventional solutions. WSP is working closely with the Ministry of Housing, Construction, and Sanitation (MVCS) to support the reform process and build sectorlevel capacity of sector institutions, regulators, and utilities. To date, WSP has helped strengthen the monitoring systems for sector regulators and is working with urban utilities to revise the existing tariff structures and adopt client-focused benchmarking to better serve the poor. One of the largest urban utilities in Peru, SEDAPAL, has already internalized the idea that nonconventional solutions can help deliver permanent solutions to serve unconnected poor peri-urban areas. WSP intends to continue its work with SEDAPAL to support the use of nonconventional technology and foster partnerships with the domestic private sector to provide sustainable water and sanitation services to these areas.

### Financial and Commercial Performance

Eighty-one percent of the piped water schemes and 99 percent of the service providers supported by WSP reported sufficient sales to cover expenses last year. More than 163 water schemes and 414 service providers have gross profit margins greater than 3 percent. The number of piped water schemes generating profits margins greater than 3 percent increased modestly over the year, while the number sanitation firms generating margins greater than 3 percent doubled.

More than two-thirds of the water suppliers in Cambodia are unlicensed, unregulated private businesses that often provide untreated water of substandard quality. Formalizing these businesses can help improve water quality and increase value for customers. However, low levels of capacity and uneven financial performance prevent these informal water suppliers from becoming formal, licensed suppliers. To address this problem, WSP supported the Cambodian Water Association (CWA) to implement a business development program to build technical, financial management, and business planning capacity for private water operators in the country. To date, CWA has trained 47 operators. The results of the first 30 operators demonstrate 70 percent improvements in the reduction of nonrevenue water and production costs, and an increase in in-network water pressure, contributing to improved financial performance. All 30 operators have continued to invest on average 11 to 13 percent in annual connection expansions.

### Strengthening Public Institutions

A strong public sector is needed to support the private sector to effectively serve the poor. Strengthening public sector capacity is a critical component of WSP's work and is tracked as a critical success factor in the country monitoring tool. The main determinants for strengthening public institutions include: (i) clarifying responsibilities across ministries and agencies, (ii) supporting the development of technical capacity, (iii) helping build industry standards, (iv) supporting market intelligence through data collection by public entities, and (v) developing regulation that

encourages effective performance targets in private-sector engagement.

WSP uses a five-point scale to measure a public institution's capacity levels; institutions reaching a scale of 5 demonstrate the greatest level of progress in institutional strengthening. Each institution is assessed on the appropriateness of its policies and regulations, staff skill levels, and its ability to implement and supervise programs.

WSP works with 22 national and 213 local public institutions in the 14 countries. By the end of 2014, 16 national agencies and 133 local institutions maintained scales of 2 to 4. A scale range of 2 to 4 indicates that these institutions maintained appropriate policies and regulations with skilled staff and adequate implementation and supervision arrangements. At least six national and 80 local public institutions rated a scale of 1, indicating that they still had challenges related to skilled staff and adequate implementation arrangements.

In **Senegal**, WSP strengthened capacity of regulators to effectively manage PPPs to support water sector reforms. The first PPP transaction was completed in December 2014 for the operation of two large multi-village rural water supply schemes reaching 350,000 people. Four more transactions are planned to raise the share of private-sector involvement to 75 percent by 2017.

### Influencing Donors and Governments

The action-based learning approach adopted in WSP's domestic private-sector program provides a unique opportunity to test innovative approaches by learning what works and what doesn't when expanding access to water and sanitation services for the poor. It also provides evidence for a markets-based approach to influence donors and government investments in initiatives that use the private sector to expand access to water and sanitation services. WSP measures the influence of WSP learning on the broader development community by measuring new funding for the sector that draws on markets-based approaches and evidence developed by WSP.

From January to December 2014, WSP support to the private sector helped mobilize US\$25 million in funding for the sector. To date, WSP has influenced US\$171 million in water and sanitation funding by donors and governments, far exceeding the overall program target.

In India, WSP completed an in-depth study of ongoing water PPPs in three cities, complemented by rapid assessments of water supply services in three additional cities. Based on this work, several potential PPP models were identified. Working alongside Water GP operations staff, WSP presented the PPP models to stakeholders to solicit their opinions. After review by local and state governments, one of these models was selected for implementation under the Karnataka Urban Water Supply Modernization Project, a US\$190 million World Bank investment to expand 24/7 access to high-quality water services in three cities. More than two million residents, 30 percent of whom are poor, are expected to benefit from this initiative.

### **Lessons and Opportunities**

WSP's private-sector interventions have had significant success in working with pilot firms to test innovative approaches to service delivery that leverage the domestic private sector. However, WSP has faced challenges in scaling up pilots to full-fledged country programs. This is partly a function of private sector approaches—although they have the potential to be much more costeffective and sustainable for donors, evidence from other sectors has shown that this approach requires much more time to lay the groundwork for scale. Although rapid exponential growth is possible, it often takes several years of piloting and institutional support to reach this stage. By more closely integrating with the Water GP and incorporating private-sector approaches into the World Bank's US\$22 billion portfolio of water lending, WSP will have a much larger platform for scale. In addition, in the future, WSP's privatesector work will take a more holistic, marketsbased view by addressing the supply side (firms), demand side (customers), and the enabling environment (public sector) to bring sustainable and affordable water and sanitation services to the poor.

Improving access to finance is one of the most difficult critical success factor to achieve. This problem is not unique to the water and sanitation sector. For many firms in the developing world, particularly small and medium enterprises, access to finance is a key constraint to growth, as financial institutions are often willing to lend only to the largest firms and microfinance institutions typically offer much smaller loan amounts. Even if financial institutions are willing to lend, there is a lack of "shovel-ready" investments in the water sector, since many of these services have traditionally

been provided by the public sector. Addressing the upstream enabling environment for the private sector in water, in addition to improving the creditworthiness of potential borrowers, is a critical first step to building a pipeline of deals for lenders.

There is a need to better understand the demand side of the market. Although WSP's work has demonstrated that the poor are willing and often able to pay for water and sanitation services, better market intelligence on the demand curves for these services will help firms set prices more efficiently. In addition, more research into the impact of subsidies will provide greater clarity on whether subsidies in the water sector distort markets and discourage firms from serving the poor.

# Supporting Poor-Inclusive Water Supply and Sanitation Sector Reform



In 2015, 91% of WSP's activities focused on capacity building of governments and partners to reach the poor. About 82% of WSP interventions include poverty assessments and 70% have explicit indicators to measure services to the poor this year.

Despite significant gains in achieving the Millennium Development Goals, improvements in water supply and sanitation service coverage continue to demonstrate persistent and structural inequities. Access to water and sanitation varies by wealth quintiles, with the poor often being the last to benefit from improved access. These inequities are primarily the result of political economy factors, poor governance, and weak institutions that lead to poor design and implementation of policies and programs.

Today, one in three people lacking access to clean water and 385 million people who live without sanitation survive on less than US\$1 a day. In Africa, the rich are twice as likely to have access to safe drinking water and five times more likely to benefit from improved sanitation.<sup>14</sup> In South Asia, those in the bottom quintiles are 13 times less likely to have improved sanitation than other income groups.<sup>15</sup> Women and girls are disproportionately affected by this access gap, as they are mainly responsible for fetching water in families without a drinking water source at home. Women and girls collect water in 70 percent of households in 45 developing countries. This affects their health, prevents them from getting an education, and makes them vulnerable to the risks of physical and sexual assault when collecting water far from home. Inequities in access are also based on ethnic, religion, caste, and language differences, depending on the country context.

WSP's Poor-Inclusive Sector Reform business area provides evidence-based knowledge and technical assistance to client governments in 16 countries to help the poor obtain affordable, safe, and sustainable access to water and sanitation services. 16 The program supports poor-inclusive sector reform and develops pro-poor policies that align with the World Bank's primary goal of eliminating extreme poverty. WSP also strives to strengthen the voice and capacity of citizens, especially the poorest, to demand greater

accountability and responsiveness from public officials and service providers.

### **Key Program Results**

WSP initiated an extensive portfolio review of its program two years ago to intensify focus on the poor in its current and future work program. The review consisted of a detailed assessment of key project documents of technical assistance and external training interventions. In total, 49 projects and programs from four business areas were reviewed, comprising more than 75 percent of the 2011–2015 budget. The findings provided important insights for task team leaders to improve focus on the poor. A quick review of the portfolio this year noted that the percentage of WSP interventions encompassing poverty assessment to inform project design increased from 64 to 82 percent. The percentage of activities with explicit pro-poor indicators to measure service access to the poor jumped from 56 to 70 percent; and activities focusing on capacity building for the government and partner organizations to reach the poor increased by 11 percentage points, from 80 to 91 percent. WSP is now turning its attention to improve technical assistance for propoor monitoring and evaluation, citizen voice and accountability, and ensuring that baseline surveys include the poor.

Providing evidence-based knowledge for better decision-making can be a strong entry point for sector reform. This year, a series of global flagship studies such as the Economics of Sanitation Initiative (ESI), the Monitoring Country Progress in Water and Sanitation (MAPAS), and the Service Delivery Assessment (SDAs) continued to build a rigorous evidence base to identify gaps and opportunities in water and sanitation service delivery. MAPAS completed in El Salvador, Honduras, and Panama this year identified the need for an additional US\$864 million in annual investments to help these countries meet their national goals for water and sanitation. The SDA

<sup>14</sup> A WHO/UNICEF Joint Monitoring Programme. 2010. Progress on Sanitation and Drinking-Water. 2010 Update. Geneva, Switzerland: World Health Organization, and New York: United Nations Children's Fund.

<sup>15</sup> UNICEF. 2010. Narrowing the Gaps to Meet the Goals. New York: United Nations Children's Fund.
16 The pro-poor sector reform work is being implemented in Benin, Bolivia, Burkina Faso, Cambodia, Democratic Republic of the Congo, Honduras, India, Indonesia, Kenya, Lao PDR, Mozambique, Nicaragua, Niger, Pakistan, Peru, and Vietnam.

completed in the Sindh Province of Pakistan estimated a need for an additional US\$160 million funding per year for the next 10 years to address water and sanitation challenges and achieve SDG targets.

Implementations of two separate initiatives on country poverty diagnostics for WASH and gender in WASH country policies and strategies aim to further intensify focus on the poor and vulnerable groups. The initiatives will inform country strategies and mainstream poverty and gender analysis into the sector, improve targeting of programs, and support current and future World Bank operations.

# Guiding Poor-Inclusive Policy and Strategy

WSP supports sector reform by working with local and national governments in 16 countries to develop pro-poor policies and strategies.

In Cambodia, water supply and sanitation service assessments were used to increase pro-poor focus of the National Strategic Plan for Rural Water Supply, Sanitation and Hygiene 2014–2025, endorsed by the Cambodian Council of Ministers in January 2014. Recognizing the importance of closing the water and sanitation access gap between the poor and non-poor to achieve the vision of universal coverage by 2025, the action plan outlines specific mechanisms to support the poor. WSP is supporting the government to develop a management information system for the sector, with specific indicators for measuring access for the poor.

In **Honduras**, the government approved the National Water and Sanitation Plan (NWSP) 2015–2022, with support from WSP. The strategic instrument will help consolidate national sector reform processes, develop a more comprehensive approach to address sector challenges, and help leverage future investments. The NWSP consists of seven strategic pillars with a differentiated approach for providing water and sanitation services in rural and urban areas. The investment needed to implement the policy is estimated at US\$1.3 billion. The government expects all future

investments in the sector to be fully aligned to the national plan.

# Developing Implementation Guidelines and Strengthening Institutional Capacity

WSP builds partnerships with a wide range of organizations to encourage regulatory and structural changes, resulting in institutional capacity for greater inclusion.

WSP facilitated the establishment of a national information system in Mozambique to monitor activities in the water and sanitation sector. The program supported the Government of Mozambique, through its lead agency, the National Directorate of Water (DNA), in creating a National Water and Sanitation Information System (SINAS). SINAS was established to strengthen sector oversight and accountability, provide upto-date data for sector planning, track investment programs, and monitor the sustainability and continuity of services. Since its establishment in 2007, the program has trained a large number of government staff in the collection and use of SINAS. The information system has greatly improved the government's data collection and analysis capacities. The DNA is using this data to generate annual sector performance reports and make informed decisions about planning, budgeting, and management of water and sanitation interventions. Improved sector monitoring highlighted a marked reduction in nationwide sanitation coverage rates, dropping from 45 to 12 percent, due to the redefinition of indicators. This reduction spurred changes in policy and approach, encouraging a more policy and operational emphasis on the sanitation ladder. The experience in setting up a national sector-monitoring system also helped to re-emphasize focus on sustaining existing services as well as on developing new infrastructure and the need for greater involvement of local government authorities in the provision of water and sanitation services.

In Lao PDR, WSP supported the establishment of a National Capacity Building Framework for scaling up rural sanitation. An action plan for implementation of the framework was adopted at

national, provincial, and local levels last year. WSP is supporting capacity development to strengthen sector monitoring by developing a dedicated rural sanitation monitoring system in Champasak and Sekong provinces, with the intention of using this as the model for developing a national framework. Data collection from the district level will help inform decision-making at the provincial level. Key learning generated through this work will be used to develop the national-level monitoring system.

### Generating Evidence-Based Knowledge for Improved Decision Making

WSP has built a rigorous evidence base through a series of flagship studies to inform policies, strategies, and programs and guide sector reform and investments to improve access for the poor and vulnerable groups.

### **Economics of Sanitation**

The Economics of Sanitation Initiative launched eight years ago aimed to address major gaps in evidence among developing countries on the economic impacts of sanitation. To date, ESI studies have been completed in Africa and East Asia and South Asia, with a study currently underway in Latin America. A second phase of ESI was completed in East Asia in 2014 to analyze the costs and benefits of alternative sanitation solutions. The studies attributed dollar amounts to a country's losses from poor sanitation.

The evidence base generated from more than 35 countries estimates global economic losses associated with inadequate water supply and sanitation at US\$260 billion annually. On average, the cost of inadequate sanitation for countries could be as high as 1.5 percent of total GDP, while the global economic return on sanitation spending is US\$5.5 for every one dollar invested. The estimated costs to achieve WASH targets by 2030 ranges from US\$1.8 to US\$7.8 per capita.

This year, the ESI methodology was used to estimate the value-added of bringing sanitation services to unserved populations to support the World Bank Swachh Bharat-Gramin Mission in

### FIGURE 6: STANDARDIZING METHODOLOGY AND TRAINING POLICYMAKERS ON THE ECONOMICS OF SANITATION

### THE GLOBAL COSTS OF INADEQUATE SANITATION North Africa **TOTAL COSTS \$ 260** BILLION Caucasus & Central Asia **MORE THAN** Oceania CHILE'S \$2 \$10 \$30 \$50 \$70 \$90 \$4 \$6 \$8 **ENTIRE GDP ECONOMIC COST (IN BILLIONS)**

US\$9.2 billion: Economic cost of poor sanitation and hygiene in East Asia

### **US\$95** million:

Cost of poor sanitation in Nicaragua

### 6.4 percent of GDP:

Cost of inadequate sanitation in India

**US\$5.5 billion:** Annual cost of inadequate sanitation for 18 African countries **India**. The methodology also supported operations in Jakarta to help the Government of **Indonesia** estimate economic damages resulting from poor sanitation as part of its campaign to implement ambitious citywide sanitation goals.

WSP also developed an online toolkit to enable sector partners and World Bank operations to generate standardized, transparent, and simple economic analyses, customized to the specific needs and conditions of the decision-making environment. The toolkit is being tested in 10 different projects for further validation and to optimize user-friendliness. It is expected to be widely available in the next year.

# Monitoring Country Progress in Water and Sanitation

WSP, in partnership with Central American Governments (FOCARD), released the first three Monitoring Country Progress in Water and Sanitation reports for El Salvador, Honduras, and Panama. The reports examine major bottlenecks in water and sanitation service delivery and help governments prioritize major sector reforms. The reports identified the need for additional US\$864 million in annual investment to help these countries meet their national goals for water and sanitation, revealing serious gaps between planned investments and actual funding needs. The reports also examined current policies, sector performance, information sharing, and service delivery mechanisms. In El Salvador, urban population growth is much faster than the current expansion rate of water and sanitation services. Rural and peri-urban areas are largely underserved in Panama. Honduras faces challenges in service delivery, as poor quality and performance of existing services is translating into low user satisfaction. The findings of the reports are facilitating Honduran officials to use equity criteria to direct investments toward populations that do not have access to drinking water and improved sanitation and promote better coordination between sector institutions and municipalities. MAPAS studies

are now underway in **Costa Rica, Dominican Republic**, and **Guatemala**.

# Water Supply, Sanitation, and Hygiene Poverty Diagnostic

Implementation of Water Supply, Sanitation and Hygiene Poverty Diagnostics continued this year. WSP is working closely with Water and Poverty Global Practices to conduct poverty diagnostics in 20 countries to better understand the interlinkages between extreme poverty and poor water and sanitation outcomes.<sup>17</sup> The findings will mainstream poverty analysis into sector policies and strategies and improve targeting of programs to reach the poor, especially the bottom 40 percent. The diagnostics will also strengthen country-level data collection systems to effectively track SDGs, build in-country capacities to replicate the diagnostic, and test innovative data analysis techniques to better understand linkages with other sectors.

A common framework has been applied for the different countries to determine: (i) who and where the poor are, (ii) level of access and quality of WASH services being availed to the poor, (iii) linkages between WASH and other sectors, and (iv) WASH service-delivery constraints and solutions. The diagnostics will primarily focus on population groups living in the bottom 40 percent of income quintiles.

Data mining has taken place for all 20 countries, and half of the countries have completed their project concept note review process. Preliminary data analysis was completed for India, Indonesia, and Tunisia. Democratic Republic of the Congo (DRC), and Mozambique are in the final stage of refining their analysis plans. Data analysis generated in India helped inform the preparation of the US\$1.5 billion World Bank Swachh-Gramin Bharat Mission by providing insight into where open defecation is concentrated, and how the levels of open defecation have been changing in various states in India over time.

<sup>&</sup>lt;sup>17</sup> These countries are Bangladesh, Democratic Republic of the Congo, Ecuador, Egypt, Ethiopia, Haiti, India, Indonesia, Mozambique, Nicaragua, Niger, Nigeria, Pakistan, Panama, Tajikistan, Tanzania, Tunisia, Uganda, West Bank Gaza, and Yemen.

# Gender Dimensions in WASH Policies and Strategies

WSP completed the first phase of a two-year multi-country review of gender dimensions in WASH policies and strategies. The initiative aims to support government and development partners in mainstreaming gender in design, implementation, and monitoring and evaluation of water supply and sanitation policies and strategies. The global policy review analyzed whether key gender dimensions were being integrated in the current WASH policies and strategies. The review assessed more than a hundred WASH policies and strategies across 12 countries.<sup>18</sup>

The key findings suggest that almost all of the country policies incorporate gender to varying degrees. The second phase currently underway involves fieldwork in select countries to determine the extent to which these policies are being implemented and monitored and, where feasible,

whether they are making any difference on the ground in terms of reducing gender disparities and improving WASH outcomes. WSP is engaging with World Bank operations to ensure that the findings from the study help inform current and future investments and technical assistance work in countries such as Ethiopia, the Philippines, and Haiti.

### **Lessons and Opportunities**

Strengthening sector monitoring systems is essential for achieving sustainable and equitable services and engaging citizens. Large funding channeled to water and sanitation sector needs to be adequately monitored to ensure that poor and vulnerable groups also benefit. Sector monitoring at the national and local levels empowers citizens to effectively participate in the development process. Development of citizens' feedback mechanisms has become an integral part of World Bank operations. By 2018, all Bank projects must include

## FIGURE 7: KEY EXAMPLES OF GENDER MAINSTREAMING IN WATER AND SANITATION SECTOR POLICIES IN SELECT COUNTRIES



**Philippines:** All government institutions must allocate 5 percent of their budget for gender-informed development programs.



Laos PDR: Human resource development plans in the WASH sector aim to increase women representation at every level. A scholarship program for female high school graduates to pursue WASH tertiary education is also being promoted.



**Nicaragua:** At least one woman has to be part of the executive board for water and sanitation committees. Women in these committees are also trained in system operation, tariff setting, and collection and management.



**Uganda:** Sociologists and community development specialist are hired to implement WASH-related community development activities and are responsible for ensuring that key gender aspects are incorporated in the WASH programs.

<sup>18</sup> The gender policy review is being convened in Bangladesh, Bolivia, Cambodia, Ethiopia, Haiti, India, Lao PDR, Nicaragua, Nigeria, the Philippines, Uganda, and Vietnam.

appropriate beneficiary feedback mechanisms. WSP is working with the Water Global Practice to modify existing tools and develop new approaches to strengthen citizen engagement by drawing on ICT-based monitoring innovations.

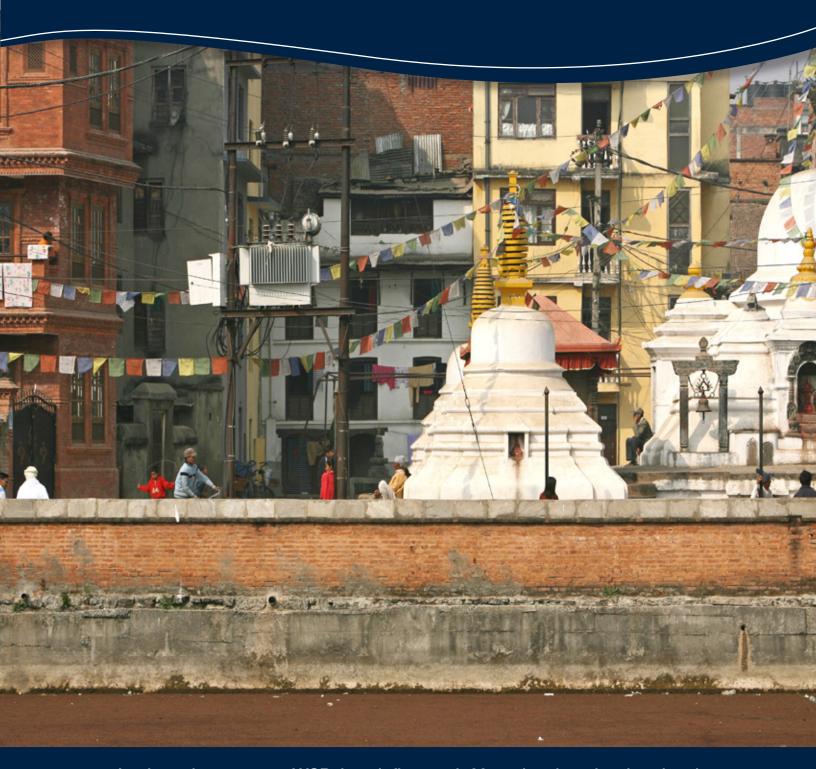
Political economy analyses need to be strengthened to fully understand issues of inequalities and exclusion in the sector. Poor-inclusive and genderbased sector policies and strategies often do not translate into programs catering to the needs of the poor and vulnerable groups. The 2004 World Development Report suggested two pathways for achieving "voice" for citizens: a "long route" through the political process and a "short route" through a "compact" that links citizens more directly to policymakers and service providers. In most countries, however, it takes decades for a well-functioning long or short route to take root and overcome structural inequities engrained in the system. Political economy analyses closely aligns with the institutional focus of the Water Practice. WSP and the Water Practice hopes to work closely with the Governance GP to understand political context and paths for collective action, and to explore and work with "islands of effectiveness" that involve multiple interested stakeholders, and

hence improve water security and water and sanitation service delivery.

Efforts to reduce inequalities by making services more affordable to the poor are not being widely used in the client countries. Data from 94 countries suggests that only 17 percent of countries consistently apply financial measures to reduce disparities in access to sanitation for the poor, compared to 23 percent for drinking water. 19 WSP's experience shows that some form of subsidy may be needed to ensure that the poorest who face hard affordability issues are not left behind. A recent cluster-randomized trial study in rural Bangladesh showed that subsidies to the landless poor increased ownership among subsidized households and reduced open defecation by 14 percent. Although there is evidence that the poor are willing to spend up to 30 percent of their annual income on a toilet, cash constraints may prevent them from doing so. In these cases, some form of financing facility could help them smooth payments and overcome cash constraints. WSP is actively learning how to administer targeted subsidies and financing mechanisms without affecting local market development or dampening demand by households and communities.

<sup>&</sup>lt;sup>19</sup> UN Water and WHO. 2014. Investing in Water and Sanitation: Increasing Access, Reducing Inequalities. UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water. GLAAS 2014: Main Findings. Geneva, Switzerland: World Health Organization.

# Targeting the Urban Poor and Improving Services in Small Towns



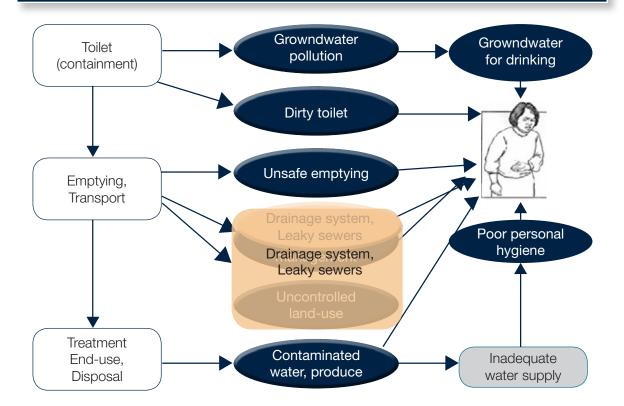
In the urban sector, WSP has influenced 20 national and subnational policies and strategies, strengthened organziational capacity of well over 60 operators, and reached 3,000 service providers through performance benchmarking over the last five years.

Two-thirds of the world's population is expected to live in urban areas in the next 30 years. Of this growth, 90 percent will be in Asia and Africa. Nearly half of the world's 3.9 billion urban dwellers today live in informal settlements with inadequate basic services. This number is as high as 70 percent in Asia and Africa. Smaller cities are often characterized by institutional weaknesses, weak capacity, and limited resources to effectively deliver basic services such as clean water supply and sanitation. Urban sanitation coverage has not been able to keep pace with rapid urbanization, increasing by only 35 percent over the last two decades. Access to improved water has marginally improved (from 83 to 85 percent) since 1990, while access to piped water has declined to 38 percent.

The increased population density and the largely unplanned nature of many urban settlements in developing countries mean that problems in service delivery to the poor impact everyone. Overstretched utilities are often unwilling or unable to extend coverage to the poor and need support to develop the capacity to do so. Scaling up urban water and sanitation services is a complex issue requiring a broader focus and strong buyin from policymakers and regulators. Sustainable improvements in water and sanitation services can be achieved by integrating service delivery into the broader context of urban development and watershed management that tackles issues of water scarcity, urbanization, and economic development. Greater political will is essential to build a durable citywide approach that involves households, the private sector, and civil society in planning, dialogue, and feedback.

WSP's Targeting the Urban Poor and Improving Services in Small-Towns business area supports governments and service providers in improving

### FIGURE 8: INTERLINKAGES BETWEEN WATER, SANITARY SERVICES, AND PUBLIC HEALTH



Lack of adequate water and sanitation facilities leads to health issues such as diarrhea, malaria, and cholera outbreaks. Between 1990 and 2008, 1,052 million people living in cities benefited from improved water supply and 813 million gained access to improved sanitation. In comparison, urban population during the same time period grew by 1,089 million people.

systems and institutions to scale up access to water and sanitation in both large and small cities across 14 focus countries. <sup>20</sup> The program aims to enrich knowledge of what works and what does not work, and translating and applying lessons to enable governments, clients, and development partners to reach scale. Learning generated through this process is not only replicated but also feeds into policies and strategies that inform investment priorities and operational practices on the ground and helps shape global dialogue.

### **Key Program Results**

Over the past five years, WSP has influenced 20 national and subnational policies to improve urban water and sanitation services, with a notable increase in frameworks for improved sanitation. More than 60 operators have been assisted directly in cost-effective expansion and efficient delivery of services to the urban poor in cities and towns of varying size. WSP has also supported 3,000 urban service providers to carry out performance benchmarking in order to provide more robust data to support institutional strengthening and service improvements.

Shifting policy agendas is a critical aspect of WSP's long-term impact on sector transformation. The ground-breaking analysis on fecal sludge management has gone substantially beyond technical solutions to address the critical political economy and institutional issues that are restricting urban water and sanitation for the poor. Significant progress has been achieved in shifting government paradigms to adopt citywide integrated urban water management that combines water and sanitation services with urban planning and water resource management. The approach has transformed the use of water and the management of human waste in a number of cities, resulting in increased efficiencies through conservation and reuse, greater services for the poor, and increased resilience of urban utilities to climate change.

WSP's cutting-edge empirical work is also influencing significant lending operations in the World Bank and other development partners. WSP

is helping to incorporate poor-inclusive citywide planning, including improved on-site sanitation facilities and fecal sludge management into World Bank lending programs, such as the US\$305-million Lusaka Sanitation Program, the US\$150-million Greater Accra Sanitation and Water Project, the US\$30-million Sierra Leone Resilient Cities Project, and the US\$230-million project in Guayaquil, Ecuador to assist in universalizing sewage collection and treatment services in the city.

# Influencing Policy and Strategy for Improved Service Delivery

WSP has supported 20 national and subnational policies and strategies over the last five years to more effectively address water and sanitation service delivery needs for urban poor consumers in cities and small towns. Support to policy and strategy formulation and reform is rooted in empirical work to add depth to policy analyses and harness political will to help transform the sector.

In India, the National Urban Sanitation Strategy adopted in 2008 with support from WSP is extending to more cities and states. The 14th Finance Commission's guiding document for fiscal transfers from national to state governments has recommended capital expenditure for septage management as an eligible expense benefitting all cities and towns in the country. WSP is supporting the municipal government in the city of Bishalgarh to design a septage treatment facility. The government has allocated US\$2 million to build the facility. The state of Tripura plans to replicate the model in 20 towns, benefitting close to one million people. The momentum symbolizes greater emphasis by the government on fecal sludge management rather than simply building toilets.

WSP's advisory services in **Kenya** have helped align the legal and institutional frameworks for water and sanitation to the newly decentralized constitution promulgated in 2010. The key challenge has been to develop a new policy formulation system that moves away from national government

<sup>&</sup>lt;sup>20</sup> These countries are Bangladesh, Bolivia, Cambodia, Democratic Republic of the Congo, Honduras, India, Indonesia, Kenya, Laos PDR, Mozambique, Pakistan, the Philipoines, Tanzania, and Zambia.

developing policies for the subnational institutions to implement to engaging the different levels of government in jointly developing these policies. To initiate this process, WSP has been supporting the national government in formulating policies that are based on evidence from the ground and in promoting dialogue between the different tiers of government in line with devolution. A new water bill developed with support from WSP was passed by the parliament and is now being reviewed in the county-based senate. WSP's work in Kenya is also linked to three major World Bank investment projects on urban services (Water and Sanitation Service Improvement Project), urban planning (Kenya Informal Settlements Improvement Project), and improving water security and resilience (Coastal Region Water Security and Climate Resilience Project). As part of this work, WSP shared global experience on tackling interjurisdictional bulk water management issues in the Coastal Region. Mombasa, Kenya's second largest city, which is located in this region, relies entirely on water resources from neighboring counties. WSP is working closely with the operations team to find functional and politically legitimate arrangements to manage cross-county water flows in the region as well as improve overall quality of water and sanitation services in Mombasa.

In Bangladesh, WSP helped revise a Ministry of Local Government sector development plan (SDP) on provision of water and sanitation services in Bangladesh up to 2025. WSP's work on the economics of sanitation and benchmarking has been incorporated into the plan. WSP also facilitated local-level consultations to extend outreach for the plan. The plan provides a common platform for local governments and service providers to ensure greater integration of urban services through broader urban planning and helps expand access to water and sanitation services for low-income groups.

## Strengthening Capacity of Service Providers

WSP worked with well-over 60 operators to strengthen their technical, financial, and

institutional capacities to more effectively deliver water and sanitation services to the poor and increase their accountability to policymakers and customers. The capacity-building measures extend beyond enabling operators to adopt cost-effective expansion or more efficient delivery of services. WSP also supports operators to demand effective and informed responses to governance issues in the sector.

Sustained technical assistance from WSP in the last several years in **Pakistan** has led to the creation of the first autonomous urban water and sanitation utility in Peshawar, governed by an independent board of directors, serving approximately two million people with improved water supply and sanitation services. This year, WSP supported the urban water and sanitation utility in Peshawar in conducting a comprehensive customer and market survey to gauge citizens' perspectives on quality of services and their willingness and affordability to pay for these services. The market survey helped enhance the customer base from 77,500 to 251,851 in less than one year and to detect 108,351 illegal connections that had not received or paid water bills for over 30 years. The collected data fed into a GIS-based dashboard with features such as image and inventory of properties in the city, data on connection and property types, and financial history.

WSP supported the Federal Ministry of Water Resources (FMWR) in Nigeria to build capacity of 35 state water agencies (SWAs). The initiative was driven by the findings of performance data collection of utilities from 2011 to 2013 and an analysis of their institutional arrangements. The analysis highlighted that more than 9 million people were not connected to main water utilities, requiring an investment of over US\$6 billion over the next 10 years to reach these people. The findings also highlighted the need for greater autonomy of the SWAs to encourage private-sector participation and develop national-level policies and guidelines to help SWAs better target the poor and vulnerable groups. WSP helped develop this analysis and is now working with the ministry to fill capacity gaps of the water agencies.



FIGURE 9: STATE WATER AGENCIES WITH PRO-POOR TARIFFS IN NIGERIA

SWAs across the country are using different approaches to reach the poor, ranging from providing water through standpipes to subsidizing water costs. However, the vast majority of poor consumers rely on alternative service providers, paying as much as US\$10 per cubic meter.

# Enhancing Performance Monitoring and Accountability Arrangements

WSP initiated country-level engagements and developed partnerships with governments through the International Benchmarking Network for Water and Sanitation Utilities (IBNET), reaching more than 3,000 service providers in 115 countries. In Africa, WSP worked with comparative data related to World Bank lending operations in 20 countries. The performance tools were also used outside by the German Development Agency in Kenya, the Asian Development Bank in Pakistan and South Pacific, and ADERASA in Latin America. System reforms initiated on the basis of this data has helped WSP influence around US\$300 million in urban investments over the past five years, both from international and country-level resources.

Since 2011, WSP has supported 305 urban water and sanitation providers to strengthen performance monitoring and accountability arrangements. Application of mobile and Internet applications were widely used in a number of focus countries to support utility performance.

After the successful implementation of the mobile phone-based customer feedback software in **Kenya**, MajiVoice, in one of the country's largest water utility reaching more than 43,000 people, WSP is now rolling out the application to more utilities, with support from the water regulator. The initiative aims to support Kenyan water sector regulators to develop innovative software to receive and process customer feedback and offer clear benefits to consumers, utilities, and the regulator. The main challenge in scaling up the initiative is finding additional service providers that can adopt the software with nominal support from WSP.

The mobile applications launched by WSP in the cities of Rawalpindi, Lahore, Faisalabad, and Karachi in **Pakistan** enabled urban utilities to receive customer feedback from 500,000 people. Integration of the short code within the utilities is a further step toward institutionalization

of information and communications technology in utilities. All three utilities now have a dedicated four-digit SMS short code. The Faisalabad utility has partnered with mobile phone companies and commercial banks to facilitate customers in paying their water bills.

In India, the service-level benchmarking (SLB) initiative implemented in 2009 was extended to track citizen feedback on service delivery through the "SLB Connect" initiative. Mobile to Web citizen feedback surveys were completed in seven cities, covering 5.5 million people. Further scaling up is now underway in partnership with other agencies and by linking to recent Government of India urban programs. Key findings from the surveys have been used to inform performance improvement plans developed by various cities and identify hotspots for operational interventions. Follow-up surveys via telephone and SMS polls were later conducted in one city and necessary steps taken to improve water quality and the complaint management system. SLB Connect has also been integrated into the design of a US\$200 million World Bank Karnataka Urban Water Supply Modernization Project to help mainstream citizen feedback processes in lending operations.

# Using Knowledge to Shape Policy and Dialogue

The global review on challenges, trends, and approaches to achieve viable poor-inclusive urban sanitation at scale conducted in 2011–2013 demonstrated that effective urban sanitation depends on a chain of services, and that one of the largest gaps in the chain is fecal sludge management.

The global study on Diagnostics Tools and Guidelines for Fecal Sludge Management was an initial step toward gaining a deeper understanding of this issue. It helped enhance the overall agenda for urban sanitation and inform policy formulation, sector reform, and service delivery programs. The five in-depth case studies on fecal sludge management are generating new ideas for sustainable approaches to address fecal waste

management challenges in cities. The fecal sludge flow diagram has helped cities analyze and identify specific problems in the service delivery chain, and is being widely used in global discussions on options for monitoring the SDGs for sanitation. WSP's work was also extensively cited during the third global Fecal Sludge Management conference, held in Vietnam in January and attended by more than 700 delegates from governments, municipalities, service providers, the private sector, and research institutions globally. The discussions during the AfricaSan-4 conference held in Dakar in May also centered on this work.

WSP continues to collaborate with Gesellschaft für Internationale Zusammenarbeit (GIZ) and the Bill & Melinda Gates Foundation and with the universities of Leeds and Loughborough to promote and facilitate the use of fecal waste flow analysis. The Foundation provided an initial tranche of US\$1 million to begin work on this approach and has already co-organized discussions with WSP and other partners at two major events in 2015—the Stockholm Water Week and the Global FSM conference in Vietnam.

The Government of **India** has integrated fecal sludge management as an essential part of its national sanitation program, requiring state and municipal governments to incorporate fecal sludge management in the city and state sanitation plans. The 2008 Urban Sanitation Policy is also being rolled out to different states. State governments are increasingly dedicating more resources to improve urban sanitation conditions for the poor. WSP has provided extensive technical assistance and analysis to move the urban sanitation agenda in the country.

The study on the potential of prepaid meter systems in serving poor urban communities in **Africa** was completed this year.<sup>21</sup> Drawing on case studies from eight cities across Africa, the study helped inform urban utilities, oversight agencies, and other stakeholders on the suitability, introduction, and management of prepaid systems. The study found that despite inconsistencies in the performance and quality of prepaid systems, they do help service providers reach the poor and

<sup>&</sup>lt;sup>21</sup> Heymans, Chris, Kathy Eales, and Richard Frances. 2014. The Limits and Possibilities of Prepaid Water in Urban Africa: Lessons from the Field. WSP report. Washington DC: World Bank.

help customers manage their water usage and budgets. It also noted that prepaid systems might not compensate for management shortcomings and poor financial management in a utility. Careful considerations are needed by utilities to assess the investment costs for installing and maintaining prepaid metering systems vis-à-vis revenue income. Revenues generated from prepaid systems may not be enough to cover costs unless there are high consumption volumes per connection and service providers charge economic tariffs. The analysis also highlighted the need to differentiate between applications of prepaid system for standpipes, individual connections, and institutional and commercial customers, each of which have different implications for their users, as well as cost effectiveness. Utilities would also need to justify investment in prepaid systems and the opportunity cost to the specific application relative to other means of improving services. The analysis has brought much-needed attention to understanding the key drivers of utility performance and unpacking these factors to improve quality and sustainability of water and sanitation services for the poor. The World Bank urban water teams in Kenya, Zimbabwe, and Malawi have drawn on this research to advance the dialogue on the impacts of such meters.

The sanitation study covering 12 cities in Indonesia and Vietnam attempted to investigate why house connections to sewerage were underutilized in an effort to improve on-site sanitation in areas without sewer access, with a focus on connecting more poor households. The study found that although 55 to 96 percent of households had access to flush toilets, most discharged into septic tanks or pits. Sixty-six percent of the pits and tanks in Indonesia, and 75 percent of those in Vietnam were not emptied, resulting in overflow into drains or rivers. The unclear institutional arrangements and lack of coordination resulted in poor sanitation management and planning, underutilization of capital investments, construction delays, and difficulties with asset handover. There were also significant gaps in decrees, regulations, and standards for both sewerage and on-site systems. Financial resources were often dedicated to largescale municipal infrastructure, neglecting the support needed for households to connect to sewers and improve on-site sanitation. The findings from the study have been widely disseminated among sector stakeholders and are forming the basis for further planning and investment preparation.

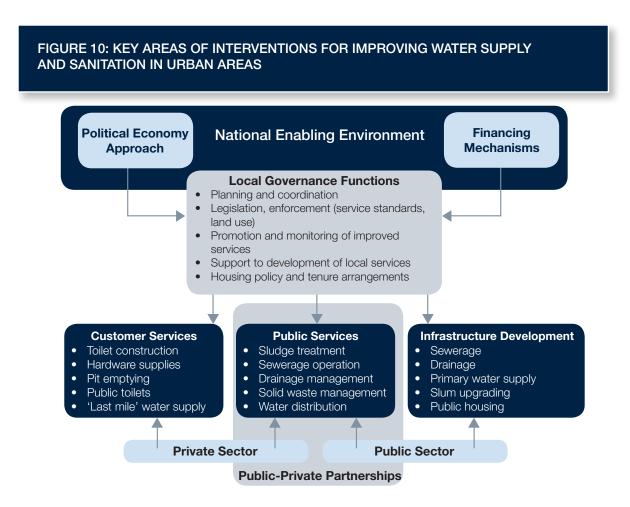
In Indonesia, wastewater utilities intend to use the data generated from the study to review the Jakarta Wastewater Master Plan. The findings are also helping to inform the design of a joint WSP and USAID output-based program (Indonesia Urban Water, Sanitation and Hygiene program) to improve on-site sanitation and fecal sludge management for 40 cities starting next year.

In **Vietnam**, the results of the study are helping to redesign the World Bank Sustainable City Development Project in the city of Da Nang in order to develop separate sewerage system in areas without sewer access, with a target of achieving a 100 percent connection rate to completely separate wastewater from storm water. The municipal government has also issued a new regulation requiring permits before construction and operation of on-site sanitation facilities in the city. Additionally, the provincial government of the Binh Duong province is constructing a separated sewerage system and wastewater treatment plant for Di An town under the Vietnam Urban Water Supply and Wastewater Project. The province is also formulating regulations to ensure better management of septic tanks and fecal sludge, making sure that connections to sewers becomes mandatory.

### **Lessons and Opportunities**

Policy momentum and institutional strengthening are essential to deliver effective services across a range of emerging megacities, peri-urban areas, and smaller cities and towns. However, the critical challenge in expanding water and sanitation services to the poor is about achieving scale. Interventions for the poor should be based on a boarder citywide perspective with integrated planning and management to achieve maximum impact.

With the increase in absolute numbers of people without access to water and sanitation in regions like Africa, the challenge posed under the SDGs is to support governments and service providers in expanding their investments in basic infrastructure and services to ensure

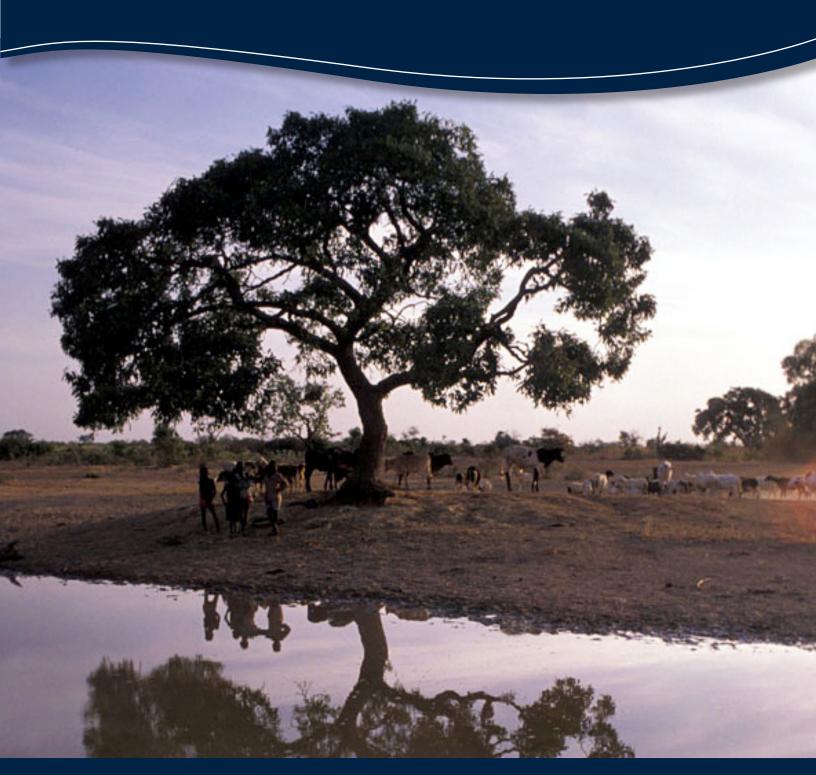


This diagram provides an overview of the different areas of interventions needed to improve urban water and sanitation services for the poor in cities and small towns.

that cities are able to perform their important roles as engines of economic growth. Support to clients must go beyond capacity building for individual institutions. Going forward, WSP intends to focus on strengthening the abilities of policymakers, utilities, and other sector agencies to serve the poor by developing effective and well-targeted subsidy policies, tariff systems, and cost-recovery models to improve access for the poor. WSP would also like to generate evidence to strengthen monitoring systems on pricing and service levels and assist in professionalizing utilities to improve their credit worthiness and access to financial markets.

Emerging challenges of water scarcity and natural disasters facing cities call for greater focus on integrated urban water management (IUWM) systems to make them more resilient to impacts of climate change. WSP's integration with the Global Water Practice has provided a unique opportunity to work closely with lending operations focusing on IUWM to assist cities to address the emerging challenges of water scarcity, urbanization, and economic development, and help them adapt IUWM frameworks that integrate water and sanitation needs of the poor into national and municipal urban policies.

# Adapting Water Supply and Sanitation Delivery to Climate Change Impacts



Since 2011, WSP has worked in 10 countries to mainstream disaster risk management and climate change adaptation in WASH policies and strategies and has supported six major utilities in improving water and sanitation service resiliency, benefitting more than 12 million people.

Climate change affects capacity and operations of water and sanitation infrastructure and services. Changes in weather patterns and increased reoccurrence of natural disasters not only compromise the quality of existing water and sanitation services, but can also put future gains in access and service quality at serious risk, with cascading effects on human health and development. The risks are unevenly distributed and amplified for poor and disadvantaged communities that already lack essential infrastructure and services.

Climate change is also projected to reduce renewable surface water and groundwater resources in most dry subtropical regions, intensifying competition for water among sectors. Of the world's next 3 billion people, 90 percent will likely be born in regions already experiencing water shortages. Sustainable delivery of water supply and sanitation therefore needs to consider fundamental issues of water quality, water scarcity, and water resource management.

WSP's Adapting Water Supply and Sanitation Delivery to Climate Change business area supports governments in a small subset of countries to mainstream climate change adaptation (CCA) and disaster risk management (DRM) approaches into sector policy frameworks and practice. The program also raises awareness of the impacts of climate change for the water sector through evidence-based knowledge, advocacy, and dialogue.

#### **Key Program Results**

Much of WSP's work in climate change has focused on conducting sector assessments to identify gaps and opportunities for mainstreaming CCA and DRM in the WASH sector, support policy and strategy development, and build institutional capacities to meet these gaps.

Over the last five years, the diagnostics on the status of incorporating disaster risk management

in the water and sanitation sector were completed for all seven member countries of the Central American and the Dominican Republic Forum for Drinking Water and Sanitation (FOCARD-APS). WSP trained the member countries on DRM tools and techniques to manage risks in the sector. The vulnerability assessment conducted in the Ben Tre province of **Vietnam** paved the way for development of a provincial CCA strategy to integrate climate change resilience into the design of new infrastructure projects.

WSP support to SEDAPAL in **Peru** helped improve the water and sanitation service resiliency for more than 9 million people. SEDAPAL is the largest urban utility in Lima, with exposed assets worth approximately US\$2.8 billion. WSP supported the utility in implementing systematic improvements in the mitigation and vulnerability strategy based on thorough cost-benefit analysis. WSP, in close collaboration with the World Bank Disaster Risk Management Unit, provided technical assistance to the National Water Utility SANAA, the strategic investment and planning department, to improve water supply and sanitation service resiliency for approximately 1.5 million people in Honduras. To date, the support provided to the different utilities across a range of countries has benefitted more than 12 million people.

## Supporting Policymakers to Manage Risks

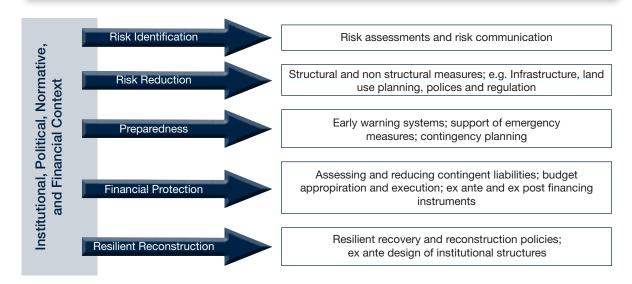
WSP has supported governments in their efforts to mainstream CCA and DRM in nine national and subnational water and sanitation policies and strategies across 10 countries in Latin America and Asia (Vietnam) over the last five years.

This year, WSP continued its work with the Central American countries and the Dominican Republic to disseminate the results of the assessment of the status of DRM in the water supply and sanitation sector policy framework and practice and share best practices through regional groups and an online community.<sup>23</sup>

Bolivia, Peru, and Vietnam are part of the Climate Change business area. However, WSP also worked in Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Nicaragua, and Panama to carry out the assessment on the status of disaster risk management in water supply and sanitation for the FOCARD-APS members through a subregional Economic and Sector Work project. WSP also implemented the water security pilot in India.

<sup>&</sup>lt;sup>23</sup> Serrano, Rodríguez, and Antonio Manuel. 2015. Central America and the Dominican Republic. Regional Assessment: Status of Disaster Risk Management in the Water Supply and Sanitation Sector. Policy Framework and Practice. Report No: AUS11011. Washington, DC: World Bank.

# FIGURE 11: DISASTER RISK MANAGEMENT FRAMEWORK USED TO CONDUCT THE CCA-DRM ASSESSMENTS IN THE CENTRAL AMERICAN COUNTRIES AND THE DOMINICAN REPUBLIC



Source: Ghesquiere, Francis, and Olivier Mahul. 2010. Financial Protection of the State against Natural Disasters. Policy Research Working Paper No. 5429 Washington DC; World Ban

The analytical framework for the diagnostics focused on five strategic areas to provide a snapshot of the challenges faced and progress made by countries in the incorporation of DRM and CCA in WASH sector policy frameworks and practice.

WSP helped organize a series of learning events to create a community of practice and supported the regional thematic group comprising seven member countries of the Central American and Dominican Republic Forum for Drinking Water and Sanitation. In total so far, around 400 key stakeholders from more than 17 countries, including 100 high-ranking decision-makers, have participated in a wide range of events. The member countries continue to meet periodically to share ideas and best practices in an effort to promote horizontal learning. The continuation of this dialogue has resulted in increased interest from major utilities in other countries to implement similar initiative in their cities.

WSP continued to work closely with the World Bank Disaster Risk Management Unit to support the major WSS utilities in incorporating probabilistic seismic risk assessments in their operative plans in Tegucigalpa, **Honduras**, and Arraijan and Puerto Armuelles, **Panama**. Initiated in 2008, the Central

American Probabilistic Risk Assessment (CAPRA) aims to strengthen the institutional capacity for assessing, understanding, and communicating disaster risk, with the ultimate goal of integrating disaster risk information into development policies and programs. The World Bank, in partnership with United Nations International Strategy for Disaster Reduction, Inter-American Development Bank, and others, is raising awareness among client countries in Central America by providing them with a set of tools to help them better understand the risk of adverse natural events. WSP played an instrumental role in helping bring the initiative to the Water and Sanitation sector.

### Building Institutional Capacity to Respond to Risks

WSP strengthened the organizational capacities of six utilities in mainstreaming CCA and DRM measures during the business plan period.

WSP's support to national and subnational urban utilities in Bolivia, Honduras, Panama, and Peru, and its work with the Ministry of Drinking Water and Sanitation in India to implement the national drinking water security pilot has helped reach more than 12 million people.

In India, WSP has been supporting the Ministry of Drinking Water and Sanitation to implement the drinking water security pilot project in 10 states, providing 2.3 million people with safe water. To date, more than 400 water security plans have been developed to address the serious water scarcity challenges in the selected pilot sites that are mostly economically underdeveloped. To maximize results for the communities, manage water resources, and construct infrastructure, funds from multiple government programs were pooled. In Rajasthan, departments of agriculture, irrigation, and watershed reported convergence of funds with Mahatma Gandhi National Rural Employment Guarantee Scheme (MNREGS) and Nirmal Bharat Abhiyan (NBA or Total Sanitation Campaign), accumulating over US\$1.6 million in the last two years. In Karnataka, the total funds pooled were over US\$30 million, of which the Government of India Swachh Bharat-Gramin Mission contributed approximately 45 percent. The pilot project has brought the issue of water security to a wider debate in the country and has drawn the attention of planners and administrators on addressing water security challenges. The key learnings generated from the project signify the importance of adopting a bottom-up approach to developing water security plans, deeper engagement of state governments, and crosssectoral and interdepartmental coordination.

In **Bolivia**, WSP has been supporting the Ministry of Environment (MMAyA) to implement wastewater reuse policy in an effort to promote the treatment of all wastewater through research on water reuse and optimization of treatment models to deliver nutrient-rich water. Informal use of wastewater for agricultural irrigation is a standard practice accounting for 2.3 percent of total irrigated area. Urban expansion has significantly increased domestic and industrial water demands in the country. Water originally intended for downstream

irrigation is now appropriated. The National Sanitation Plan 2008–2014 anticipates that climate change will further intensify the use of wastewater for agricultural purposes, resulting in poor water quality and serious consequences for public health.

To address this, WSP facilitated the creation and operation of the Wastewater Reuse Joint Commission to define policies, strategies, and interventions, and to operationalize wastewater reuse related lines of action outlined in the national sanitation plan. WSP also provided input to the World Bank Strengthening Environmental Management Project to analyze technological solutions and potential economic impacts associated with the introduction of planned wastewater reuse schemes in different cities of the country. WSP conducted a study on the opinions, perceptions, and practices of producers, sellers, and consumers of wastewater-irrigated products. These inputs helped MMAyA formulate the first strategic guidelines for the promotion of safe wastewater reuse practices. WSP also supported a series of knowledge-exchange events to inform water sector authorities and Bolivian sanitation practitioners about the national wastewater reuse policy. In total, around 200 people from 10 different countries participated in the events. WSP also built capacity of Viacha water utility to improve wastewater management and reduce contamination.

### **Lessons and Opportunities**

Delivery of sustainable and resilient water, sanitation, and hygiene services is intrinsically linked to climate change. However, the tools to understand and manage these linkages are scarce. Adaptation options and effective strategies exist, but their context for implementation and potential to reduce climate-related risks differ across countries and regions. Inadequate sector representation in the institutional policy and regulatory frameworks, poor governance, and weak organizational capacities are some of the most common constraints hindering the mainstreaming of CCA and DRM in the sector. Analysis of climate finance flows show that the sector is not

optimally utilizing funds available to support adaptation to climate change. The effectiveness of national institutions and importance given to water security in government policies can also be attributed to poor sector coordination, fragmented responsibilities for water, and absence of concrete water security frameworks.

WSP's engagement in climate change will be much more significant in the coming years. Climate

change is at the forefront of the water agenda for the Global Water Practice to bring together water security with more traditional components of water, including water supply, sanitation, irrigation, and water resources. The Water Practice is engaged with a number of key stakeholders to raise the profile of water at the 2015 Paris Climate Conference (COP21) taking place in December 2015, and to draw attention to the close linkages between climate change and water, including water-dependent sectors of the economy.

Delivering Water Supply and Sanitation Services in Fragile and Conflict-Affected States



Since the start of the program in 2011, WSP's engagement in fragile states has expanded to 13 countries across four regions. To date, WSP has influenced about US\$493 million in financing for the water and sanitation sector.

Although Fragile and Conflict-Affected States (FCAS) have made some progress toward MDGs, this progress has been much slower than in more politically stable developing countries. Nearly two-thirds of fragile states will miss the target of halving poverty by 2015, while only one-third of stable developing countries will fall short of this target. The proportion of the extreme poor is largely concentrated in FCAS, representing 40 percent of people living on less than a US\$1.25 a day. By 2030, this is expected to increase to 60 percent.<sup>24</sup>

Progress on human development targets for education, health, and water and sanitation has been even slower in fragile states, with only 28 percent of FCAS meeting the water supply MDG compared to 61 percent of stable developing counties. A mere 18 percent of FCAS have met the basic sanitation target compared to one-third of stable developing counties. Only one fragile state will meet the target on reducing infant mortality.

WSP's Delivering Water Supply and Sanitation Services in Fragile and Conflict-Affected States business area supports sectors in transitioning from ad hoc emergency interventions to long-term country-led development programs. The technical assistance focuses on building country-led WASH delivery pathways revolving around institutions, systems, and processes that are needed to effectively plan, implement, and sustain services. This approach draws on the logic that country systems are both a foundational requirement of a functional state and essential to extend the reach and rate of progress in the WASH sector and improve credibility of local and national institutions in the eyes of the citizens. WSP's support in fragile states has scaled up significantly over the last five years. Starting from an initial engagement in Democratic Republic of the Congo (DRC), WSP now works in 13 fragile and conflict-affected states around the world.<sup>25</sup>

### **Key Program Results**

The experience of working across a number of countries has helped WSP refine its approach to

supporting sector transition in fragile states. Initial engagement primarily focused on analytical tools to evaluate the status of water and sanitation services in fragile states and to evaluate service delivery models. From this initial engagement, WSP has developed an evolutionary approach to introducing, adapting, selecting, promoting, and growing service delivery models in fragile states. The approach is now being used to translate analysis into investment across a range of fragile states where WSP works. To date, WSP has been able to influence US\$492.75 million in financing from governments and donors for the WASH sector.

Two years of technical assistance provided by WSP to a national policy dialogue finally culminated in the development of Papua New Guinea's (PNG) firstever WASH Policy. The SDA conducted in 2012 found that an unclear division of responsibilities between institutions and the absence of a national WASH policy were some of the key factors preventing the expansion of water and sanitation services in the country. Since then, WSP has provided technical assistance to facilitate the work of the multi-departmental task force to develop a comprehensive WASH policy and strengthen capacity of WASH sector agencies. Approved by the National Executive Council earlier this year, the new WASH policy has helped align thinking in the sector to develop common objectives, prioritize key service gaps, and describe strategies to address them, and is already attracting additional funding to the sector. The World Bank has committed US\$50 million to help implement the policy through a new loan project focusing primarily on institution building in the sector.

In Liberia, WSP's upstream work supported the first major post-crisis World Bank urban water sector investment in response to the Ebola outbreak. The project will invest US\$10 million to rehabilitate Monrovia's distribution network and build capacity of the Liberia Water and Sewer Corporation (LWSC). The investment will also complement an African Development Bank (AfDB) funded urban water sector intervention for the restoration of

<sup>&</sup>lt;sup>24</sup> The baseline for this indicator is drawn from the published results of the 2010 African Ministers' Council on Water regional synthesis report: Pathways to Progress: Transitioning to Country-Led Service Delivery Pathways to Meet Africa's Water Supply and Sanitation Targets. Washington, DC: World Bank and WSP.

<sup>&</sup>lt;sup>25</sup> The fragile state program is being implemented in Congo, Democratic Republic of the Congo, Haiti, Liberia, Myanmar, Nigeria, Pakistan, Papua New Guinea, Sierra Leone, Somalia, South Sudan, Timor-Leste, and Zimbabwe. In Pakistan, WSP is building on the existing program by drawing on the support of the fragile states teams to deepen engagement in the conflict-affected parts of the country.

LWSC's White Plains production from the current 6 million gallons a day (MGD) to 16 MGD. WSP's technical assistance in Liberia was instrumental in consolidating high-quality and difficult-to-collect data to provide an overview of the service delivery in the sector. The data helped inform sector investment plans. WSP also played an active role in multi-stakeholder planning and review processes and preparing institutions for investment.

WSP in partnership with the United States Agency for International Development (USAID) supported the Government of Khyber Pakhtunkhwa (GoKP) to establish Pakistan's first autonomous water and sewerage corporate entity in Peshawar. The technical assistance facilitated the amalgamation of seven fragmented municipal institutions to create a citywide utility, serving approximately 2 million people. The provincial government signed a management agreement with the City District Peshawar to transfer more than 4,000 staff from the municipalities of Peshawar to the new utility, and allocated over US\$1 million as seed funds. Feasibility studies are now being convened to set up similar utilities in six other large cities of the province.

# Strengthening Country-Led Service Delivery Pathways

WSP uses the average WASH service delivery pathway score across the fragile states and subsectors (urban, rural, water, and sanitation) it works in to monitor sector progress. The underlying matrices for each country and subsector assess the ability of a client government to effectively plan, budget, finance, deliver, monitor, and sustain WASH services. The WSP team reviews the 108 underlying factors that influence these intermediate outcomes and adjusts scores annually for the different countries. The current scorecards report progress across seven FCAS in Africa. Other countries, including Haiti, Pakistan, Papua New Guinea, and Timor Leste, are at different stages of developing service delivery baselines.

In fiscal year 2015, progress against the averaged service delivery pathway score is 1.25, thus falling below the annual target of two. There is, however, wide variation in country and subsector progress underlying this average score, although no country or subsector has reached the target score. It is important to note that the scores reported in the

Sustaining

1.5 1

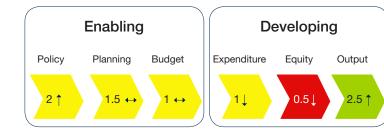
Use

2.5 +

Maintenance Expansion

### FIGURE 12: SERVICE DELIVERY PATHWAY AND SCORES FOR RURAL WATER SUPPLY IN LIBERIA

### **Rural Water Supply**



Data in each cell shows scores for fiscal year 2015. Arrows show progress, stagnation, or regression for each building block since FY11. For example, the definition of institutional roles in the Sector Strategic Plan for Liberia has strengthened the policy building block. However, the downgrade in the expenditure building block is the result of the Government's budget utilization rate dropping below 50 percent, due to the Ministry of Public Works failing to fully implement a shallow well investment program in Grand Cape Mount County.

### FIGURE 13: CHANGES IN SCORES FOR SERVICES DELIVERY PATHWAYS ACROSS THE SEVEN AFRICAN COUNTRIES FROM 2010 TO 2015

Rural Water Supply				Urban Water Supply				Rural Sanitation				Urban Sanitation								
	2010 Average Score	Change between 2010-2015 Avera		2015 Average Score	2010 Average Score	Change	e between 20	010-2015	2015 Average Score	2010 Average Score	verage Change between 2010-2015		2015 Average Score	2010 Average Score	Change between 2010-2015		2015 Average Score			
		Enabling	Developing	Sustaining			Enabling	Developing	Sustaining			Enabling	Developing	Sustaining			Enabling	Developing	Sustaining	
Liberia	1.5	0.06	-0.06	0.06	1.6	1.5	0.06	0.00	0.06	1.6	1.2	0.06	-0.06	0.00	1.2	0.8	0.06	-0.06	0.00	0.8
ROC	1.2	0.00	-0.06	0.00	1.1	1.5	0.00	-0.06	-0.06	1.4	1.3	-0.17	-0.11	-0.11	0.9	1.5	-0.11	-0.11	0.00	1.3
Zimbabwe	0.8	0.44	0.11	0.11	1.4	1.2	0.44	0.22	0.06	1.9	0.8	0.11	0.17	0.17	1.3	1.3	0.17	0.06	0.00	1.5
S.Sudan	0.8	0.22	0.06	0.39	1.5	0.7	0.33	0.17	0.28	1.5	0.7	0.33	0.11	-0.06	1.1	0.4	0.28	0.11	0.22	1.1
DRC	0.9	0.11	0.06	0.11	1.2	1.4	-0.17	0.06	-0.11	1.2	0.6	0.00	0.11	0.06	0.7	0.4	0.06	0.00	0.17	0.6
Sierra Leone	1.4	-0.11	-0.06	-0.11	1.2	1.5	0.00	-0.06	0.00	1.4	1.4	0.00	-0.06	0.00	1.3	1.2	-0.06	0.00	-0.06	1.1
Nigeria	1.4	0.11	0.06	0.00	1.6	1.4	0.11	-0.06	0.00	1.5	1.3	0.00	-0.17	0.00	1.1	1.3	-0.28	-0.17	-0.06	0.8
						All Wate	er Supply	/								All San	itation			
						1.24	0.12	0.03	0.06	1.44						1.02	0.03	-0.01	0.02	1.06
																All Sub	-sectors	3		
																1.13	0.07	0.01	0.04	1.25

The individual country and subsector status overview provides a much greater resolution on where progress is being made by comparing country status overview indicators in 2015 with those in 2010.

country status overviews are a shared outcome reflecting the combined effort of governments and development partners in each country and are subject to both positive and negative changes.

Previously, the average service delivery pathway scores were only reported at an aggregate level, providing little understanding on which countries and subsector were making progress and which were not. This year, the WSP team developed a tool that gives an overview of the change scores for service delivery pathways for each country and subsector that WSP works in for the full five-year period. This provides both a transparent audit trail and shows the wide variation in country and subsector progress ranging from the positive developments in the urban water supply in Zimbabwe to the deterioration in Nigeria's urban sanitation service delivery pathway.

Progress in the country status overview scorecard for **Zimbabwe's** urban water supply sector is supported by the Cabinet approval of the national water policy, which clearly articulated the separation of roles between service authorities and service providers. The comprehensiveness of the national budget has improved with the inclusion of most donor funding. A water sector

investment plan was also published last year and service-level benchmarking across 32 utilities was institutionalized, improving horizontal learning and monitoring. However, upstream improvements in the service delivery pathway are being thwarted by downstream bottlenecks. The urban water sector has been set back by (i) not implementing a revenue sharing formula for intergovernmental transfers to municipalities, (ii) not finalizing determinations on tariff applications, and (iii) letting coverage fall behind population growth in both Harare and small towns across Zimbabwe. WSP is now shifting attention to address these bottlenecks with its technical assistance to regulation and small towns being closely integrated into the Zimbabwe Reconstruction Fund (ZIMREF)-financed National Water Project.

Regression in **Nigeria's** urban sanitation sector has dragged the overall scores down. The urban population of Nigeria (more than 85 million) now accounts for 50 percent of the country's total population. Urban growth over the last five years has meant that the proportion of urban households using improved sanitation facilities has fallen. With the exception of two areas (Lagos and Abuja), there are virtually no functioning sewer networks or treatment facilities. Coordination and leadership

for policy development and planning for urban sanitation at state level has deteriorated in most states. To counter this, WSP has increased its involvement in Nigeria both at the federal level and by working closely with Rivers State providing a combination of (i) upstream analysis on the linkages between urban sanitation and water quality, (ii) support to sector reform through the US\$270-million World Bank lending operation, and (iii) researching service delivery models for an urban sanitation investment planned by the AfDB in Port Harcourt, Rivers State.

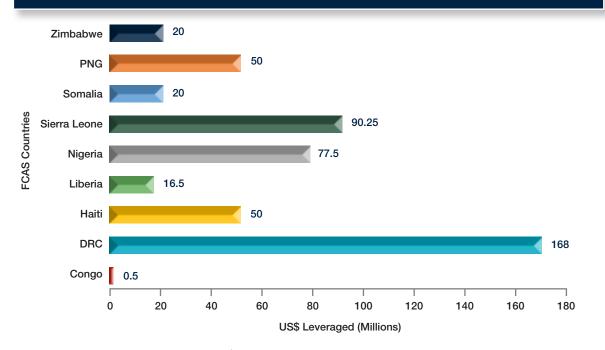
# Influencing Investments to Improve Service Delivery

In the last fiscal year, WSP influenced US\$134.75 million in funding from governments and donors for the WASH sector. In total so far, WSP has leveraged

its knowledge by influencing US\$492.75 million of financing over a five-year period, exceeding the cumulative program target. This includes directly influencing US\$233.25 million of World Bank project funding and US\$259.5 million of other development partner and domestic funding. WSP achieved this by shifting the way aid is channeled, improving aid targeting, and influencing the service delivery models deployed.

Most WASH investments in FCAS are channeled through projects, often focused on direct infrastructure investment. This approach, while delivering services in the short term, often neglects and can even undermine the development of country-led service delivery pathways capable of enabling, developing, and sustaining WASH services. WSP's experience suggests that shifting domestic and development partner funding toward





In DRC, WSP has influenced US\$168 million in financing from the World Bank and other development partners. WSP's technical assistance to Port Harcourt Water Corporation in Nigeria on water quality monitoring and utility billing assessment was used to inform reform process in other states, influencing US\$70 million in funding. In Sierra Leone, water point is widely being used to target funds to areas in need of rehabilitation.

supporting and strengthening country-led WASH service delivery pathways in FCAS can be expedited by (i) increasing domestic budget allocations to WASH, and (ii) working with development partners to align with and use country systems at an early stage of the emergency to development transition.

### Increasing Domestic Budget Allocations

Competition for domestic budget allocations in fragile states is fierce and often prioritized for nondiscretionary recurrent costs such as security services and civil servant salaries. The small remaining capital budgets are generally used to crowd-in private and loan finance for growth-oriented energy and transport infrastructure in the expectation that development partners are likely to subsidize investment in poverty reduction-related sectors. Nonetheless, opportunities exist to secure domestic budgets for WASH service delivery in situations where rents from natural resources such as oil, steel, and diamonds begin to flow into public budgets.

In Liberia, WSP's technical assistance to WASH line ministries to prepare annual budgets using a medium-term budget framework (MTEF) format helped increased budget allocations to WASH from US\$1 million to US\$3.5 million. WSP also facilitated dialogue between ministries responsible for water and sanitation and the Ministry of Finance and supported staff to defend the financial request during budget hearings. WSP is now working with the line ministries to improve their disbursement rates and absorption capacity.

# Influencing Development Partners' Use of Country Systems at the Point of Reengagement with FCAS

Influencing development partner alignment with and use of country systems is most effective when development partners reengage with specific fragile state as the crisis subsides.

With the World Bank's reengagement in **Somalia**, WSP is working closely with operations to deliver the first government-implemented water investments in 23 years. A US\$2-million rural water supply project, funded by the World Bank's State and Peace-building Fund

(SPF), and jointly supervised by the Agriculture and Water Global Practices, is a first step in rebuilding the implementation capacity of the regional state governments of Puntland and Somaliland. This modest initial operation is likely to receive additional funds from the World Bankadministered Multi Partner Fund for Somalia to expand operations to other regional states. In the urban subsector, WSP's technical assistance to Hargeisa Water Authority (HWA) to improve governance processes, including the nomination of a board of directors, has helped secure an additional US\$6 million for water resources exploration and infrastructure investment.

### Synthesizing Experience on Transition Steps for Building Country-Led Service Delivery Pathways

Where it is not possible to increase domestic investment in WASH or directly finance governments to build their implementation capacity, alternative incremental transition steps are needed to build country-led service delivery pathways. WSP, in close collaboration with Sanitation and Water for All (SWA) members, has brought together the experience of building country-led service delivery pathways under a set of guidelines on "collaborative behaviors."

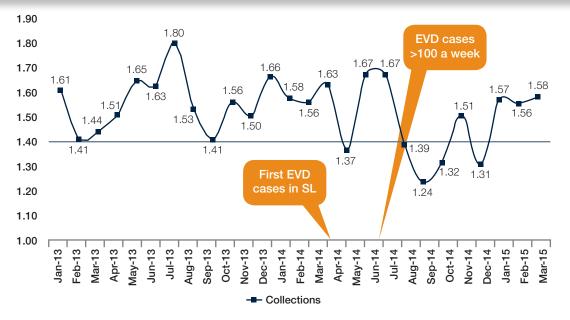
Building country-led service delivery pathways for WASH requires risk-taking by both developing country governments and development partners. Donors may be reluctant to directly finance service delivery through weak developing country systems. Developing countries may be unable to independently develop robust investment vehicles. Collaborative behaviors that focus on transition actions provide a more gradualist approach to building country-led service delivery pathways than offered by the binary (on/off) nature of sector or general budget support. They involve give and take on the sides of both developing country governments and their development partners. The following are four examples of such transition actions that have worked for WSP:

 Investment planning. Nationally driven sector investment planning even in scarcely funded subsectors is extremely important. The funding outpour in Liberia following the Ebola virus disease (EVD) epidemic completely transformed the aid environment. The preparatory work convened in the past was instrumental in developing credible plans and design studies to absorb these funds, including the World Bank US\$10 million investment.

- 2. Common targeting mechanisms. WSP influenced US\$84 million of investment in Liberia and Sierra Leone by working with development partners such as UNICEF and AfDB to adopt the results of national water point mapping exercises for targeting infrastructure development and rehabilitation. UNICEF in Sierra Leone has committed to using the national water point maps as a basis for working with district councils to identify villages requiring hand pump repairs.
- 3. Evaluating and spreading context-specific service delivery models. In Haiti, learning generated through an evaluation of the World

- Bank emergency Rural Water Supply and Sanitation Project unexpectedly identified the combination of volumetric billing and domestic private sector participation (DPSP) as a model that was delivering well compared to the more traditional post crisis model of public stand post service delivery. The successful volumetric billing and DPSP model has been integrated into the new US\$50 million IDA investment that will support the lead ministry for water (DINEPA) and its de-concentrated agencies to replicate this approach across the country.
- 4. Increasing utility revenues through cost recovery. In Sierra Leone, WSP worked with the country's largest utility, Guma Valley Water Corporation (GVWC), to assess its cost recovery mechanism and generate customer data for tens of thousands of customers that was missing from the company's defunct billing system. A new billing system was installed to populate the data. This was done just as the

## FIGURE 15: GVWC'S MONTHLY COLLECTION BILL DURING THE EBOLA CRISIS (Billion Le)



This graph illustrates the drastic reductions in GVWC's monthly billing collections as a result of the Ebola outbreak.

Ebola outbreak took hold, causing many of GVWC's larger customers to close. The new billing system and much-improved customer database enabled GVWC to sustain revenues, rather than having to seek government subsidies, in the face of the EVD outbreak. The improved data and systems also enabled GVWC to implement cost recovery innovations such SMS billing.

### **Lessons and Opportunities**

In countries where progress is slow due to lack of political will to support institutions, governments struggle to work with development partners, or there is a resurgence of conflict, WSP needs to reassess its engagement and redirect resources to other countries. WSP plans to draw back its engagement in Republic of Congo. Despite significant support provided by WSP over the last several years to conduct water point mapping, the data is still not being used to target WASH interventions. On the

other hand, WSP does plan to intensify engagement in Papua, New Guinea. With the momentum for reform generated by the WASH Policy Task Force, the ratification of the National WASH Policy and the planning for the US\$50 million investment, WSP intends to help implement the reform agenda in the country by establishing new institutional, planning, financing and monitoring processes and service delivery mechanisms.

WSP continues to explore alternative ways to support client governments in countries where security is deteriorating. Although WSP initially had to curtail operations in South Sudan, based on a recent request from the government, WSP is now working with the SWA Country Processes Task Team (chaired by WSP) to support the WASH sector planning and review processes. The government has actively participated in the analytical work on aid effectiveness carried out by SWA and has requested targeted support for the joint sector review.

# Global Communications



This year, WSP continued to leverage its role within the World Bank and the Water Global Practice to share knowledge on a much wider scale, using a variety of communication channels. The efforts resulted in improved delivery to our clients and strengthened our global influence to advance the WASH agenda.

Effective communication facilitates appropriate and timely delivery of key messages to the intended audience. WSP employs a diverse range of innovative communication tools to share key knowledge and advocacy messages for use by partners and the global public.

This year, WSP continued to leverage its role within the new Water Global Practice to share knowledge on a much wider scale using internal and external events, digital products, social and traditional media, and leveraging partnerships. The Water Global Practice communication strategy for fiscal year 2015 focused on building the new Water Practice and leveraging World Bank support for overcoming water challenges, delivering to clients, and strengthening global support for water and sanitation.

# Leveraging Support from the World Bank Group

To help build the Water Global Practice, internal outreach around WASH issues is critical to sensitize World Bank staff and maximize leveraging of corporate support for WASH solutions.

WSP's support strengthened these efforts by highlighting the critical importance of WASH to the World Bank Group goals of ending poverty and boosting prosperity by 2030.

Hosting an event with Sesame Street on WASH and behavior change at the World Bank helped engage President Jim Yong Kim, facilitate the support of World Bank development economics experts (such as an author of the World Development Report on Mind, Society and Behavior), and reach the World Bank internal and external communication channels.

### **Engaging Traditional and Social Media**

WSP leveraged the World Bank website to consolidate and synthesize water-related content to improve user experience and application, resulting

in a 20 percent increase in usage compared to the previous year. The website attracted more than half a million visitors this year. Traffic to WSP.org increased by 50 percent in one year, attracting 120,000 visitors. WSP also continued to leverage and contribute to building the World Bank's social media presence through Twitter @WorldBankWater, which reached more than 15,000 followers and was named the number one influencer in Water by The Guardian. Some of the most influential new twitter followers include Mariano Rajoy, Prime Minister of Spain; Melanie Schultz, Minister of Infrastructure and Environment, Netherlands; and Fredy Marrufo, Mayor of Cozumel, Mexico. WSP also received coverage in top-tier media outlets, including The Guardian, Bloomberg, the Huffington Post, USA Today, Time, and Al Jazeera.

### **Delivering to the Clients**

In India, WSP continued to support the government's national sanitation campaign, Swachh Bharat-Gramin Mission. WSP collaborated with BBC Media Action in NEEDLE2015, the communications conclave on sanitation, to establish a national thinktank on WASH communication that can guide implementation of national-, state-, and district-level WASH communication strategies. The conclave explored ideas and trends from different disciplines to support sanitation communication campaigns in the country.

WSP delivered the OpenStreetMap in **Bangladesh**, built by a community of mappers that maintain data about roads, trails, cafés, railway stations, etc., around the world. WSP supported the Bangladesh Bureau of Statistics (BBS) to collect demographic data using GIS-mapping. Pilot mapping was completed for 60 households in Chandanpur village of Manikganj district to collect basic information on household and water and sanitation features. Data collected was later uploaded to the global OpenStreetMap.org portal. WSP also trained 20 Google community mappers to share findings from the open data collection and mapping system.

# @WorldBankWater named top influencer by The Guardian





**50%**# of unique visitors for WSP.org



77%
Increase in
Twitter followers



180/0+
Increase in # of
You Tube views

The Guardian

**USA Today** 

The Wall Street Journal

Washington Post

TIME

0 /



# New high level influential followers

Minister of Infrastructure and Environment

@MelanieSvH

Price Minister of Spain @MarianoRajoy

Reuters

Yahoo News MSNBC

Bloomberg

The Huffington Post

The Financial Times

Livestream of Sesame Street event with the WBG receives

**3,500+** viewers



#KidsEndPoverty
Trends on **Twitter** in DC

WSP supported Water Week Latin America to promote exchange of experiences and practices between scientific, business, political, and civic communities and develop innovative thinking and positive action to address global water challenges and their impact on the environment, health, climate, the economy, and the community.

# Strengthening Global Influence to Advance the Global WASH Agenda

In September 2014, the Water Global Practice collaborated with the Global Poverty Project to organize the Global Citizen Festival in an effort to create a global movement for ending poverty by 2030. More than 60,000 people gathered in New York's Central Park to take part in the event, while millions of others tuned in live on NBC and MSNBC. With support from WSP, the event attracted unprecedented attention to sanitation. During the event, Indian Prime Minister, Narendra Modi, reaffirmed his commitment to provide toilets to all Indian citizens by 2019. Water Global Practice Senior Director, Junaid Ahmad, also announced the World Bank's commitment to allocate US\$15 billion over the next five years to reach more than 150 million people with improved water and sanitation.

The Senior Director also took the stage during the Global Citizen 2015 Earth Day celebration at the National Mall in Washington, DC, in April to reaffirm World Bank's commitment to improving sanitation in the developing world. Attended by close to 30,000 people, the event also urged action to fight poverty and prevent global warming and climate change. WSP's empirical work on economic impacts of sanitation was widely shared during the two events. Branded toilet paper was used to disseminate critical sanitation facts and figures.

WSP engaged World Bank staff from around the globe during the United Nations World Toilet Day in November 2014 to raise awareness on sanitation challenges disproportionally affecting women and girls. The World Bank Group Senior Director for Gender, Caren Grown, and Junaid Ahmad authored a joint op-ed published in Reuters, and participated with partners in social media campaigns, #worldtoiletday and #wecantwait, which both trended on Twitter, reaching an even wider audience.

During the World Bank Spring meetings in April 2014, her Excellency Gertrude Mutharika, First Lady of Malawi; Her Excellency Voahangy Rajaonarimampianina, First Lady of Madagascar; CNN Anchor and Correspondent Isha Sesay; and many other distinguished guests launched an official declaration asking world leaders to take urgent action to achieve universal access to safe drinking water and sanitation. Junaid Ahmad helped launch the declaration, which was also signed by World Bank Managing Director Sri Mulyani.

WSP invited Sesame Street to the World Bank in June 2015 to initiate discussion on WASH and behavior change. President Jim Yong Kim and Sesame Workshop Chief Executive Jeffrey Dunn jointly hosted the event, which was livestreamed and trended on Twitter in Washington, DC. A joint Kim-Dunn blog was also published in the Huffington Post to promote dialogue on sanitation and behavior change and share the intention of the two organizations to work together in the future to help eliminate open defecation. Sesame Street is one of the largest informal educators of children, with the ability to reach more than 156 million children in 150 countries.

## Administration and Finance



WSP disbursed US\$54.9 million in fiscal year 2015, reaching full-scale program implementation. Overall disbursements increased by 17% over the previous fiscal year.

WSP measures progress in the current business plan through a Global Results Framework that links individual activities to program outcomes and is supported by a country monitoring tool that takes a contribution analysis approach to measuring outcomes. Over the last several years, WSP has spent significant time and resources to enhance the country monitoring tool and migrate it to a Web-based platform for improved data tracking and aggregation. WSP country teams update the progress achieved in the tool for their respective business areas toward the end of each fiscal year to report to the WSP Council. Data inputs are rigorously verified by the regional team leaders and sector specialists and cleared by the global business area leaders to ensure accuracy and consistency. The monitoring tool currently tracks progress for two business areas: Rural Sanitation and Domestic Private Sector Participation. Progress in the other business areas is measured by collecting data against specific indicators from the different countries and analyzing and consolidating this data for broader results. This year, field visits to all four regions were conducted to support country teams in the data population, compilation, and reporting from the country monitoring tool. A number of enhancements were also made to improve user experience and increase the tool's security features.

### Extending of the Global Core Multi-Donor Trust Fund

WSP was granted a one-year no-cost extension for the Global Core Multi-Donor Trust Fund (MDTF), from December 2015 to December 2016, to help close out the current business plan and finalize strategic planning for future program activities.

WSP is currently in the last year of the current business plan period. Approximately 80 percent of the total funding for the business plan is channeled through the Global Core MDTF. The one-year extension has provided critical support to ensure operational and business continuity of WSP programs, and to minimize the risk of any potential disruptions in country engagement that could adversely impact the significant gains made over the last five years. The extension is also helping WSP achieve additional results made possible through new funding received in the last two years of the current business plan.<sup>26</sup>

# Developing the 2016-2019 Strategic Partnership Framework

Work is underway to finalize the partnership and governance structure for the next phase of WSP's program activities. The intensive consultations with the donors over the last year have focused on developing a feasible structure that reflects WSP's new role within the Water Global Practice, aligns with the Water Practice's integrated water agenda, and meets the strategic priorities and legal and administrative requirements of the different donors. An agreement was reached with the donors in September 2015 to develop an overarching Water Global Practice partnership framework for all trust fund activities, with a single governance structure and a common results framework at the Water Practice level.

<sup>&</sup>lt;sup>26</sup> The 2011–2015 business plan was fully funded in 2013. WSP received additional US\$22 million from the Swedish International Development Cooperation (SIDA) to intensify activities in fragile states and conduct country-level poverty WASH diagnostics to investigate linkages between extreme poverty and access to and quality of water and sanitation services.

WSP is working closely with the Water Practice Global Solution Group Leads to develop three-year workplans, which will then feed into an integrated Water GP results framework. Input is also being sought from the World Bank Trust Fund Unit to understand the administrative, legal, and financial processes involved in creation of the proposed partnership framework to ensure compliance with the World Bank Trust Fund Reforms. WSP hopes to finalize the administrative processes and operationalize the proposed structure by January 1, 2017, before completion of the current Global Core MDTF.

### Disbursements by Fiscal Year

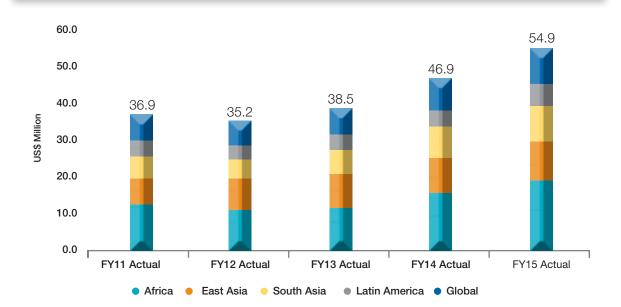
In fiscal year 2015, WSP disbursed US\$54.9 million, representing the highest level of disbursements since the start of the business plan. WSP's overall disbursements increased by 17 percent in 2015 over the previous

fiscal year. The disbursements have steadily increased over the business plan period, with highest disbursement rates over the last two fiscal years as the program reached full-scale implementation. WSP's implementation capacity across the different regions increased with the addition of several new technical staff. Increased disbursements in each region ranged from 11 to 35 percent this year, with highest disbursement taking place in Arica (US\$19 million).

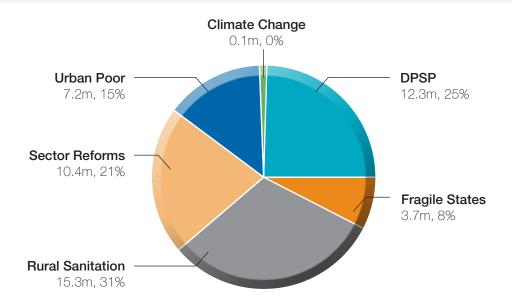
### Disbursements by Business Area

Disbursements in the rural sanitation, domestic private sector, and poor-inclusive sector reform business areas continued to comprise the bulk of WSP's spending in fiscal year 2015, with a combined total of 77 percent of total disbursements. The amount disbursed to these three business areas is relatively similar to fiscal year 2014 (78 percent).









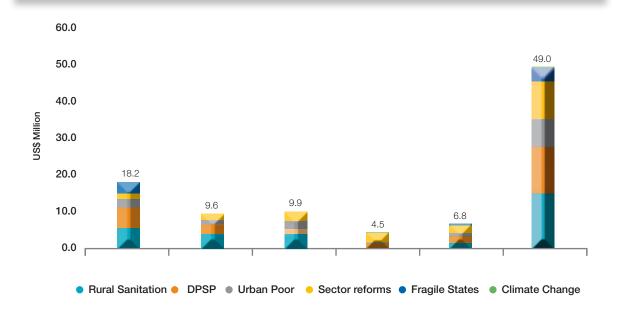
Disbursements for domestic private sector business area activities accounted for 25 percent of total disbursements, compared to 21 percent in fiscal year 2014. Urban business area spending also increased slightly this year at 15 percent, compared to 13 percent in the previous fiscal year. Activities related to delivering water and sanitation services in fragile states increased marginally from US\$3.6 million to US\$3.7 million this fiscal year. Disbursements for climate change activities were unchanged from fiscal year 2014.

Disbursements for rural sanitation, domestic private sector, and fragile state activities were highest in Sub-Saharan Africa, while disbursements for pro-poor sector reform were high in Latin America. The rural sanitation

business area spending was also significantly large in East and South Asia. Spending related to urban sector activities predominantly took place in Africa, East Asia, and South Asia—comprising 70 percent of total funding for this fiscal year. Climate change funding was primarily used to support ongoing activities in Latin America.

Disbursement variations across the different business areas over the last five years reflect overall disbursement trends. Spending on domestic private sector, urban poor, and fragile states rose steadily over the five years. Disbursements in the domestic private sector rose from US\$2 million in fiscal year 2011 to US\$12.3 million in fiscal year 2015 as a result of expansion of existing activities and hiring of additional staff. Disbursements for the urban business area increased from US\$2.7 million

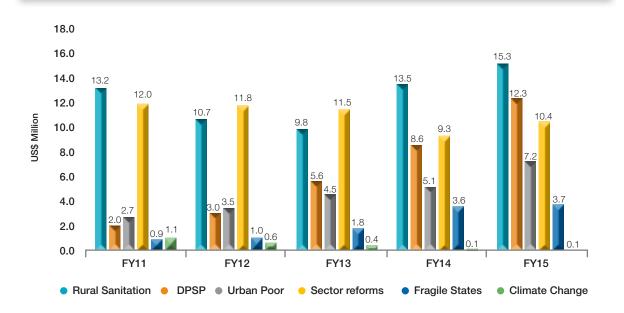




to US\$7.2 million over the five years, while the fragile states spending rose from US\$0.9 million to US\$3.7 million over the same time period. The

steady increase in disbursements for urban and fragile states illustrates a gradual intensification of the activities in new countries.

### FIGURE 19: DISBURSEMENTS BY BUSINESS AREA - FISCAL YEAR 2011-2015



### **Donor Contributions**

WSP received US\$29.5 million in contributions in fiscal year 2015. Of this amount, the global core share was 71 percent, the regional core was 23 percent, and targeted funding was 6 percent.

Cumulative contributions of US\$233.7 million were received during the current business plan period. In accordance with signed administration agreements, WSP expects to receive an additional unpaid amount of US\$10.8 million for fiscal years 2016 to 2018.

### FIGURE 20: DONOR CONTRIBUTIONS - FISCAL YEARS 2011-2018

(in US\$ million)

						(in US\$ million
Funding partner	Purpose	FY11-14 Receipts	FY15 Receipts	FY11-15 Receipts	FY16-18 Pledge/Unpaid	Total FY11-FY18
Austria (Min of Finance)	Global Core	-	2.46	2.46	-	2.46
Australia (AusAid)	Global Core	17.36	3.92	21.29	3.84	25.13
Austria (ADA)	Global Core	1.89		1.89		1.89
Denmark	Global Core	1.12		1.12		1.12
Gates Foundation	Global Core	6.00	1.22	7.22	3.65	10.87
Luxembourg	Global Core	0.87		0.87		0.87
Netherlands	Global Core	5.50	-	5.50	2.00	7.5
Norway	Global Core	1.88		1.88		1.88
Sweden (Sida)	Global Core	49.70	4.02	53.72		53.72
Switzerland (SDC)	Global Core	5.37	-	5.37	1.04	6.42
United Kingdom (DFID)	Global Core	50.79	9.44	60.23		60.23
	Global Core Sub-total	140.48	21.07	161.55	10.53	172.08
Australia (AusAid)	Africa MDTF	4.97		4.97		4.97
Austria (ADA)	Africa MDTF	2.11	0.38	2.49	-	2.49
Finland	Africa MDTF	13.29	3.34	16.63		16.63
Switzerland (SDC)	Africa MDTF	1.47	1.49	2.96	0.26	3.22
Australia (AusAid)	South Asia Regional Core	3.10		3.10		3.10
Australia (AusAid	East Asia MDTF	4.42		4.42		4.42
Australia (AusAid)	East Asia Targeted	2.28		2.28		2.28
Switzerland (SDC)	LAC MDTF	3.92	1.55	5.48		5.48
	Regional Core Sub-total	35.56	6.77	42.32	0.26	42.58
Finland	Targeted - Ethiopia	0.43		0.43		0.43
Sweden (Sida)	Targeted - Bangladesh	1.05	-	1.05	-	1.05
Switzerland (SDC)	Targeted - Bangladesh	3.31	0.47	3.77	-	3.77
USAID	Targeted - Pakistan	2.72	1.20	3.92		3.92
	Targeted Sub-total	7.52	1.67	9.18	-	9.18
United Kingdom (DFID	SS-DPSP	10.05	-	10.05		10.05
Gates Foundation	TSSM	10.57		10.57		10.57
	Programmatic Sub-total	20.62	-	20.62	-	20.62
Total		204.18	29.50	233.68	10.79	244.46

### Annex

# Fiscal Year 2015 Disbursements by Country



Country/Program	Activities	FY15 Disbursements
Africa		
Benin	Capacity Building for PPP & SS-DPSP	
Benin Total		496,398
Burkina-Faso	Burkina Domestic Private Sector in Water Burkina Pro-Poor Sector Reforms	
Burkina-Faso Total		682,374
Democratic Republic of Congo	WSS Services to the Poor	
Democratic Republic of Congo Total		22,260
Egypt	Sustainable Rural Sanitation	
Egypt Total		46,533
Ethiopia	Building Capacity for Sanitation Performance Monitoring for Sanitation Support to Government of Ethiopia to Improve Sanitation	
Ethiopia Total		1,169,632
Kenya	Accelerating Access to Sanitation Improve Service Standards in Urban Water Innovation in Urban Poor Access to WSS Kenya Urban Commercial Financing in Water Kenya Water & Sanitation OBA Fund Nairobi Sanitation Preparation Nairobi Sanitation Project Plastic Latrines Impact Evaluation Supporting the new Water Policy & Act	
Kenya Total		3,809,893
Liberia Total	Improve Access to Water Supply Monrovia	182,087
Mozambique	Rural and Town Water Supply Peri-Urban Sanitation & Water Sector Information System	
Mozambique Total		1,657,861
Niger	Strengthening Enabling Environment of Sanitation Strengthening the Domestic Private Sector Strengthening WSS Planning & Monitoring	
Niger Total		1,057,818
Senegal	Senegal Domestic Private Sector in Water & Sanitation Strengthening the Enabling Environment to Scale Up Rural Sanitation	
Senegal Total		637,280

Country/Program	Activities	FY15 Disbursements
Tanzania	Enabling Sanitation Performance Review Poor-inclusive Sustainable Water & Sanitation Rural Sanitation Supply & Demand Sustainable Rural Water Supply	
Tanzania Total		2,410,664
Uganda	DPSP in Small Towns OBA in Kampala-Water Connections Private Sector Performance in Delivering Strengthening the Enabling Environment for Sanitation	
Uganda Total		949,791
Zambia	Peri-Urban Sanitation Improvement	
Zambia Total		37,417
Africa	Knowledge Management Coordination	
Knowledge Coordination Total		137,553
Regional Sanitation	Economics & Financing of Sanitation Regional Sanitation & Hygiene	
Regional Sanitation Total		552,303
Urban	Assessment of Prepaid Systems Water Utilities & the Urban poor	
Regional Urban Total		246,993
Fragile States	Delivering WSS in Fragile States	
Regional Fragile States Total		3,191,344
ICT Regional	Unlocking ICT Potential in WASH	
Regional ICT Total		527,654
Program Management & Administration		494,136
Miscellaneous Costs		449,699
Africa Total		19,059,689

Country/Program	Activities	FY15 Disbursements
East Asia		East Asia
Cambodia	Domestic Private Sector in Water RWSS Sector Improvement Support Sanitation Marketing	
Cambodia Total		1,588,443
Indonesia	WASPOLA Facility - Component 1 DPSP in RWS Rural Sanitation Market Expansion WASH Poverty Diagnostics Water Sanitation Information Services Rural Sanitation Capacity Building Scaling Up Rural Sanitation Septage Management Sustaining Lessons of WASPOLA Facility Updating PE of Sanitation	
Indonesia Total	, ,	2,141,201
Laos	Impact Evaluation Rural Sanitation Sanitation Demand Creation Sanitation Marketing Strengthen Lao WASH Sector Coordination	
Laos Total		1,252,913
Papua New Guinea	Water & Sanitation Policy Development	
Papua New Guinea Total		4,919
Philippines	Integrating Sanitation Programming in 4P NWRB Permit Management Process Scaling Up Rural Sanitation Small Water Utilities	
Philippines Total		1,675,151
Vietnam	Developing a WSS Provincial Master Plan Rural Sanitation NM-CH Rural Sanitation Capacity Building for Sanitation Rural Sanitation Demand & Supply Vietnam Water Sector Reform/Regulation	
Vietnam Total		1,205,552
EAP Regional	Stocktaking Community WASH Initiatives Regional Knowledge Products Improving Sanitation in Poor Urban Areas Pacific Poor Inclusive WSS Approaches Service Delivery Assessments	
EAP Regional Total		1,704,585
Program Management & Administration		514,287
Miscellaneous Costs		274,780
East Asia Total		9,802,433

Country/Program	Activities	FY15 Disbursements
South Asia		South Asia
Bangladesh	Diarrhea & Sanitation WSS Policy Reform Urban Poor DPS Regulatory Framework Sanitation Private Operators & Investors in Water Support to National Capacity Development	
Bangladesh Total		3,269,817
India	Benchmarking & Citizen Voice City Sanitation Plans India Sanitation/Insurance SIEF Service Delivery Assessment India WASH Poverty Diagnostics Institutional Capacity & Gender Knowledge Forum on Sanitation Programmatic Support for Swachh Bharat Regulation & Pro-Poor Strategy SS-Domestic Private Sector Participation Strengthening Client RWS Operations Strengthening LG Sanitation Capacity Strengthening Sector Policy Rural Sanitation Support for NUSP Supporting Drinking Water Security Pilot Supporting Impact Evaluation in WSS Tracking Sanitation Outcomes thru ICT	
India Total		5,161,211
Pakistan	Capacity Development of Urban Utilities Pakistan WASH Poverty Diagnostics Scaling Up Rural Sanitation & Hygiene Strengthening Rural Water Providers Strengthening Urban policy & Institution WS Service Delivery Assessments Pakistan	
Pakistan Total		1,350,939
Program Management & Administration		599,967
Miscellaneous Costs		123,656
South Asia Total		10,258,278

Country/Program	Activities	FY15 Disbursements
Latin America		
Bolivia	Peri-Urban/Small Towns Sanitation Service Revision of WS Pre-investment Norms Strengthening WS Sustainable Services	
Bolivia Total		429,712
Central America	Country WASH Poverty Diagnostic Improving RWSS National Strategies MAPAS in CA - Phase II MAPAS-Water & Sanitation Regional Agenda for Sanitation Status of DRM & CCA in WSS	
Central America Total		448,918
Ecuador	WASH Sector Poverty Diagnostic SENAGUA Institutional Strengthening	
Ecuador Total		107,386
Haiti	DINEPA TA Haiti Country WASH Poverty Diagnostic	
Haiti Total		266,847
Honduras	Strategy for WSS in Small Towns Strengthening Sanitation Planning WSS Sector Financial Policy	
Honduras Total		444,421
Nicaragua	Creating Sustainable Sanitation Services Economics of Sanitation Initiative WSS Policy Reform	
Nicaragua Total		330,448
Peru	Creating Sanitation Markets Demand Management in Utilities Impact of WS in Private Business Competitiveness WATER Impact Evaluation Workshop Decentralized Rural WSS Strategy Urban Utility DRM Policy Latinosan Regional Conference Peru 2016 Peri-Urban WSS Service Delivery Support to the W&S Sector Reform in Peru WASH in School Infrastructure	
Peru Total		2,320,020
Latin America Regional	SIASAR Consolidation & Expansion WSP Latin America Regional Learning	
Latin America Regional Total		578,501
Program Management & Administration		775,129
Miscellaneous Costs		375,578
Latin America Total		6,076,960

Country/Program	Activities	FY15 Disbursements
Global Program		
Global Program	Economics of Sanitation Toolkit Multisector Approaches to Nutrition-WASH Economic Aspects of the Urban Water Sector Vietnam P for R RWSS Impact Evaluation Behavior Change Community of Practice Behavior Change Community of Practice Events Benchmarking of Water Utilities Country Diagnostics Coordination ECA General Strategy Equalizing access to WSS FSM Diagnostics for Service Delivery GL/GLO/24: COMM, Knowledge & Advocacy Global Delivering WSS in Fragile States Global Scaling Up Rural Sanitation MNA General Strategy Post-2015 WASH Costs, Benefits, Finance Pro-Poor Reform Global Coordination SSDPSP Global coordination Strengthening Public Institutions/DPSP Supplemental DPSP Global Coordination TWIWP Global Sector Events WASH Poverty Diagnostic Global PA WSP Global Knowledge GPT WSP Knowledge Management	
Global Program Total		8,338,911
Program Management & Administration		1,583,018
Miscellaneous Costs		190,830
Global Total		9,731,099
Grand Total for FY15 Disbursements		54,928,459





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