

Sustainable Drinking Water Services at Scale: Everyone Forever



IRC ROUND TABLE
NEW DELHI, MARCH 13, 2013

Critical Gaps in Operationalising NRDWP Guidelines and Policy Initiatives

Selected Areas for Potential Engagement

- Sustainability Gap
- Drinking Water Security Gap
- Post-construction Support Gap
- Community Management Gap
- Institutional Change Management Gap
- Life-cycle Cost Gaps
- Monitoring and Learning Gap
- Communications and Research Gap



The key driver for WASH sector infrastructure in India is national public investment. The country has sound policies in place, high quality technical expertise and large impact programmes. Though India is on the verge of 'full coverage,' there continues to be high levels of unsustainability and slippage. A fundamental challenge is in how to achieve a balance between efforts to increase coverage, while sustaining services.

IRC International Water and Sanitation Centre, an international knowledge broker and change agent in the WASH sector, has over four decades of global learning experience in developing, experimenting with, and scaling up innovative and sustainable solutions for WASH service delivery. IRC and its wide network of partners has the capacity to offer focused international technical expertise, communicate examples of international good practice, and lend support in documenting and disseminating trends and innovative solutions for a sustainable WASH sector in India.

Selected Areas for Potential Engagement

Sustainability Gap

India has achieved 91% normative coverage for its rural population, with a cumulative sector investment of US\$ 35 billion, supplemented by an annual average investment of US\$ 4 billion in recent years. There exist good policies supported by large impact programmes. However, sustainability of investments in providing the designed service level has become a serious challenge over the years. On an average 30-35% of all schemes are dysfunctional, and another 30% function at sub-optimal levels leading to high rates of slippage and declining service levels. According to the 2011 census, hand pumps continue to be the single largest source of water in rural areas (44%) despite their unreliability; only 32% of all households use treated piped water (as compared to 75% in Brazil and China); and an estimated 18% continue to fetch drinking water from a source with a distance of 500 metres (rural areas) and 100 metres (urban areas). Strategically India will need to shift its focus from an engineering model towards a sustainable service delivery model in order to leverage the benefits of high investment.

Drinking Water Security Gap

Source sustainability is a major cause of slippage. The ground water resource scenario is bleak showing severe physical and economic scarcity, compounded by informal and unregulated competing use, often referred to as 'ground water anarchy'. Water stress also adds to the further deterioration of water quality. Out of a total of 1.66 million habitations in India, about 0.12 million habitations are quality affected and 0.44 million have either witnessed slippage, or have only partial drinking water coverage. The Government of India (GoI) is currently piloting drinking water security at village level in ten identified districts in India. However the approaches are partial; they require deeper thinking and an analysis of consumptive and non-consumptive water use. Without adequate safeguards, the promotion of source protection interventions often increases agricultural water use at the expense of water for other uses (FAO, 2012).

Post-construction Support Gap

In India, once the rural water supply schemes are completed, they are handed over to the Panchayat Raji Institutions (PRIs)/ communities; who often are not adequately capacitated to manage such schemes. Compounded by gaps in post-construction support, community-based management has shown a high degree of unsustainability. At sub-national level, WASH service delivery is regarded as the constitutional mandate of the PRIs who themselves, are limited in their capacity to perform technical, financial and managerial tasks. The accountability mechanisms put in place for the Government's Public Health Engineering Departments (PHEDs) and Water Boards are still vertical to State Governments, as opposed to being horizontal to and more aligned with the PRIs. Institutional harmonisation and the strengthening of local capacity (at grassroots level) are both critical in facilitating sustainable services delivery.

Community Management Gap

India's (draft) Twelfth Five Year Plan (2012-17) aims for the enhancement of rural service levels from 40 to 55 lpcd, and a shift to piped water supply for house connections in rural areas reaching to 80% by 2022. To date, rural communities continue to struggle in the management of relatively simpler local source-based schemes. The introduction of a new challenge—i.e., managing far more complex piped water supplies—may pose more threats than opportunities in ensuring sustainable service delivery in the country. Community centric institutional delivery models, which dominate the rural sector, are already showing symptoms of unsustainability on account of developing complexities in management that require professionalism and improved capacity; technical, financial and managerial.



Institutional Change Management Gap

Water institutions established to deliver engineering solutions are seldom effective in triggering complementary change management processes. This is one of the leading factors behind the weak operationalisation of sound policies. Institutions are critical instruments behind the efficient and effective delivery of services. Lagging institutional change management processes, slow institutionalisation of best practices within the sector, and weak capacities are serious bottlenecks in achieving sustainable services at scale.

Life-cycle Cost Gaps

Implementing a life-cycle costs approach in planning and budgeting for WASH services offers potential benefits in making WASH services less prone to slippage. The application of a life-cycle costs approach improves value for money and facilitates cost-efficient operations. The comprehensive nature of the components of cost and service levels reveals the importance of investments at various stages of the life cycle of a system in sustaining services. As such, sustainable services need to be understood within a broader context of access, quantity, quality, reliability and security.

Monitoring and Learning Gap

There are serious gaps in monitoring WASH based on real time, as well as gathering reliable data as evidenced by inconsistencies found in the official NRDWP and Census data sets. As monitoring mechanisms are weak there is a danger of providing misleading results. Sustainable services require for comprehensive monitoring systems to be set in place – these involving quantitative and qualitative tools, which are tested for measuring functionality, service levels, results and outcomes.

Communications and Research Gap

IRC has a globally recognised e-learning centre, with the well-known IRC Source Weekly features providing sector-specific information, which could be adapted in the Indian context. Also, IRC's conceptual work and practical application of the Learning Alliances¹ (e.g., in Ghana, Uganda and the Middle East) could be used to set up and facilitate multi-stakeholder learning alliance platforms at state and national levels.

Reference and Select Readings

Central Statistical Organization, Ministry of Statistics and Programme Implementation, Government of India, 2011. Millennium development goals, India country report 2011. [pdf] New Delhi: Gol. Available at <http://www.in.undp.org/content/dam/india/docs/mdg_india_2011.pdf> [Accessed 10 January 2013].

FAO – Food and Agriculture Organization of the United Nations, 2012. Coping with water scarcity: an action framework for agriculture and food security. (FAO Water Reports 38) [pdf] Rome: FAO. Available at <<http://www.fao.org/docrep/016/i3015e/i3015e.pdf>> [Accessed 12 February 2013].

Gol – Government of India, 2010. Rajiv Gandhi National drinking water mission: national rural drinking water programme, movement towards ensuring people's drinking water security in rural India. [pdf] New Delhi: Department of Drinking Water Supply, Ministry of Rural Development, Gol. Available at: <<http://rural.nic.in/sites/downloads/pura/National%20Rural%20Drinking%20Water%20Programme.pdf>> [Accessed 5 January 2013].

Gol – Government of India, 2011. 2011 Census data: preliminary results. [website] Ministry of Home Affairs, Gol Available at: <<http://censusindia.gov.in>> [Accessed 10 February 2013].

Gol – Government of India, 2012. Draft national water policy (2012) as recommended by national board in its 14th meeting held on 7th June, 2012. [pdf] New Delhi: Ministry of Water Resources, Gol. Available at: <http://mowr.gov.in/writereaddata/linkimages/DraftNWP2012_English9353289094.pdf> [Accessed 5 January 2013].

¹ Learning alliances are structures (learning platforms) that bring together stakeholders from different institutions and different institutional levels to address problems, face challenges and find innovative solutions. They are structures, usually facilitated, that provide time and space for researchers, practitioners and other professionals to share experiences and expertise and can help to bridge the gap between community based organisations, organisations at district or provincial level with responsibility for service provision and support, and national policy makers.



Gol – Government of India, no date. Strategic Plan 2011-2022, Department of drinking water and sanitation – rural drinking water: ensuring drinking water security in rural India. [pdf] New Delhi: Department of Drinking Water and Sanitation, Ministry of Rural Development, Gol. Available at: <http://www.mdws.gov.in/sites/upload_files/ddws/files/pdf/StrategicPlan_2011_22_Water.pdf> [Accessed 13 February 2013].

India Country Team, Energy and Infrastructure Department, South Asia Region World Bank, 2006. India water supply and sanitation: bridging the gap between infrastructure and service. [pdf] New Delhi: World Bank. Available at: <http://siteresources.worldbank.org/INDIAEXTN/Resources/Reports-Publications/366387-1140691677823/WorldBank_BG_MainReport20Feb_Print.pdf> [Accessed 15 January 2013].

Ratna Reddy, V. and Jaya Kumar, N., 2011. Financing the WASH Sector in India: cost of provision and budget allocations. (WASHCost-CESS Working Paper 12) [pdf] Andhra Pradesh: WASHCost India and CESS. Available at: <<http://www.cess.ac.in/cesshome/wp/WP-12-Financing%20the%20WASH%20Sector%20in%20India.pdf>> [Accessed 10 January 2013].

Smits, S., Verhoeven, J., Moriarty, P., Fonseca, C. and Lockwood, H., 2011. Arrangements and cost of providing support to rural water service providers. (WASHCost Working Paper 5) [pdf] The Hague: IRC International Water and Sanitation Centre, WASHCost and Triple-S. Available at: <<http://www.irc.nl/page/68105>> [Accessed 15 January 2013].

Sustainable Development Unit, South Asia Region, World Bank, 2006. Review of effectiveness of rural water supply schemes in India. [pdf] New Delhi: World Bank. Available at: <<http://www.indiaenvironmentportal.org.in/files/rws-india.pdf>> [Accessed 10 January 2013].

IRC International Water and Sanitation Centre

P.O. Box 82327, 2508 EH The Hague, The Netherlands | +31(0)70 304 4000 | general@irc.nl | www.irc.nl

