

ISWM Plan for Nairobi: Training on Baseline for Waste Data

A-Prof. Harro von Blottnitz



UNIVERSITY OF CAPE TOWN

Environmental & Process Systems Engineering Research Group

Where is this place?

“We can only move towards sustainability if we are ready to change our behaviour. Much of the city resident’s behaviour drifts away rather than towards sustainability. We are simply materialistic and wasteful. Consequently, majority of the residents consume more that they actually need. The environmental sustainability of the city now and in the future relies on the resident’s ability to adopt more sustainable behaviour patterns. The residents need to decouple their sense of prosperity from over consumption and only consume what we actually need. Our national model of citizenship should value sustainable behaviour and not conspicuous and wasteful consumption.”



How do we deal with quantification?

- “The city of Nairobi manufactures a total of 192,836 tones per year (t/yr) of plastics from a raw material input of 239,602-t/yr. Out of this manufactured total, 49,022 t/yr equivalent to 25% of the total manufacturing comprises of plastic carrier bags. An additional 27,813-t/yr of finished plastic products are imported into the city.”
- Identify two weaknesses in the above paragraph.

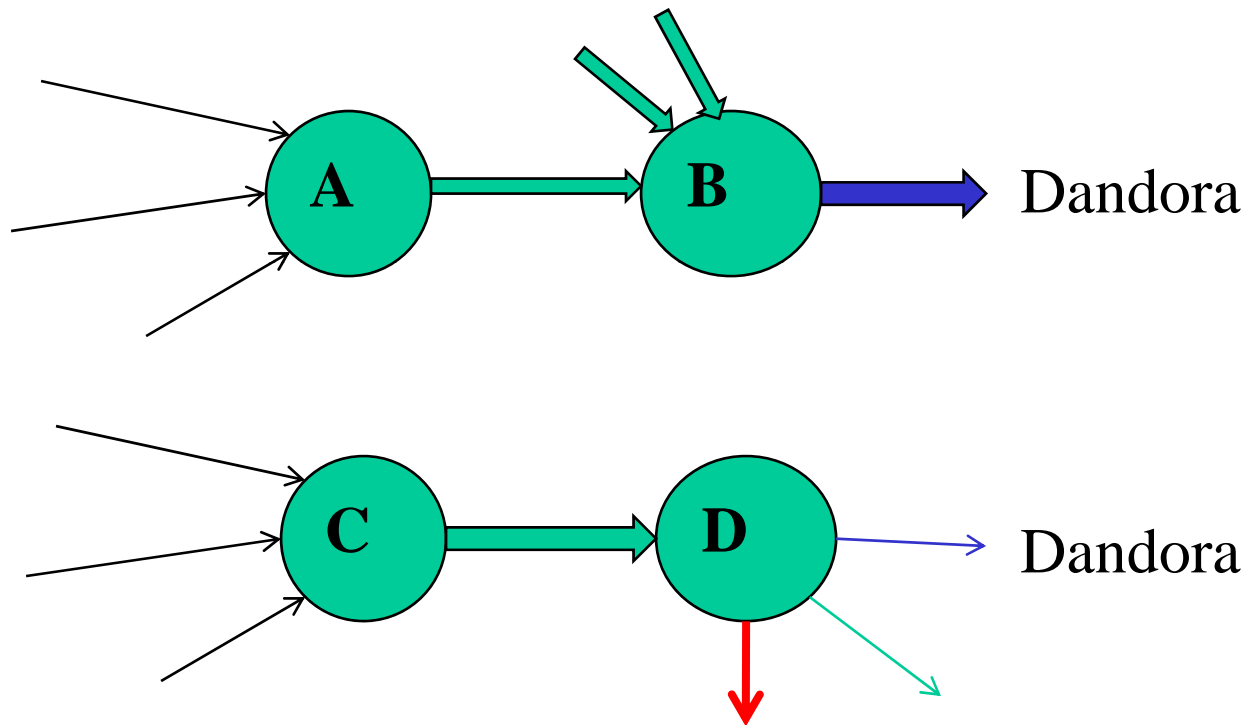


Definitions

- You are working in one of the 9 zones in Nairobi and have identified the following sources of waste:
 - 3 boarding schools
 - Blocks of flats with 5000 dwelling units
 - A fresh produce market
 - A hospital with theatre, beds and canteen
 - A furniture manufacturing company
 - A pesticides formulation company
 - A large construction site
- Under the headings of municipal, industrial, and healthcare wastes, list the typical wastes which you expect to have to quantify.



Is it a collection point, a transfer station or a materials recovery facility?



Appraisal of existing information

- “The city of Nairobi manufactures a total of 192,836 tones per year (t/yr) of plastics from a raw material input of 239,602-t/yr. Out of this manufactured total, 49,022 t/yr equivalent to 25% of the total manufacturing comprises of plastic carrier bags. An additional 27,813-t/yr of finished plastic products are imported into the city.”
- How much supporting data were gathered in this project?

