

# Governing Solid Waste Management

micro-credit organization BASA capacity of municipalities to plan for and implement better waste management systems.

- In Sri Lanka, waste management has been an important component of the work with communities affected by the *tsunami*. This includes technologies for composting and plastic recycling.
- Regional: A project is working in Bangladesh, Sri Lanka and Nepal, adopting an integrated approach to improving the urban environment. This project takes community capacity-building and participatory planning as its starting point. It includes elements of work on waste management in four towns across the three countries.

Practical Action's activities in Kenya include building the capacity of waste management co-operatives in Nairobi and Nakuru. Technologies around composting, plastic and paper recycling have been developed. In Nakuru the project works with waste salvagers at the dumpsite and in the town; and at the other end of the spectrum with the inter-ministerial committee on the

environment to help ensure new policies are pro-poor. Another important initiative is the publication of *Waste Digest* which is published with support from UNDP. In Zimbabwe, work has started with groups in three urban areas to help them link with their local authorities, provide a collection service in their neighbourhoods, and develop viable, sustainable businesses.

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■ SKAT Foundation  
<http://www.skat-foundation.org/publications/prarticle.2005-09-29.7288084326>

The SKAT Foundation regularly produces manuals and reports, often in co-operation with other institutions or on behalf of government agencies or donors. Check out their full list of available titles by topic.

## Websites

■ Professor David Wilson  
[www.davidwilson.com](http://www.davidwilson.com)

Professor David C. Wilson is a senior and respected figure in waste and resources management in the UK and internationally. He is now working full-time as an independent consultant, specializing in high-level policy and strategy work. He is also Visiting Professor in Waste Management at Imperial College, London. His web site contains a range of useful information, including information on Strategic Planning needed for good Governance in waste management.

■ Urban Resource Centre Karachi  
<http://www.urckarachi.org/home.htm>  
Urban Resource Centre (URC) Karachi has a dedicated area on waste management. Chaired by Prof Arif Hasan, who facilitates citizens' participation and voices in city-level decision making, it is worth a look to see what is available!

*Compiled by Mansoor Ali, International Urban Projects Manager, and Lucy Stevens, International Co-ordinator, Access to Services Programme, Practical Action.*

## waterpoints

### Rope and washer pump clean enough?

Does the rope and washer pump deliver water as clean as other hand pumps? The rope pump principle, in which the rope goes in and out of the well is often considered to be not as satisfactory in terms of protection of the water source as other pumps which are more tightly enclosed. But recent research<sup>1</sup> suggests that the water quality is equal to that of a standard hand pump.

The rope and washer pump is not a new technology. The principle was already known and used two thousand years ago in China. The technique is easy to understand, to adapt and to manufacture with locally available materials such as wood, bamboo and tyres. The functioning principle is a continuous rope, with pistons attached to it, pulled through a pipe the bottom of which is in the water. Each piston traps some water and lifts it up.

More recent innovations require the washers to be manufactured from rubber, but the technology is still cheap: around US\$150 for a complete pump, as opposed to US\$700 for a Nira AF85, a strong handpump widely used in Africa. The pump can be used in a well of 40m depth, and even up to 60m depth can be achieved.

To compare the microbiological quality of water pumped, 20 pumps were tested, ten Nira and ten rope pumps, operating in different areas of the Ghana's Upper East Region, and installed with support from the local charity Rural Aid. Three samples were taken for each pump.

The analysis of the results shows that there are no significant differences between the two types of pumps in terms of their impact on microbiological water quality.

The rope pump also outperforms the Nira AF85 regarding other criteria: its

capital costs are lower, as are maintenance costs. The pumping head is higher for the rope pump than for the Nira, along with the flow rate. These financial and technical advantages are coupled with the fact that the rope pumps are manufactured locally.

The study concludes that the rope pump should be considered for adoption as a standardized pump by the Ghanaian and other governments.

## Reference

1. Harvey, P.A. Drouin, T. (2006) 'The case for the rope-pump in Africa: a comparative performance analysis' *Journal of water and health*; Vol. 4, No. 4

### Solid waste management training courses in Africa

Poor solid waste management (SWM) policies and practices impact heavily on the environment, well-being, and quality of life in Africa. The World Bank Institute (WBI) has therefore identified

the need to build the capacity through training courses of people associated with the SWM profession, in both Anglophone and Francophone countries of Africa. Capacity building is also needed to enable African training institutes and specialists to deliver SWM training courses, initially with support from the WBI, but later becoming self-sustaining.

Workshops will therefore be run for the prospective trainers from the training institutes and elsewhere. Courses will be prepared in English and French; they will form part of special training packs to be distributed at the workshops, and will be delivered by the consulting team and possibly other suitably qualified specialists.

The objectives of the workshops are to: teach trainers the elements of SWM, and provide them with material that they can use to regionalize the basic courses.

The courses are aimed at trainees with a tertiary level of education. This does not however imply that they will be of a post graduate standard or that candidates with a secondary level of education cannot register.

The courses will be based on the logical sequence of the SWM elements, focusing on basic principles:

1. Overview of Waste and SWM Principles
2. Generation, Storage and Collection
3. Recovery, Treatment and Special Wastes
4. Disposal – Open Dumps/Sanitary Landfill
5. Implementation and Economic Principles

The selected trainers from the training institutes will take one or more of the above courses and under the guidance of the Consulting Team convert them into African region-specific courses, indicating specific needs for SWM, appropriate technology and sustainable systems in their regions. They would then expand on the material by adding local detail such as local waste and other characteristics, implications, good and bad case studies, risks, opportunities, etc. The Consulting Team would then review the courses, implement quality control and ensure consistency.

The training packs and course material would then be amended accordingly, for presentation of the regional courses by the Regional SWM Training Institutions.

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## Good local governance critical

Controversies over private versus public provision of water and sanitation are misleading. The principles and governance tools required to get private providers to improve provision to the urban poor are very similar to those needed to improve public provision. While there is no single model of good water and sanitation governance, and no reason to favour private providers, good local governance is critical to getting the best out of private as well as public providers. These are the main conclusions from a recent paper by the Human Settlements Programme of the International Institution for Environment and Development.<sup>1</sup> There is an important role for international support in improving water and sanitation provision for low-income urban residents. However, from a governance perspective one of the major challenges is to prevent vested interests (many of which are international) from dominating local water sectors.

## Reference

1. McGranahan, G.; Satterthwaite, D. (2006) *Strengthening local capacity for improving service provision*, London, UK, International Institute for Environment and Development (IIED).

## Indian environmentalists support ISWM strategy

A broad range of stakeholders and environmental organizations supported a proposed draft state-level comprehensive strategy for integrated solid waste management in India. The strategy, which seeks to make urban and rural local bodies compliant to national regulation on waste management, was presented at a consultation in Trivandrum on 15 September 2006. Mr T. K. Jose, Secretary, Local Self Govern-

ment (LSG) identified the need of the draft strategy to be translated into the local language and shared with political leaders and officials across the state to raise awareness on the approaches presented. The event, supported by Water and Sanitation Program-South Asia (WSP-SA), was inaugurated by the Minister for LSG and was attended by state government, rural and urban local government representatives, civil society organizations, academics and sector specialists.

## Manila Water gains community support

To do profitable business in low-income areas, companies must make long-term community commitments, says a McKinsey business report.<sup>1</sup>

The Philippines company, Manila Water, is singled out for succeeding under difficult circumstances, where illegal connections are commonplace and tracking them down is expensive and can be dangerous.

Instead of hiring security, Manila Water offers households options to pay in small or larger groups. About 30 per cent of the Manila poor now pool their bills, cutting connection fees. Because there is a collective responsibility, non payment has been eliminated.

Manila Water provides employment for 10,000 people, offers small business loans and brings affordable water to schools, hospitals and markets. It makes links with 'community agents' such as mayors, *barangay* captains, school heads and religious leaders, most of whom backed the company when it applied to put rates up.

'If a company can show that its own interests are aligned with their interest in employment and commerce, it can then enlist community support for security, collection and system monitoring,' says the report.

## Reference

1. Beshouri, Christopher P. (2006) A grassroots approach to emerging-market consumers, *The McKinsey Quarterly*, Member edition, 13 December.