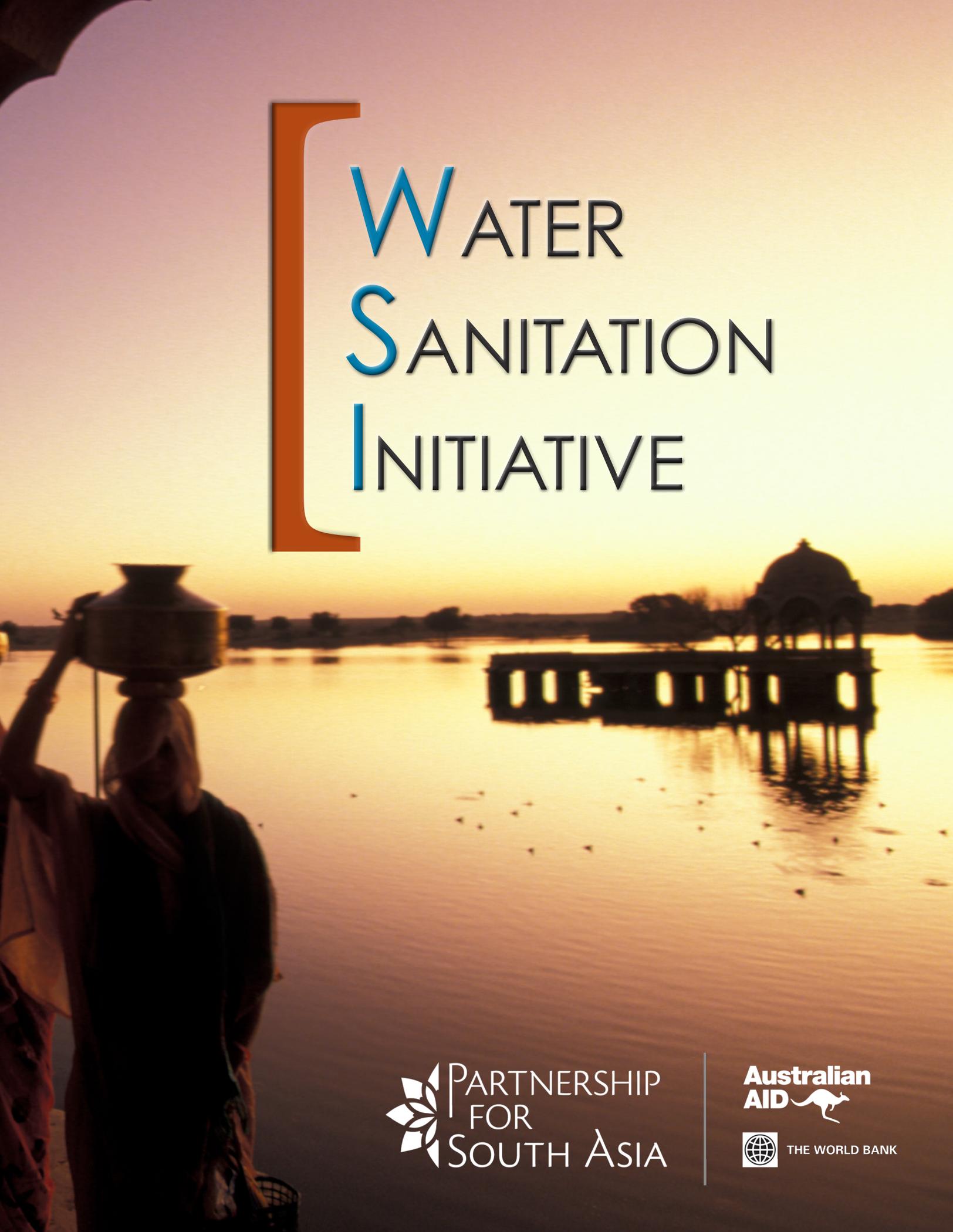


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# WATER SANITATION INITIATIVE

 PARTNERSHIP  
FOR  
SOUTH ASIA

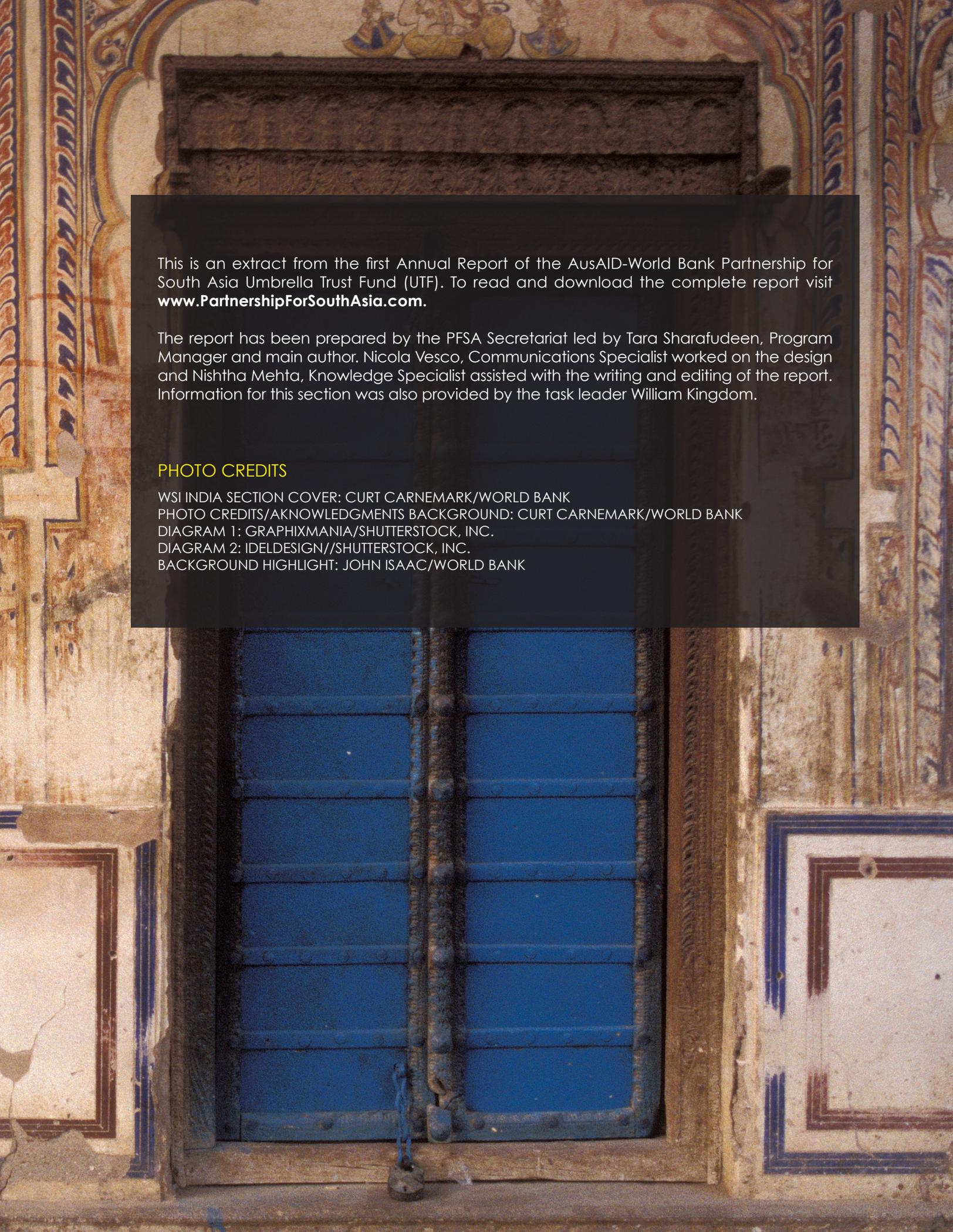
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The background of the page is a photograph of a traditional Indian doorway. The door is painted a vibrant blue and is set within a wooden frame. The walls on either side of the door are decorated with intricate, colorful patterns in shades of blue, red, and gold. The overall scene is brightly lit, highlighting the textures of the wood and the colors of the paint.

This is an extract from the first Annual Report of the AusAID-World Bank Partnership for South Asia Umbrella Trust Fund (UTF). To read and download the complete report visit [www.PartnershipForSouthAsia.com](http://www.PartnershipForSouthAsia.com).

The report has been prepared by the PFSA Secretariat led by Tara Sharafudeen, Program Manager and main author. Nicola Vesco, Communications Specialist worked on the design and Nishtha Mehta, Knowledge Specialist assisted with the writing and editing of the report. Information for this section was also provided by the task leader William Kingdom.

### PHOTO CREDITS

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PHOTO CREDITS/AKNOWLEDGMENTS BACKGROUND: CURT CARNEMARK/WORLD BANK  
DIAGRAM 1: GRAPHIXMANIA/SHUTTERSTOCK, INC.  
DIAGRAM 2: IDELDESIGN//SHUTTERSTOCK, INC.  
BACKGROUND HIGHLIGHT: JOHN ISAAC/WORLD BANK

# 1.1 THE CASE FOR WATER SUPPLY AND SANITATION REFORMS IN INDIA

To understand and address the issues facing India's Water Supply and Sanitation (WSS) sector, it is important to look beyond just the access agenda to the challenge of providing quality and sustainable services. WSS services in the country are constrained by a weak policy framework resulting in poor sector governance and accountability, distorted and inequitable pricing and unsatisfactory cost recovery. The weak financial position of water utilities has resulted in insufficient maintenance of existing assets and low capital investments. These inefficient institutional and financial arrangements leave service providers weak, with poor operational incentives, and a capital works mindset based on building assets, rather than properly operating and maintaining them. The lack of focus on, and dearth of expertise around asset management adds to the losses in the sector. Poor asset management combined with poor service provision and coverage affects the utilities' potential to improve cost recovery, trapping them in a vicious cycle of losses. This situation is further exacerbated by capacity constraints at all levels. Weak capacity and low levels of professionalization affect

all tiers of government, and service providers, and (in the rural sector) Community Based Organizations (CBOs). This also impacts all stages of the project operational cycle from planning, to implementation, operations and oversight. It is clear that the resource and capacity needs of the WSS sector cannot be met only by the public sector and access to private capital and public-private partnerships are needed to improve services.

These challenges and capacity constraints are worse in the lagging regions of the country, which have the poorest access and the lowest quality of service. Within the more advanced regions too, there are vulnerable groups with limited access to water supply and sanitation services, including women and the poor. The main challenge, then, is not just of access, but of providing sustainable and quality service to all consumers. While these challenges and gaps are best understood in the water supply and sewerage sub-sectors, they are equally applicable to solid waste management and drainage.

## WATER SUPPLY

Indiscriminate abstraction of ground water to compensate for poor service quality has resulted in dropping water tables. Access to drinking water is further threatened by the contamination of aquifers through untreated wastewater in urban areas and chemicals from agricultural use and irrigation recharge in rural areas. Natural contamination of groundwater with arsenic and other metals such as fluoride is also common in parts of India. Weak management of water resources, particularly in the catchments and river basin ecosystems from which water is derived, exacerbates the issues of water quality and quantity. In India, each aspect of the water use cycle is with different departments, and there is no composite examination of water use and quality. According to the Joint Monitoring Program (JMP) of WHO/UNICEF, 2012, 97 % of the country's population has access to improved water sources. However, these figures do not tell the real story. Currently, no Indian city has continuous water supply.

Intermittent water supply increases both the likelihood of contamination and the coping costs for consumers. JMP data also reveals that the coverage of piped water in urban India has been decreasing (52% in 1990 to 48% in 2010), implying that the rate of urbanization is outstripping the ability to expand service. In rural areas too, while 90% of the population has access to improved water sources, distance of water sources from homes, availability of adequate water at the source, and lack of water for irrigation and the trade off with drinking water remain key issues.

## SANITATION

South Asia is home to 692 million people who are forced to defecate in the open due to the lack of sanitation facilities; 90% of this population (623 million) lives in India. A 2006 Water and Sanitation Program (WSP) study estimated that the total cost of inadequate sanitation for India is \$54 billion, or 6.4% of annual GDP. Inadequate rural sanitation, in particular, is one of the most critical issues in India, with more than 550 million people defecating in the open. Gol has implemented the Total Sanitation Programme (TSC) and Clean Village Award, which provides financial incentives and Presidential recognition for villages that demonstrate open defecation free (ODF) status. However, almost 95% of ODF villages lapsed back due to poorly constructed toilets, population increase, lack of water, poor market linkages for repair and up-gradation, the fatigue of local leadership, and weak monitoring and incentives. Urban areas too face similar challenges in sanitation due to financially weak institutions, lack of demand, poorly constructed and managed assets, and lack of fecal sludge management.

## SOLID WASTE MANAGEMENT

India is still a low income country and its solid waste generation rate per person is low. The average solid waste generation is about 0.5 kg/capita/day or 188,000 tons/day. Waste issues are significant primarily in urban areas, and only about 35% urban waste is safely collected at the source. Most of this waste undergoes segregation of recyclables by waste collectors in an unhygienic and unsafe manner.

## DRAINAGE

Inadequate drainage of storm water is evident in most large Indian cities. This stems from a series of mutually reinforced failures, including poor trash collection (resulting in blocked drains), poor enforcement of urban planning regulations (resulting in loss of natural flood plains and drainage channels), and weak service provision. Whilst drainage is a low priority at this time, it is still a significant issue due to flooding and due to potential commercial losses for major cities.

# 1.2 OBJECTIVES OF WSI INDIA

The primary objective of the WSI window is to create a demand for sector reforms that address the challenges in the sector and to improve the design, implementation and outcomes of Bank projects that support these reforms. The broader outcome sought is to assist GoI to meet MDG targets through increasing access to sustainable service delivery. The dual approach of creating the demand for and also supporting reforms links the entire change cycle; from problem to action to likely outcomes. Creating demand without supporting implementation can lead to sub-optimal results, for it is during the implementation phase that support is required to overcome the range of hurdles that appear as reforms move from concept to reality.

In the same manner support for implementation without creating demand for and understanding of the reform agenda can result in weak ownership and poor design. Reforms are impeded by the lack of a common understanding of key sectoral and policy issues by the stakeholders and the fragmentation of institutions that have oversight of different sub-sectors. The funds from WSI are helping cement the

new benchmarks required to move the sector forwards by deepening support for reform and thereby increasing the likelihood of success.

The approach is grounded in the realization that the key to sustainable reform of the sector is to address the institutional, governance and financing shortfalls along with the technical issues. Communication and outreach to stakeholders is crucial to the change process and to arriving at outcomes. This support is crucial for the client to realize that these issues need to be tackled in a comprehensive manner and that a consensus among stakeholders is needed for change. Once the demand for reform is created, investments that have a demonstrative effect and set new benchmarks for other states and local governments, are vital. The domino effect that these transformative investments can have has been demonstrated in other sectors in India like the metro in Delhi. It is then important to follow through and provide technical assistance throughout the reform process. The theory of change supported by the WSI-India is modeled in Diagram 1.



DIAGRAM 1 - THE THEORY OF CHANGE: BRIDGING THE GAP BETWEEN NEEDS AND OUTCOMES

# 1.3 AREAS OF TECHNICAL ASSISTANCE

WSI funds provide technical assistance (TA) for policy advocacy and sector reforms, and enhance project preparation, design and implementation of Bank projects that assist in implementing reforms. This balances the need to show results by working with projects under preparation or implementation, and the need to introduce and promote reforms and innovations, which can then be rolled out through projects. The TA is broadly supporting technical engagement, around three pillars

- 1 - Improving access to water supply and sanitation
- 2 - Improving the quality and sustainability of services
- 3 - Improving sector capacity/professionalization

AusAID's Policy Notes "Saving Lives: Improving public health by increasing access to safe water and sanitation" and "Sustainable Economic Development: Transport, Water, Urban, Energy and Communications" are strongly aligned with these pillars. Diagram 2 indicates the support provided under each pillar. Through their joint efforts, the Bank and AusAID are facilitating and scaling-up innovation, improving accountability, increasing private sector participation and public-private partnerships, enhancing connectivity in both urban and rural areas, and supporting access to WSS services in lagging regions of the country.

WSI is supporting key sector work, looking at implementation options for the National Urban Sanitation Policy, assessing PPP options for urban sewerage, evaluating Maharashtra's WSS reforms, and examining ways to improve regional WSS performance in the National Capital Region. Aside from the advocacy work, it is also supporting preparation and implementation of key projects. These include a new national program for RWSS in the lagging regions, the Karnataka Urban Water Supply Modernization Project (KUWSMP) that will scale up 24x7 water supply in three cities, and the Rajasthan RWSS project. WSI also contributes to project implementation by making it possible to include PPP options and pilots in two ongoing RWSS projects in Punjab and Andhra Pradesh, the Ganga clean up and conservation program, and the project under preparation to scale up continuous water supply.

A JIT window has been created to support the reform process by funding urgent TA requests that require a rapid response. This window has supported the financial assessment of the state of Maharashtra's UWSS reforms, and a scoping study for sanitation in Kerala state and options for reforms in the RWSS sector in Uttarakhand state.

## PILLAR 1: IMPROVING ACCESS TO WATER SUPPLY & SANITATION

- ACCESS FOR LAGGING GROUPS: THE POOR AND WOMEN
- SCALE UP OF INNOVATIONS
- INTRODUCTION OF OUTPUT BASED MODELS
- DELIVERING THE FULL RANGE OF SERVICES IN AN INTEGRATED MANNER
- IMPROVING WSS SERVICES IN UNDERSERVED URBAN AREAS AND LAGGING REGIONS

## PILLAR 2: IMPROVING QUALITY AND SUSTAINABILITY OF SERVICES

- POLICY AND INSTITUTIONAL REFORMS FOR SUSTAINABLE SERVICE PROVISION
- MOBILIZING PRIVATE CAPITAL
- FINANCIAL INCENTIVE SCHEMES TO IMPROVE OUTCOMES
- MANAGING COMPETING DEMANDS FOR SCARCE WATER RESOURCES
- BETTER RESOURCE EFFICIENCY AND ASSET MANAGEMENT

## PILLAR 3: IMPROVING SECTOR CAPACITY

- WORKING WITH EDUCATORS AND PROFESSIONAL ASSOCIATIONS TO IMPROVE VOCATIONAL TRAINING AND ACADEMIC EDUCATION
- DEVELOPMENT OF ACCREDITATION SCHEME FOR WSS PROFESSIONALS
- NEW CAPACITY BUILDING MODELS FOR SERVICE PROVIDERS SUCH AS FRANCHISING

## WSI SUPPORT

- INVESTIGATION OF GENDER IMPACTS OF POOR ACCESS TO WATER AND SANITATION SERVICES
- ASSESS BARRIERS TO THE IMPLEMENTATION OF INDIA'S NATIONAL URBAN SANITATION POLICY
- ACCESS TO RWSS IN LAGGING STATES
- SCALING UP 24x7 WATER IN CITIES
- SCOPING STUDIES FOR SWM
- ACCESS TO DRINKING WATER IN LOW WATER CONDITIONS IN THE STATE OF RAJASTHAN

- SUPPORT TO GANGA PROGRAM TO ADDRESS ENERGY EFFICIENCY IN WASTEWATER TREATMENT
- ADDRESSING ISSUES OF NON-REVENUE WATER, ENERGY EFFICIENCY AND FINANCIAL MODELING
- SUPPORT TO PPPs IN RWSS IN ANDHRA PRADESH AND PUNJAB AND UWSS IN KARNATAKA
- SECTOR REFORMS IN UTTARAKHAND
- SUSTAINABILITY FRAMEWORK FOR RWSS
- OPTIONS FOR WSS DELIVERY IN THE NATIONAL CAPITAL REGION
- FINANCIAL SUSTAINABILITY OF INCENTIVE BASED WSS REFORM PROGRAM IN MAHARASHTRA

- EACH PROJECT INCLUDES TRAINING AND CAPACITY BUILDING OF SERVICE PROVIDERS AND POLICY MAKERS
- ACTIVITIES SUPPORTED BY AUSAID THROUGH IFGI AND PFSDS TRUST FUNDS HAVE SUPPORTED THIS PILLAR AND INFORMED WSI ACTIVITIES
- BUILDING INSTITUTIONS AND CAPACITY FOR ASSET MANAGEMENT

DIAGRAM 2 - WSI THEMATIC PILLARS SUPPORTED

# 1.4 FINANCIAL SUMMARY

## 1.4.1 - DISBURSEMENTS & COMMITMENTS

The trust fund is continuing to disburse well. The total allocation to 19 tasks in Round 1 and 2 is \$3.35 million. Total disbursements and commitment for both rounds is at 53.11% of allocations. As of March 1, 2013, projects funded in Round 1 and Round 2 had committed and disbursed 54.20% and 51.46% of the total funds respectively.

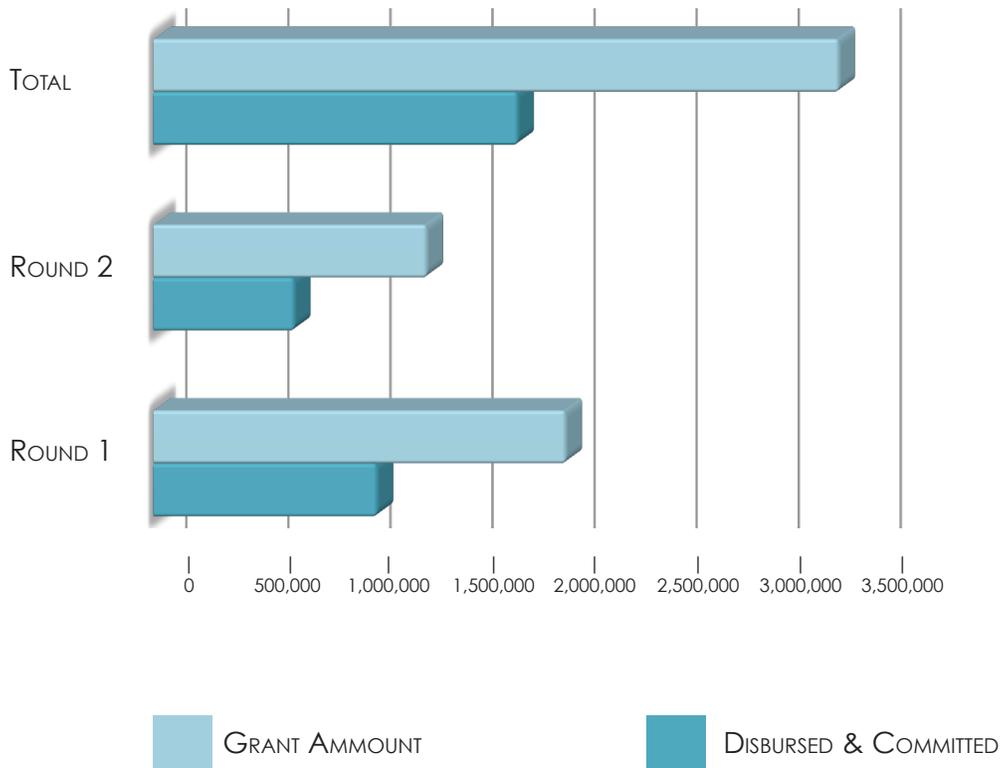


FIGURE 1 - WSI DISBURSEMENTS & COMMITMENTS (USD)

## 1.4.2 - URBAN & RURAL PROJECTS

Activities supporting projects in both urban and rural regions have been funded. Through AusAID support, the Bank has been able to initiate a new line of business in the urban areas. Approximately 33% of the funds are allocated to the urban sector and 43.5% to the rural sector. Activities spanning both urban and rural sectors have received 23.19% of the funds.

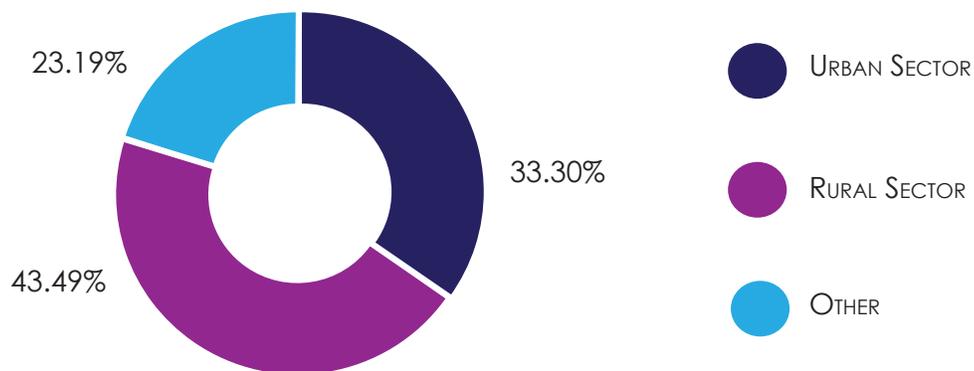


FIGURE 2 - WSI URBAN & RURAL PROJECTS ALLOCATIONS

## 1.4.3 - PUBLIC PRIVATE PARTNERSHIPS

Activities supporting PPP have been funded in both rounds and in the urban and rural sectors. PPP related tasks have been allocated 33.62% of the funds. Four of the tasks funded have a PPP focus.

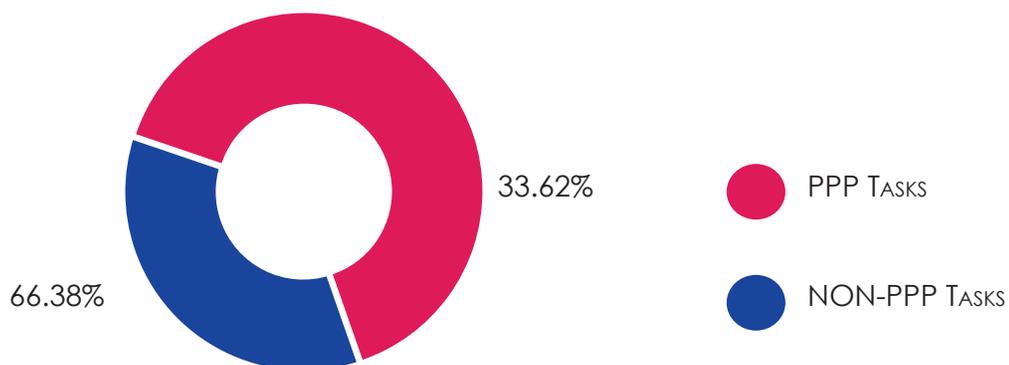


FIGURE 3 - WSI PUBLIC PRIVATE PARTNERSHIPS ALLOCATIONS

## 1.4.4 - TYPE OF ACTIVITY SUPPORTED

Both pre-Project Concept Note (PCN) tasks that deal with policy advocacy and those that are post-PCN where a PCN has been approved in the Bank system and the task is then linked to the design and/or implementation of a project have been supported. In the Project Design Document (PDD) for WSI-India it had been agreed that the split between pre-PCN and post-PCN activities would be 40-60. Pre-PCN activities supporting policy dialogue have been allocated 35.27% of the funds while 64.73% of the funds have been allocated towards post-PCN activities supporting the design and implementation of Bank projects.

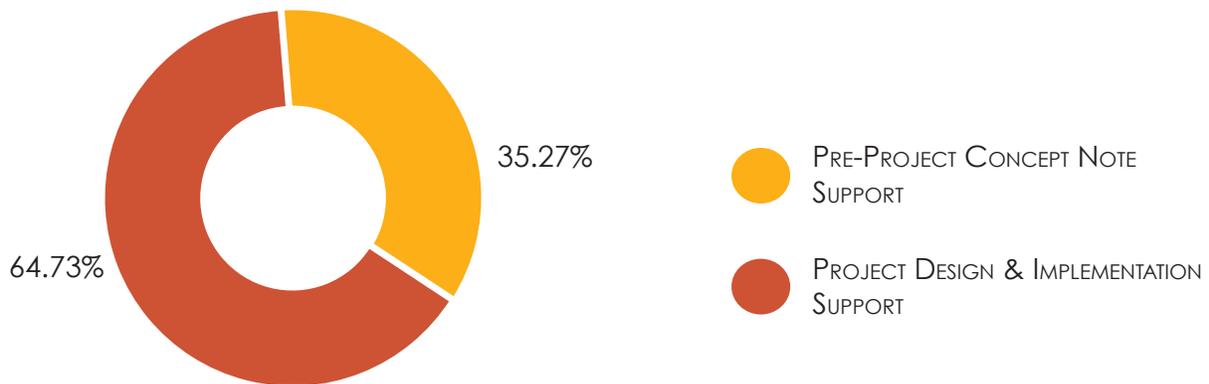


FIGURE 4 - WSI TYPE OF ACTIVITY SUPPORTED

# 1.5 PRELIMINARY RESULTS

The WSI window has been operational since June 2011. In the normal course, an activity takes two years to be completed. However in the one and half years that the window has been active, we are starting to see preliminary results from a number of activities. Some of these are detailed below.

## 1.5.1 - SCALING UP INNOVATION

**BENEFIT ASSESSMENT OF THE 24X7 WATER SUPPLY DEMONSTRATION ZONES IN KARNATAKA STATE** - A Bank project had succeeded in demonstrating in demo zones of three cities that 24x7 water supply is an achievable target. The assessment provided valuable information for the design of the project currently under preparation to scale up 24x7 water supply from the demo zones citywide in the three cities. It emphasized the positive social and economic impacts of the availability of water in a continuous manner on the lives of the beneficiaries. People with continuous water supply not only save money due to lower coping costs, they have more time to engage in productive economic and educational activities. Based on this work, the PFSA Program Secretariat has prepared a brief "**Bringing 24x7 Water to India**" which is forwarded

## 1.5.2 - SUPPORTING PPPs

**TRANSACTION ADVISORY SERVICES FOR PPP IN RWSS IN ANDHRA PRADESH** - Possible options for PPPs for multi-village RWSS delivery were developed. After extensive consultations on the Design Build and Operate (DBO) model government decided to tender three DBO pilots. These are to be implemented via the Bank AP RWSS project currently under implementation. This is an early win for the WSI window. The Bank team continues to provide transaction advisory support for the successful implementation of the PPP pilots. These will have a demonstration effect on including PPP options for RWSS delivery.

**PPP IN RWSS IN PUNJAB** - The final report and action plan for possible PPPs in RWSS has been completed. The report suggests the ways in which the government can incorporate PPPs into RWSS and structure better PPP arrangements. Workshops to disseminate the findings are being conducted. A national-level one-day workshop will be held on May 24th, 2013 by the Punjab Water Supply & Sanitation Department to disseminate the findings of the report. The next step is to explore the possibility of implementing the suggestions made in the report through pilots. Work has started on this aspect.

**TECHNICAL ASSISTANCE TO MINISTRY OF URBAN DEVELOPMENT (MoUD) ON PPPs IN THE-SEWERAGE SECTOR** - The final report has been completed and presented to government. An Action Plan to include PPPs in the sewerage sector has been developed which has been endorsed by MoUD. The action plan and the outputs from the report will be used to support small and medium sized urban local governments in developing performance-based contracts and in rolling out these contracts. A national workshop chaired by the Secretary, Urban Development was held on April 18th, 2013. As a result of this work, the Secretary asked the Bank team to conduct state level workshops to disseminate the findings to various stakeholders including the private sector.

## 1.5.3 - NEW LINES OF BUSINESS/SCALING UP INNOVATIONS

**KARNATAKA URBAN WATER SUPPLY MODERNIZATION PROJECT** - WSI has enabled the development of a new line of business focusing on WSS delivery in urban areas. A part of this engagement is the support provided for policy advocacy to scale up 24x7 water supply in three cities in Karnataka state. It has allowed the Bank team to work closely with the government of Karnataka in creating a consensus for the reforms needed for continuous water supply and for the design of the project. This has included improving the quality of the various technical and financial models that underpin the project design, the assessment of different institutional and PPP arrangements, and the organization of workshops to engage a range of stakeholders.

## 1.5.4 - GENDER AND WSS

**ENGENDERING UWSS** - The study examined the neglected area of gender exclusion in WSS in urban areas in India. See details in Highlight 2 Engendering Urban WSS in India. The final report is under preparation and the findings will be disseminated widely through workshops and discussions to inform water and sanitation policies at the national scale. This includes the National Urban Sanitation Policy which, at present, does not mention gender.

## HIGHLIGHT

# ENGENDERING URBAN WSS IN INDIA

While gender in RWSS has received some attention from policy makers, practitioners and academia, the same is not the case with urban WSS. Women suffer the most in urban settings due to the lack of access to WSS. This study on Gender and UWSS mainstreams attention to gender-based differences in the design and implementation of Bank projects in the water and sanitation sector. It also suggests policy changes for gender inclusive UWSS. Through an extensive literature review and on the ground research in several cities, the obstacles to a gender inclusive approach to water and sanitation service delivery were analyzed. The reasons for why urban communities receive poor service and the gender implications of this poor service were distinguished. Building capacity of the service provider and knowledge sharing to ensure political support emerge as key factors in overcoming obstacles to gender mainstreaming in the WSS sector.

As a part of this work, six case studies have been completed across India. They suggest two approaches to addressing gender and social exclusion issues in UWSS provision for the poor: (1) Household-level provision, which addresses most of the gender and social-exclusion issues; and (2) where this is not feasible, improved provision of shared services – with a special focus on gender and social exclusion issues. Based on this research, a social inclusion plan has been developed for the WSS sector. This plan is built around three key ideas – to increase awareness across all stakeholders (decision-makers, utility staff, academia, media and target groups) about social inclusion issues in UWSS, to highlight social inclusion issues in UWSS in the public domain – thus encouraging more government attention and action, and to create an institutional platform for joint action across government departments and institutions – for more effective grassroots impact. This plan, if buttressed by political support and an efficient service provider, could lead to a more inclusive and gender-sensitive service delivery in urban areas of India. This model of reform could provide valuable lessons for other cities in the region.



## 1.5.5 - JUST IN TIME (JIT) SUPPORT

**KERALA SANITATION SCOPING** - Technical guidance was provided for solid waste management in Kerala. This was in response to an urgent request from the Chief Minister of the State. A reputable international expert in SWM was engaged for this work and the final report suggested a way forward. Based on this report, the Government of Kerala has expressed interest in a pilot project.

**UTTARAKHAND INSTITUTIONAL DEVELOPMENT PROGRAM FOR RWSS** - This JIT activity led to the development of a menu of options for institutional restructuring of the Jal Nigam and Jal Sansthan, the agencies responsible for delivering water supply and for operations and maintenance respectively, for the State of Uttarakhand. This has helped the Government of Uttarakhand understand the options and international good practices for turning-around poorly performing RWSS service providers and institutions.

# 1.6 GOING FORWARD

The Bank, in partnership with AusAID, will continue to work to create the demand for reform and to improve project design and implementation. Some of the areas that will supported going forward are:

1 - Looking at the entire water use cycle to ensure availability of water and water quality. This will entail working with the Bank's water resource management and irrigation sectors.

2 - Looking at ways to improve water and sanitation services in the fast growing secondary cities of South Asia where reforms are needed to prepare for rapid growth in demand.

3 - Developing new institutional structures to provide long term sustainability for rural water supply and sanitation services, including new options where a convergence between urban and rural supply especially around small towns is emerging.

4 - Exploring the human side of gender inclusion in RWSS schemes and how this has provided a launching pad for new opportunities for women.