

# **Assessing the Range of Options for PPP in Expanding Waste Management Services in Developing Countries**

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# Outline of Presentation

1. Introduction
2. PPP Defined
3. Conventional PPPs
4. Non-Conventional PPPs
5. Recycling and Reuse
6. Conclusion

# 1. Introduction

- Solid waste is modernising rapidly in DCs
- The main emphasis is on improving service delivery in DC cities, especially to slums
- This challenges the capabilities of the public sector; they are lagging behind urban growth
- Public-Private Partnerships (PPPs) add the power, creativity, and experience of private actors to the mix, to improve performance.

## Introduction ...

- The private sector is a key stakeholder in Integrated Sustainable Waste Management (ISWM)
- ISWM is more than purely service delivery, it includes also *valorisation of materials*
- PPPs in ISWM up to now focus on service delivery systems, especially in low- and middle-income countries
- Including recycling/composting is the next step.

## 2. PPP Defined

- PPP: arrangement between a public entity and one or more private or NGO partners for a specific purpose
- May create a new organization with co-ownership and co-responsibility,
- Supplements municipal competence and experience.
- Risks as well as rewards are shared.
- Both “P”s have a clear and transparent role.
- An innovative and attractive tool to address solid waste management, recycling, public cleansing.
- Existing PPPs in ISWM cover many aspects.

### 3. Conventional PPPs with Formal Public and Private

- PPPs between two formal sectors – a public entity and a private enterprise/ institution.
- Private institutions can be NGOs, CBOs, academic or professional associations, non-State actors.
- Based on the recognition that public and private sectors and communities share interests, but have different and complementary competences.
- There is great benefit from complementary pooling of resources and sharing risks and responsibilities.

## 3.1 Conventional and Non-conventional PPPs

- Conventional PPPs involve forming a new entity in which public and private partners co-operate
- The term PPP is getting a somewhat wider definition
- Now includes also what used to be called PSP, private sector participation
- Can involve informal and formal private sector, NGOs, CBOs, and different levels of government
- The UNDP definition of a PPP puts the local authority in charge, and the private sector as contractor
- Other definitions involve joint ventures, public companies, concessions, franchises, and CBOs

## 3.2 Conventional PPPs

- Public Sector – Private Sector (Formal)
- Municipal contracting with private service provider
- Municipality awarding franchise or concession
- Payments usually go from public to private entity
- Source of funds is public treasury



## 4. The Range of Options for Conventional PPPs

- **Service Contract** - The private partner has to provide a clearly defined service to the public partner. Duration: 1-2 years
- **Management Contract** - The private partner is responsible for core activities like operation and maintenance of the system. Duration: 10-15 years
- **Design, Build and Operate (DBO)** - The private contractor is responsible for the design, construction and operation of SWM facility. Duration: 25-30 years

# Range of Options of Conventional PPPs ...

- **Lease** - The private partner is fully responsible for operation and maintenance; the public partner is responsible for new investments. Duration: 8-15 yrs
- **Build, Operate and Own (BOO)** - The private partner builds a facility based on a defined design and owns and operates it. Duration: 15-25 yrs
- **Build, Operate and Transfer (BOT)** - Same as BOO with an additional clause for later transfer of the asset to the public partner. Duration: 15-30 yrs
- **Concession (including fee collection)** - The private partner is fully responsible for operation, maintenance and investments. Duration: 15 to 30 yrs

## Examples of Conventional PPPs in SWM in Asia

- (1) **BOT Project with a Private Firm:**  
Materials Recovery Facility and Transfer Station in San Fernando City, Pampanga, Philippines. This project of of the city focuses on waste collection, financing and construction of a materials recovery facility (MRF), expansion of an existing compost facility into a large scale centralized facility, transport and haulage of residual waste to a regional Sanitary Landfill outside the city. A private firm provides all the services while the City Government provided the land for the MRF, assists the firm in marketing their compost fertilizers to farmers in the Province and allows it to receive income from the MRFs.

# Examples of Conventional PPPs in SWM in Asia

- DBO Project with a Private Firm in Tuas, Singapore. Waste to energy project in Tuas is Singapore's first waste-to-energy plant built under a DBO agreement. DBO contract for Keppel-Seghers Engineering Company is for 25 years.
- BOO Project with a Private Firm in Bangalore, India. Contract has been awarded in Bangalore for construction of compost plant and landfills on the basis of BOO contract.

## 6. Conventional PPPs with Other Private Institutions

- PPPs can be also made between the public sector and other formal private entities like NGOs, academe and civil societies.
- These type of PPPs are not yet popular. In fact, they hardly exist. However, PPPs from these private institutions would be potentially effective in mobilizing community participation in implementing SWM projects since the strength of NGOs and civil societies are in social marketing, communication and capacity development.

## 7. Principles that make a PPP work

- All parties have status and legitimacy
- Pre-existing claims are recognised/respected
- Each party does what they are best at:  
“Render unto Caesar what is Caesar’s,  
render unto God what is God’s”
- There is transparency and accountability
- Each party gets their minimum needs met
- There is some overlap in competences

## 8. Non-Conventional PPPs: Public Sector – Private Sector (Informal)

- The informal sector in SWM (i.e., itinerant waste collectors, itinerant waste buyers, informal recyclers, informal brokers of recycled products, informal reusers of food waste, kitchen waste, etc.) provide enormous services to cities but their work escape the sphere of PPPs because their value is unknown and not recognized.
- Investment arrangements between local governments and the informal sector are potentially good areas for PPPs in SWM that would be non-conventional in nature.

## 8.1 Characteristics of Non-Conventional PPPs and 5-Ps

- Non-conventional PPPs differ from the conventional PPPs in focus, equity arrangements, ownership of assets.
- The public sector mobilises or leverages (micro-) financing for equipment, siting
- Public / NGO intermediaries facilitate, organise
- Capacity development is critical for all parties
- Guidelines on health protection are critical
- Social support may be necessary



# Characteristics of Non-Conventional PPPs

- The informal sector contributes experience, contacts, market knowledge (forms of sweat equity)
- Direct revenues from services or trading are the main forms of operational financing
- Time and knowledge is required to organise informal entrepreneurs, & regulate claims & competition.
- The formal legal requirements of government may require modification or adjustment, 'small' registration.
- Organisation according to the legal requirements of the government creates a kind-of semi formal status.

## 9. Recycling: Areas for Non-Conventional PPPs

- The informal sector in low- and middle-income countries is divided into various occupations

Processors	Collectors
Mobile traders	IWBs or IWCs
Small junk shops	Dump, street, container pickers
Medium junk shops	Truck and collection crew pickers
Buy-back centres	Specialised buyers
Swine/livestock feeding	
Cottage industries	

## Recycling: Potential for non-conventional PPPs

- Recycling or *valorisation* is a private trading activity undertaken by the informal sector,
- It benefits cities by reducing, *by up to 20%*, volumes of waste collected, at little (no) cost to the city budget.
- Protects urban environments by diverting materials from disposal & reducing soil, water or air pollution
- Informal recyclers work in poor conditions, & are vulnerable to changes in ISWM at municipal level
- PPPs in recycling create security for informals and sustainable environmental benefit to cities.

# Recycling: Areas for Non-Conventional PPPs

- Recycling is not a public service until governments take on the responsibility of recycling
- This usually happens when disposal is improved so that it becomes expensive.
- Governments see a need to organize and better manage resources by entering into arrangements with private business or community associations.
- In developed countries (e.g., Singapore, Japan), government has done this with formal businesses

# Examples of Non-Conventional PPPs

- As of date, non-conventional PPPs in SWM between the public sector and the informal sector already exist and are thriving in some developing cities.
- Some examples of Non-Conventional PPPs:



Colour" 2009



# Itinerant waste buyer, Pakistan



3-R Asia "A Horse of a Different Colour" 2009

# Non-ferrous junk shop, Eritrea



3-R Asia "A Horse of a Different Colour" 2009



## 4. Examples of good practice -1

City / Country	Specific good practice PPP(PP)
Brazil Philippines	PPPs giving informal recyclers /junk shops concessions to collect or receive materials /to operate recycling centres (ASMARE and Quezon City MRFs)
Mali (W. Africa)	PPPs to operate recycling transfer and community disposal (COGEVAD, Mali)
Egypt Columbia	PPPs for post-collection sorting, tip areas (Colombia, Cairo)
Bangalore, India	Facilitate waste picker-business service relationships which include access to materials (Bangalore, India)
Tanzania Bulgaria	Municipality micro-franchises waste collection (Dar, Tz), sweeping (Bulgaria)

# Examples of good practice -2

City / Country	Specific good practice
New York USA, South Africa	Excavate, seive, and reconstruct the old landfill, shift to cell pattern, add recycling and composting areas
Bangladesh, India, Malawi, Kenya	PPPs to collect market waste, separate and wash plastics, compost organics
Brazil China	Organise privatisation tenders so that documents require working with the informal sector
Costa Rica, Honduras, India	Facilitate B-to-B PPPs with bank sector & finance ministry & LAs for loans guaran-tees /longer contracts to MSEs / CBOs



# Municipality supports informal collectors of recyclables in Lima, Peru



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# Examples of good practice -3

City, Country	Specific good practice
USA, Canada, Netherlands	PPPs with cities and private compost producers to use compost for parks, road berms, cemeteries, public spaces
Sri Lanka, Belgium	PPPs with agriculture ministry and farmers to promote on-farm production and use of compost ( )
Tanzania, Serbia	Market studies, market failure analysis as part of ISWM assessment, PPPs for gradual expansion / strengthening of existing informal systems
India, Brazil, Mali, Columbia, & globally : WIEGO & RWB	Organise informal recyclers through, unions, NGOs, co-operatives; platforms; associations



# Examples of good practice -4

Country, City	Specific good practice
Philippines, USA, Canada, Costa Rica	PPP recycling co-operatives with port authority, other public entities & EPR
Philippines; Colombia; USA	organise collective transport, storage, and/or marketing co- operatives
Indonesia, Canada & California USA, Bangladesh	Support recyclers to develop hybrid or new businesses combining services with valorising the materials. respectively: composting, deposit return, carbon financing
Costa Rica, Netherlands, Canada	Create EPR systems where the producers support costs of safe recycling or guarantee prices

# City of Diadema, Brazil contracts the informal sector to collect recyclables



Brazilian President Lula shows his support to the informal sector and encourages decision makers to recognise their value and use their professional expertise (2005)

3-R Asia "A Horse of a Different Colour" 2009

# Challenges in PPP

## Conditions that will ensure success of a PPP

- a) PPPs in SWM will enjoy success only under an enabling policy environment and a rationalized regulatory framework of the government.
- b) Government personnel have adequate capacity to conduct monitoring and evaluation of PPP projects.
- c) The private sector partner (formal) has sufficient financial resources. The private sector partner (informal) has adequate management skills.



## Some resources

The Collaborative Working Group on Solid Waste Management in low- and middle-income countries:

[www.cwgnet.net](http://www.cwgnet.net) (and the informal sector network)

WASTE, Advisers on Urban Environment

[www.waste.nl](http://www.waste.nl) -- and coming soon, a new portal

Chintan-Environmental, Delhi, India

[www.chintan-india.org](http://www.chintan-india.org)

WIEGO: Women in Informal Employment --  
Globalizing and Organizing;

[http://www.wiego.org/occupational\\_groups/  
waste\\_collectors/index.php](http://www.wiego.org/occupational_groups/waste_collectors/index.php)





**THANK YOU!**