

Linking public and private action for sustainable waste management

When it comes to managing waste in developing countries, the private sector can contribute technical skills, organisational capabilities and flexibility. Yet private sector involvement alone will not solve all the problems. The public sector, while far from abrogating its responsibilities, has to strengthen regulations and step up project management. It is also vital to improve the financing of waste management services and to ensure a better-structured regulatory framework.

**Amandine Dukhan,
Christel Bourbon-Séclet and Nathalie Yannic**

*Project manager, Local Authorities and Urban Development division, Agence française de développement
Investment officer, Infrastructures and Mines division, Proparco
Investment officer, Infrastructures and Mines division, Proparco*

Solid waste management is often regarded as the most local of all public utilities. Since the first steps were taken to decentralise this service in developing countries, responsibility for it is increasingly falling to municipalities, as it has been the case in Europe for decades. Frequently subject to financial, material and work force constraints, municipalities try to manage just the most urgent needs, such as removing waste from cities to keep them clean. Many focus their efforts on developing basic cleaning services – street sweeping, waste collection, gutter maintenance and running landfills – with mixed results and high costs. In

some cities in sub-Saharan Africa, operating costs can account for 30 to 50% of a municipality's total annual budget. Yet this approach, based on collecting and storing waste in open landfills, falls short of managing municipal solid waste on a long-term basis.

The exponential growth in waste, which is a consequence of increasing urbanisation and change in consumption habits, requires a change in practices to reduce landfill deposits and incineration. For several years, government authorities in the South have had to conduct in-depth reviews of how waste management services are configured and have been encouraged to safeguard the environment and protect public health. Improving the geographical coverage of such services so that vulnerable or peripheral neighbourhoods are no longer excluded is also a major social challenge. Developing facilities, managing infrastructure and recovering and recycling waste are increasingly considered critical to any public waste management policy. Yet more often than not, such policies are implemented in a deprived economy, and management costs inevitably increase as infrastructures become more sophisticated and the number of stakeholders multiplies. Against this backdrop, it is essential for the private sector to become more involved, which would require a renewed public-private partnership.

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Amandine Dukhan joined the Agence française de développement (AFD) in 2007 to work in the urban development sector. After obtaining a master's degree in urban services engineering from Rennes Institute of Political Studies (2006), she spent two years working in Togo, before relocating to AFD's headquarters. She oversees numerous urban projects, particularly those involving solid waste management.

Christel Bourbon-Séclet is a lawyer. She gained expertise in the waste management sector through working for

a subsidiary of the Veolia Environnement Group, before joining Proparco in 2008. As investment officer of the Infrastructures and Mining division, she oversees energy and waste management projects.

Nathalie Yannic is a graduate of ESCP-EAP European Business School and has a master's degree from AgroParisTech. She began her career at Gaz de France before joining Proparco in 2007, initially in the Bangkok office. She is now an investment officer in the Infrastructures and Mining division specialising in energy and waste projects.

THE NEED FOR INTEGRATED MANAGEMENT OF MUNICIPAL SOLID WASTE

Reducing the quantity and noxiousness of waste at the source, introducing separate collection and sorting procedures to encourage recycling and reuse, organising waste trans- ▶▶▶

Waste:
the challenges
facing developing
countries

▶▶▶ portation, and investing in recycling, energy and organic recovery technologies are the fundamentals of sustainable waste management. All the links in this chain are interdependent: they follow exactly the same path and address the same issues, regardless of region. An integrated system based on prevention-sorting-recycling-recovery-reuse is therefore key to reducing waste production over the long term and reducing the amount of waste deposited in landfills.

When waste management was decentralised relatively recently, skills were transferred, but not the corresponding resources. Municipalities are still struggling with the organisation of the different stakeholders and the recurring expenses related to collecting waste and depositing it in landfills. The challenges involved in waste recovery and recycling are

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sometimes given low priority and dealt with in part by the informal sector. The public sector’s efforts to develop waste management toward an integrated system are hindered by the difficulties associated with investing in and maintaining facilities, the lack of business competencies in certain links of the chain, and the ongoing absence of sustainable financing sources.

REDEFINING THE ROLES OF PUBLIC AND PRIVATE SECTORS

The private sector can address the management difficulties encountered in a state-run system and provide the technical skills sometimes lacking in the public sector. In best-case scenarios, private operators have qualified staff and appropriate production resources, while still being flexibly organised.

Since costs cannot be fully covered by the fees collected from users, calling on specific service providers (for collecting waste, operating a waste transfer plant or technical landfill centre) is more widespread than the appointment of a large-scale private operator covering the entire sector. Public-private partnerships involving a BOT¹ contract are the most common; these involve a system of direct payment to the private operator by public authorities, based on a management cost per metric tonne. This rate not only covers operating costs but also, in some cases, investment in initial infrastructure and upgrading works. As it is difficult for municipalities in developing countries to pay private operators enough to cover the cost of all waste management services, the central state often has to provide additional funding. The private network is therefore split between primary col-

lection organised by a very active informal service and the rest of the waste management chain, where one can find global corporations as well as local operators, some of whom are from the informal sector.

But private sector management of all or part of the system does not solve the problems entirely, and public authorities have to step up their involvement as regulator and project manager even further. Perhaps more so than for other public utilities, waste management requires coordination among numerous stakeholders² at different stages in the process, and calls for a broad range of skills and know-how. Implementing a proper waste management policy implies a strong involvement from the public authorities in running the service. This includes controlling costs, planning investment, negotiating contracts with service providers, educating users, establishing and enforcing regulations, and involving producers and consumers.

SUCCESS FACTORS OF PRIVATE SECTOR INVOLVEMENT

To attract private investment, local authorities need to establish a strategic framework tailored to local conditions and based on consultation with all local stakeholders. The project must take into account the town’s socio-spatial structure, the type of waste involved, the resources available, the institutional setting, and whether those involved are from the formal or informal sector. Adopting European standards is often counter-productive for local authorities lacking the necessary financial and technological resources. For a public waste management policy to be sustainable, a pragmatic, customised and progressive approach is essential. Such an approach is preferable to applying high standards from the beginning. More generally, a clearly defined regulatory framework enabling companies to compete equitably is a prerequisite for effective private sector involvement.

The public authorities should be able to offer a clear, well-defined and securing contractual framework for the private sector. Public-private contracts must be relatively long term so that private operators can customise and improve the services provided, while complying with municipal budgets. Shared responsibilities must be stated explicitly so that private operators are best able to manage their risks. Financial and legal stipulations (such

¹ The goal of a BOT (Build, Operate and Transfer) contract is to appoint a private operator for the design, construction, operation and maintenance of a project. It implies a transfer of ownership of the project to the government at the end of the contract.

² The challenge for public authorities is to include, structure and regulate the informal sector, which handles a significant portion of waste sorting, recycling and reuse.

as penalties or termination conditions) must be included in the contract to ensure that private operators fulfil their role in a professional manner and comply with the strategic framework (particularly in terms of service level and access). Ultimately, local authorities must have the work force and sufficient resources to be able to monitor and control contracts and, more generally, implement a consistent public policy.

A COMPLICATED FINANCIAL EQUATION

Solid waste management services in both developed and developing countries rarely reach financial equilibrium. Local authorities in the developing countries often have to resort to three different funding sources – household waste collection fees paid by the user, a household waste collection tax, and general budget contributions – in an attempt to cover sector costs. Waste collection fees are paid directly by each household and usually apply to collection only. The amount is kept low, to be manageable for households, and is typically paid to private or informal waste collection operators. These fees are generally not enough to cover the system's upstream costs.

Local authorities therefore try to obtain additional financing via a household waste collection tax, which is used to finance other aspects of the service. This tax is usually linked to a land tax on developed properties. In the case of local authorities in the developing countries, the base of this tax is reduced, and payment rates are low. Furthermore, the tax is collected by the state and channelled through the treasury. Due to the lack of transparent systems for paying local taxes to municipalities on an ongoing basis, losses inevitably occur. Waste management services in the developing countries are therefore subject to the problem of mobilising tax resources in towns and cities. Consequently, the income generated is not sufficient to cover the costs of setting up an integrated waste management system.

Some interesting initiatives have been introduced to improve tax revenues. For example, the city of Lomé has been experimenting with levying fees on major producers of waste

(manufacturing industries, restaurants, hotels, business, and so on), while Addis Ababa has been experimenting with indexing the household waste collection tax based on a household's water bill. These fees, generally proportional to consumption, mean that at the very least, payments are spread in keeping with living standards.

Mobilising the private sector, skilled as it is, does not in itself constitute a solution for better waste management. To be effective and appropriate, a waste management system must be accompanied by better financing mechanisms, increased technical and institutional capabilities on the part of public authorities, and a well-structured regulatory framework.

In the absence of such an environment, private sector involvement – even if it can temporarily fill public management gaps – may still not be enough to achieve an integrated and sustainable waste management system. •

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The Agence française de développement (AFD) supports development of the integrated management of municipal solid waste in several cities such as Lomé, Addis-Abeba, Cap Haïtien and Gaza. Through loans or subsidies, it mainly focuses on the reorganisation of the pre-collection, collection and transport of waste, and the improvement of waste storage and elimination. It also supports innovative projects involving waste recovery and recycling.