

PUNJAB SERVICE DELIVERY ASSESSMENT

Draft Report

March 2013



Agreed priority actions to tackle these challenges, and ensure finance is effectively turned into services, are:

Priority actions for the institutional framework

- Immediately (in 2013) carry out a province-wide stakeholder analysis to map and document the multiple stakeholders in the sector and their current roles (as mandated and de facto).
- Reach institutional clarity within the sector to align the sector, rationalize mandates and address historical issues of fragmentation. Develop a consensus based framework by December 2013 to segregate roles and responsibilities: (i) Regulator; (ii) Water Production (broader water issues and integrated water management); (iii) Water Assets and O&M (service provision).
- Prioritize passage of the draft Punjab Municipal Water Act (by mid-2013) to ensure legal provision for regulation of the sector.
- Ensure a "Regulatory body" is created by December 2013 in accordance with the draft Punjab Municipal Water Act. The watchdog body will require sustained policy and financial support. It will provide for a long-term sector perspective with regulatory functions to cover: (i) compliance with environmental regulations and monitoring of water quality; (ii) groundwater abstraction; (iii) tariff setting; (iv) providers' performance; and (v) protection of customer interests.
- Review the service cadres engaged in sector service delivery (at all levels) with a view to developing a coherent service cadre for the sector by FY2014. Assess existing capacities and HR needs for: (i) strategic planning and management; (ii) engineering and technical; (iii) financial management; (iv) urban management; (v) social/community development/customer focus.

Priority actions for financing and its implementation

- High levels of advocacy within GoP to ensure that the required investment levels for each subsector are tapped from within "provincial" resources. Lobby and obtain approvals for a minimum % annual budget allocation for W&S sector.
- Support for advocacy with federal government and selected donors to tap additional projects and funding for new and existing W&S initiatives
- Mandate the WASAs, PHED and TMAs to raise sector funding from markets and other sources.
- Promote "public private partnerships" in W&S through a clear policy and targeted marketing campaign.
- Immediate attention on comprehensive financial information management, including consolidated annual data collection and reporting with a particular focus on sub-sector allocations and expenditure tracking.
- Review and further rationalize institutional mandates and jurisdictions between WASAs, PHEDs and TMAs.

Priority actions for Sector Monitoring and Evaluation

- Prioritize and fast-track the development of a sector information management system. Agreement on the principles of management of the SIMS, integration with planning processes and sustained resourcing needs to be urgently reached by mid-2013, with the system in place by December 2013.
- Definitional consistency and harmonization between the macro-sources of data (MICS, PSLM, DHS, Census etc.), which will also allow for triangulation and a better understanding of coverage and equity. The indicators should be defined with the longer-term perspective of monitoring outcomes in a post-MDG scenario.
- Review departmental and existing systems of monitoring (at all tiers of government) in 2013. Determine capacity needs and where to strengthen existing structures for better and more systematic generation of information, in relation to physical assets, financial management and service delivery/customer focus. Third party audits and performance monitoring to be systematically carried out and built into the work-plans of oversight bodies and the Regulator.

Priority actions for Rural Water Supply

- Rehabilitation of non-functioning schemes verified as demand-based
- Accepting CBOs as legal entities with ability to raise funds, extend coverage/services and access technical and financial support services from PHED;
- Significant increases in budgetary allocations (capital/recurring expenditures) from the provincial/federal government to ensure current level of coverage is sustained
- Clear segregation of roles and responsibilities for ‘Policy’, ‘Regulation’ and ‘Service provision’ supplemented by support for sub-sector coordination and planning.

Priority actions for Urban Water Supply

- Revisit the policy, mandate and structure of the 5 WASAs and TMAs with a view to introduce needed autonomy and reforms including the introduction of performance based systems; authority for appropriate adjustment of tariffs; hiring and firing; and raising of finances to ensure effective service provision and cover annual costs; an ‘Institutional Reform plan’ for WASAs and TMAs should be developed and approved by the ‘provincial government’ in 2013.
- Starting with FY 2013, an annual tripling of the sub-sector budget allocations (capital/recurring expenditures) should be ensured;
- Balance sub-sector budget needs should be ensured from the federal government and selected donors to ensure that the CAPEX gap identified by the SDA is fully covered and MDG targets are met
- Clear segregation of roles and responsibilities for ‘Policy’, ‘Regulation’ and ‘Service provision’ should be reflected in the ‘Institutional Reform plan’ for the sub-sector
- Systems for Sub-sector planning, Coordination and oversight should be ensured through i) required data bases/MIS and notification of subsector for along with TORs
- Advocacy with selected donors to plan, design and fund new sub-sector projects for the Punjab. WSP-SA, for example, can play a key role with provision of TA and other support.

Priority actions for rural sanitation and hygiene

1. Designation of a clear institutional home for rural sanitation and hygiene, and creation of a Punjab ODF Task Force, comprised of Health, LG&CD, PHED, Education and other key stakeholders which is mirrored at the district and sub district levels;
2. Prioritization of *safe human excreta* disposal over other aspects of sanitation (e.g. *liquid and solid waste and street pavement* etc.) in the interim period, requiring at least 30 % of departmental budgetary allocations, till open defecation practices are eradicated.
3. Formulation and implementation of a well- coordinated Provincial Rural Sanitation Acceleration Roadmap at scale with well-defined targets and sub targets for all tiers of local government based on the Provincial Sanitation Strategy.

Priority actions for Urban Sanitation

- Ensure that ‘Environmental laws and regulations are fully complied with, in regard to sewerage treatment ; this will entail clarity on roles and responsibilities for regulation; new institutional capacities as well as needed mandates and resources for effective regulation
- Revisit the policy, mandate and structure of the 5 WASAs and TMAs with a view to introduce needed autonomy and reforms including the introduction of performance based systems; authority for appropriate adjustment of tariffs; hiring and firing; and raising of finances to ensure effective service provision and cover annual costs; an ‘Institutional Reform plan’ for WASAs and TMAs should be developed and approved by the ‘provincial government’ in 2013.
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1. Introduction

The Water and Sanitation Program (WSP) South Asia has undertaken a series of assessments in the region to better understand the impediments to effective, efficient and equitable service delivery, and enable governments to accelerate progress towards the Millennium Development Goals (MDGs). The analytical tools were developed in Africa and widely used across Africa, Latin America and East Asia to better understand enabling factors and bottlenecks in the sector.

The WSP is currently supporting governments in India, Bangladesh and Pakistan in undertaking these assessments, at the national level in Bangladesh, the state level in India and the provincial level in Pakistan.

The Government of Punjab is leading the SDA initiative in Pakistan, being the first provincial government to undertake the Service Delivery Assessment (SDA). The timing of the SDA also coincides with the delegation of powers to the provinces through the 18th Constitutional Amendment, providing an opportunity to re-assess the institutional landscape and investments and determine provincial priorities. The SDA has taken place over the period of January 2012 through to March 2013, and has involved an extensive process of consultation and data gathering with the Government of Punjab and other key stakeholders.

The analysis fundamentally aims to help governments assess their own service delivery pathways for turning scarce finances into water supply and sanitation services in each of four sub-sectors; rural and urban water supply and rural and urban hygiene and sanitation. The SDA has three key components: a review of past coverage, a costing model to assess the adequacy of current and projected future allocations, and a scorecard which uses traffic-lighting to diagnose specific bottlenecks in key thematic areas.

This report presents the key findings of the exercise based on the development of the scorecard and costing model. It attempts to analyze past trends and the current status of the sector, to understand whether future targets and goals can be achieved to and beyond the MDGs. Specifically it attempts to understand which elements of the service delivery pathway are particularly weak, and what needs to be done to accelerate progress in the sector. Priority recommendations have been highlighted for each area of analysis.

2. Sector Overview: Coverage and Finance Trends

Coverage: Assessing Progress

Definitional issues impede a clear consensus on coverage estimates for the water and sanitation sector in Pakistan as a whole, and in the Punjab. There are differences in determining what constitutes 'improved' coverage and indicators used by the various household surveys. Broadly, however, there is consensus that while the water supply sector is on track to meet the MDG target, sanitation lags behind fairly limited targets.

Weak sector monitoring is a barrier to assessing coverage and household surveys, notably the Multi-indicator Cluster Surveys (MICS) which allow disaggregation to the provincial and even district levels, are the key tool for determining access for the Punjab. The Pakistan Living Standards Measurement Surveys (PSLMs), also measure access and can be disaggregated to the provincial level.

The JMP provides data at the national and not the provincial level and therefore provincial data had to be assessed afresh. To determine coverage and project trends, it was necessary to use a number of data sources. Prior to the MICS the PIHS or Pakistan Integrated Household Survey was the key source of data for the sector. Data for the base year for determining MDG targets was derived from the PIHS (1991), correcting for improved sources based on JMP guidelines, and trends were projected using the current MICS (2011). Coverage in water supply stands

at 94% and for sanitation at 54%, indicating that the MDG target of 96% has almost been met for water supply. Projecting to 2015, what is striking is that water supply will fall short of the target, as access is not expected to increase beyond the current level. Sanitation coverage is expected to expand to 59%, still falling well below what could be called a fairly low target of 67%.

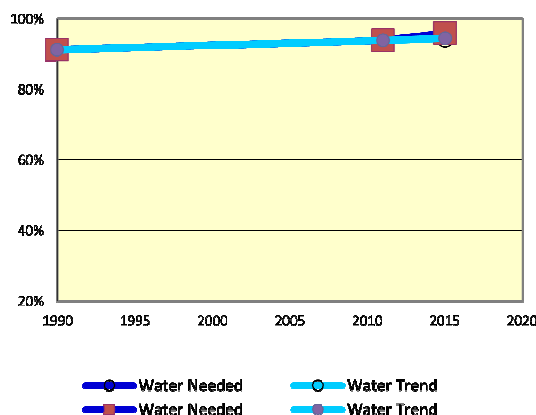
-Disaggregating this, rural water access is currently 96%, which already exceeds the MDG target of 94%. Rural water supply coverage is expected to rise to 98% should current trends continue to 2015. For urban water supply coverage is a surprisingly low 88% currently, though using the PSLM, this rises to 91%. This is significantly lower than the situation in 1991, where access was estimated at 97% by the PIHS. MDG targets of 98.5% are unlikely to be met projecting this trend, as coverage will decline to 87%.

Sanitation coverage when unbundled stands at 63.6 % according to the MICS (2011). However, definitional issues are a cause of some concern, as the MICS categorization diverges from what the JMP considers as 'improved' sanitation. Correcting for some of these anomalies, we estimate coverage at about 40%. The sub-sector MDG target of 54% (low given the minimal coverage estimates extrapolated from 1991 data at 9%), is unlikely to be achieved.

Similarly, for urban sanitation, correcting for what can be defined as 'improved' sanitation, access is

Figure 1
Progress in coverage

Water Supply



Sanitation

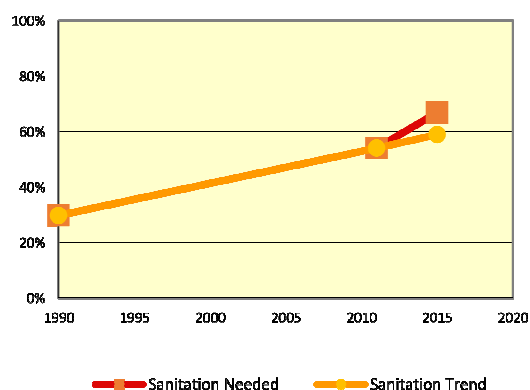
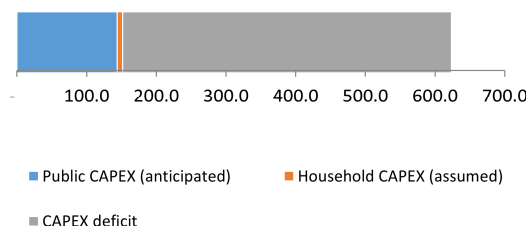
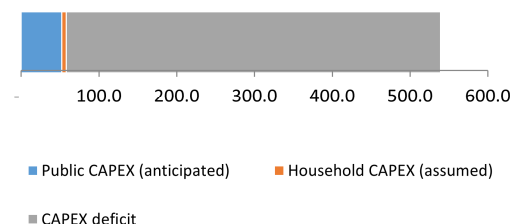


Figure 2
Required vs. anticipated public investment

Water Supply



Sanitation



estimated at 84%. Projecting forwards the current trend indicates that the MDG target of 89% is unlikely to be attained, with coverage reaching only 85%.

The government of Punjab's own estimates as presented in the PHED's MTBF statement for 2011-2014 indicate water supply coverage in urban and

sanitation, but in particular for sanitation. The serious gap in investments for capital expenditures and allocations for operational expenditures, contributes to the sectors inability to expand infrastructure to keep pace with growing populations, and maintain and rehabilitate existing aging infrastructure. This situation could frame a

Table 1
Coverage and investment figures

	Coverage			Population requiring access '000/year	CAPEX requirements		Anticipated public CAPEX			Assumed HH CAPEX	Deficit
	1990	2011	2015		Total	Public	Domestic	External	Total		
	%	%	%		US\$ million/year						
Rural water supply	89%	96%	94%	409	240	110	110	7	117	24	130
Urban water supply	97%	88%	99%	2,715	256	41	41	11	52	-	215
Water supply total	91%	94%	94%	3,124	496	151	151	18	169	24	345
Rural sanitation	9%	40%	54%	2,765	180	21	21	2	23	18	159
Urban sanitation	78%	84%	89%	2,139	355	37	37	11	48	36	318
Sanitation total	30%	54%	67%	4,904	535	58	58	13	71	53	477

rural areas as 87% and 48% respectively, indicating a clear definitional variance, in particular for rural coverage (the PHED's definition of improved supply is linked to the provision of piped water). The MTBF statement defines sanitation as comprising sewerage and drainage, and estimates coverage in urban areas at 85% and rural areas as 56%. This is evidently not comparable to estimates based on latrine coverage. This highlights the need for definitional convergence, which is elaborated on later in the report.

Investment requirements: the adequacy of financing trends

The SDA provides estimates of annual investments required to meet targets based on coverage data, unit costs, technology mix and technology lifespan. These investment requirements are analyzed against existing commitments from government and donors.

The results present a grave picture- indicating a severe short-fall for both water supply and

critical decline in the sector with coverage declining as infrastructure and service delivery cannot keep pace.

The budgetary analysis indicates a CAPEX shortfall in rural water supply of 130 million dollars annually, and in urban water supply of 215 million dollars. For sanitation, long neglected, the shortfall is larger, at 159 million dollars annually in the rural subsector and 318 million dollars annually for the urban sub-sector. OPEX, or operation and maintenance expenditures are estimated at 86 million dollars/year for water supply and 80 million dollars/year for sanitation. Rural water supply and urban sanitation comprise the bulk of the OPEX expenditures.

The incentives in the sub-sectors are skewed towards capital expenditures with little consideration for sustainability.

Table 2
Annual O&M, SDA estimates

Subsector	O&M
	US\$ million/year
Rural water supply	60
Urban water supply	26
Water supply total	86
Rural sanitation	11
Urban sanitation	69
Sanitation total	80

Investment requirements take into account the extensive need for rehabilitation of degraded infrastructure, both in the rural and urban sectors. Requirements are likely to be multiplied when considering the need for treatment facilities- a severe gap in the sector. Cost-effective and technically feasible options are yet to be trialed seriously. Declining water resources affecting bulk water

supplies and increasing quality issues are also like to impact on investment needs.

The analysis of financial bottlenecks is set against a backdrop of shrinking resources and limited investment by donors. The lack of a sector wide approach has at times obscured the ability to identify and systematically address structural flaws. A number of weaknesses in the service delivery pathway can limit the extent to which investments translate into effective services. This includes the disjuncture between responsibilities for capital investments and their operation and maintenance, and the virtual absence of cohesive planning, monitoring and sector regulation. This report onwards assesses the service delivery pathway in its entirety, focusing on these bottlenecks, and identifying priority actions to address them.

3. Reform Context

Water and Sanitation (WSS) Service Delivery has seen radical changes in the six odd decades since Pakistan's independence; oscillating between a centralized mode of management and fledgling attempts at decentralization. Shifts in the national polity have been mirrored in the architecture for WSS to varying degrees.

In the 1970's engineering departments such as works and services, irrigation and the public health engineering department (PHED) were created to specialize in deep drilling and implement complicated schemes to provide services to large populations quickly through improved access to piped water. However, a smaller role also lay with the Local Government and Rural Development Departments, albeit with miniscule budgets for providing lower-cost, simpler technologies such as hand-pumps predominantly in rural areas. While PHEDs were dedicated to the sector and recognized as technical leaders, the LGRDs were thought to be more responsive to the communities they served and had a wider range of functions.

As the thinking shifted in the 1980's a WB Technical Paper in 1989 (Pasha and McGarry) identified the core issues for the sector as: (1) the need for better links between the PHEDs, LGRDs and Health Departments; (2) the need for provincial sector investment plans; (3) greater investments in sanitation; (4) a minimum level of water supply coverage for all; (5) an assessment of funding needs for basic sanitation and drainage; (6) increased private sector participation; and (7) tapping community resources, user management and financing of schemes. Two decades on, most of these recommendations remain alarmingly pertinent.

Under the Social Action Program (SAP) of the 1990's the principal reforms of the sector related to the strengthening of institutional capacities to deliver service. The Uniform Policy sought to engage beneficiaries in the planning and management of services, stating that responsibility for O&M in rural schemes lay with communities. A large number of schemes were handed over to communities. Studies later showed that enthusiasm and capacity to manage these schemes amongst communities was often limited. Frequently, the schemes were not demand driven and departmental capacity to engage with communities was weak. The policy environment required PHEDs to staff themselves for community mobilization, but in the Punjab for example, it is only very recently that the staff have been absorbed by

the department (regularized). While there were some successes through projects (e.g. the ADB's rural water supply initiatives in the Punjab), often community engagement remained a 'rubber stamping' exercise. Schemes were operating at far below their efficiency and over the years many failed. Revenue collection also remained a fraction of operating costs, a factor exacerbated by escalating energy costs.

In the urban sector the development authorities through their WASAs remained responsible for service provision, with a notable absence of a viable customer interface or focus.

In 2001 Pakistan underwent a major exercise in devolution of powers, enshrined in the Local Government Ordinance – LGO 2001. The ordinance abolished the rural-urban divide and prescribed the dissolution of rural water and sanitation institutions- i.e. the PHED. Instead TMAs were established to plan and operate services in rural and urban areas. PHED staff were to be absorbed in TMAs, providing the technical back-bone of these entities. Elected Tehsil Councils were vested with powers to allocate financial resources and utilize both own-source revenues and provincial grants through the PFC. In the Punjab approximately half of PHED staff were transferred to TMAs.

The decentralization however, did not work, and as soon as 2003, PHED staff reverted to their parent department, with the department de facto taking over service delivery in the rural sector. This was made inevitable by the erosion of technical capacity from the TMAs. The lack of clarity on which agency was responsible – and differing scenarios de jure and de facto- resulted in the PHEDs operating in rural areas and the TMAs operating in non-WASA urban areas. Through this legal responsibility and ultimately O&M remained the responsibility of the TMAs.

With TMAs lacking resources and capacities, around 2005, decision makers vested PHED with the responsibility for providing technical support to TMAs in urban areas. Infrastructure development in urban TMAs therefore also came to reside with the PHED, especially in relation to complex schemes. TMAs would commission PHED to undertake these schemes, but their lack of capacity meant that all elements of the project cycle from identification to planning and design were also ceded to PHED. With insufficient expenditures for O&M, this has

frequently resulted in poorly maintained schemes and weak service provision. Many schemes are therefore not operational or have not been taken over.

In December 2009 the law which protected the LGO expired, and different provinces have since taken different routes. In the Punjab, the cabinet has in principal approved an amended LGO 2012, which envisages the restoration of the old mayoral system for the metropolitan cities, and chairman led district councils. The rural-urban divide is once again been instituted; in rural areas the union councils and zila (district) councils will be responsible for services; while in urban areas the metropolis, metropolitan, municipal corporation, municipal and town committees will be restored. Currently, there is a period of transition with no elected local governments and the TMAs still in place, albeit headed by an administrative figure. Local body polls have been pending since October 2009.

The highly technical nature of the sector has meant that technical capacities reside largely in the public sector- while the private sector has not been sufficiently incentivized to develop these capacities. Self-provision in the Punjab has become increasingly prevalent, however, as the state fails to deliver services. This remains unregulated and is a source of concern for water resource management.

The sector has been characterized by fragmentation and unclear lines of accountability. Lack of sector regulation is resulting in unbridled use of resources and growing issues of water quality. Sector financing remains a critical issue- and the sector is virtually entirely financed through grants.

Prior to the current 18th Amendment which was passed by the National Assembly of Pakistan in April 2010, the Ministry of Environment (MoE) of the Federal Government was responsible for policy development and guidelines for the sector. Following the 18th Amendment the role of the federal government is limited, although the Planning Commission and Ministry of Finance do have roles in approving provincial development programs and allocation of resources from federal to provincial levels.

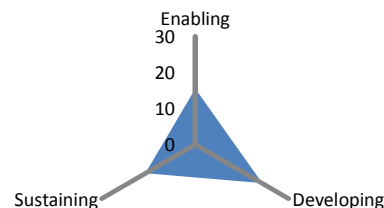
The MoE took the lead in the development of the National Sanitation Policy (2006) and the National Drinking Water Policy (2009). The policies cover both urban and rural, and provide a framework for meeting the MDGs. They also serve as a template for provincial policies. The Punjab Drinking Water Policy was approved in 2011, and the Punjab Sanitation Policy in 2012. The Punjab Municipal Water Act drafted in 2010 is yet to be approved. The policies provide broad guidelines, and associated

strategy documents have been prepared. However, there is greater effort required in clearly delineating institutional responsibilities and accountabilities, articulating clear mechanisms for implementation, and addressing the structural weaknesses in the sector. The Punjab Municipal Water Act importantly provides for an overarching Commission for regulation of the water sector and the foundations of a sector-wide approach.

The historical narrative serves as a backdrop to the serious structural issues the sector faces, which have been explored in detail using the SDA Scorecard- an assessment tool which provides a snapshot of the reform process and bottlenecks along the service delivery pathway. The SDA Scorecard assesses the building blocks of service delivery which relate to three key areas; (i) enabling services; (ii) developing services; and (iii) sustaining services. Each building block is assessed through specific indicators which are scored from 1 to 3.

Figure 3 shows the average scores for the three main groupings along the service delivery pathway.

Figure 3: Average scorecard results for enabling, sustaining and developing service delivery



Broadly the scores would suggest weaknesses both in enabling and sustaining services, with an emphasis on developing. With both upstream and downstream weaknesses, the developmental pathway would also intuitively be compromised.

The report onwards assesses the institutional framework, financing for and M&E of the sector, before examining each subsector in detail. Indicators have been extracted from the score card and are presented at the start of each subsector chapter. Overall results would indicate that while policies may be in place, associated planning and budgeting processes remain weak, thus undermining the 'enabling' pillar of the pathway. Weaknesses in maintenance and expansion also undermine the 'sustaining' dimension of the pathway across sectors. The thematic area of 'development' is strengthened by high utilization of funds, which is however, also indicative of severe under-financing of the sector,

and the development building blocks in rural sanitation remain extremely weak.

Table 3
Key dates in the reform of the sector

Year	Event
1993-2002	Social Action Program and Uniform Policy
1996	National Sanitation Policy
1999	National Drinking Water Supply Policy
2001	Devolution Program and Local Government Ordinance 2001- delegation of responsibility to TMAs
2009	LGO legal cover lapses
2011	18 th Constitutional Amendment (decentralizing to provinces)
2011	Punjab Drinking Water Policy
2012	Punjab Local Government Ordinance
2012	Punjab Sanitation Policy

4. Institutional Framework

Priority actions for the institutional framework

- Immediately (in 2013) carry out a province-wide stakeholder analysis to map and document the multiple stakeholders in the sector and their current roles (as mandated and de facto).
- Reach institutional clarity within the sector to align the sector, rationalize mandates and address historical issues of fragmentation. Develop a consensus based framework by December 2013 to segregate roles and responsibilities: (i) Regulator; (ii) Water Production (broader water issues and integrated water management); (iii) Water Assets and O&M (service provision).
- Prioritize passage of the draft Punjab Municipal Water Act (by mid-2013) to ensure legal provision for regulation of the sector.
- Ensure a “Regulatory body” is created by December 2013 in accordance with the draft Punjab Municipal Water Act. The watchdog body will require sustained policy and financial support. It will provide for a long-term sector perspective with regulatory functions to cover: (i) compliance with environmental regulations and monitoring of water quality; (ii) groundwater abstraction; (iii) tariff setting; (iv) providers’ performance; and (v) protection of customer interests.
- Review the service cadres engaged in sector service delivery (at all levels) with a view to developing a coherent service cadre for the sector by FY2014. Assess existing capacities and HR needs for: (i) strategic planning and management; (ii) engineering and technical; (iii) financial management; (iv) urban management; (v) social/community development/customer focus.

A disconnect between the de jure and de facto institutional responsibilities in the sector has led to parallel discourses; while the institutional architecture as designed and legislated would ensure some cohesion in planning and coordination, on the ground capacity limitations result in a very different picture with regard to service provision. As a result the reforms and decentralization efforts of the last decade did not fully translate into practice for the sector, and for all intents and purposes were reversed very soon after they were instituted. Responsibilities for the sector are spread across a range of institutions and actors, with issues in coordination and no clear responsibility for overarching planning efforts. The 18th Constitutional Amendment presents a new opportunity for aligning the sector, and ensuring that previously fragmented efforts at service delivery are transformed into a more cohesive and coordinated framework. There is general agreement that a clear roadmap is needed, which rationalizes the institutional system and ensures clear incentives for operational efficiencies and effectiveness. While the decentralization efforts through the LGO 2001 had initiated this process, these efforts were never fully realized.

The main actors in the sector are the Local Government and Community Development Department (LG&CD), the Housing and Urban Development and Public Health Engineering (HUD&PHED) Department, and in large cities, the WASAs which report to the HUD&PHED. There are other actors such as private housing colonies and

cantonments responsible for their own provision. Communities play a critical role- self-provision is significant in the province, and O&M of rural schemes is undertaken by communities themselves. Legal ownership of assets and the fundamental responsibility for service delivery rests with the local bodies. There is no regulator for the sector, and no one agency with responsibility for sector planning.

Currently, TMAs are responsible for O&M of urban schemes (other than in large cities covered by WASAs), while communities undertake O&M of rural schemes. Construction of schemes is generally undertaken by the PHED (through private sector contracting) on the behest of the TMAs, and by the private sector for WASAs. Figure 5 provides an overview of sector agencies and their associated responsibilities under the current dispensation.

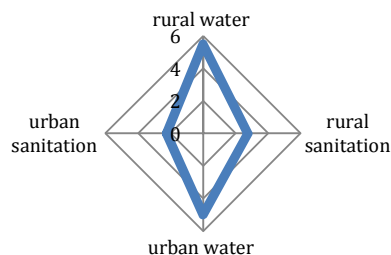
Reforms in the sector have historically attempted to enhance demand responsiveness and accountability through community participation and local government decentralization. During the Social Action Program (SAP), responsibilities for O&M were given to communities in the light of resource limitations and to enhance ownership. Through the LGO 2001, a new roadmap was developed, which gave the newly formed Tehsil Municipal Administrations (TMAs) the responsibility for the planning and delivery of water and sanitation services. However, severe capacity and resource limitations resulted in this reform remaining embryonic and ultimately being reversed, with the

PHED taking on the mantle of service provision (rather than remaining a technical advisory body as envisaged).

Figure 4 shows progress in institutional reform, and broadly indicates that while responsibilities for rural and urban water supply are fairly clearly defined, sanitation remains less clear.

The key issue relates to the design of institutional arrangements which are more geared towards the creation of capital infrastructure than accountable and customer focused service provision. The current incentives in the system emphasize capital expenditures, while human resources and finances for system operation and maintenance are side-lined. The impacts of this are most evident in the sanitation subsectors.

Figure 4
Scorecard indicators relating to institutional framework, with average of indicator scores by subsector and peer-group comparison



Conceptual Framework for Service Provision

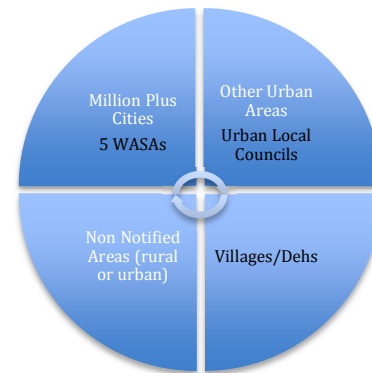
The conceptual framework assigns the state the responsibility for water and sanitation provision. This responsibility was interpreted in national (federal) drinking water and sanitation policies that provided a template for provincial policies. The policy framework assigns responsibility for operating and maintaining rural assets in particular to communities.

After the 18th Amendment the water and sanitation sector has been solely assigned as per the 1973 constitution to provincial governments. The national policies continue to provide the template for provincial policies, including in the Punjab. In effect there is a continuation of the de facto situation of some years, a more centralized mode of provision, while the province remains in a state of transition till newly elected local governments are in place, and the Punjab Local Government Bill (2012- approved in principal) is implemented.

The Province consists of:

- Five city districts, 36 districts, 144 Tehsils, 3,464 union councils and 26,075 villages.
- 5 large cities: (1.9m – 9m)
- 13 Intermediate cities: (0.25 m - 0.8m)
- 150 + small urban settlements: (more than 25k – 0.25m)

Figure 5
Population by Categories



Under the conceptual framework: The Federal Government under the IRSA Act retains **Water Resource Management**. This is important with rapid urbanization and the reliance on depleting groundwater for bulk water supplies. It is also critical in a situation where there is high pressure on and competing demands for water resources which must be managed sustainably particularly in the face of climate change.

Drinking Water and Sanitation Planning remains with: Provincial level with LG&CD – although the policy umbrella assigns a technical role for HUD&PHED in planning for resource allocation.

- 5 WASAs in Million Plus Cities
- All other ULCs (Metropolitan Corporations, Municipal Corporations, Municipal Committees and Town Committees)
- Zila Councils in rural areas

(Note that this is the proposed allocation of responsibilities through the new dispensation in the PLGO 2012. However, at present the TMAs remain in place on the ground, though administratively managed in the absence of elected bodies.)

For one decade (2001-2011) planning was moved to the regional and sub-regional levels ie District and Tehsil. The reversal in the decentralization experiment actually began some years prior to 2011, when it was given a legal umbrella.

City level planning is conducted by other agencies than those responsible for W&S planning: Urban Local Councils (Municipal and Town Committees/Corporations post LGO 2012 or TMAs pre-2012) or ULCs do have theoretical responsibility for preparing Annual Plans. Note that under the LGO 2001, in every town of a city district there remained a town council, and town municipal administration as a body corporate. Towns were administered by a Chief Officer (taking over from dissolved town and municipal committees or Municipal Corporation).

WASAs prepare Annual Plans In addition provincial departments prepare Outline Development Plans and Structure Plans in the case for ULCs and Development Authorities prepare city wide plans in the case of WASAs.

While the mandates are present, capacities for planning effectively and executing plans have remained limited.

Water and Sanitation Assets continue to be owned by the state. In theory these are owned by:

- WASAs
- ULCs in non-million plus cities
- Zila Councils

For one decade (2001-2011) these were owned by Tehsil Municipal Administrations (TMAs), which were created through integrating urban local councils and the water and sanitation functions of the zila councils and provincial governments. In rural areas the functions of rural UCs and zila councils were merged.

Water Services Management remains with: WASAs in million plus cities which are meant to have a relatively more professional and better technical teams; and ULCs/TMAs in all other urban areas.

Communities in rural areas Provincial government runs capacity building for water service management through trainings at the local government academy.

Financial Planning Financial flows in this model (post 18th amendment): The Federal Government disburses funds through the NFC Commission to the provincial governments.

The provincial government planning exercise has its emphasis on capital expenditure planning and disbursement.

The provincial government disburses funds based on:

- Bureaucratic Imperatives
- Review of previous year budgets
- Request from departments to present budgets
- Political Demands

There is a heavy weightage towards political process which determines sectoral allocations, and thereafter geographical allocations through the PFC to districts. However, there are formulae prevalent which to some extent determine allocations in accordance with need/deprivation.

It is important to note that budgets are determined largely in the absence of:

- Policy Financing Plans (capital and/or O&M and/or Human Resources and/or Systems)
- Determination of scenarios and projections for the planning horizon (technology options, financing options, service level options)
- Sector Financing Plans (capital and/or O&M)
- Sector Strategic Plans (capital and/or O&M)

Importantly, while political process is not inherently deleterious, it is notably not generally informed by the above considerations and limited by the lack of compiled data and planning information which remains to be developed for the sector.

All capital funds are routed through the HUD&PHE Department (some minor funds are routed through LG&CD) as follows:

WASA subsidies and capital budget transfers
Rural water supply sectors

Urban Local Councils raise funds from Own Source Revenues (taxes, Octroi Compensation Grant, and Fees etc.) and receive funds from the LG&CD, which is the reporting department for body corporates and zila councils. Their revenue raising potential has limitations, largely due to the involvement of another provincial department (Excise and Taxation Department) for property tax collection. A culture of at-source financial management has meant that historically ULCs have not had a complete financial picture of their resources and their liabilities, however the PMDFC and Urban Unit have been working with TMAs/ULCs to improve physical and financial planning.

De Facto Framework While in theory service provision and asset ownership lies largely with local bodies, institutional shifts and lack of capacity have resulted in a very different situation in terms of institutional roles and service delivery. Importantly, the starkest absence in the conceptual framework is that of households. Households continue to be the most significant provider of drinking water and sanitation services in the Punjab. Without engagement through local governments it is not possible for the province to engage productively and efficiently with households, communities and small-scale independent providers (SSIPs). However, the capacity gaps at the local level have meant that this

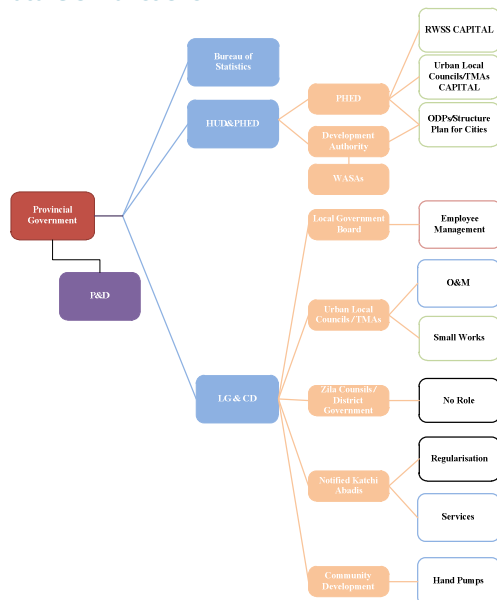
engagement has remained limited, and been undertaken largely by other departments.

The PHED emerges as the stronger service delivery arm of the sector. Although in theory the PHED is a technical arm of the GoPb and works at the request of local government institutions, because the routing of all capital asset formation funds are through it, it remains the stronger of the two institutions. LG&CD, local governments, and communities are responsible for operation and maintenance and service provision. While the PHED undertakes a process of consultation, both with local governments and with communities, this process can remain cursory. O&M and the quality of service provision remain in question under these circumstances, and result in numerous dysfunctional rural schemes and poorly maintained urban schemes.

As institutional interests in capital formation are greater than in O&M the reform process has been unable to address the institutional fragmentation and political economy in the water and sanitation sector. An attempt, under LGO 2001 was made, to integrate capital and O&M functions but this has not succeeded.

Figure 6 shows the sectors institutional architecture, while Figure 7 shows how

Figure 6:
Institutions by Reporting Departments and
Nature of Functions



Critical Issues and Mitigating Factors

A number of critical issues and gaps are highlighted from the discussion above:

The absence of an overall regulatory body for the sector

Lack of capacity for service provision (as opposed to asset formation)

Weak demand responsiveness

Fragmented responsibilities with no clear accountabilities

No cohesive M&E system

Lack of incentives to improve operational efficiencies (NRW, tariff collection, staffing etc.)

The 'disconnect' between capital expenditure and O&M responsibilities is an important one. This is reflected in:

RWSS where communities are held responsible for systems which they have had a limited role in identifying, designing and planning, with little legal cover for their role.

UWS, where TMAs/ULCs sub-contract HUD/PHED for capital expenditure on their behalf, with the more powerful department driving the capital expenditure decisions, at times with little consideration for O&M resources, and with service expansion overriding considerations for service sustainability and improvement.

Figure 7:
Missing Links: O&M with Capital Planning



Recent years have seen the emergence of a number of initiatives which hold promise for the sector. The new Punjab Municipal Water Act is potentially powerful in legislating for a regulatory entity, and taking a holistic view of the sector. While the Act has been debated at length, it has yet to be passed. The work of the Urban Unit, and the Punjab Municipal Development Fund (PMDFC), have gone some way towards generating and consolidating critical data for planning and decision-making-however, the need for a formally designated central repository for sector monitoring and information remains.

5. Financing and its Implementation

Priority actions for financing and its implementation

- High levels of advocacy within GoP to ensure that the required investment levels for each subsector are tapped from within “provincial” resources. Lobby and obtain approvals for a minimum % annual budget allocation for W&S sector.
- Support for advocacy with federal government and selected donors to tap additional projects and funding for new and existing W&S initiatives
- Mandate the WASAs, PHED and TMAs to raise sector funding from markets and other sources.
- Promote “public private partnerships” in W&S through a clear policy and targeted marketing campaign.
- Immediate attention on comprehensive financial information management, including consolidated annual data collection and reporting with a particular focus on sub-sector allocations and expenditure tracking.
- Review and further rationalize institutional mandates and jurisdictions between WASAs, PHEDs and TMAs.

The “score card” approach focuses on “budgets” and “expenditures” as important indicators of sector performance. Under these broad headings the assessment has focused on “adequacy” of sub-sector budgets, the budget structure and its utilization under recurrent and capital heads. The review shows glaring inadequacies on the budgetary front. Virtually each sub-sector will require many folds increase in the annual budgetary allocations to meet the MDGs.

On the other hand, with some exceptions, generally all public sector institutions show good capacities to spend the available capital and recurring budgets. Considering donor assistance to the sub-sectors has virtually dried up, the government of Punjab and/or the Central Government will need to rise to the occasion and address the large financing gaps. In aggregate the 4 sub-sectors will require nearly a 1 billion USD annual commitment. Based on the diagram below, the largest allocations will be needed for Urban sanitation (at USD 355 million/year) followed by Urban Water Supply (USD 256 million/year), Rural Water supply (USD 240 million/year and Rural Sanitation at USD 180 million/year.

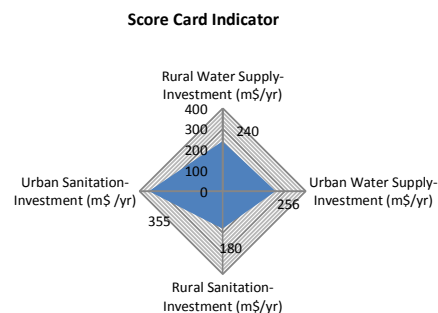
The SDA process is currently on-going in India, and Bangladesh, therefore the comparative assessment in relation to the South Asia region is pre-mature.

Punjab is generally ahead of the other provinces in terms of Planning Reforms and financing systems. The primary planning instruments are the “Medium Term Development Framework (MTDF)” which is widely viewed as a “wish list” of sector and sub-sector projects that are not backed by rigorous analysis of the sector needs and local priorities. The actual sector allocations are subject to federal receipts and competing demands from other sectors. The “Annual Development Programs” determine the actual allocations and are approved each year. These

essentially outline a list of projects and associated budgets that typically respond to the “political pulls and pushes” of a large number of constituencies” with little relationship to sector needs.

Figure 8:

Scorecard indicators relating to financing and its implementation, with average of indicator scores by subsector and peer-group comparison

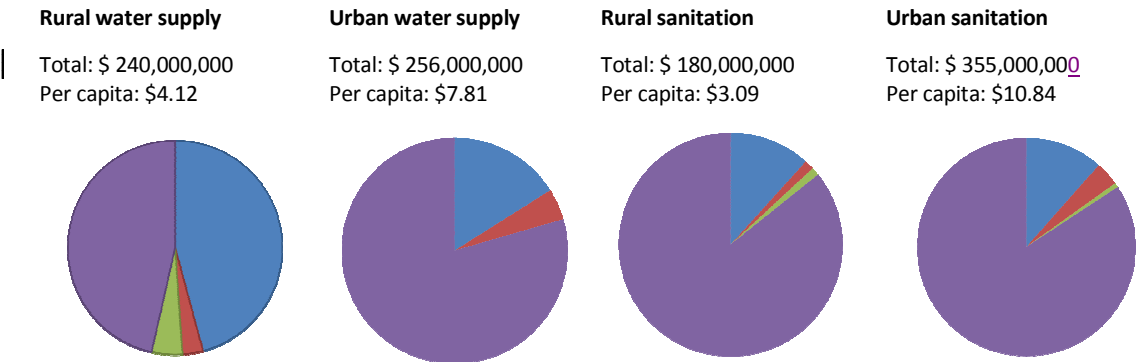


Budget support to the sector is fragmented and also poorly coordinated. Multiple agencies and tiers of government including the large WASAs, PHEDs, TMAs and the grass root communities struggle and compete for the small annual funding that in many cases largely supports the salary costs that have rapidly grown in recent years. Alongside selected donor projects and special initiatives funded through the MNAs, Senators and MPAs further add to sector distortion and inhibits a coordinated approach. Thus sector transaction costs remain high and there is desperate need of rationalization to optimize the available resources for enhanced access and service improvements. Over the past 8 years the annual development budgets for

WATSAN has reportedly risen from PKR 2.8 billion (USD 46 million) in 2004/5 to nearly PKR 10 billion (USD 100 million)¹ in 201/12². However relative to population growth “capital budgets” have shrunk and represent a major challenge to any service expansion and/or sustaining the quality of existing services. Meanwhile donor assistance to the sector has declined and now represents less than 10 % of the annual budgetary needs. As a result large investment gaps can be seen in “figure 2” which shows the annual requirements, the available contributions and the per capita requirements for each sub-sector. Among other issues, the current budget structure and reporting system does permit tracking of the total water and sanitation budgets and expenditures. There is no consolidated budget or budget reporting for the sub-sectors at large. Nor does the Punjab “Planning Board” have any system for sector wide planning and

The various agencies and departments responsible for W&S activities typically work in isolation and only come together to review progress and performance issues on various “sub-projects” without a common vision or sector framework. Other challenges arise from the aggregation of sanitation and drainage budgets which are treated as a common “sub-sector” in Punjab. Likewise most W&S agencies, both in urban and rural areas (i-e WASAs and the TMAs) also handle “solid waste management” which adds to recurring budgets but is not accounted for in the SDA review.

Figure 9:
Overall sub-sector annual investment and per capita requirements and the contribution by each anticipated source



budgeting.

¹ Based on 1 USD = 60 PKR in 2004/6; to 1 USD = 100 PKR in 2012
² PHED Punjab Report, 2012

6. Sector Monitoring and Evaluation

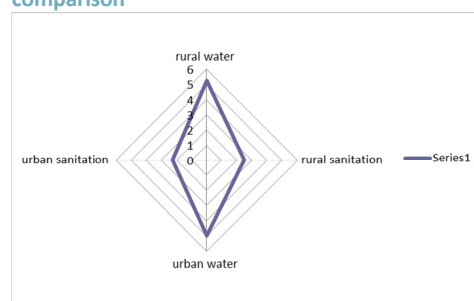
Priority actions for Sector Monitoring and Evaluation

- Prioritize and fast-track the development of a sector information management system. Agreement on the principles of management of the SIMS, integration with planning processes and sustained resourcing needs to be urgently reached by mid-2013, with the system in place by December 2013.
- Definitional consistency and harmonization between the macro-sources of data (MICS, PSLM, DHS, Census etc.), which will also allow for triangulation and a better understanding of coverage and equity. The indicators should be defined with the longer-term perspective of monitoring outcomes in a post-MDG scenario.
- Review departmental and existing systems of monitoring (at all tiers of government) in 2013. Determine capacity needs and where to strengthen existing structures for better and more systematic generation of information, in relation to physical assets, financial management and service delivery/customer focus. Third party audits and performance monitoring to be systematically carried out and built into the work-plans of oversight bodies and the Regulator.

To show clear accountability and efficiency in resource utilization and demonstrate that concrete results in terms of better access can be attained through well planned sector investments, robust Sector Information and Monitoring (SIMS) systems need to be in place.

Figure 10 depicts Punjab's performance based on indicators for the score card. The scores broadly indicate weaknesses in the monitoring of sanitation in relation to water supply. More importantly it is the fragmentation of responsibilities in service delivery which is also mirrored in the measurement of service delivery outputs and performance, which is the key issue. Notably, a cohesive and integrated SIMS is missing, which has proven to be a significant barrier to undertaking analysis around the sector. This hampers integrated planning and measurement of performance, and does not enable a sector-wide approach to be adopted.

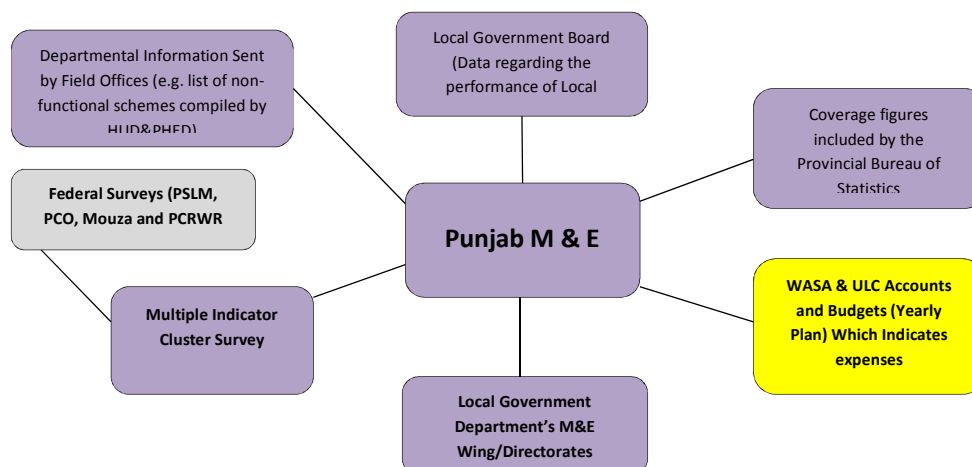
Figure 10:
Scorecard indicators relating to M&E, with average of indicator scores by subsector and peer-group comparison



Conceptual Framework

The essential architecture of the Punjab's M&E system is depicted in Figure.11

Figure 11:
M&E Architecture



While water and sanitation is by design a local government subject and water and sanitation assets are de jure owned by local governments, in fact numerous agencies and departments are involved in service delivery. Reporting within the LG&CD themselves remain weak, and while organizationally a Local Government Board and monitoring committees for oversight do exist, monitoring of water and sanitation has not been a part of their remit. Data with the TMAs therefore is not collated systematically by the department, in relation to service delivery and thus has remained dispersed.

In practice the LG&CD as a department has a limited role in the W&S sector and assumes a caretaker function. The H&PPD is responsible for providing technical support to ULCs and Zila Councils through the construction of W&S assets on their behest by the PHED. In rural areas the PHED has de facto responsibility, with only cursory oversight by the LG&CD, and does monitor assets. WASAs in general self-report although more structured performance bench-marking initiatives have been taking place over the past years (IBNET initiative with the production of data books for the Punjab).

The role of LG&CD in non-WASA ULCs/TMAs remains largely restricted to O&M functions. While each project/ scheme does in theory have a project cycle-based on a series of documents from PC-1 to PC-5, the end of project evaluation stage (PC-V) is rarely undertaken, bypassing yet another institutional monitoring mechanism.

There is no defined M&E system with a set of clear goals, indicators and systems in place to assess:

- Quality to entry
- Participation
- Provision
- Performance
- Staffing
- Complaints
- Quality
- Equity

This has resulted in practice with limited departmental or management data availability other than for some WASAs and basic data on assets that lies with PHED in relation to rural schemes. This has historically been further constrained by the limitations to acquiring satellite imagery (which have now been lifted). To date there is no consolidated geo-referenced database which will allow for planning.

Regulator as Neutral Arbitrator

No regulatory body exists. In effect this means that there is no body that provides neutral or third party audited information on:

- ✓ coverage
- ✓ performance
- ✓ sector financing/targets formulae

Broad oversight is provided by the Planning Department, but the capacity for detailed sector oversight by the small cell remains limited.

National/Macro Data Sets

In practice therefore provincial governments, scheme and city level providers have limited information. It is understood that monitoring has to operate on two axes; (i) the monitoring of outcomes- i.e. people using the facilities; and (ii) the monitoring of outputs- i.e. the functionality of facilities. Both are complementary and important for assessing sector performance.

In the absence of consolidated and harmonized data on outputs, the sector is reliant largely on examining coverage through surveys which look at access from the household perspective. Reliance on coverage is limited to the PSLM, MICS, and more recently the PCRWR (focusing on quality and functionality). For some indicators data sets provide similar trends, however there are discrepancies and anomalies that need further work.

Self-reporting by utilities is also considered to be a cause of some discrepancies in examining performance. There is a general perception that pressure to demonstrate that MDG targets have been met has compromised the quality of data.

Moreover, although feedback from the field and anecdotal information would suggest that there have been improvements in services over the past decade it is felt that third party surveys may lead to statistics that are closer to ground reality, and on the basis of which credible decisions can be made.

Macro Review Process

The federal PRSP involves a yearly review process led by the Ministry of Finance. Although this ensures that tracking of macro targets is undertaken detailed sub-sector information is not available. Coverage is tracked through national household surveys and sector investments tracked through provincial submissions.

At the provincial level several mechanisms exist for providing overviews:

- PRSP
- MTDF
- MTBF/MTEF
- ADP

However, it is generally the ADP which forms the crux of planning efforts. Critically, it is not possible to accurately access capital expenditure by urban sanitation and hygiene, rural sanitation and hygiene, urban water and rural water. In addition, O&M expenses at the macro level are not readily available. Data is not readily disaggregated by sub-sector or fully aggregated at one point to build a detailed sector wide picture.

This is partly due to outdated financial management systems in WASAs, ULCs and Zila Councils and broader public resource management bottlenecks. All of these can be addressed by consolidation and integration of institutional roles, assigned finances and coherent financial flows.

Poor public expenditure management means that it can be difficult to establish unit cost of services (important for planning and determining efficiencies) regardless of whether it is at the city level or the macro level. Moreover, disbursement linked to outputs continues to be a challenge. However, post the PLGO 2001 District level budgets have been continued. This means that it is possible to get information on all provincial government sectoral investments spatially i.e. by district.

Harmonizing Data Sets

Unlike other social sectors there is no critical mass of watsan indicators against which sector performance is monitored or evaluated.

This non-alignment and lack of commonality in indicators is apparent in all three dimensions:

- a) Vertical: i.e. comparisons between federal, provincial, district, union, city/village, and schemes are almost not possible.
- b) horizontal: i.e. rural and urban disaggregations are available but not for all data sets; poor and non-poor disaggregations are available but not across all data sets.
- c) sub-sectorally: i.e. comparisons across the sanitation sub-sector, or across the water sub-sector. Ideally, different levels of governments would have some common and some different indicators across quantitative data sets. The common indicators would be used to form a backdrop for the qualitative/perception based data.

In Pakistan, at the federal level the four data sets with significant information on the water and sanitation sector are:

- (i) **Population Census Organisation**, which is the custodian of the Population Census and the District Census Reports (now also available by Union Councils). Theoretically the census should be conducted every ten years but historically this has not been practiced due to political reasons. The value of the census data is that it covers the entire country (so none of the federal territories are excluded), it includes 100 percent coverage, the data is disaggregated to the union council level and can be analyzed along with data on utility access, housing access, family size etc. However, the indicator used by the PCO measures level of service not quality or source. So tap water, may simply be a tap attached to a pipe attached to a motor pump, or a dug well. The PCO's indicator is 'potable water' and 'latrine'.
- (ii) **The Federal Bureau of Statistic's Pakistan Social and Living Measurement Survey** which is conducted yearly. The indicator used here is 'source of water' (i.e. tap, hand pump, motor pump, dug well, others) which confuses level of service ie tap with source of water i.e. groundwater, surface water etc. For Sanitation the PSLM uses 'type of toilet' as an indicator (flush, non-flush or no toilet).
- (iii) **The Agriculture Census Organisation's Mouza Statistics (2008)** is the only public sector data set in the water and sanitation sector that provides perception based information i.e. what coverage does the patwari think there is within their patwari circle (which can through a fairly longwinded process be superimposed on disaggregated data from the Population Census). Mouza statistics include indicators on sources of drinking water (piped supply, tube well, well, hand pump, private/electric pump, canal/river, spring/stream/karez, tank/pond and other). In addition Mouza Statistics includes taste of drinking water (sweet/brackish) and the availability of filtration facility for drinking water. This makes it the only data set other than MICS which provides some information on the quality of drinking water. On sanitation toilet facilities are covered (inside house/open place). In addition it includes data on bricked streets, bricked drains and sewerage system (all, mostly, some, none). From the gender perspective the Mouza Statistics are important as they provide information on social organizations by gender (NGO, CO, CCB, Community Centre/Library, and None). From the integrated water perspective it includes sources of irrigation and water course improvement.

- (iv) **Pakistan Demographic and Health Survey** conducted by the National Institute of Population Studies under the aegis of the Ministry of Population Welfare and largely funded by USAID. PDHS's indicators are similar to the MICS indicators on watsan: source, distance, purification, and type of toilets. The new round is currently under preparation (with the last round published in 2006).

In the Punjab, at the provincial level, there are currently seven sources of information on the sector:

- (i) **Punjab Bureau of Statistics and P&D and UNICEF's Multiple Indicator Cluster Survey** which is available by district but cannot be used to compare to any national level data set (although for some indicators can be compared to the MICS in other provinces/regions) which has a number of indicators with some indicators disaggregated by urban and rural, income group, and educational status of the head of the household.
- (ii) **Annual Development Plan** of the Government of Punjab provides data on the capital investments in the given year which are publicly accessible and are maintained by the P&D in electronic form. However, analysis of the ADPs and other government documents do not necessarily generate the same data and information. No comprehensive exercises are conducted on a yearly basis comparing data and analysis amongst core government documents: i.e. ADP, MTDF, ABS and reports for the PRSP.
- (iii) **Departmental level data** may be collected by HPP & PHED and LG&CD. This information is not accessible publicly and is not collated or analyzed manually or in computerized form.
- (iv) **Local Council/TMA Annual Budget Document** is submitted to the Local Government Board at LG&CD. These documents are not accessible publicly and are not collated or analyzed manually or in computerized form.
- (v) **Scheme wise data** is meant to be collected at the scheme level. This information is not accessible publicly and exists in systems, some not computerized, at the departmental level.
- (vi) **Annual Budget Statements** of the Government of Punjab are available publicly.

As no template exists for an overall Sector Performance Report it is difficult to consolidate the input data i.e. investments, operational costs in one place, and the output/outcome data in one place let alone monitor or evaluate it. What can be done in a non-consolidated framework is the monitoring of outcomes in the sector. However, the lack of a critical mass of indicators means that sector monitoring is not comprehensive. Moreover, broadly speaking the

MICS and PSLM for instance does not present the same outcomes for similar indicators. This is further compounded by the reporting of generous service coverage figures as a result of the pressure to report success with MDG targets.

Quite critical is the fact that there is a lack of consistency in the definitions used by various surveys and no common understanding at the federal and provincial level of what constitutes safe water or sanitation.

Sector MIS

If institutional consolidation and synergy remain a medium to long term challenge, greater work needs to be undertaken on building a sector MIS. This requires:

- Definitional parameters to be improved
- Anomalies to be investigated
- Analysis against other data sets to be enabled
- A process of participation
- Credibility to be improved

A Sector Wide Management Information System should draw on the disparate data sources mentioned and collate these into a comprehensible and legible report with presentation of key data in the forms of maps, graphics and tables to enable the planning process. This, further supported with an agreement on some common indicators at all levels, would help in providing a baseline on which sector performance may be measured. As a later step, quality of data could be improved and a system for triangulation and cross verification introduced.

Initial efforts have been made by the Urban Unit and the PMDFC, as well as the PHED to consolidate data. However, these efforts need to be drawn together in a cohesive, integrated form and with a clear institutional home.

Additionally MISs needs to be created at:

- Services at household level (quality, level and financial management as by income and area)
- Services at community level (quality, level and financial management as by income and status)
- Scheme level (condition, operational cost, rehabilitation, depreciation etc.)
- City Level/Settlement Level (income, status, area etc.)
- Outcomes
- Performance and Operational Indicators
- Benchmarking
- Complaints

7. Subsector: Rural Water Supply

Priority actions for Rural Water Supply

- Rehabilitation of non-functioning schemes verified as demand-based
- Accepting CBOs as legal entities with ability to raise funds, extend coverage/services and access technical and financial support services from PHED;
- Significant increases in budgetary allocations (capital/recurring expenditures) from the provincial/federal government to ensure current level of coverage is sustained
- Clear segregation of roles and responsibilities for ‘Policy’, ‘Regulation’ and ‘Service provision’ supplemented by support for sub-sector coordination and planning.

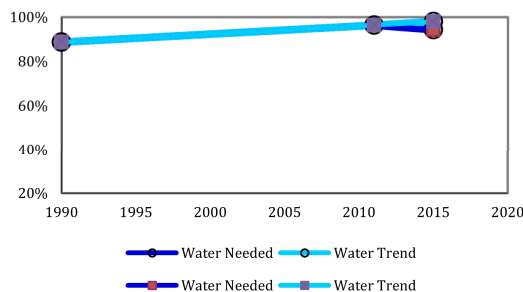
According to the National Drinking Water Policy (NDWP) of 2009, Pakistan's goal is to provide universal access to drinking water in an equitable, efficient and sustainable manner by 2025.[18] The main public data source with disaggregated water supply coverage by province at the time of estimating the MDG targets was the Pakistan Integrated Household Survey (PIHS), 1991. Based on this the rural drinking water coverage for the Punjab includes private tap (8.7%); private wells (81.5%); and public wells (0.9 %). Using the guidelines of the WHO/UNICEF Joint Monitoring Program (JMP) and correcting for the percentage of private and public wells that can be considered as improved sources, the overall rural coverage in 1990/91 is estimated at 89 %. Estimates of rural water supply coverage for 2011 as contained in the Punjab MICS 2011, is 96 %³ which is a 7 % coverage increase over a 20 year period. Measured in relation to the coverage in 1990, the MDG Goals aimed at halving the share of people without sustainable access to an improved water source by 2015. This essentially requires rural Punjab to achieve a target of 94 % by 2015. Using

the Punjab MICS and Projecting the trend, the 2015 coverage is estimated at 98 %. This indicates that MDG goals are likely to be achieved should there be no deviation from current trends. However, while coverage figures are encouraging, growing concerns over quality could erode some of the associated benefits, as is explained later. Figure 12 shows the graphical illustration of the coverage trends since 1990.

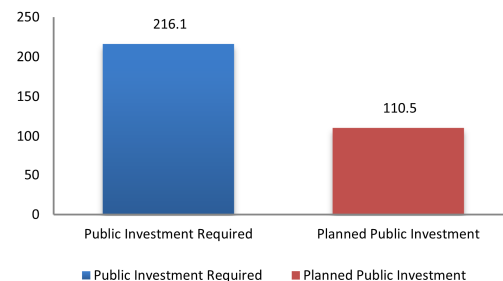
Based on the current gaps, technology distribution, associated costs and the MDG targets, an estimated USD 216 million annual investments will be needed to meet the sub-sector targets. Against this investment the provincial government currently can mobilize an estimated USD 110 million per annum which includes a modest donor commitment of USD 6.9 million and minimal funding in the “Non-governmental sectors” (i.e. USD 0.5 million). Thus a two fold increase in public sector funding commitment is needed to meet the urgent budgetary gap for “capital expenditure”.

Figure 12:

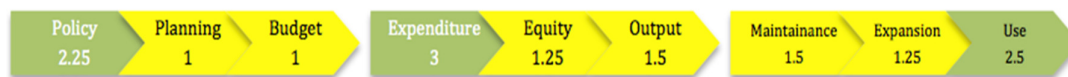
Coverage trends since 1990



Rural Water Supply



³ 95 % as per Pakistan Social and Living Standards Measurement Survey (PSLM). 2010-2011.



The bulk of the investment requirements are for replacement and rehabilitation purposes as a large number of existing schemes are near or past their design life and require costly rehabilitation and replacement investments.

The PHED in Punjab has assumed responsibility for implementation of RWS sector projects, specifically in relation to planning, identification, construction and major maintenance. PHED generally construct schemes and hand over to CBOs for routine O&M. Ownership of the schemes however rests with the local governments. The PHED's own estimates suggest that there are 2931 existing schemes which are operational against 1301 non-operational schemes (31%). It is believed that some of these schemes were not genuinely demand-based, while others have fallen prey to major operational and maintenance issues.

Rural Water Supply Scorecard

The stakeholder review of the SDA performance indicators shows that policy guidance for the sector exists in the form of a Provincial Water Policy. However the policy fails to clearly segregate roles and responsibilities of the policy makers from those of regulators and service providers. In terms of sector planning, foreign aid coordination is still an area requiring improvement as no SWAP exists and meetings to coordinate the multiple fund flows do not regularly take place.

A long term planning horizon is noticeably absent, with no multiyear (3-5 year) investment plan which is based on costing of subsector hardware and software needs to enable the achievement of the sub sector targets. Ideally speaking such a plan has to be built up from a location-based assessment (e.g. service provider asset registers; business plans; village listings etc.). Such a holistic plan should prioritize or sequence interventions against criteria (e.g. rates of return, existing service level, equity etc.). The SDA does not consider population-based costing or top-down programs as sector investment plans. Lastly sector planning also suffers due to the lack of multi-stakeholder assessments of subsector performance which review the corrective actions committed to in the previous year and which set new corrective actions for the current year. Presently Provincial level reviews are occasionally held but are not multi-stakeholder, lack a third party dimension and often fail to set corrective actions.

Sector budgeting is another area of concern. In terms of adequacy the study finds that public financial

commitments to the subsector are insufficient for meeting the requirements for new and replacement infrastructure. A recent PCRWR study suggests that close to 30 % of existing water schemes are close to the end of their design life. Since 85 % of the population uses no household level water treatment (MICS 2007) and 50 % of the samples drawn from across the Punjab show that water contains bacteriological contamination it becomes evident that systems are ageing and/or failing and need critical rehab/replacement investments.

The budget structure at the Provincial and agency level is such that sub sector investments can be identified (e.g. in the MTDF 2011-14) however the budget structure fails to capture and record sector subsidies where they exist such as the PHED and LG&CD operations which rely on heavy and continuing subsidies from the Provincial government. Also, while the consolidated RWS budget allocation data for PHED is available this does not cover TMAs, whose budgets are not currently available in a consolidated form. The budget breakdown at the national and provincial level covers most domestic and official donor investments but again, these are not covered at the local government level. Hence, while the sub-sector budget at the provincial/departmental level is comprehensive, it is difficult to determine fund flow to the sub-sector in its entirety.

Equity is another area of concern for the RWS sub sector. Procedures and guidelines for local participation exist as does the practice of community voice and choice during scheme implementation, but these practices are not followed when it comes to sector planning and budgeting. Further, human and other resources to enable community engagement are not fully institutionalized. In conclusion a comprehensive community and stakeholder participation approach encompassing all aspects from planning through to execution has not been officially notified and is not uniformly applied.

On the "equity of use", however, the MICS 2007/8 indicates that overall 96.8 from the lowest quintile and 94.7 from the highest quintile have access to improved water sources.

A clear and widely understood and adhered to criteria for budget allocation contributes a great deal towards bringing equity into RWS sub sector. The study finds that no such criteria exist to guide allocation of resources within the broader rural water supply and sanitation sector (e.g. between water and sanitation) or within a district to guide equitable distribution between rural and urban areas. Some

broad criteria are followed at the provincial level, however, to direct resources towards less developed districts. The MTDF for W&S shows a 45:55 allocation criteria for rural:urban development allocations broadly. However no break-up is available for RWS. High-level meetings with the Punjab Planning Board suggest a 65:35 allocation criteria for urban/rural W&S allocations as a rule of thumb. The Water policy advocates equitable financial allocations based on need and disparities, but criteria to translate this into practice are yet to be developed.

The sector currently does not benefit from clear and measurable indicators of equity, hence no evidence base exists to guide the sub sector and determine whether allocation criteria and local participation procedures set by government have been adhered to and are reducing disparities in access. Limited stakeholder consultation and an inadequate evidence base for current policy and practices will lead to further widening of coverage disparities. A recent PHED study attempted to determine the effectiveness of local participation in scheme implementation and sustainability. However the study is still not published, and is not part of a periodic review and analysis process.

Development of the sub-sector is also confronted by issues surrounding outputs (new services). While apparently an adequate number of new systems are being constructed each year, it is believed that not enough existing systems are being replaced and/or rehabilitated at the end of their design life. Given the large volume of schemes which are nearing the end of their design life, this is a serious area of concern and could reduce coverage and increase issues related to quality.

While generally all new water schemes are tested as per national guidelines and standards, in the absence of routine surveillance and O&M mechanisms a large number of systems fail to deliver safe water consistently. In recent years a number of efforts were made to put in place a sub sector MIS with little success. Current information on the number of new schemes and their locations cannot be easily retrieved across agencies (PHED, LGAs, NGOs etc.) and hence this is not reported in a consolidated format each year. While some form of agency specific asset inventory registers are maintained for internal planning and monitoring by PHED and TMAs these often fail to record systems built in the same geographic areas by NGOs and other agencies for example. The lack of a sector MIS to serve as a foundation for planning, asset management and monitoring is a serious gap.

Maintenance of schemes is an important area of concern for the RWS sub sector. In accordance with the Punjab RWS policy, beneficiary communities pay for operational and basic maintenance costs in the RWS sub sector, and minor maintenance is generally

not an issue. However often in case of major breakdowns or complicated schemes this can be a serious concern. Recently PHED has initiated measures to support CBOs managing complex schemes through a Provincial fund. The results of these new measures are yet to be determined. For small towns the responsibility and costs of O&M have been the responsibility of TMAs, who are able to recover only a fraction of the operating costs and generally depend on huge subsidies. Overall, the private sector is adequately responding to the supply chain needs with exceptions in Southern Punjab where the study found that distances impact on time taken to obtain spare parts, and still affect scheme downtime.

A key enabling factor for the Punjab in achieving its MDG target for the RWS sub sector is its policy on community management of RWS schemes. This releases scarce funds for capital investments. However it is important to review management options on the basis of subsidiarity. For example CBOs need support and handholding not only to maintain the RWS schemes but also to address issues of expansion and service provision as part of a medium to longer term vision. Under such a vision village and small town piped water supplies are allowed to expand and are recognized as legal entities (e.g. under specific water sector legislation or general legislation covering cooperatives, societies, company law etc.). It is then possible for such CBOs to receive technical support e.g. for engineering design and scheme management etc. Under current policy in the Punjab CBOs in rural areas are responsible for O&M but do not own scheme assets and the ownership lies with the PHED/local governments. CBOs cannot expand the scheme, and do not receive technical and financial assistance towards this. For small town schemes, management is generally by TMAs who also face both capacity and financial constraints to effectively manage such schemes. It is therefore imperative that CBOs are recognized as legal entities and necessary support programs initiated to graduate them to become small scale providers. The majority of CBOs managing RWS schemes are reported to have aspirations to expand their schemes but so far have received limited support in this regard from relevant agencies. PMDCF has plans for expansion of small town water supply schemes (in over 37 TMAs currently), however there are no similar plans for CBO managed rural schemes.

User fees do not cover expansion costs and barely cover O&M in many instances except in a limited number of schemes where CBOs are reported to be financially strong and could afford to finance their own expansion plans. It is also important that other management options be explored and tested, so that the schemes are sustained and MDG targets not compromised.

8. Subsector: Urban Water Supply

Priority actions for Urban Water Supply

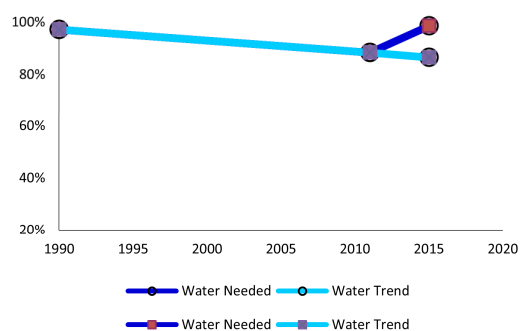
- Revisit the policy, mandate and structure of the 5 WASAs and TMAs with a view to introduce needed autonomy and reforms including the introduction of performance based systems; authority for appropriate adjustment of tariffs; hiring and firing; and raising of finances to ensure effective service provision and cover annual costs; an ‘Institutional Reform plan’ for WASAs and TMAs should be developed and approved by the ‘provincial government’ in 2013.
- Starting with FY 2013, an annual tripling of the sub-sector budget allocations (capital/recurring expenditures) should be ensured;
- Balance sub-sector budget needs should be ensured from the federal government and selected donors to ensure that the CAPEX gap identified by the SDA is fully covered and MDG targets are met
- Clear segregation of roles and responsibilities for ‘Policy’, ‘Regulation’ and ‘Service provision’ should be reflected in the ‘Institutional Reform plan’ for the sub-sector
- Systems for Sub-sector planning, Coordination and oversight should be ensured through i) required data bases/MIS and notification of subsector for along with TORs
- Advocacy with selected donors to plan, design and fund new sub-sector projects for the Punjab. WSP-SA, for example, can play a key role with provision of TA and other support.

Punjab’s total population is 91 million⁴ of which the urban population is estimated at approximately 33 million (36.26 %)⁵. As of 2012 nearly 54 % of the urban population (18 million) resides in the 5 largest cities including Lahore, Faisalabad, Multan, Gujranwala and Rawalpindi. The remaining urban population is scattered in small and intermediate towns serviced by ‘Tehsil Municipal Administrations’ (TMAs). While the Urban Water and Sanitation Authorities (WASA’s) service the large cities. Pakistan has experienced rapid urbanization trends and Punjab is no exception. Available country data shows

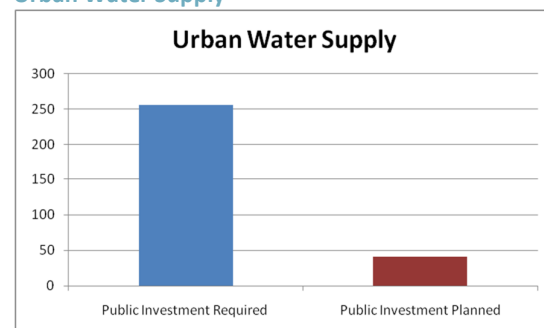
that the proportion of the national urban population has steadily grown from 28 % in 1980 to 36.5 % in 2012⁶. Pakistan’s National Drinking Water Policy (2009) calls for universal access by 2025. The large public data source on disaggregated water supply coverage by provinces is the Pakistan Integrated Household Survey (PIHS), 1991. Based on this the urban drinking water coverage includes private tap (49.7 %); private wells (46.9%); and public wells (2 %). Using the JMP guideline and correcting for the percentage of private and public wells that can be considered as improved sources, the overall provincial coverage in 1990/91 is estimated at 97 %.

Figure 13

Coverage trends since 1990



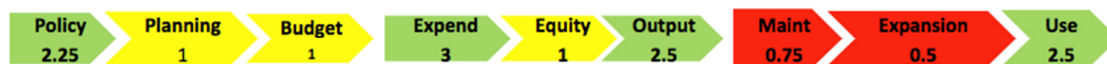
Urban Water Supply



⁴ Preliminary estimates of

⁵ Estimates of population for Punjab Cities and other urban areas is gathered from multiple web sites and the ‘Urban Unit, Lahore, Pakistan.

⁶ JMP estimates, March 2012



Estimates of provincial coverage for 2011 are also contained in the Punjab MICS 2011, which has yet to be officially approved. Based on this data the urban coverage in Punjab has surprisingly declined to 88 %; 9 % coverage drop over a 20 year period. The 2010/11 estimates from the Pakistan Social and Living Standards Measurement Survey (PSLM) shows a slightly higher estimate with a distribution of 32% tap water, 28% hand pumps, 27% motor pumps, 4% dug wells and 9% others. Assuming “other sources” reflect unimproved water sources, the aggregate access to improved water source stands at 91%.

Measured in relation to the coverage in 1990, the MDG Goals aimed at halving the share of people without sustainable access to an improved water source by 2015. This essentially requires Punjab to achieve a target of 98.5 % by 2015. Using the Punjab MICS and Projecting a linear declining trend, the 2015 coverage is estimated at 87 %. Thus MDG goals are not likely to be achieved. Figure 13 shows the graphical illustration of the coverage trends since 1990.

Based on the current gaps, technology distribution, associated costs and the MDG targets, an estimated USD 256 million annual investment will be needed to meet the sub-sector targets. Against this investment the provincial government currently shows a very modest commitment of USD 30 million; a relatively insignificant donor commitment of USD 11 million and a virtual lack of funding in the “Non-governmental sectors” (i.e USD 0.5 million). Thus an 8 fold increase in public sector funding commitment is needed to meet the urgent budgetary gap on the “Capital expenditure” front.

On the operational fronts virtually all of the Punjab “Urban Water and Sanitation Authorities” (WASA’s) are faced with a grim fiscal situation. WASA Lahore has been running a multi-billion rupee annual deficit for the past many years⁷, followed by WASA Rawalpindi, Multan, Faisalabad and Gujranwala that also show deficits or a break even financial scenario each year. Incomes from water tariffs and other

sources have generally stagnated while recurring costs have grown due to rapid salary increases, electric bills and other costs. Although a break-down of W&S is currently unavailable for the WASAs the Lahore WASA data shows an exceptionally high 220 % increase in salary budgets and a similar 219 % increase in power bills since 2006. This translates into a 44 % annual increase in expenditure, which the provincial government continues to subsidize on an annual basis.

Outside the large cities the urban population is spread over a large number of small and intermediate Punjab towns which are serviced by “Tehsil Municipal Administrations” (TMAs) that are faced with a similar financial crunch. Over a 5 year period salary costs for urban water supply in Punjab TMAs have risen by 220 % while non-salary costs have increased by 73 %. Stuck with poor tariff structures and no mandates or capacities for generating other “revenue sources” virtually all of the Punjab TMAs are heavily reliant on annual provincial transfers that keep them afloat. In the absence of radical changes to the “investment” and “recurring budgetary” trends, the coverage and quality targets are not likely to be met or sustained.

Urban Water Supply Scorecard

The stakeholder review of the SDA performance indicators show that the largest gaps exist on the “maintenance” and “expansion” fronts which are both poorly rated. This reflects the very high percentage of non-revenue water; large annual deficits in the three major WASA’s and poor tariff structures that have restricted the cash flows needed to sustain and improve services. A recent JICA study, and Lahore WASAs leak detection studies shows non-revenue water is as high as 40 % of the total in Lahore WASA. The patterns in other WASAs and smaller towns are not dissimilar. On the cost recovery fronts, all WASAs show annual deficits or barely a break even scenario; Lahore appears to be the worst with an operating ratio of 0.57.

A review of the tariff structure shows inadequate tariffs and up-dation frequency; virtual lack of metering (less than 5 %); “land area” versus “water usage” based flat rates; and poor collection efficiencies. Provincial policy controls have also restricted WASA’s from raising tariff which is widely seen to be politically sensitive.

⁷WASA Lahore shows a PKR 2 billion deficit in 2011/12, PKR 1.8 billion deficit in 2010/11 and PKR 1.55 billion deficit in 2009/10 ; WASA Rawalpindi shows a PKR 200 million deficit in 2010/11; other WASA’s also slightly lower or break even scenarios on annual basis.

Among other areas the assessment of the “Planning”, “Budgeting” and “Equity” indicators also shows a generally weak rating and these are highlighted as areas of high concern.

The Punjab Drinking Water Policy exists and covers both urban and rural water supply. This calls for a 100 % population coverage target by 2020 while the national water policy calls for 93 % access target by 2015 which is also not likely to be met. Legislative changes introduced during the Musharraf regime (1991-2008) led to huge changes within the Local Governments and “Municipal” bodies. As a result the sector institutions have remained in flux with overlapping and unclear roles, particularly in non-WASA areas. The broad institutional roles are also outlined in the national drinking water policy. However these need to be updated in light of the post 18th amendment scenario and the anticipated changes in the “local government framework”. Among the key areas of concern, the separation of responsibilities on the policy-making fronts, regulation and service provision will need to be ensured.

On the planning fronts no formal and consistent mechanism exists to coordinate water and sanitation sector investments. Quarterly and Annual departmental reviews take place at the level of WASA's, LG&CD, PHED and the P&D. However there is no evidence of a structured W&S Institutional group for sector wide review; TORs, coordination of funding flows or joint reviews of progress across respective domains. The water policy does provide a basis for SWAP but is not operationalised.

At the provincial level a Medium Term Development Framework (MTDF) 2011-14 exists, but this is not fully operationalized; the MTDF is also very biased towards hardware. The MTDF shows only block allocations as it is not based on bottom up planning. It does not cover planned investments by the LG&CD or WASAs. As a practice a multi-stakeholder reviews of sub-sector performance does not take place. Annual or quarterly review are typically held at the agency and ministerial level, but not by the range of sector stakeholders; such reviews are normally project and/or Annual Development Plan (ADP) specific and not across the sector.

Public sector investments remain a major issue with inadequate budgetary allocations. The Annual Capital/Revenue budget data is available (i.e MTDF 2011-14) and shows capital/revenue budget break down for UWS in aggregate and by each district of Punjab; the WASA budgets show aggregate development allocations; and also by water supply; UWS budget allocations data for LG&CD units (i.e TMAs) is currently unavailable for the province. The

donor funded programs are reflected in federal budget, however a break down by allocations for “UWS” is not provided. In general all WASA's, PHED and LG&CD operations rely on heavy and continuing subsidies from the provincial government. The WASA reports for 2011/12 suggest a PKR 2.7 billion annual subsidy is needed for running the 5 WASAs; likewise LG&CD own-source revenues are a fraction of annual development and establishment costs.

The “Expansion” rating is generally weak. This is largely attributed to the lack of policy and operational autonomy of WASAs that are directly managed by the provincial government with close policy, institutional and financial control through the Department of Housing and Urban Development. WASAs have limited or no autonomy for hiring and firing; investments and disinvestments or other major decisions with any significant impact on the organization. Key informant interviews also suggest lack of business plans within all WASAs; no formal plans exist for securing water resources; expansion, fund mobilization and other critical areas. Where business plans exist they are not implemented/funded by the respective authorities. As part of the current policy WASAs are also not mandated to tap funds from the markets thus further limiting the choices for reform and future growth.

Predictably the “Sector Expenditures” received the highest rating while the sector “Policy”, “Sector outputs”, “Use and outcomes” also show a relatively robust rating. Within THE PHED and LG&CD establishments, recurrent budgets are typically not segregated for “urban” or “rural” areas. However all recurring budgets are typically short of annual requirements and reportedly utilized 100 % on an annual basis. On the utilization of domestic and donor capital funds, field interviews and review of quarterly budget utilization reports show some surrender and re-appropriations on an annual basis. However over 75 % of the development budgets are reportedly spent annually. All expenditure versus budget (or domestic flows) is regularly reported and closely watched on a quarterly basis. Donor programs also follow project/program specific work plans and reporting systems which are fairly rigorous.

With regard to equity policy and procedures exist for community local participation but these are not operationalized; thus neither WASAs, PHEDs or the TMAs have any structured system for local participation in planning and decision making in urban areas (such as those for PHED for rural areas). The few pilot schemes under the “Changa Paani project” are an exception where a structured approach to community participation has been successfully demonstrated. Multi-stakeholder events in the sector are few and ad hoc.

The MTDf for W&S shows a 45:55 allocation criteria for Rural:Urban development allocations. However no break up is available for Urban Water Supply. High level meetings with the Punjab Planning Board suggest a 65:35 allocation criteria for Urban/Rural W&S allocations as a thumb rule. However no specific criteria are available for UWS, nor are any criteria consistently applied.

WASA and TMA pro poor policies or plans for the 3 largest cities are currently unavailable. The various meetings held thus far do not show a specific pro-poor focus. Meanwhile a provincial body dedicated for kachi abadis (urban slums) does exist and is working. This institution is currently not integrated with the overall planning and investment decisions of WASA, PHED and the TMAs. Importantly many dwell in slums which are not formally notified and do not come within the remit of any agency.

In terms of the sub-sector outputs coverage has declined between 1990 and 2010. (from 97 % to 88 %) and water quality remains a major concern. Investments are required for network replacement and upgrade, which is a large challenge. Available reports suggest that PHED alone has an inventory of over 4000 schemes in Punjab of which over 30 % are non-functional due to source failure and engineering flaws.

Based on MICS 2007/8, 94 % of Punjab residents (urban/rural combined) use un-treated water and 50 % of the water samples tested across Punjab (rural/urban combined) show varying levels of bacteriological contamination. Water treatment trends are higher in large cities where 31 % of the residents use some form of treatment followed by other urban areas (7%). Majority of urban schemes are provided with water treatment facilities, often in the form of chlorine injectors, although this does not always translate into effective or consistent practices for water treatment. Consolidated mapping or aggregated data on Urban Water supply is not available. However, various forms of asset inventory registers are maintained by WASA, PHED and TMAs. These need major revamping and consistency across the W&S sector.

In terms of the sub-sector targets if the current trends continue, coverage is likely to reach 87 % by 2015 well below the 99 % coverage requirements of MDG. On the "equity of use" the MICS 2007/8 indicates that overall 96.8 from the lowest quintile and 94.7 from the highest quintile have access to improved water sources. Across Punjab, water users continue to face varying amounts and durations of water supply. Multan and Faisalabad show between 6-12 hours of supplies as per a recent JICA report; while the Lahore WASA is reportedly supplying water through 12-18 hours of pumping with barely 1.5 % of

storage capacities in overhead reservoirs.

Conclusions

Despite the relatively large focus, urban water supply coverage has declined over a 20 year period (97 % in 1990 to 88 % in 2010). Thus the MDG target of 99 % coverage in 2105 is not likely to be achieved. Several factors appear to have contributed to the state of affairs. The rapid urbanization has clearly not been matched by a commensurate capital and recurring budgetary injection; nor has urban Punjab ensured the necessary institutional and regulatory environment to respond to the growing challenge. The need to run "large Cities" along professional lines is reflected in government policy and the establishment of WASAs that were supposed to manage municipal service provision in the 5 large cities of Punjab. In theory WASAs were expected to run with considerable 'autonomy' make policies for "Urban W&S"; hire and fire staff; maintain high quality services, ensure cost recoveries, decide on service tariffs; raise finances and take other measures that are needed to ensure "customer" needs are met. However the review shows that WASAs practically operate as another "government agency" with little or no autonomy and serious policy, budgetary and institutional constraints.

Thus "municipal service provision" in the cities is essentially faced with an "Institutional challenge" that remains the biggest hurdle in service delivery and any future reform. As things stand, WASAs are currently geared to respond to the "government above" as opposed to the "customers" or the "urban residents" the bulk of whom have little or no choice but to tap services from the local WASA.

Likewise the "service provision" to urban dwellers in smaller and intermediate towns is the responsibility of the "Tehsil Municipal Administrations" that are even weaker and thus a significant challenge to any meaningful improvement in service provision. In contrast with WASAs the TMAs also service "Rural areas" within each 'Tehsil' although "urban areas" receive a priority over rural areas. The bulk of the TMA resources are consumed in supporting W&S services in the "urban constituencies". Another government agency called the "Public Health Engineering Department (PHED)" primarily services the rural Punjab.

The Institutional challenge is also further compounded by the continuing legal and policy changes over the past 10 years that brought major structural changes in the "municipal entities" across the entire country including the Punjab. Having experimented with the "Local Government Reforms" introduced in 2001, the sector is undergoing another change as a result of new political developments.

While the dust has yet to settle, field reports and interviews with key informants suggests that the “Municipal Service sector” is likely to revert to systems in vogue prior to 2001.

Meanwhile WASAs and TMAs have no real mandate or incentives to change the status quo; nor do they have the required resources for a rapid transformation. Donor funding to the sector has also generally declined while the municipal service providers are currently not mandated to raise funds elsewhere. Therefore unless the government priorities are radically altered with a new focus and large additional investments goals will not be met; a realistic prospect for change essentially lies in mandating and reforming the “service providers”. This can be quickly done to enable WASAs and TMAs

to take charge and meaningfully address the service gaps and the growing quality issues in W&S. Alongside the government and potential donors will need to ensure significant additional resources for the sector to facilitate the transition.

Finally the sub-sector is very poorly regulated with unclear roles and responsibilities. Service provision and regulation functions are currently inter-twined within the broad roles of WASAs and TMAs which is in clear contrast with stated public policy and best practices. Based on this review, new and independent regulatory capacities for the sub-sector is emerging as a very high priority need to ensure that quality, health and environmental considerations receive sustained and high levels of attention.

9. Subsector: Rural Sanitation and Hygiene

Priority actions for rural sanitation and hygiene

4. Designation of a clear institutional home for rural sanitation and hygiene, and creation of a Punjab ODF Task Force, comprised of Health, LG&CD, PHED, Education and other key stakeholders which is mirrored at the district and sub district levels;
5. Prioritization of *safe human excreta* disposal over other aspects of sanitation (e.g. *liquid and solid waste and street pavement* etc.) in the interim period, requiring at least 30 % of departmental budgetary allocations, till open defecation practices are eradicated.
6. Formulation and implementation of a well- coordinated Provincial Rural Sanitation Acceleration Roadmap at scale with well-defined targets and sub targets for all tiers of local government based on the Provincial Sanitation Strategy.

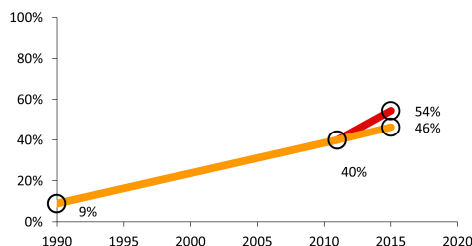
In the absence of base year (1991) rural sanitation coverage figures the study adopts the WHO/UNICEF Joint management Program's (JMP) country estimates of 9% for the Punjab. The only available base year rural sanitation figures for the Punjab are provided by the PIHS 1991 survey, which is not taken into account for MDG monitoring by JMP as it does not provide a sufficient level of disaggregation of sanitation categories⁸. The 2011 Punjab MICS survey provides overall improved sanitation coverage of 63.6 percent. Pour flush latrines connected to septic tanks are the prevalent latrine technology in rural areas. The study however finds that often the effluent from the septic tanks is discharged directly into open drains, which is environmentally unacceptable. Most of the pit latrines fail to disrupt the faeco-oral transmission route due primarily to missing pit covers or vent pipes. Incorporating these two corrections the study concludes that the current rural sanitation coverage stands at 40 percent.

The MICS 2011 data also considers shared toilets (almost 10 %) as improved sanitation but these are not considered as 'improved' by the JMP. There are therefore clear definitional issues that need to be urgently addressed.

An increase in coverage from 9 percent in 1990 to 40 percent⁹ by 2011 suggests that the subsector target of 54 percent will not be achieved if the current trend continues.

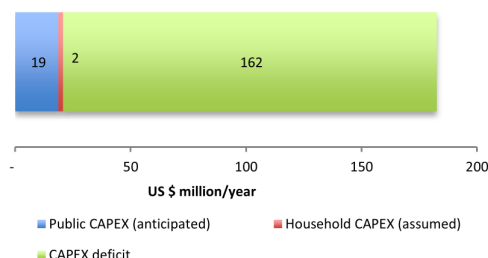
Based on the current gaps, technology distribution, associated costs and the MDG targets, an estimated US\$180 million per year in CAPEX is required to meet the national sector target. Of this it is anticipated that the sector will get US \$ 19 million per year from public investments, potentially further leveraging a meager US \$ 1.9 million as household contributions if a policy of 10 percent of user contribution is effective. Assuming the accuracy of coverage estimates, any effort to achieve the sector goals will be a highly challenging endeavor, as it will require an almost tenfold increase in financial resources.

Figure 14
Rural sanitation coverage



⁸ Source: *Comparing International and national data on access to drinking water and sanitation, data summary sheet of drinking water and sanitation coverage in Pakistan – UNSD and ESCAP meeting, Bangkok, January 2009*

Rural sanitation investment requirements



⁹ 68% as per Pakistan Social and Living Standards Measurement Survey (PSLM). 2010-2011.

Figure 15:
Rural sanitation and hygiene scorecard



The scorecard shows that the subsector is generally in disarray and facing neglect in the arena of policy, planning and even more so in budgeting. The Province has a Sanitation Policy but this is still in draft form with a 2025 target date for universal sanitation coverage with no breakdown of annual targets. The policy while it does assign roles and responsibilities for implementation, fails to clearly define and separate the role of regulator and the policy maker from that of service providers. It also needs to adjust its provision in the light of anticipated changes to the local government ordinance in the wake of the 18th constitutional amendment. In terms of sector planning, aid coordination is still an area requiring improvement as no SWAP exists and key stakeholder meetings to coordinate the multiple fund flows do not regularly take place.

The rural sanitation sub sector lacks a multiyear (3-5 year) investment plan, which is based on costing of both the hardware and software needs required to achieve the sub sector targets. Ideally speaking such a plan has to be built up from a location-based assessment (e.g. service provider asset registers; business plans; village listings etc). Such a holistic plan should also prioritize or sequence interventions against criteria (e.g. rates of return, existing service level, equity, poverty etc.). Lastly the prevailing planning practices in the sector are not evidence based and fail to learn from and build upon multi-stakeholder and third party assessments of subsector performance. What exist are occasional (annual or quarterly) reviews held at agency or departmental level which are not multi-stakeholder and often fail to set corrective actions. Such reviews are typically project and/or Annual Development Plan (ADP) specific and not sector wide.

Rural sanitation is the most neglected of the four sub sector receiving the lowest local government budget allocations. Multi-year analysis of TMA budget allocations for W&S reveals that sanitation receives 55-60% of the total budget. It is interesting to note, however, that the word sanitation is almost universally interpreted by LGAs staff to refer to wastewater collection, conveyance and disposal systems along with brick pavement of streets and lanes. This general definition also includes solid waste collection and disposal. However human excreta disposal and inter alia latrines are generally considered as a fringe sanitation item. A similar

breakdown of PHED budgets shows that at the Provincial level no CAPEX is allocated for onsite sanitation and hygiene promotion programs in rural areas. However 33-42 % of the PHED's budget is spent on urban sanitation, again primarily on construction of drains, sewers and street pavement. The situation thus clearly establishes that significant funds are being spent under the name of sanitation, however on those aspects of sanitation which have a relatively lower impact on human health and which at the same time require relatively higher unit costs compared to interventions related to proper management of human excreta disposal. This points to misdirected efforts rather than a case of unavailability of finances. Hence it is important that policy makers prioritize human excreta disposal (and eradication of open defecation) and allocate the bulk of the current sanitation budget towards this key aspect of sanitation on an emergency basis, at least for the next 3-5 years¹⁰.

Whatever meager resources are allocated to the sub sector have fuller utilization, than other budgetary allocations. However, the end results, as assessed in the output, uptake, and use building blocks are lagging (Figure 15).

With limited application of participatory procedures for local planning and implementation, and absence of budget allocation criteria for rural sanitation, equity receives a low score, and represents a real barrier to effective service delivery (note red color, Figure 15). Guidance to ensure equity in rural sanitation programs exists in the draft sector policy and strategy but these practices are not followed when it comes to sector planning and budgeting. In conclusion a comprehensive community and stakeholder participation approach encompassing all aspects of rural sanitation have not been officially notified and are not always uniformly applied. Most TMAs have no structured system for local

¹⁰ Poor hygiene and open defecation pose the greatest risk to human health and the planners need to prioritize these areas as these are relatively cheaper to implement resulting in the widest impact on human health. This should be followed by the other environmental health risks that are posed by improper solid waste collection, disposal and poor drainage.

participation in planning and decision making for rural sanitation; PHED has skills in rural sanitation promotion, and approaches are being tested on a small scale, though this is not the major focus of their programs currently. Multi-stakeholder consultative events in the sector are few and ad hoc.

A clear and widely understood and adhered to criteria for budget allocation contributes a great deal towards bringing equity into the RWSS sub sector however the study finds that no such criteria exists to guide allocation of resources within the broader rural water supply and sanitation sector (e.g. between water and sanitation) or within a district to guide equitable distribution between rural and urban areas. The MTDf for W&S shows a 45:55 allocation criteria for rural: urban development allocations broadly. However no break up is available for RWS. High-level meetings with the Punjab Planning Board suggest a 65:35 allocation criteria for urban/rural W&S allocations as a thumb rule.

The sector currently does not benefit from clear and measurable indicators of equity in the RWSS sub sector. Hence no evidence base exists to guide the sub sector on whether allocation criteria and local participation procedures set by government have been adhered to and are reducing disparities in access. Limited stakeholder consultations and an inadequate evidence basis for current policy and practices will lead to further widening of coverage disparities.

The budget breakdown at the national and provincial level includes most of the domestic and official donor investments, but these are not covered at the local government level.

Capacities in terms of staff, expertise, tools/materials - to deliver an RSH program at scale, using community-based approaches are extremely limited, almost none within TMAs, and limited at both PHED and the Health department. With their extensive outreach at the grass roots level through LHWs and some training and orientation towards behavior change communication the DOH offers the best option as an agency to take the RSH agenda forward.

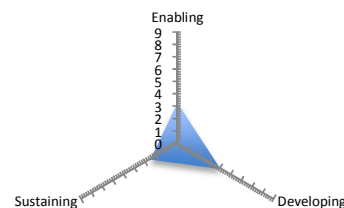
Challenges for output and markets, two other building blocks in the sanitation service delivery pathway, intersect: on the one hand, government must ensure provision of software (such as promotion tools) but also help stimulate markets which provide sanitation goods and services.

The Community-Led Total Sanitation (CLTS) approach has been piloted in many areas of the Province with encouraging results. There is a general consensus to adopt CLTS as the main approach for rural sanitation

promotion. The study however finds that the latrines constructed by rural households do not necessarily meet the JMP criteria, and additional work is needed on the supply side and in developing a sanitation-marketing component.

Figure 16

Average RSH scorecard scores for enabling, sustaining, and developing service delivery, and peer-group comparison.



A review of TMA and Provincial ADPs does not establish significant allocations for rural sanitation programs focusing on promotion of improved household latrines following community led approaches to sanitation. The Sanitation Policy (draft) widely recommends private sector participation in rural sanitation however, there has been no real support to facilitate or promote the private sector. While the Sanitation Policy provides for private sector engagement e.g. (CBOs, NGOs and the private sector) the strategy for PSP is neither fully articulated nor practiced.

Sector monitoring is a major shortcoming, with issues of definitions, systems and responsibilities for data collection, collation and utilization. No M&E system exists within TMAs / PHED/LG&CD to capture and report on ODF villages under the ongoing somewhat sporadic RSH interventions which are supported by a limited number of development partners (e.g. UNICEF, PLAN, Water Aid and WSP). Monitoring of uptake—in terms of the quantity and quality of latrines constructed by households, and hygiene behavior change—is limited, and constitutes a further barrier in the service delivery pathway.

In the absence of a RSH MIS it is hard to expect evidence based planning and monitoring in the sector. The existing LHWs database does offer a good starting point in this direction for future RSH programs. Once developed more accurate estimates of coverage will be available allowing factual planning, monitoring and resource allocation.

Relatively little is known about rural populations' attitudes and practices regarding hygiene and sanitation. MICS 2011 however provides some key insights. For example the survey finds that stools of 43.4 percent of children (age 0-2) in rural Punjab were disposed of unsafely. The MICS also found that

29.5 percent of rural households were found to lack either water or soap at hand washing places indicating that a significant population does not consistently wash hands with soap at critical times. For the lowest quintile this figure stands at 57.9 percent and in some of the poorer districts such as D.G Khan and Lodhran this figure stands at 57.5 percent and 36.3 percent respectively indicating that in poorer communities hygiene practices are seriously inadequate.

Typical sanitation schemes in rural areas consist of construction of combined open drainage systems (catering for both household wastewater and storm water) and brick or concrete pavements of local lanes and streets. Wastewater is disposed of into water bodies almost always without proper treatment. The community carries out the cleaning of drains on a self-help basis.

The supply side assessment of RSH reveals that the sanitation and hygiene supply chain exists almost everywhere in rural Punjab, but costs remain high for poor rural communities (In Bangladesh for example a WC costs less than a dollar while in Punjab it still costs more than 3/4 dollars). Masons are available almost everywhere but the quality of their construction is an issue that necessitates some degree of investment in training and certification. The draft Sanitation Policy and associated Strategy does acknowledge the role of the private sector in RSH, however, there has been no real support on the ground so far to facilitate or promote the private sector as the strategy for PSP requires more detailed articulation and implementation support.

The area of uptake is the most critical area limiting the effectiveness of the RSH sub sector. Since there are no formal annual sub targets available for the RSH sub sector, the service providers and planners do not know where they are and what interventions and level of funding is required to achieve targets. Also, in the absence of sector regulations there is no information available on the quality of uptake in terms of whether or not the quality conforms to the subsector standards for improved sanitation.

In conclusion the rural sanitation subsector in the Province has to undergo a transformation - *from a provider's movement into a people's movement*. This requires a substantive shift in the approach of the institutions of sanitation and hygiene service delivery in rural areas. The shift calls for the fullest adoption of the 'Community led' approach - where the grass roots demand for improved sanitary conditions emerges from local communities themselves. The proposed shift in the existing approach also calls for closer multi-stakeholder partnerships - where citizens, government agencies (DoH, PHED, LG&CD, DOE), NGO's, donors, media and academics all work

together to foster a 'ground swell' of public demand for improved sanitary living conditions. Lastly it calls for a specific government institution (e.g. LG&CD) to become the institutional home for rural sanitation promotion actively facilitating & regulating sanitation service delivery through a multi-agency task force (comprised of health, PHED, Education and Environment departments, with NGOs and development partners etc also included). The broader terms of reference of this task force shall include formulation of Provincial, District and Tehsil level plans for eradication of open defecation by an agreed to cutoff date, ensuring well-coordinated implementation and resourcing of the plan, development of required capacities, putting in place a robust planning, monitoring and evaluation mechanism, sanitation marketing and behavior change communication through mass media besides knowledge management and documentation. The Provincial task force will also ensure that necessary technical assistance is provided to district and Tehsil level agencies to formulate their own ODF plans. This task force will require mirroring at the District and Tehsil levels as well to ensure that lower level ODF plans are not only formulated but implemented in a coordinated manner at the union and village levels.

To provide the necessary boost to the implementation of ODF Province/ District/Tehsil plans the Provincial task force may consider reflecting the various level ODF targets as performance benchmarks in the ACRs of the respective staff of the different agencies involved. This action on its own will trigger the speedy development of an MIS and clear sight of annual targets to be achieved by senior managers and field implementers. It would also push managers to ensure necessary resources (human, logistic and financial) are available to help them achieve their respective targets.

Punjab is one of the most densely populated provinces of Pakistan with a population density of 358 against an average of 166 for Pakistan according to the 1998 census report. A typical village in the Punjab consists of several hundred closely spaced households, each housed within a walled compound, most of who discharge wastewater and wherever latrines exist, discharge directly into the street or open drains nearby. As a result, the streets are often inundated with foul smelling wastewater containing excreta¹¹. Punjab being the land of five rivers, has a water table which is often shallow especially in the most densely populated districts on both sides of the river Indus and its tributaries. Feedback from key

¹¹ The Lodhran Pilot Project Implementation Toolkit, WSP 2009

informants suggests that out of the 26000 villages of the Punjab approximately 18000 villages merit such a description. This implies that the prevalent sanitation technologies¹² will only partially address the problem. Innovative solutions such as household latrines connected to shallow sewers or communal septic tanks will have to be promoted. This will mean that the per capita cost of such technologies will be higher relative to current technologies and the ten-fold funding increase required will in fact escalate to 12 folds or even higher. However as mentioned earlier, prioritization of *human excreta disposal* over other aspects of sanitation and redirecting budget allocations from hardware oriented projects (*construction of drains and street pavements*) as currently pursued by PHED and TMAs to behavior change oriented approaches will, to some degrees, address the sub sector funding requirements.

A recent study, the Economics of Sanitation Initiative (ESI) estimates that the overall economic cost of poor sanitation in Pakistan stands at 344 billion PKR (US\$5.7 billion) per year (2,160 PKR per person per year) and is equivalent to 3.9 % of the nation's GDP.¹³ There is clearly a compelling case for redistribution of financial resources from curative to promotive healthcare interventions. With increased allocation of resources to LGAs, PHED and the health department it is anticipated that the large financial shortfall would be broadly covered internally with only a modest need for mobilization of external resources from development partners and banks.

¹² As per MICS 2011 prevalent rural sanitation technologies are: 4.5% Flush to pipe sewer; 46.3 % Flush to septic tank; % 11 flush to pit latrine; 0.8% VIP; 0.8 % Pit; 0.2 % compost.

¹³ <http://www.wsp.org/wsp/sites/wsp.org/files/publications/WSP-esi-pakistan.pdf>

10. Subsector: Urban Sanitation

Priority actions for Urban Sanitation

- Ensure that “Environmental laws and regulations are fully complied with, in regard to sewerage treatment ; this will entail clarity on roles and responsibilities for regulation; new institutional capacities as well as needed mandates and resources for effective regulation
- Revisit the policy, mandate and structure of the 5 WASAs and TMAs with a view to introduce needed autonomy and reforms including the introduction of performance based systems; authority for appropriate adjustment of tariffs; hiring and firing; and raising of finances to ensure effective service provision and cover annual costs; an ‘Institutional Reform plan’ for WASAs and TMAs should be developed and approved by the ‘provincial government’ in 2013.
- Starting with FY 2013, an annual tripling of the sub-sector budget allocations (capital/recurring expenditures) should be ensured;
- Balance sub-sector budget needs which should be ensured from the federal government and selected donors to ensure that the CAPEX gap identified by the SDA is fully covered and MDG targets are met
- Clear segregation of roles and responsibilities for ‘Policy’, ‘Regulation’ and ‘Service provision should be reflected in the ‘Institutional Reform plan’ for the sub-sector
- Systems for Sub-sector planning, Coordination and oversight should be ensured through i) required data bases/MIS and; ii) notification of subsector for along with TORs
- Advocacy with selected donors to plan, design and fund new sub-sector projects for Punjab. WSP-SA for example can play a key role with provision of TA and other support.

Urban Sanitation Coverage

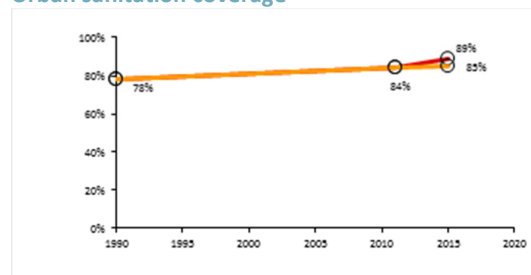
Punjab’s total population is 91 million¹⁴ of which the urban population is estimated at approximately 33 million (36.26 %)¹⁵. As of 2012 nearly 54 % of the urban population (18 million) reside in the 5 largest cities including Lahore, Faisalabad, Multan, Gujranwala and Rawalpindi. The remaining urban population is scattered in small and intermediate towns serviced by “Tehsil Municipal Administrations (TMAs).

While the Urban Water and Sanitation Authorities (WASA’s) service the large cities. Pakistan has experienced rapid urbanization trends and Punjab is

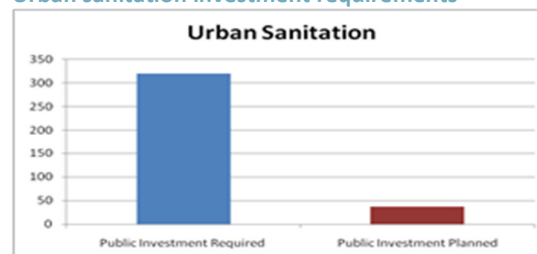
no exception. Available country data shows that the proportion of national urban population has steadily grown from 28 % in 1980 to 36.5 % in 2012¹⁶. The National Sanitation Policy of 2006 aims to meet the [Millennium Development Goal \(MDG\)](#) concerning sanitation by 2015 and universal access by 2025.¹⁹ The large public data source on disaggregated sanitation coverage by provinces is the Pakistan Integrated Household Survey (PIHS), 1991. However the JMP does not accept PIHS 1991 sanitation figures, hence JMPs 1991 figures for Pakistan have been assumed to be valid for Punjab as well.

Figure 17

Urban sanitation coverage



Urban sanitation investment requirements



¹⁴ Preliminary estimates of

¹⁵ Estimates of population for Punjab Cities and other Urban areas is gathered from multiple web sites and the ‘Urban Unit, Lahore, Pakistan.

¹⁶ JMP estimates, March 2012

Based on this the urban sanitation coverage of improved sources in 1990 was estimated at 78 %¹⁷. Estimates of sanitation coverage for 2011 are contained in the Punjab MICS 2011 which has yet to be officially approved. This shows a distribution of Flush to pipe sewer (57.3%); Flush to septic tank (32.5 %); Flush to pit latrine (1.8 %); Flush to VIP latrines (0.2 %); Flush to pit latrine (0.4 %); and compost at (0.1 %). Using a correction factor for the “flush to septic tank” and “flush to pit latrines” the updated Punjab coverage for “Sanitation” from safe sources works out to 84 %.

The 2010/11 estimates from the Pakistan Social and Living Standards Measurement Survey (PSLM) show a higher estimate with a different nomenclature of sanitation types including “flush toilets (97 %); Non-flush (1 %); and “No Toilets” (2%). Assuming “flush toilets” as improved sources only the coverage figures work to 97 %. However for purposes of the SDA the team has conservatively used the adjusted estimates drawn from MICS 2011.

Measured in relation to the coverage in 1990, the MDG Goals aimed at halving the share of people without sustainable access to an improved sanitation source by 2015. This essentially requires Punjab to achieve a target of 89 % by 2015. Using the Punjab MICS and projecting a linear trend, the 2015 coverage is estimated at 85 %. Thus MDG goals are not likely to be achieved.



CAPEX and OPEX

Based on the current gaps, technology distribution, associated costs and the MDG targets, an estimated USD 355 million annual investments will be needed to meet the sub-sector targets. Against this investment the provincial government currently shows a very modest commitment of USD 26 million; a relatively insignificant donor commitment of USD 11 million and a virtual lack of funding in the “Non-governmental sectors” (i.e USD 0.5 million). Thus a 14 fold increase in public sector funding commitment is needed to meet the urgent budgetary gap on the “Capital expenditure” front.

On the operational fronts virtually all of the Punjab “Urban Water and Sanitation Authorities” (WASA’s)

are faced with a grim fiscal situation. WASA Lahore has been running a multi-billion rupee annual deficit for the past many years¹⁸, followed by WASA Rawalpindi, Multan, Faisalabad and Gujranwala that also show deficits or a break even financial scenario each year. Incomes from sanitation tariffs and other sources have generally stagnated while recurring costs have grown due to rapid salary increases, electric bills and other costs. Although a break-down of W&S is currently unavailable for the WASAs the Lahore WASA data shows an exceptionally high 220 % increase in salary budgets and a similar 219 % increase in power bills since 2006. This translates into a 44 % annual increase in expenditure which the provincial government continues to subsidize on an annual basis.

Outside the large cities the urban population is spread over a large number of small and intermediate Punjab towns are serviced by “Tehsil Municipal Administrations” (TMAs) that are faced with a similar financial crunch. In contrast with the recurring budget provisions for “urban water supplies”, over the same 5-year period (i.e 2006-2011) the salary cost for “urban sanitation” has witnessed a relatively modest 40 % increase while non-salary costs have increased by about 50 %. This is largely attributable to an institutional anomaly whereby thousands of “Sanitation workers” have been practically retained as long-term “daily wagers” with no benefits or career growth with various

municipalities. Limited by poor tariff structures and with no mandates or capacities for generating other “revenue sources” virtually all of the Punjab TMAs are heavily reliant on annual provincial transfers that keep them afloat. In the absence of radical changes to the “investment” and “recurring budgetary” trends, the coverage and quality targets are not likely to be met or sustained.

Urban Sanitation Scorecard

The Federal Sanitation Policy (2006) calls for universal coverage target by 2025 which is also endorsed by the draft Punjab Sanitation Policy (2012) with distinct provisions for urban and rural

¹⁷ This includes improved facilities at HH levels at 72 % and 6 % additional coverage of shared facilities.

¹⁸ WASA Lahore shows a PKR 2 billion deficit in 2011/12, PKR 1.8 billion deficit in 2010/11 and PKR 1.55 billion deficit in 2009/10 ; WASA Rawalpindi shows a PKR 200 million deficit in 2010/11; other WASA’s also slightly lower or break even scenarios on annual basis.

sanitation.

The sub-sector has shown steady progress in terms of coverage and quality. The overall SDA assessment shows, however, that the sub-sector is in disarray and serious issues exist on many fronts. Among these the largest gaps exist on the “equity” front which is poorly rated. Policy and some procedures exist for “Local participation” however these are not operationalized ; thus neither WASAs, nor the TMAs have any structured system for local participation in planning and decision making for urban sanitation.

On the budgetary fronts, the MTDF for W&S shows a 45:55 allocation criteria for rural:urban development allocations, however no break up is available for Urban Sanitation. Discussions with the Punjab Planning Board suggest a 65:35 allocation criteria for Urban/Rural W&S allocations as a thumb rule. However no specific criteria are available or consistently applied.

WASA and/or TMA specific pro poor policies or plans for the 3 largest cities are currently unavailable. The stakeholder meetings do not show a specific focus. A provincial body for kachi abadis (urban slums) does exist and working. However it is not integrated with the overall planning and investment decisions of WASA, PHED and the TMAs. Further, many reside in slum areas which are not notified or covered by the formal remit of any agency.

The assessment of “Planning”, “Budgeting” and “Expansion” also shows marginally better ratings. On the planning fronts, no formal and consistent mechanism exists to coordinate sanitation sub-sector investments. Quarterly and Annual departmental reviews take place at the level of WASA's, LG&CD, PHED and the P&D. However there is no evidence of a structured W&S Institutional group for sector or sub-sector wide review; coordination of funding flows or joint reviews of progress across respective domains. A “Medium Term Development Framework (MTDF 2011) exists but is not operationalized. As it stands the plan is also heavily biased towards hardware and highly ‘projectized’ resulting in a low score. The MTDF also currently does not cover planned investments by the LG&CD or WASAs.

Multi-stakeholder reviews of sub-sector performance do not take place. Annual or quarterly reviews are typically held at the agency and ministerial level, but not by all of the key stakeholders including civil society, the private sector and citizen's forums. Sub-sector reviews are normally project and/or Annual Development plan (ADP) specific and do not cover the entire sub-sector.

Budget availability for the sub-sector is inadequate and reflected in the dismal 6 % change in coverage

over a 20 year period (1990-2010). In all urban areas, sewerage disposal and treatment remains a huge issue. The available data from WASAs and TMAs show that virtually 100 % of all urban sewerage is disposed of untreated into water bodies or into ground water (other than a small proportion of Faisalabad's sewage). Based on the coverage data in urban areas, the MDG targets for urban sanitation are not likely to be met. If the current coverage trends continue, urban sanitation coverage will touch 85 % in 2015 thus falling 4 % points short of the MDG targets.

The budget structure for WASA as well as PHED (i-e the MTDF 2011-14), shows sewerage and drainage combined and therefore poses a fundamental question for assessing and analyzing sub-sector budgets. For the purposes of the SDA the “household sanitation” and “street level drainage” is currently lumped and treated as “Sanitation”. The key reason for this is that WASAs as well as all TMAs currently manage the two under a common heading. All capital and recurring costs on the sub-sector are also difficult if not impossible to dis-segregate for Punjab and therefore treated as a lumped sector.

The annual capital/revenue budget data is available (i-e the MTDF 2011-14). In general all WASA's, PHED and LG&CD operations rely on heavy and continuing subsidies from the provincial government on which separate data is available. The WASA reports for 2011/12 suggest a PKR 2.7 billion annual subsidy is needed for running the 5 WASAs. Likewise the LG&CD own-source revenues are a fraction of annual development and establishment costs and heavily dependent on the provincial government for supporting the annual salary and non-salary needs of the sub-sector.

Virtually all WASAs are directly controlled by the Provincial government through the Department of Housing and Urban Development. WASAs have limited or no autonomy for policy making, hiring and firing; investments and dis-investments or taking any other measures to bring about any meaningful change. The review shows that no formal business plans exist and most investments are typically ad hoc and invariably tied to available funding from the public sector or the large multi-lateral and bi-lateral donors. WASAs are also not authorized to tap funds from the market and thus entirely dependent on the provincial resource allocations.

The institutional roles outlined in the provincial sanitation policy and the recently drafted sanitation strategy, are not fully operationalized. The regulator role is still unclear and unassigned. The Broad institutional roles are also outlined in the national sanitation policy. However these need to be updated in light of the post 18th amendment and anticipated

changes in the "local government framework". The separation of policy making, regulation and service provision roles is critical for sector reform and needs to be ensured.

Within the PHED and LG&CD establishments, capital and recurrent budgets are typically not segregated for "urban" or "rural" areas. Within the array of SDA indicators, the annual budget spending or "Expenditures" has received the highest rating, largely because annual recurring budgets and over 75 % of the capital budgets are utilized on an annual basis. Field reviews of the quarterly budget utilization reports show some surrender and re-appropriations on an annual basis. However this is not a very large percentage of the annual portfolio. The system of quarterly releases remains a major issue and is considered to be a serious barrier to sector efficiency. In general expenditure versus budget (or domestic flows) is regularly reported and closely watched on a quarterly basis. Donor programs also follow project/program specific work plans and reporting systems which are fairly rigorous.

The collection of fecal waste and its treatment remains an issue across all urban areas. While sanitation coverage has grown over the years, and collection efficiencies have improved, nearly 100 % of the sewage is disposed of without any treatment on nearby lands or into water bodies. Meanwhile huge political and management issues impact on cost recovery and large annual deficits are the norm in all urban entities. The sanitation related O&M costs are generally known. However while a meagre 50 % of the O&M costs for sewerage are recovered, there is no cost recovery for other areas of sanitation e.g. solid waste and drainage.

Mandatory tariff reviews are conducted however decisions on rate adjustments typically rest with the political leadership and are invariably deferred. Thus the gaps between the costs of service provision and "cost recoveries", has grown substantially. The national and provincial policy calls for "Private sector Participation" in service provision. However apart from a few pilots the policy is generally not implemented.

Within the large cities of Punjab 96 percent of households have installed flush latrines while the coverage of sewerage systems varies from 50-85%. Solid waste collection and disposal facilities are available to 66% population in the major cities as compared to 33% in other urban areas. Solid waste system lacks sanitary landfill sites and recycling of solid waste is highly limited.

Conclusions

Despite the large need, urban sanitation coverage

has improved at a snail's pace and will fall short of the MDG target of 89 % coverage by 2015. While access has steadily improved, safe disposal of "sewage" remains a huge challenge. Sewerage networks represent 57 % of the total followed by "flush to septic tank" assemblies estimated at 32 %. Virtually 100 % of the urban sewage from the 5 WASA areas (i.e the large cities) flowing through the sewerage networks is untreated and currently disposed of into rivers and perennial nullahs. Households sewage from septic tanks eventually finds its way into street level drains, adjoining lands and eventually into the ground water with huge environmental and health consequences for both urban and rural residents.

Several factors appear to have contributed to the state of affairs. The rapid urbanization has clearly not been matched by a commensurate capital and recurring budgetary injection; nor has urban Punjab ensured the necessary institutional and regulatory environment to respond to the growing challenge. The need to run "large Cities" along professional lines is reflected in government policy and the establishment of WASAs that were supposed to manage municipal service provision in the 5 large cities of Punjab. In theory WASA's were expected to run with considerable 'autonomy' make policies for "Urban W&S"; hire and fire staff; maintain high quality services, ensure cost recoveries, decide on service tariffs; raise finances and take other measures that are needed to ensure "customer" needs are met. However the review shows that WASA's practically operate as another "government agency" with little or no autonomy and serious policy, budgetary and institutional constraints.

Thus "municipal service provision" in the cities is essentially faced with an "Institutional challenge" that remains the biggest hurdle in service delivery and any future reform. As things stand, WASA's are currently geared to respond to the "government above" as opposed to the "customers" or the "urban residents" --- the bulk of whom have little or no choice but to tap services from the local WASA. The "service provision" to urban dwellers in smaller and intermediate towns is the responsibility of the "Tehsil Municipal Administrations" that are even weaker and thus a significant challenge to any meaningful improvement in service provision. In contrast with WASAs the TMAs also service "Rural areas" within each 'Tehsil' although "urban areas" receive priority over rural areas. The bulk of the TMA resources are largely consumed in supporting W&S services in the "urban constituencies". Another government agency called the "Public Health Engineering Department (PHED)" which primarily services the rural Punjab.

The Institutional challenge is further compounded by

the continuing legal and policy changes over the past 10 years that brought major structural changes in the “municipal entities” across the entire country including Punjab. Having experimented with the “Local Government Reforms” introduced in 2001, the sector is undergoing another change as a result of new political developments. While the dust has yet to settle, field reports and interviews with key informants suggests that the “Municipal Service sector” is likely to revert to systems in vogue prior to 2001.

Meanwhile WASAs and TMAs have no real mandate or incentives to change the status quo; nor do they have the required resources for a rapid transformation. Donor funding to the sector has also generally declined while the municipal service providers are currently not mandated to raise funds elsewhere. Therefore unless the government priorities are radically altered with a new focus and large additional investments MDG goals will prove

elusive; a realistic prospect for change essentially lies in mandating and reforming the “service providers”. This can be quickly done to enable WASAs and TMAs to take charge and meaningfully address the service gaps and the growing quality issues in W&S. Alongside this the government and potential donors will need to ensure significant additional resources for the sector to facilitate the transition.

Finally the sector is very poorly regulated with unclear roles and responsibilities. Service provision and regulation functions are currently inter-twined within the broad roles of WASAs and TMAs which is in clear contrast with stated public policy and best practices. Based on the SDA review, new and independent regulatory capacities for the W&S sector is emerging to be a very high priority need to ensure that quality, health and environmental considerations receive sustained and significant levels of attention.