

WORLD ISWA CONGRESS 2012

Session 04: Challenges and Limits of Recycling (2)

**Urban solid waste in southern countries:
from a blurred object to common pool resources**

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A long neglected issue

- ❑ « *The orphan child of sanitary engineering* » (Melosi 2000)
- ❑ In developing countries: priority to brown agenda



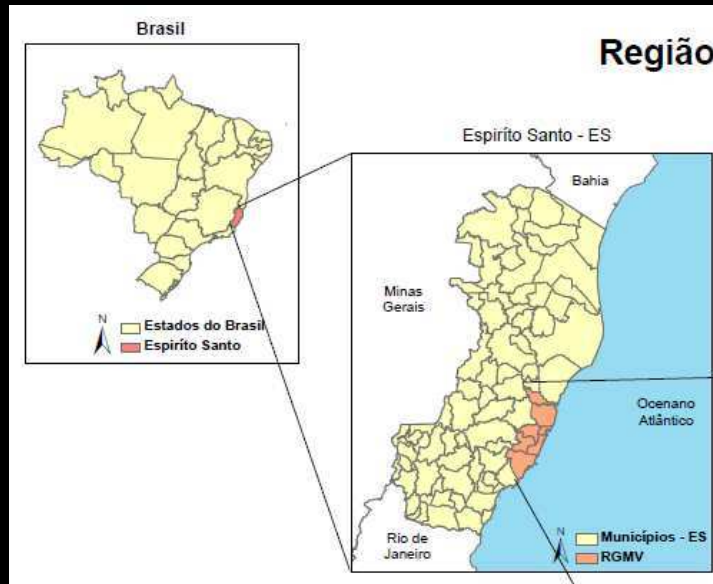
- A growing problem
- Imported solutions
- White elephants...

The SWM sector « *modernization* »

- ❑ Dumping sites are banned and sanitary landfills imposed
- ❑ Threatens the informal recovery and recycling sector
→ Waste Pickers!
- ❑ The type of economic service that MSWM represents is unclear:
is it a public service?
is it a market economy activity?
- ❑ The introduction of separate collections reinforces the **blurred** economic nature of the SWM service

=> what is the impact of the introduction of separate collections schemes in the MSWM service?

Two case-studies in emerging countries



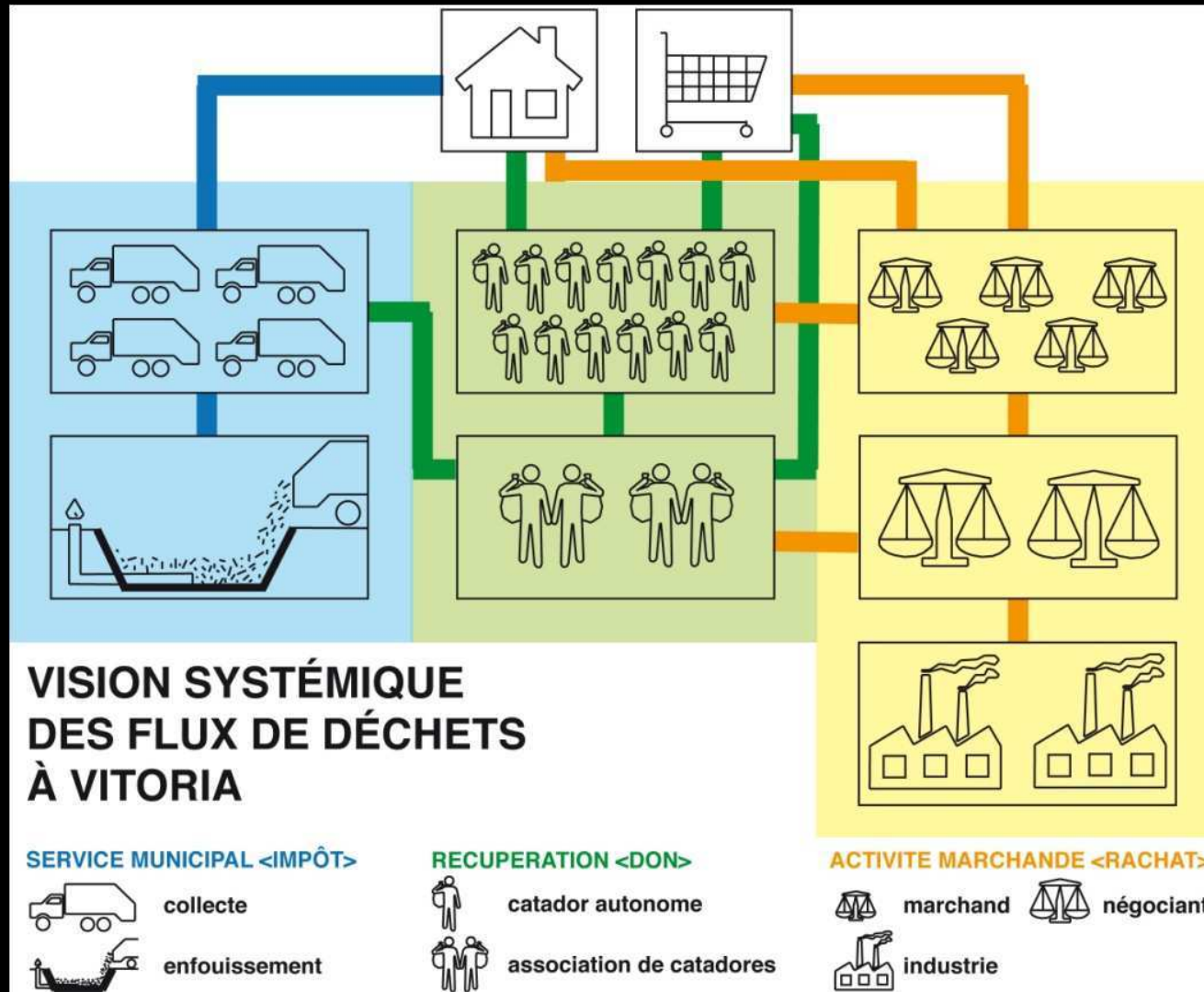
Vitória – ES – Brazil

Coimbatore – TN – India

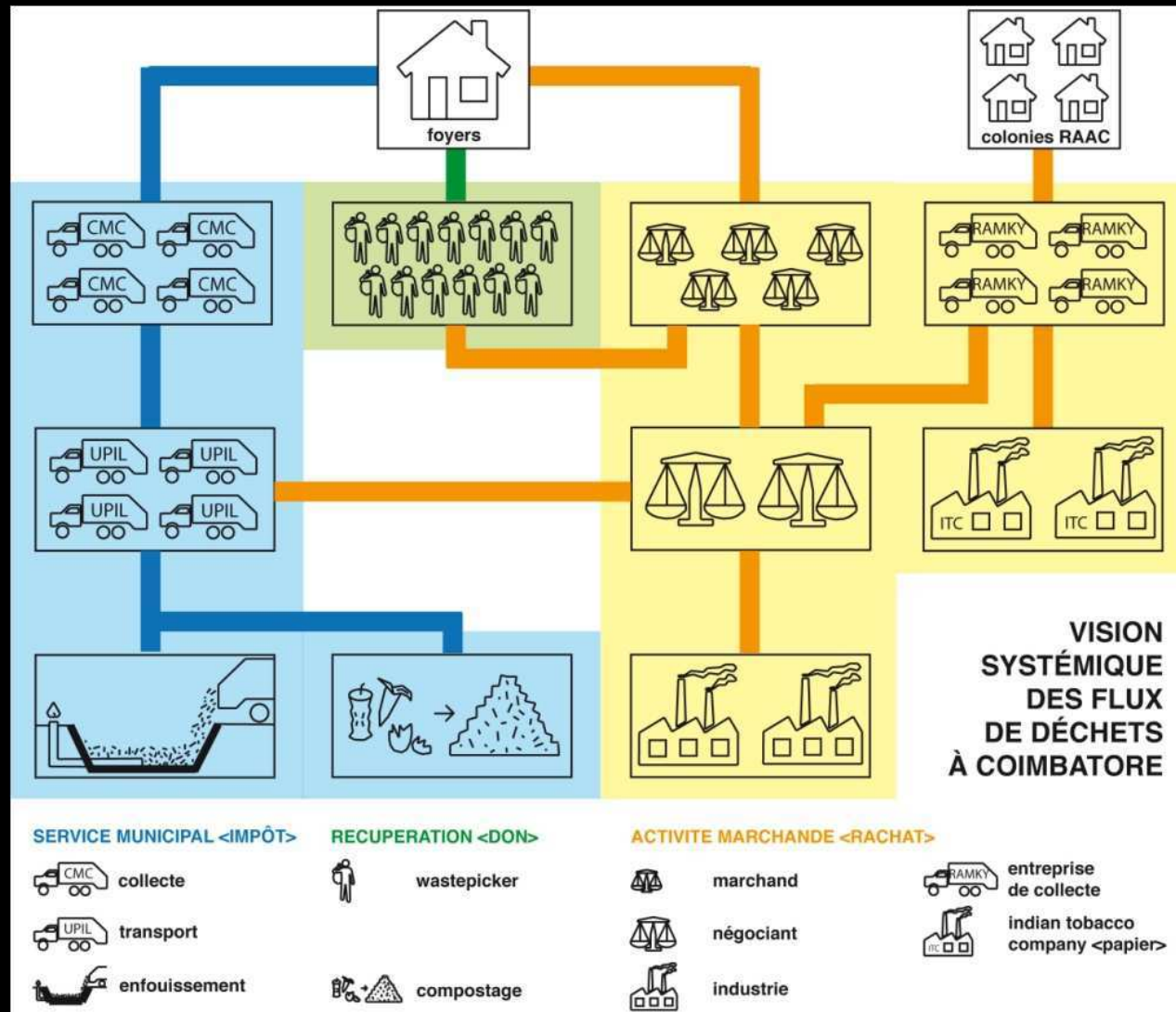


Formal comparison of the agglomerations	two	Population	Waste production	
			<i>tons per day</i>	<i>Kg / capita / year</i>
Vitória ¹		1 484 800	1 111	271
Coimbatore		1 482 000	882	217

SWM in Vitória: tax, gift, purchase



SWM in Coimbatore: tax, gift, purchase



To whom does the *res derelictae* belong?

- In both cities, different kinds of interactions coexist around the waste deposit: tax / gift / purchase
→ the sense of the exchange is unclear
- Waste appears as a blurred object:
where does the product end?
where does trash begin?
- Every device aims at appropriating the inhabitants' valuable **dry waste**.
No one has clear property rights over these materials
As a matter of fact, waste is what has been abandoned,
i.e. ***res derelictae***
=> Political economy of this « *contested management* »

The appropriation conflicts' determinants

- An unquestionable economic issue at stake
 - part of the MSW deposit is seen as resources

- The spatial dimension: as close **to the source** as possible!
The centralized municipal service is **short-cut** by more flexible devices
 - **Creaming-off effect**

- When the dry items sale is lucrative, it becomes almost impossible to suppress short-cut recovery diversions
 - As exclusion is impossible, the MSW deposit can be economically characterized as a **common good**

The urban SW deposit as a common good

Types of goods and services in economical theory

Exclusion possible

Exclusion impossible

Private good

Common good

Rivalry

a car

fishery

Non - rivalry

Toll good

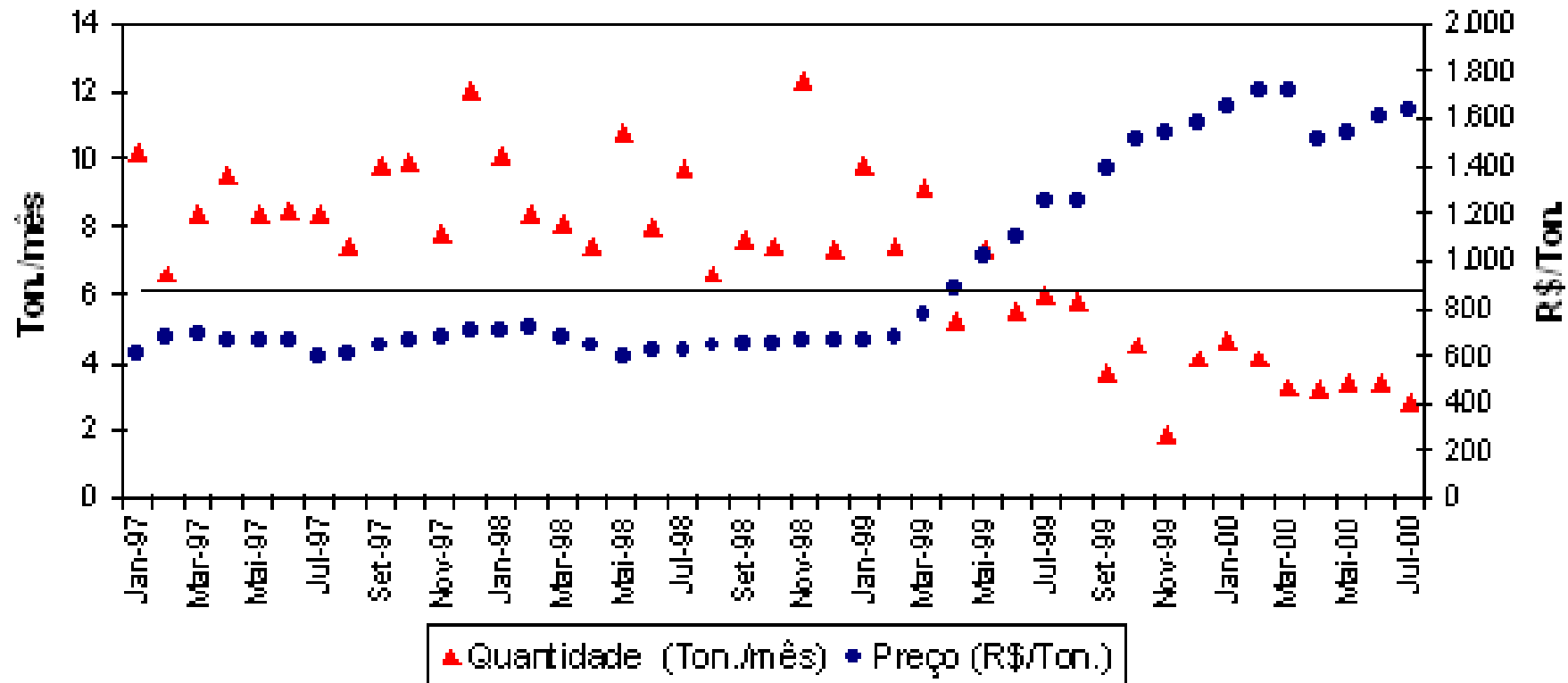
Public good

Cable TV

*Air,
National defense*

Informal recovery is influenced by market prices

Quantidade de latas de alumínio coletadas pelo serviço municipal em função do preço de comercialização



(source: F. Baptista 2001)

Global raw materials quotations have an impact on local dry items resale tariffs

Comparaison des cours de l'aluminium dans le monde (vierge) et au Brésil (us agé)



(source: Cavé 2011)

Urban mining industrial strategies

- ITC's *Wealth Out of Waste* scheme is a national programme
 - implemented in all major South-Indian cities
 - behind a CSR discourse, lies an industrial strategy

- In Coimbatore, **the cement manufacturer ACC**
intends to **recover mixed plastic waste**
in order to use it for co-incineration
 - *Alternative Fuels and Raw Materials* strategy
 - A National "Geocycle" program (GIZ)

Conclusion (I)

- ❑ The income heterogeneity in urban areas from Southern countries constitutes a decisive key to understanding
- ❑ The present situation of recovery is fundamentally different from the historical context of *ragpicking* in Northern cities in the late XIXth century.
- ❑ The SW valorization sector is becoming **highly strategic**.
→ Solid waste is, worldwide, the only (secondary) raw material deposit which is expanding.

Conclusion (II)

- Overcome dichotomies
 - industrial ecology,
 - livelihood and
 - public service delivery issues unfold in urban areas

 - Property rights over garbage are still uncertain!

 - The urban SW deposit has common goods characteristics
 - Valorization cannot happen without a proper disposal facility
 - garbage burying must be compensated for *and* mitigated by valorization alternatives
- => The deposit should be considered and managed as common pool resources (Ostrom 1990)

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Grazie !

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