

See Hindi Version of the [Query](#)
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Environment



Water Community



Decentralization Community

Solution Exchange for the Water Community Solution Exchange for the Decentralization Community Consolidated Reply

Query: Urban Local Body Charges for WATSAN Services - Experiences; Advice

Compiled by [Nitya Jacob](#) and [Joy Elamon](#), Resource Persons and [Sunetra Lala](#) and [Tina Mathur](#), Research Associates

Issue Date: 5 May 2009

From [Ramakrishna Nallathiga](#), Centre for Good Governance, Hyderabad
Posted 31 March 2009

The Centre for Good Governance is a public non-profit organization set up by the Government of Andhra Pradesh under the DfID-funded programme of service delivery improvement. Currently, we are working on a project aimed at providing guidelines for the levy of user charges in four major civic services, water supply, sewerage/sanitation, and solid waste management.

Urban Local Bodies (ULBs) already levy a charge on the provision of certain services, particularly water supply, albeit at a very low rate. The remaining two services - sewerage/sanitation and solid waste management - face more difficulties as no charges are currently levied. Municipalities find it difficult to provide these services unless voluntary, local organizations take up the job of collection and transportation (especially in the case of solid waste management).

The water charges levied by public utilities are often inadequate to cover the costs of operation and maintenance. This raises the question of the long term sustainability of the service on the one hand. On the other, the pricing of water is contested from several perspectives and some even say it is not possible to price water due to the political compulsions of decision-making in municipal councils.

In this regard I would like to request members provide information on the following:

- What are the guiding principles and tools for ULBs to use while working out user charges?
- How can access to the poor be addressed within a cost-recovery framework for these services?
- Please provide experiences of how these services have been provided more cost-effectively and/or with the help of community organizations
- How can the financial and overall sustainability of these services be improved? Please give examples where this has been achieved.

Your responses will help us in formulating the guidelines for the levy of user charges in civic services.

Responses were received, with thanks, from

1. **Abhijit Datta**, Independent Consultant, Kolkata ([Response 1](#)) ([Response 2](#)) ([Response 3](#))
2. **David Foster**, Centre for Energy, Environment, Urban Governance and Infrastructure, Administrative Staff College of India, Hyderabad ([Response 1](#)) ([Response 2](#))
3. **Jyoti Gupta**, IBPHM, Kanpur
4. **Aparna Pandey**, The Alpha Foundation (Trust of ICFAI), Dehradun
5. **Avinash Zutshi**, Feedback Ventures Pvt. Ltd., Gurgaon ([Response 1](#)) ([Response 2](#))
6. **Jasveen Jairath**, Water Sector Professional, Hyderabad
7. **Khatibullah Sheikh**, Society for Participatory Research in Asia (PRIA), New Delhi
8. **Ramakrishna Nallathiga**, Centre For Good Governance, Hyderabad ([Response 1](#)) ([Response 2](#)) ([Response 3](#))
9. **Harshad Gandhi**, Excel Industries Ltd, Mumbai
10. **Rajarshi Rakesh Sahai**, University College of London, United Kingdom
11. **Barenyo Chowdhury**, iKOnet, Kolkata
12. **Ramesh Jalan**, United Nations Industrial Development Organization (UNIDO) South Asia Regional Office, New Delhi
13. **Pradeep Dadlani**, Sycom Projects Consultants Pvt. Ltd, New Delhi
14. **U.B. Singh**, Regional Centre for Urban and Environmental Studies, University of Lucknow, Lucknow
15. **Manoj Kumar Teotia**, Centre for Research in Rural and Industrial Development (CRRID), Chandigarh ([Response 1](#)) ([Response 2](#))

Further contributions are welcome!

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Summary of Responses

Urban Local Bodies (ULBs) charge for water service delivery but these seldom cover the capital costs, or operation and maintenance expenses. The query sought some pointers for ULBs to work out these charges, while maintaining services for the poor within a cost-recovery framework.

Members' inputs indicated while different users (such as those with metered connections, the poor living in slums without connections) are willing to pay, water service providers are usually reluctant to work out and levy charges that will enable them to cover their running and capital costs.

Members noted that **the guiding principle for ULBs while working out user charges** is to ensure cost recovery, but not develop a cost-plus model. Here, budget planning is important because ULBs cannot show profits but have to provide the services. For instance, in Bangalore, an analysis of the municipality's budget planning exposed certain inadequacies and low public participation.

The cost recovery approach could look at the cost of providing a new connection as well as operation and maintenance. The lowest income groups need not pay more than 15% of its income for water service delivery; even though members felt the rich pay a much smaller percentage of their income for this service than the poor. The poor have a higher willingness to pay because of the higher benefits from an assured water supply – less time lost on water collection, better health and eventually, and a better standard of living.

To **work out costs for all ULBs**, members suggested setting up a central tariff regulatory body. This would help overcome the political misconceptions surrounding water tariffs. Some ULBs have been very effective in covering their utility costs. [Chandigarh](#), for example, charges differential rates for differential consumption for recovering water supply costs. However, others like Raipur levy a flat rate that does not cover even running costs and the ULBs have been running into losses, affecting their development activities.

Members also pointed that Community-based organisations (CBOs) and ULBs can jointly work out a system for levying user charges in slums and other places where the poor reside. This will ensure a balance between water service delivery and collection of charges. While some members suggested installing piped water supply systems in these areas as the supply and consequent collection of charges is much better than with stand-post based systems, other suggested stand-posts were the only effective means to ensure the poor got an assured water supply. They did not, however, indicate how user fees could be collected from communities dependent on stand-post systems.

Public-private partnerships (PPPs) are an alternative method of collecting user fees, in the context of moving from an infrastructure to a service delivery framework. Members highlighted that there are different PPP models: the private party performs an institutional/municipal function and delivers against pre-agreed performance milestones; the private party acquires the use of state and municipal property for commercial purposes and; the private party operates social services against predetermined operational costs.

Giving an example of **how to provide services more cost-effectively**, members noted the Vijayawada municipality has reduced the cost of new connection to Rs. 1200 from Rs. 5000. People who want new connections can pay this in 12 monthly installments. The Bangalore municipal corporation also provides metered connections to many of the slums inhabited by families living below the poverty line. Another set of suggestions included using funds from the Jawaharlal Nehru National Urban Renewal Mission or similar schemes to provide water and sewerage connections to poor families. A CBO could work out a mechanism and collect the charges to cover operation and maintenance costs, and pay the municipality. If the benefit is enjoyed by an individual user, then it is easier to work out and levy user charges; in such cases, a CBO or even private provider can collect the charges.

In Thailand, communities share facilities such as power, water and sanitation provided to a single household as part of an internal arrangement; they divide the costs of service delivery, operation, and maintenance.

Members provided several examples where NGOs and CBOs have taken up the task of collecting municipal waste. These are applicable to water service delivery as well. In Shimla, [Himachal Pradesh](#) an NGO developed a door-to-door collection system for solid waste. In Gurgaon, [Haryana](#) a private concessionaire is paid tipping charges to cover costs of transporting solid waste from households to a landfill site. In a town in [Uttarakhand](#), neighbourhood sanitation committees were set up in 2004 and now collect 50% of the total waste disposal charges; the municipality covers the other half.

Finally, **to improve the financial and overall sustainability**, members suggested plugging the leakages in the urban water supply systems. Nearly half of all the water supplied in an average ULB water supply system is lost to leakages. In addition, users spend a lot on electricity to pump and store water at the household level. This unaccounted water is a big burden and a major source of revenue loss; members felt all ULBs have to fix this on priority. This would reduce the cost of service delivery, as well as increase the quantity of water supply. It would also help ULBs cover the poorer sections with better water supply.

Comparative Experiences

Chandigarh

Better Services Through Differential User Charges and Operation and Maintenance Recovery (from *Manoj Kumar Teotia, Centre for Research in Rural and Industrial Development (CRRID), Chandigarh; [response 1](#)*)

Chandigarh has emerged as a model city where access of WATSAN services to the poor is concerned. Better services have been the result of cost recovery by the Chandigarh Municipal Corporation. The Neighborhood Committee system has ensured participatory service delivery while cross subsidization has ensured higher operation and maintenance (O&M) recovery and in turn financial and overall sustainability of these services. Read [More](#)

From [Pradeep Dadlani](#), *Sycom Projects Consultants Pvt. Ltd, New Delhi*

Haryana

Door-to-door Collection and Transportation of Waste Ensured by the Public Private Partnerships (PPP) Model

In many towns of Haryana, the Haryana Urban Development Authority charges a development fees for sanitation and solid waste disposal. Door-to-door collection and transportation is done in the PPP model. ULBs are not encouraged to levy door-to-door collection charges. Instead the concessionaire does all the management and is paid a tipping fee per tonne of waste delivered at the tipping plant which is all inclusive. This system has proved to be quite effective.

Himachal Pradesh

Public Private Partnerships (PPP) for Solid Waste Disposal Works Well

In Shimla a PPP model was developed for door-to-door collection of waste in 6 out of 24 Wards in the city. A Bill to this effect was passed by the Shimla Municipal Corporation and legislation by the Himachal Pradesh Assembly. The system worked quite effectively as a penalty provision was also included in the regulation and used for ensuring compliance.

Uttarakhand

From [Aparna Pandey](#), *The Alpha Foundation, Dehradoon*

Urban Local Body Support Gets Better Collections

In a hilly town a voluntary organization supported the Municipal Council to constitute Mohalla Swachhata Samities. Neighborhood Sanitation Committees were formed in both developed colonies and slums. The partnership of the community and ULB ensured the collection of user charges in both areas. As a result, the community and the ULB each bore 50% of the expenses as part of their contribution.

Political Pressure Impacts WATSAN Services

In a large city in Uttarakhand, a Village Development Officer requested a Ward member of a slum to adopt the practice of Neighborhood Sanitation Committees to keep the surroundings clean. The Ward member refused the request to ensure that levy of charges would not impact his election candidature. The community, that was willing to pay for better services, had to do without due to political exigencies taking centre stage.

Related Resources

Recommended Documentation

Meeting the Financing Challenge for Water Supply and Sanitation (from [Abhijit Datta](#), Kolkata; [response 1](#))

Summary Report; Meera Mehta; The World Bank and Water and Sanitation Program-Africa; Nairobi, Kenya; November 2004;

Available at

<http://www->

wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2005/07/22/000011823_20050722181033/Rendered/PDF/330650PAPER0af1o0303480main0report1.pdf (PDF; Size: 484 KB)

Provides a framework for reviewing financing mechanisms for water supply and sanitation, including guidelines for user charges

On the Hidden Cost of "Free" Water (from [David Foster](#), Administrative Staff College of India, Hyderabad)

Blog Comment; by David Foster; Administrative Staff College of India, Hyderabad; India Water Portal; Bangalore;

Available at <http://www.indiawaterportal.org/blog/2008/02/09/on-the-hidden-cost-of-free-water/>

Discusses impacts of lack of household water connections on the poor, demonstrating how the poor pay a hidden cost by waiting for free water at the stand posts

Innovative Municipal Management for Mobilization of Financial Resources and Upgradation of Environmental Infrastructure (from [Manoj Kumar Teotia](#), Centre for Research in Rural and Industrial Development (CRRID), Chandigarh; [response 2](#))

Case Study Report; by J.P. Gupta and Manoj Kumar Teotia; Centre for Research in Rural and Industrial Development; Chandigarh; 2004;

Available at <http://www.solutionexchange-un.net.in/environment/cr/res-31030901.doc> (DOC; Size: 388 KB)

Describes the urban development initiatives in Chandigarh, including resource mobilization through rationalization of water tariffs and augmentation of water supply

Initiatives for Solid Waste Treatment (from [Harshad Gandhi](#), Excel Industries Ltd., Mumbai)

Note; by Harshad Gandhi; Excel Industries Ltd.; Mumbai;

Available at <http://www.solutionexchange-un.net.in/environment/cr/res-31030902.doc> (DOC; Size: 400 KB)

Describes the initiatives undertaken by Excel Industries in solid waste treatment and processing, which can be adopted to improve sanitation services by ULBs

From [Tina Mathur](#), Research Associate

Water and Urban Poor

Paper; by Lynn Bouselly, Shreekanth Gupta and Debjani Ghosh; National Institute of Urban Affairs; New Delhi; December 2006;

Available at

http://www.niua.org/Publications/working_papers/water%20and%20urban%20poor_lynn.pdf

(PDF; Size: 177.52 KB)

Examines why water services in India for the poor is found lacking, including user charges issues; and suggests measures that can be undertaken to improve the situation

Pro-poor Water and Wastewater Management in Small Towns - Water Supply Management in Colombo, Sri Lanka

Case Study; by K. A. Jayaratne, Lal Premanath and Rupa Manel; United Nations Economic and Social Commission for Asia and the Pacific; January 2007;

Available at

http://www.unescap.org/pdd/prs/ProjectActivities/Ongoing/Water/Colombo/Colombo_MR.pdf

(PDF; Size: 182.87 KB)

Provides an example of drinking water distribution through a public, private and civil society partnership where water and sanitation is provided at low charges

User Charges-ULB Level Reform

Guidelines; Jawaharlal Nehru National Urban Renewal Mission (JnNURM); Development; Government of India; New Delhi;

Available at

http://www.indiaurbanportal.in/JNNURM/mandatory_reforms/Local%20Level%20Reforms/usercharges.pdf (PDF; Size: 54.84 KB)

Describes the modalities and objectives of establishment of user charges by ULBs for urban services, including water supply under the reforms suggested by the JnNURM

From [Sunetra Lala](#), Research Associate

India - Water Resources Management Sector Review : Rural Water Supply and Sanitation Report

Report; by World Bank; January 1998;

Available at

http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/1999/06/03/000009265_3980901105844/Rendered/PDF/multi_page.pdf (PDF; Size: 8.33 MB)

Addresses the need to devolve decision-making powers relating to water projects to the Panchayat level that will have the incentive and the opportunity to initiate prompt action

Global Water Crisis: Partnerships For the Future

Article; by Vibhu Nayar and V. Suresh; The Hindu; November 2008;

Available at

<http://www.thehindu.com/thehindu/mag/2008/11/02/stories/2008110250010100.htm>

Discusses how Public Public Partnerships (PUPs), for water service delivery have achieved successes by forging dynamic relationships between ULBs, panchayats and communities

Needed, A Paradigm Shift

Article; by Vibhu Nayar and V. Suresh; The Hindu; October 2008;

Available at

<http://www.thehindu.com/thehindu/mag/2008/10/26/stories/2008102650130400.htm>

Discusses how only new initiatives between state institutions, such as ULBs, panchayats and the citizen, based on transparency, can ensure fair access to water for everyone

Recommended Organizations and Programmes

Jawaharlal Nehru National Urban Renewal Mission (from [Khatibullah Sheikh](#), Society for Participatory Research in Asia, New Delhi)

Ministry of Urban Development, Government of India, Nirman Bhawan, Maulana Azad Road, New Delhi 110011; Tel: 91-11- 23061287; Fax 91-11-3793672; www.jnnurm.nic.in/

Flagship programme for urban development, includes reforms in infrastructure and service delivery, including water; and proposes cost recovery for urban services by ULBs

National Institute of Urban Affairs, New Delhi (from [Abhijit Datta](#), Kolkata; [response 1](#))

Core 4B, India Habitat Centre, Lodhi Road New Delhi 110003; Tel: 91-11-24643284; Fax: 91-11-24617513; urbanindia@niua.org; <http://niua.org>

Works towards providing policy prescriptions, including those on water service delivery, for better urban governance and improving the quality of life of urban residents

From [Ramakrishna Nallathiga](#), Centre for Good Governance, Hyderabad; [response 2](#)

Janaagraha, Bangalore

4th Floor, UNI Building, Thimmiah Road, Vasanth Nagar, Bangalore 560052; Tel: 91-80-41277102; Fax: 91-80-41277104; info@janaagraha.org; <http://www.janaagraha.org>

Institution for promoting citizenship and democracy, which carried out the PROOF Campaign for water budget analysis of ULBs

Public Records of Operations and Finance (PROOF) Campaign, Bangalore

Janaagraha, 4th Floor, UNI Building, Thimmiah Road, Vasanth Nagar, Bangalore 560052; Tel: 91-80-41277102; Fax: 91-80-41277104; info@janaagraha.org;

<http://janaagraha.org/taxonomy/term/123>

A public campaign facilitated by Janaagraha in Bangalore for analysing performance data, including the water budget of the Bangalore Municipal Corporation

Centre for Budget and Policy Studies, Bangalore

Maithri Bhavan 1st Floor, No 4, M.N. Krishna Rao Road, Basavanagudi, Bangalore 560004; Tel: 91-80-65907402; Fax: 91-80-26560734; office@cbpsindia.org; <http://www.cbpsindia.org/node/3>

Works for local development through research and analysis using budgets as a tool, for enhancing capacity and accountability of ULBs for improving WATSAN service delivery

From [Sunetra Lala](#), Research Associate

Department of Drinking Water Supply, New Delhi

9th Floor, Paryavarn Bhawan, CGO Complex, Lodhi Road, New Delhi 110003; Tel: 91-11-24361043; Fax: 91-11-24364113 jstm@water.nic.in; <http://ddws.nic.in/arwsp.htm>

Initiated several drinking water supply and sanitation programmes across India to assist the States and Union Territories to accelerate the pace of WATSAN services

Swajaldhara, New Delhi

9th Floor, Paryavarn Bhawan, CGO Complex, Lodhi Road, New Delhi 110003; Tel: 91-11-24361043; Fax: 91-11-24364113 jstm@water.nic.in; <http://ddws.nic.in/swajaldhara.htm>

Programme focuses on decentralised implementation of drinking water supply, involving the participation of ULBs, panchayats and communities

Recommended Portals and Information Bases

National Institute of Urban Affairs, New Delhi (from Abhijit Datta, Kolkata; [response 1](#))

www.niua.org; Chetan Vaidya; Director; Tel: 91-11-24643284; urbanindia@niua.org

Features success stories on water supply, sanitation and solid waste management service delivery by ULBs, including their financial and overall sustainability

Related Consolidated Replies

Increasing Citizens' Participation in Urban Affairs, from K. K. Pandey, Human Settlements and Management Institute, New Delhi (Comparative Experiences). Decentralization Community, Solution Exchange India,

Issued 1 December 2005. Available at <http://www.solutionexchange-un.net.in/decn/cr/cr-se-decn-28110501.pdf> (PDF, Size: 124 KB)

Seeks examples of innovative efforts (formal or informal) for involving citizens in urban affairs.

Urban Development through Neighborhood Committees, from D. Rayanna, Andhra Pradesh School Health Association, Secunderabad (Experiences). Decentralization Community, Solution Exchange India,

Issued 6 March 2006. Available at <http://www.solutionexchange-un.net.in/decn/cr/cr-se-decn-04030601.pdf> (PDF, Size: 157 KB)

Successes obtained and constraints faced by Neighborhood Committees in development activities in municipal areas, including strengths and weaknesses of various models.

Public Private Partnership in Delivery of Urban Services, from A.N.P Sinha, Planning Commission, New Delhi (Experience, Examples). Decentralization Community and Water Community, Solution Exchange India,

Issued 8 June 2006. Available at <http://www.solutionexchange-un.net.in/decn/cr/cr-se-decn-wes-08060601.pdf> (PDF, Size: 194 KB)

Addresses various aspects of service delivery in urban areas, highlighting PPP models and the underlying features of these partnership arrangements.

Institutions for Service Delivery in Urban Local Bodies from Barenjo Chowdhury, Indic Knowledge Operations Network, Kolkata (Experiences, Examples). Decentralization Community, Solution Exchange India,

Issued 9 January 2007. Available at <http://www.solutionexchange-un.net.in/decn/cr/cr-se-decn-09010801.pdf> (PDF, Size: 88 KB)

Seeks examples and experiences from the members on the interface and interactions between the numerous basic service delivery institutions in different types of urban local bodies

Responses in Full

[Abhijit Datta](#), Independent Consultant, Kolkata (response 1)

My response to the queries is as follows:

1. What are the guiding principles and tools for ULBs to use while working out user charges?

This has been extensively discussed by UNDP and the Water and Sanitation Program. For details please refer to the document titled, Meeting the Financing Challenge for Water Supply and Sanitation, by Meera Mehta, Water and Sanitation Program, World Bank, 2003.

2. How can access to the poor be addressed within a cost-recovery framework for these services (e.g. water supply, sewerage/sanitation, solid waste management)?

The only way to serve poor settlements (i.e. slums) with potable water supply is to construct adequate number of water stand posts (WHO norm - 1 for every family; Indian practice - 1 for every 120-150 families). This has to come from the municipal revenues because cross-subsidies can not meet the requirement. Covering poor households outside the slums is a difficult proposition under Indian conditions; only South Africa has been able to do it with major funding from the government. However, piped water supply has to be fully paid for on the basis of approved rates by an independent regulator. UNDP studies have shown that there is a willingness to pay, but an unwillingness to charge for it by local and state authorities.

In theory sewerage cost recovery is possible by imposing a surcharge on piped water supply; this has not been tried in India. Collection of solid wastes has the prospect of cost recovery if community organizations undertake the task; this has been demonstrated in several cities in India. Transportation of solid wastes is a dead loss, but its disposal could yield revenue by composting in smaller towns and cities and by sanitary landfills in larger cities, provided there is adequate land available for this purpose.

3. Please provide experiences of how these services have been provided more cost-effectively and/or with the help of community organizations

Please refer to the document by Meera Mehta as discussed above for such experiences.

4. How can the financial and overall sustainability of these services be improved? Please give examples where this has been achieved.

This would require a detailed study into each of these services and their components. Some success stories are available with the National Institute of Urban Affairs, New Delhi (please visit www.niua.org.)

David Foster, Centre for Energy, Environment, Urban Governance and Infrastructure, Administrative Staff College of India, Hyderabad (response 1)

My response to the queries is as follows:

1. What are the guiding principles and tools for ULBs to use while working out user charges?

The most important principle is to fully understand the costs, subsidies and impacts being imposed. In most Indian cities the monthly water charges are heavily subsidized in the name of protecting the poor while the poor are rarely even connected to the water lines. At the same time, connection costs are often extremely high (Rs. 5,000 to 10,000 per connection) thus creating a major barrier to serving the poor while providing no incentive for conservation. Furthermore, many policy makers fail to understand the real costs to the consumers or to the city of providing free public stand posts. Not only does this provide no revenue to the city but check out the following website regarding the "Cost of Free Water": <http://www.indiawaterportal.org/blog/2008/02/09/on-the-hidden-cost-of-free-water/>. It turns out that in most cases the real cost of water for the poor is far higher than for the rich.

2. How can access to the poor be addressed within a cost-recovery framework for these services (e.g. water supply, sewerage/sanitation, solid waste management)?

In most cities it will be far cheaper for both the ULB and the poor to provide water via a household connection than via public standposts or water tankers. Not only does this greatly reduce the real cost of water for the poor (when the opportunity cost of the time involved is considered) but it also provides some revenue to the ULB.

3. Please provide experiences of how these services have been provided more cost-effectively and/or with the help of community organizations

Vijayawada has successfully reduced the connection cost from around Rs. 5,000 down to Rs. 1200 (which can be paid in 12 monthly payments). Even though the BPL consumers who receive household connections will then have to pay monthly charges for their water, in almost every case they were quite happy to give up their "free" water from public stand posts. Bangalore now provides metered connections in many of the slums for BPL families. Navi Mumbai provides metered 24/7 connections in slums.

4. How can the financial and overall sustainability of these services be improved? Please give examples where this has been achieved.

The most important steps to be taken to improve financial sustainability while maintaining a pro poor policy are:

a) Reducing leakage rates. Most cities in India currently waste 50% or more of the water and 50% or more of the energy used in pumping that water. Reducing leakage rates improves financial sustainability and makes it possible to provide more water for the poor.

b) Improving billing and collection rates. Many cities still fail to collect from 20% or more of their consumers and often collection rates from APL families is often actually worse than from BPL families.

c) Increasing household connections not only improves service but also results in reduced theft and leakage.

d) Installing working meters and establishing appropriate tariffs is also an important step in maintaining sustainability. Incremental block rate (Telescoping tariffs) can be established to protect the small volume consumer while still providing incentives to discourage excessive consumption.

Jyoti Gupta, IBPHM, Kanpur

Sorry for not being able to answer your questions and instead digressing the focus – but I feel that attempts of before putting down guidelines for costing of a system we need answers for the following questions:

- Why were the services provided for free in the first place?
- Is the present government funding inadequate for running the services?
- If yes, then what part of it falls short?
- If no, then will it be inadequate in the future, why and by how much?

Then from the present situation (as described in your mail) following questions need answers:

- Why user charge was levied earlier on water supply and not on waste management? (despite the fact that water has a political backing for providing it free of cost)
- What was the basis for this decision and how was user fee calculated previously?

Ramakrishna Nallathiga mentioned that the remaining two services - sewerage/sanitation and solid waste management - face more difficulties as no charges are currently levied. Is this difficulty due to lack of user charge? Will the operation & maintenance processes show improvement solely by levying user charges? How much extra money is required to overcome these short coming?

Nallathiga also mentioned that municipalities find it difficult to provide these services unless voluntary, local organizations take up the job of collection and transportation (especially in the case of solid waste management). The services that the voluntary local organization provides – is it related with the cost factor in any way? The cost that these voluntary organizations cover, if that cost is recovered by the government as user charges - will the job get done? The reason for not increasing tax/cost of water supply is given to be political – why is waste management not a matter of political contestation?

The answer to this question is obvious, but I do not think that the effectiveness of the system's functioning is directly related to the amount charged for using these services. Thus, it seems that before coming up with guidelines on how much to charge as user fee, it is important to know how the system performs i.e. not in terms of outcomes, but in terms of functions and processes for achieving these outcomes, and in terms of the earlier purpose of having been able to provide effective services for free.

This would indicate the processes which are facilitated by central funding and which ones are by raising local money, without bringing in corruption/competition or the concept of passing the buck or an excuse for not providing the services. Answers to these questions might help fix the cost/user fee for these public utility services. However, I doubt it will be able to address your second question (on equity). The answer for it might lie in the very first question: i.e. why were the services free in the first place, (though, such an answer would be incomplete without comments on the functional processes that are facilitated by central funding) and why can't they be free now?

[Abhijit Datta](#), Independent Consultant, Kolkata (*response 2*)

I might attempt to answer the queries regarding not charging for garbage removal. First of all, it was assumed that this is a non-excludable service and its cost should be borne from the municipal general revenues. In recent times there is a realization that a part of this service is capable of being charged for and I have suggested earlier how this could be done.

Secondly, the concept of user charge is based on the marketability of the service; if the benefit is enjoyed by individual user, rather than the community as a whole, then user charge is a preferred option. In such a case the service could be privatized or franchised to private providers, like voluntary or community organizations. In that case the fees would be charged directly by these service agents and the municipalities would save the service cost and divert it for providing other public goods, such as drainage and sanitation.

[Aparna Pandey](#), The Alpha Foundation (Trust of ICAI), Dehradun

I want to share some of my personal experiences on the second point, with specific examples of solid waste management:

2. How can access to the poor be addressed within a cost-recovery framework for these services?

I have two contradictory examples in two different cities of Uttarakhand:

In one medium-sized hilly town, a voluntary organization supported the Municipal Council to constitute Mohalla Swachhata Samities (as per Supreme Court Ruling 2000 - 2003 and passed by the Government of Uttarakhand on 1 January 2004). After regular interactions and continuous meetings in the local areas these neighborhood sanitation committees were formed in both developed colonies as well as in slums. Initially the monthly collection process was slow in slums but later on the collection process gathered momentum here as well.

The monthly collection (50 % of the total monthly expenses) was quite high in commercial areas and developed colonies in comparison to the under-developed areas. So this was the success story where the municipal council and its elected representatives gave a lot of support for this practice. The ULB had borne 50% of the state contribution from its own "Palika Nidhi" (to procure sanitary instruments, rickshaws and to hire local sanitation worker) until the state contribution was not released due to some policy level problems.

On the other hand, in another big city, a VDO had asked the ward member of a slum to adopt the same practice in the area to keep the surrounding clean; the ward member refused to constitute such committees (neighborhood sanitation committees) in his constituency. The VDO had mobilized the community and they were ready to pay for better services. But because of political pressure the ward member refused to charge anything to the community to ensure his strong vote bank for the next election.

I have observed that it all depends on the political will of the specific ULB and individual local representative.

[Avinash Zutshi](#), Feedback Ventures Pvt. Ltd., Gurgaon (response 1)

[David Foster](#)'s narrative on improving financial health is undisputable in terms of:

- Reducing leakage rates – non-revenue and unaccounted for water losses
- Improving billing and collection and establishing appropriate, but pro-poor subsidized, tariffs
- Installing working meters - bulk meters on main/sub-delivery lines. On this I agree. However, where domestic metering is concerned, I have some reservations:

A Note on Public Private Partnership (PPP):

My understanding of P-P-P and reasons why it should be explored as an alternative in the context of moving forward from Infrastructure to services delivery is:

- The diverse interests of different sectors can be harnessed for the collective good. The public gets better, more cost-effective and reliable qualitative services; the private sector gets new business opportunities. Both are in the interests of the nation and a progressive way forward.
- PPP is a contract between a public sector institution and/or municipality and a private party, in which the private party assumes substantial financial, technical, and operational risk in the design, financing, building, and operation of a project.

There can be three types of PPPs:

1. Where the private party performs an institutional/municipal function, and delivers against pre-agreed performance milestones, of course closely monitored by the policy maker/regulator (services, management/lease agreements)
2. Where the private party acquires the use of state and municipal property for commercial purposes (concessionaire, long term lease for management, BOOT agreements, etc).

3. Where the social good services are operated and maintained and delivery assured against predetermined operational costs and a top-up to the service provider as his administrative cost and profit (however very strict contractual, penalization, incentivization, pro-poor subsidy provisions require to be inbuilt and made binding on the service provider as well as on the client)

A PPP may also be a hybrid of these types.

A PPP must meet the following conditions:

1. The project must be affordable, and bring in cost-effective technology
2. It must provide good value for money
3. O&M must be efficient and guarantee consumer satisfaction
4. It must transfer appropriate technical, operational, and financial risk to the private service provider/party
5. The agreement may be a Performance Based Deferred Payment Services contract (PBDPS) for running of municipal services, it should be closely linked with the revenue realization, performance delivery, and of course a real efficient billing and collection system, which is well monitored
6. The project should directly contribute to provide relief to the state treasury in terms of O&M budget/fiscal costs.

I have a few questions regarding this:

7. Capital cost - why should the state not assume this responsibility as its obligation towards social good services in urban and rural areas?
8. I agree it is necessary to improve revenue base, but increasing your work on domestic metering front may cause serious operational and managerial as well as capital cost issues (since there can be up to 10% non functional/defective meters at any point in time) and then monitoring will be a giant task
9. Water conservation and subsidizing water to less consuming consumers is good, but how can we operationalize this need especially in absence of domestic metering?

These conditions help determine the success of the PPP project cycle (inception; techno-economical and financial feasibility (TEFF); procurement (EOI and tendering; and PPP management and auditing (performance, accounting and deployment) agreement. It is clear that a regulatory framework is needed for developing PPPs at the national and state level. How, when and how much efficient need to evolve over period.

Jasveen Jairath, Water Sector Professional, Hyderabad

The discussion below has opened up very crucial issues - financial management/budget analyses of ULBs. This is an area we know very little about but this depends on sustainable implementation of effective service delivery. Arguments that ULBs are cash strapped/bureaucracy is short of funds, etc need to be assessed/evaluated in the context of how much they receive and from where, how much is spent on what, and if there are glaring gaps how are they filled or appear as shortages?

Efficiency of utilization of financial resources and efficient delivery of service are critical to ascertain whether we have "less" funds, or will we be subsidizing waste, inefficiency, and ineffective institutional mechanisms. "More" or "less" funds are relative terms - we will always have less if we use it inefficiently.

Can the Centre for Good Governance organize trainings for municipal budget analyses?

Khatibullah Sheikh, Society for Participatory Research in Asia (PRIA), New Delhi

I am putting forward my opinions on the subject touching upon each aspect of the query. Your comments and feedbacks are welcome.

There are a number of services where ULBs don't charge and even if they do, it is negligible. Take the case of water supply -the yearly water tariff for cities like Raipur and Chhattisgarh is Rs. 720 which means Rs. 60 per month, irrespective of the quantity used. An attempt to calculate the cost of supply per liter would reveal that the ULBs are running in continuous loss which is compensated at the cost of other development activities. It is very crucial to understand that water is free in nature but to bring it at the doorstep has a cost for which somebody has to pay directly or indirectly. Having said that, I am not proposing to increase the user charges dramatically, rather it should be mutually determined judiciously. The ULBs are not meant for making profits on public services but at least generate the maintenance cost. Such an aspect of cost recovery is rightly envisaged in JNNURM schemes. Therefore, I feel that ULBs should reach at agreement with the citizens to charge a reasonable price. At this juncture, making people aware about expenditure incurred on this service would be critical to enhance willingness to pay.

Another significant part of the issue is the wastage of water by various means as we hardly pay for it. In such situations installing the water meter gains significance where charges would be incremental on the basis of slabs as done for electricity. In order to reduce water loss through public taps, the wise proposition would be to connect them at household level. The whole economics of water loss and cost of household connection, even if it is free of cost to poor, would break even in a couple of months.

As per studies conducted by the Society for Participatory Research in Asia (PRIA) in various JNNURM cities and small and medium towns, even poor people showed a willingness to pay far higher charges than the current one if the service is provided in the right fashion.

Taking the case of sewerage, various cities are putting sewerage system in place through JNNURM funds without asking the critical question of connectivity. Without the preparedness of people to connect with the system, the whole infrastructure cost will end up in another drain. This is where importance of participatory planning comes in.

In the case of SWM, without community partnership and contribution the goal of safe and clean environment is difficult. The formation of Sawacchta Samiti at local levels followed by minimal user charges is the sustainable method where ULBs are engaged in transportation and disposal only. The model has worked, of course with little hiccups. As an organization we have intervened in small and medium towns to test the model and amazingly it has worked even in slum areas.

To conclude, there is an urgent need for developing partnership model with the community and the service provider irrespective of the nature of service. The policy makers and implementers should promote citizen centric planning involving primary stakeholders in the process to improve service delivery.

Avinash Zutshi, Feedback Ventures Pvt. Ltd., Gurgaon (response 2)

Theoretically, I am in full agreement with you on metering, losses reduction, and commercial viability aspects. However, the theory of financial-project management and sociology is required to be translated into working models on the ground.

We have other processes of changed management like; awareness, realization, inspiration and social controls to achieve, if not full as per theory, but may be a good start to make.

It is always not important how formal the systems are, what level of controls have been introduced (metering) but how much realization has been inspired and the ownership by the beneficiary/participating community. And, what ultimately works in a social setting is the 'LIVE and LET LIVE' approach and social controls.

I remember when I was 4 years old, we had a metered water supply (which never functioned) and at 54 I still have a meter but the provider has by-passed this. (I live in a posh middle class locality in NCR, Delhi).

My journey of 50 years into water supply may take us to look at more viable, workable, and cost effective measures.

The average water production cost in India (minus depreciation and debt servicing) is less than Rs. 4/- (sample costing for a ULB, India) for a pumping and properly disinfected water supply utility. I am counting capital costs to the state exchequer.

The break-even point (theoretical financial model developed for a ULB in India) taught me that if domestic water supply is charged at Rs. 96 with varying reasonable tariffs slabs for commercial (intensive and non-intensive users), and if institutional and other additional sources of income are generated, the operational ratio improves dramatically in less than 4 years.

All this is possible if social controls are exercised, regulatory and monitoring systems are willing to discharge their mandated functions and the community is willing to pay the required amounts to offset the water cost, otherwise expended by them indirectly to meet their water requirements.

Adding to the above, if water losses of over 30% (transmission and distribution system) are minimized and non-revenue water eliminated, we will have an amazingly different situation.

The theoretical water losses calculated on sample basis (Kerala at >60%, Gujarat at >50%, Rajasthan at >60%, J&K at >50%) and wastewater system operational efficiency (at <15% in Delhi) are very hard to understand and speaks poorly of the sector, but these facts are ignored by everybody. On the other hand, it is always possible to improve the production (by up to 25%) over the designed capacities of water treatment plants by incorporating small efforts viz., re-modeling, up-gradation and efficient and improved technology.

The whole talk on public-private partnerships has taken a backseat, because nobody is just ready to plunge into the holy task of managing an unmanageable and non-workable a water utility.

Unless we have some committed alternative sector players available, let's commit to at least not weaken the state PSU's, who are fighting a very tough task maintaining systems and bringing water at our/ your doorsteps every morning. I need to stop now, and not open up the Pandora's box of ills in the system.

[Ramakrishna Nallathiga](#), Centre For Good Governance, Hyderabad (*response 1*)

First of all thanks for sharing your knowledge and experience on the subject user charges. As pointed out by [Aparna Pandey](#), the design of solid waste management service and cost recovery have to be different for different towns/ULBs based on size or economic level.

What we also find in common is that in small towns the service is well organised and there is low or nil payment which make the service non-starter or a neglected one. In medium towns, good

organization and good recovery are possible and the service can be sustained. In large towns, the willingness to pay tends to be there but the service provision does not pick up.

Moreover, the ULBs are not obliged to have a door-to-door waste collection service but only community level collection, and therefore, can always charge for this service. Transport and disposal are the real costs that are not taken into account. One means of reducing this cost burden is to charge for the commercial bulk wastes from sources like hotels, shops, eateries, private educational institutes, hospitals, etc. These charges can be high enough to recover good share of O&M costs of solid waste management service and can effectively cross-subsidise domestic sector.

[Ramakrishna Nallathiga](#), Centre For Good Governance, Hyderabad (response 2)

[Jasveen Jairath](#) raised an important but differently linked question.

First, the validity of the claims about "low" (and not high) budgetary resources with ULBs to undertake the services. I think the claim is right, excepting large municipal corporations whose resource base is large and means are divergent (e.g., just building regularisation gives several crores to Municipal corporation of Hyderabad). The design of ULB finance itself is constraining - they cannot show surpluses and profits, they are obligated to provide the services in municipal law and those passed on by state and central government - it is thinly spread money on several services that make little money available with ULB for a service. A large part of it also goes into fixed costs like staff salaries and support services.

The usefulness of Budget analysis of ULBs is well demonstrated in Bangalore. The PROOF campaign of Janaagraha has pointed to the inadequate budget planning and low public participation. Centre for Budget and Policy Studies (CBPS) also publishes analysis of budgets. Somehow, there are no processes in ULBs to institute them and take the feedback and so budget is prepared in a mechanical manner - but it does not alter underlying structure. CGG has not taken over this role as it operates like a public non-profit organization but not an NGO. But, we need NGOs like Janaagraha and CBPS to pitch the public priorities into the budget planning.

[Harshad Gandhi](#), Excel Industries Ltd, Mumbai

We indeed appreciate [Ramakrishna Nallathiga](#)'s initiatives inviting suggestions in formulating the guidelines for the levy of user charges in civic services. We have been working on providing solutions for solid waste management and have acquired considerable experience & expertise for solid waste treatment & processing. We are attaching here (<http://www.solutionexchange-un.net.in/environment/cr/res-31030902.doc> DOC; Size: 400 KB) a write-up on our initiatives to mobilize support of stakeholders & promote / encourage Decentralized Solid Waste Management Strategy.

We do visualize that such an initiative can become mass movement & way of life with collaborative efforts of policymakers, planners, administrators to evolve ideal policy support & implementation strategy. It may be worthwhile to consider appropriate incentives to encourage micro-entrepreneurs & waste generating communities to follow sustainable pathways of Decentralized Solid Waste Management Strategy to alleviate ill-effects of garbage at source of generation.

[Rajarshi Rakesh Sahai](#), University College of London, United Kingdom

The guiding principles for ULBs can be:

- Packaging water and sewage charges together; while there is a lot of price elasticity for water, sanitation facilities are not sought after in the same sense of urgency, whilst the costs for providing sanitation facilities are significantly higher than providing water supply.
- Making sure that the lowest income group pays not more than 10%-15% of its household income in such services - now this calls for creativity, for example community taps and latrines have a lower per capita/per household cost than piped supply to the household and private latrines. However, an alternative school of thought suggests that the social costs associated with the same, for example the number of man hours saved in fetching water/using sanitation facilities, reduction in instances of abuse and violence towards women and children, maintenance and upkeep of facilities, and above all the standard of living achieved, can far outweigh the costs of providing such facilities at individual household level. In this regard the role of CBOs is paramount. In my experiences in Thailand, I have observed communities sharing the facilities - electricity, WATSAN and the legal addresses of one household in an internal sharing agreement. Such experiences, however, come with the rider, that they cannot be imposed on communities. ULBs should only undertake the same when there is a bottom-up demand for the same. Also, shared toilets in Pune are a good example, again with the pre-requisite of community mobilization and shared sense of responsibility to make it a success.
- Another point, related to the one above, is linking the minimum incomes to the wider employment guarantee act. It is possible that the employment guarantee shall be extended to every adult individual in urban and rural areas of India, thereby significantly appreciating the conservative (and often misleading) income figures that we work with currently.
- Wastage of services by unnecessary leakages and thefts is a constant issue across India. Metering and constant monitoring at local, community, and zonal levels can ensure a check on the same. Once communities are aware and proper enforcement ensured, any such attempts will not only be resisted by the authorities, but also by social pressure.
- Good Metering and Pyramidal tariffs for WATSAN (particularly water, in this case) based on amount of use, coupled with awareness campaigning to reduce the wastage of services and educating the people on potential advantages of the same can help poor households to bring down their burden significantly. If ULBs can ensure fair billing for every household in their area of jurisdiction, it will not only reduce wastage and save money, but also will create a culture of awareness, honesty, and mutual respect. Examples in British Columbia in Canada demonstrate the virtues of such a strategy in achieving a more sustainable end. Also, in this regard, it will be good to point out that the enormous saving achieved by reducing wastage can allow for a **consistent potable water supply**, which will not only make the household treatment of water unnecessary, but will also reduce any chance of contamination, resulting in significant health advantages, and the cost savings therein. Another example from BC is that of segregation of waste at household levels. It is very common to find politicians and administrators refute the possibilities of the same in India, but they fail to see the significant cost advantages in segregation of waste, transport load of waste (with organic and inorganic waste loaded together un-necessarily), hazards associated with mixing of contaminated and medical waste, missed opportunities of composting and saving in the waste field areas (which can be used even for partial incineration of dangerous waste) etc.
- Again, the cost advantage has to be seen more holistically, including the costs at individual household (of for example storage tanks, expensive and hard to maintain water treatment systems and the time spent on it all), medical bills for the Urban area at

- large, the chaos and violence over access to services, and wastage of precious services and resources.
- Most importantly, the elasticity of price for these services used to the maximum, no tolerance towards unnecessary political pressures, and making the councils and corporations responsible for the loans and matching funding can open up significant room to maneuver for reforms.
-

[Barenjo Chowdhury](#), iKOnet, Kolkata

Thanks to Ramakrishna Nallathiga for raising such an interesting topic which has triggered an enthralling knowledge exchange as this. My responses are given below:

What are the guiding principles and tools for ULBs to use while working out user charges?

Firstly, is your organization is working on developing a pricing policy for a "cost recovery" or "cost plus" model?

The user charges derived from a cost recovery model would just have meet the O&M costs incurred on delivery of the service. This may be good for any of the single entry method of accounting. Assets created are adjusted against an UC (utilization certificate), forgotten expenditures and liabilities untraceable. And if you are thinking of a cost plus model, you are heading for trouble.

Secondly, whichever pricing model you adopt, will you follow a micro or macro policy - can suggest different user charges for same user category across ULBs?

There is possibly a need for a central tariff regulatory body at state/central level. It should arrive at a cost which is common for all ULBs in India. Especially water charges are often perceived as "supersensitive issue". But from the large scale studies on "willingness to pay" covering both urban / rural population, I have been involved in the past 5 years, there is no such inhibition. It is just a political misconception.

How can access to the poor be addressed within a cost-recovery framework for these services?

Firstly, are only the people living in slums poor? Are other destitute/abandoned women with children/lonely senior citizens or BPL families living in outside slums not poor?

As enforcing user charges in slum areas are difficult, often it is assumed that slum dwellers are poor. The cost-recovery framework would anyway be applicable for the abandoned women with children / lonely senior citizens or BPL families living in non-slum area.

In slums the collection is a problem.

One way could be to charge bulk rates for them, let a registered thrift and credit group under SJSRY look after the assets (taps, pipe, bricks platform of the stand post) and collect charges including their time cost like any PCO operator. Involving a CBO/NGO is also an option but can they operate such service at no cost basis for a sustainable period. In this non-payment of tax is not considered as in many ULBs, the percentage of total payment default is mainly due to the institutions/government and large plot owners. Hence, the genuine inability of a reasonable number of actual poor (not only guided by the BPL list) may not add up to a large sum.

Please provide experiences of how these services have been provided more cost-effectively and/or with the help of community organizations

There are two issues here, **service provision, and collection of charges**.

Service provision by CBOs are difficult for water supply and sewerage/sanitation, there are some large private companies operating water supply operations. For SWM, outsourcing or involvement of CBOs is very common. Again service provision for sewerage/sanitation is not feasible as each ULB employs largest number of its manpower (permanent/ temporary) for this activity. Transferring this manpower to CBOs/private organization is impossible.

Collection of charges by CBOs or being outsourced is common. But there are problems in this system too, due to an inaccurate database of tax payers for monitoring and ease of collection, the better for larger payers are targeted while smaller payers are left out as it take more house visits to collect from them. There are other issues such as customer orientation of such staff, operation after office hours, or payment through a credible internet payment system.

How can the financial and overall sustainability of these services be improved?

This is a very interesting question. A closer look at the asset base, purely from the financial perspective, would reveal that roads, water supply system, and drainage systems in most of the ULBs (metro, large, medium, and small) are already over-stretched. Unless supported by a JNNURM support for infrastructural expansion, a rigorous user charge would boomerang. Service delivery to the reasonable level of satisfaction of the citizen (consumer) would be difficult to meet.

Actually, if you carefully notice the revenue sources, rental / lease from assets often promise the highest returns. In the short run, build smaller assets, ensure quality service, and build consumer confidence. This process would create some surplus, clubbed with state / central fund build infrastructure. PPP is an option, if there is land at the disposal of the ULB.

My question: What about improvement in other civic services - primary education, preventive health care (immunization), mother, and child health, recreation? The ULBs must also facilitate / invest on creating infrastructure for these to strengthen the financial top line and bottom line. ULBs are primarily asset managing institutions, needs to be strengthened on their capabilities of managing physical assets. The day we start empowering the ULBs like our PSUs (navaratna, miniratna) operating in monopoly environments, these institutions would shed many of the baggage of the past.

[Ramesh Jalan](#), United Nations Industrial Development Organization (UNIDO) South Asia Regional Office, New Delhi

I fully agree that community involvement in municipal solid waste management is critical to ensure the success of any strategy in this field. It is crucial to segregate the Municipal Solid Waste at source so that it is amenable to economically viable treatment processes particularly in the urban areas. It may be a good idea to train some well known personalities in the community to spearhead the awareness campaigns planned by the municipal corporations. Innovative solutions like the one devised in Suryapet needs to be developed in order to ensure that a successful model is developed that could be replicated in various cities of the country.

[Abhijit Datta](#), Independent Consultant, Kolkata (response 3)

I would like to make two points here:

1. The terms sewage and sanitation are not interchangeable; sewage is a private good, while drainage (mixed and storm water) is a public good. Sanitation is a mixed bag; it includes waste

water disposal, street cleaning, garbage removal, and control of marketed foodstuff (the municipal sanitary inspector has responsibilities for all these tasks).

2. I don't see how CBOs can ensure supply of potable water to the non-household population. This has to be an entitlement to the urban poor and its pay-off is improved community health. CBOs or private service provider may be franchised by a municipality to provide water for non-drinking purposes for a charge- that would be a fraction of that supplied by the water carriers- but ensuring adequate (i.e. 40 lpcd, or about 4% of total water consumption) has to be a municipal responsibility.

Pradeep Dadlani, Sycom Projects Consultants Pvt. Ltd, New Delhi

The topic of user charges for door-to-door collection and segregation of MSW by the Urban Local Bodies is indeed quite interesting.

Various models have been used as far as user charges are concerned. One of the earliest examples is of Shimla city, where a Public-Private Partnership (PPP) model was developed for door-to-door collection by a NGO in about 6 wards out of 24 municipal wards of the city. A bill to this effect was passed by the Shimla Municipal Corporation and a corresponding legislation was duly passed by the Himachal Pradesh Assembly to ensure collection of door-to-door fees by the NGO. A penalty provision was also included in the regulation and the same was used quite effectively.

In many towns in Haryana, HUDA charges development fees which are inclusive of the sanitation service charges. The ULBs are not encouraged to levy door-to-door collection fees. In the recent case of door-to-door collection and transportation of MSW under the PPP model, in Gurgaon, the same principle has been used wherein the concessionaire would be doing all the operations of MSW management starting from door-to-door collection up to transportation to the processing plant/SLF site at Bandhwari. They would be paid a tipping fee per tonne of wastes delivered at the processing plant which would be all inclusive.

In Delhi, the recent PPP project in collection, transportation and disposal of select zones of MCD (Civil Lines Zone, Rohini Zone, Vasant Kunj and Dwarka), the tender document does not explicitly mention whether the concessionaire could charge door-to-door collection fees.

Similarly, various variants have been used in the south, particularly in Andhra Pradesh and Karnataka which are worth studying and a Decision Support System (DSS) approach may be formulated instead of looking for an optimal solution. In our experience of working in over 20 cities, all over India, we are yet to come across an ideal strategy which could be applied uniformly.

U.B. Singh, Regional Centre for Urban and Environmental Studies, University of Lucknow, Lucknow

Urban Local Bodies in the country are authorized to levy, and collect taxes/non-taxes which are handed over to them under the Municipal Acts by the state government. The reality is that most of the state governments have not broadened their tax-base; rather it is found shrinking in many cases. This tendency is against the spirit of the supreme law of the land. A major tax left with ULBs is property tax. Unfortunately this tax is not properly administered. So far levying a charge on services, ULBs charge water charge along with water tax, assessed on ARV. But water supply services are not up to mark. In regard to charges on SWM, ULBs have in many states virtually no role at the primary collecting stage. This stage contains activities like door-to-door collection,

segregation, and transportation to the municipal bin. ULBs are involved only in sweeping of roads, drains, and collection at secondary stage, transportation, and disposal. There is no institutional arrangement at the primary collection level. Here is the role of the generators of wastes, RWAs, NGOs, CBOs, etc as it is not practicable for the ULBs to undertake this responsibility on their own. Hence the ULBs should associate the community, CBOs, RWAs, and NGOs, etc to play this role. The expenditure incurred at this level should be borne by the generators of the waste. If ULBs are authorized under Acts to levy user charge for SWM, it may go the water charge way. Hence the emphasis should not be on levying user charge but on associating the generators itself, because the problem is created by the producer. In addition, by associating the community (producer of the waste) the burden of ULBs may be reduced to a great extent, if waste is segregated, recycled, reused, and disposed in a decentralized way. The courts have always emphasized on this aspect.

David Foster, Centre for Energy, Environment, Urban Governance and Infrastructure, Administrative Staff College of India, Hyderabad (Response 2)

While members have rightfully emphasized the social responsibility for providing an entitlement for water for the urban poor, I want to remind our readers of recent programmes that clearly demonstrate that in most cases individual household connections are far more cost-effective than distribution via public standpipes and water tankers. In Vijayawada, for example, when BPL families were given the choice between obtaining "free" water from a public standpipe or paying for water delivered directly to their homes, they overwhelmingly chose household connections. When you closely analyze the costs and benefits of these alternatives (including opportunity costs) it becomes obvious that direct household connections usually provide more benefits (at less cost) to both the city and the consumer.

Manoj Kumar Teotia, Centre for Research in Rural and Industrial Development (CRRID), Chandigarh (response 1)

What are the guiding principles and tools for ULBs to use while working out user charges?

The emphasis should be given on the principles: user pays, abuser pays and polluter pays. If we adopt this then costs (at least the O&M costs) of user charges can progressively be recovered. However, at the same time ULBs must focus on improving the coverage and quality of services. Chandigarh is emerging as a model city in North India as far as recovery of water supply and sewerage charges is concerned. The differential rates are charged for differential consumption. The introduction of sewerage cess (on water closets) was also a good beginning for recovery of user charges. Sanitation services have also been upgraded with PPPs.

How can access to the poor be addressed within a cost-recovery framework for these services?

Again, Chandigarh is doing much better than its neighboring states as Punjab, Haryana and Himachal Pradesh. The slum dwellers in Chandigarh have much better access to the basic services than slums in Ludhiana, Jalandhar, Faridabad, Ambala or elsewhere. The public stand posts have been converted into covered wells and water can be fetched any time through a hand pump installed on the covered reservoir. The concept of cross subsidization has been implemented in Chandigarh and the low income groups which consume less water pay very nominal user charges while big consumers pay very high charges. There is a fine on polluters and also abusers of services.

Please provide experiences of how these services have been provided more cost-effectively and/or with the help of community organizations

Ludhiana involved local people in running tubewells, improving sanitation and maintaining parks in the localities. The Mohalla Sanitation Scheme and Park Management Scheme were introduced with community participation. The Ramdarbar locality in Chandigarh initiated sanitation through a Neighborhood Improvement Committee (NIC). The NIC totally changed the face of Ramdarbar in which local unemployed men and women were given employment. The cost cutting initiatives such as water management through SCADA, PPP in sanitation, parking, beautification of roundabouts, etc has helped MCC to provide the same cost effectively.

How can the financial and overall sustainability of these services be improved? Please give examples where this has been achieved

Chandigarh is emerging as one of best examples in the country in terms of financial and overall sustainability of water, sewerage, sanitation management etc. The progressive recovery of water and sewerage is already progressing very well. Chandigarh has very high per capita availability of water in India. The differential rates are pro poor and through a good system of cross subsidization, higher O&M recovery is also taking place. The cost cutting initiatives i.e., water management through SCADA has helped MCC to reduce its electricity bill on water. Progressive recovery of user charges along with reduction in wasteful expenditure on water management and involvement of people and private sector in sanitation are good examples of financial and overall sustainability of these crucial services.

I will be happy to provide any further information about the initiatives taken by Chandigarh to facilitate their replication.

Ramakrishna Nallathiga, Centre For Good Governance, Hyderabad

It is very interesting to receive a response from [Manoj Kumar Teotia](#), CRRID with his inputs on how Chandigarh is doing well in comparison to other states. I have not witnessed elsewhere the town planning practice of Chandigarh that has accommodated several uses and slum resettlement/housing. I will be happy to go through the detailed documentation, if any. I also feel the Union Territory has been able to achieve this success because of its status, which gives some relief from the political processes determining the user charge levy, mechanisms and revision.

Manoj Kumar Teotia, Centre for Research in Rural and Industrial Development (CRRID), Chandigarh (response 2)

Chandigarh has done much better in terms of user charges and many other local governance, planning and management practices after formation of the Municipal Corporation in 1996. The regulatory authorities themselves revised the water tariffs thrice (within six years), introduced sewerage cess, introduced property tax, decided to involve the private sector in the construction of waste treatment facility, O&M of paid parkings, beautification of roundabouts, etc. Political process has been an integral part of all the initiatives taken during the last decade or so. Of course, Chandigarh being a Union Territory gets more funds/grants, but several initiatives are being taken by the MCC to mobilise its own income.

I enclose a slightly old unpublished study conducted at the Centre for Research in Rural and Industrial Development (CRRID) (Gupta and Teotia 2004, Innovative Municipal Management for Mobilisation of Financial Resources and Upgradation of Environmental Infrastructure). Please read <http://www.solutionexchange-un.net.in/environment/cr/res-31030901.doc> (DOC; Size: 388KB). I am in the process of updating the same as several new initiatives have been undertaken during the last 5-6 years.

Many thanks to all who contributed to this query!

If you have further information to share on this topic, please send it to Solution Exchange for the Water Community in India at se-wes@solutionexchange-un.net.in and the Decentralization Community in India at se-decn@solutionexchange-un.net.in with the subject heading "Re: [se-watr] Query: Urban Local Body Charges for WATSAN Services - Experiences; Advice. Additional Reply."

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