



(Re)envisioning the prognosis of SWM tragedies in Ghana (1950 – 2020)

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# Ghanaian urban population growth, the economy and solid waste generation rates



# **Ghana - a snapshot**

Description	Unit	1984	2000	2010	2020
People Urban growth rate		1970-1984	1984-2000	2000 - 2010	2010 - 2020
National	Per annum	3.3	4.6	4.2	4.1
Regional (Accra)	Per annum	3.5	3.7	3.5	3.2
Regional (Tamale)	Per annum	4.9	3.1	4.4	4.6
Economy Per capita income					
National	¢/capita	52	40	24.2	32.8
Regional (Tamale)	¢/capita	26	5	5.6	4.1
Regional (Accra)	¢/capita	63	69	50.4	68.3
Waste generation rate					
National	M <sup>3</sup> /per day		9,501	12,710	14,130
Accra	M <sup>3</sup> /per day		1,552	2,605	3,000
Kumasi	M <sup>3</sup> /per day		962	1,689	2,600
Tema	M <sup>3</sup> /per day		636	721	901
Sekondi -Takoradi	M <sup>3</sup> /per day		255	424	531

# **Conceptual issues**



# **Spaces of neoliberalism – creative destruction**

- Interpret the spatio-temporalities realities within exiting neoliberalism from two dialectically intertwined but analytically distinct "moments"
  - <u>First</u> (partial) destruction of extant institutional arrangements and political compromises through market-oriented reform initiatives; and
  - <u>Second</u>, (tendential) creation of new politico-institutional infrastructure for market-oriented economic growth, commodification & rule of capital
- Such conceptualization offers the basis for exploring its wideranging, transformative impacts upon inherited politicoinstitutional configurations and geographical infrastructure.

# Major institutional choices



## Major institutional choices (1950-2020)

Broadly, local government Act 462, revised 2016 (Act 936) mandates MMDAs to provide SWM services

### ■ 1950 – 1970 -

Focus – protect health and aesthetic - to provide <u>universal access</u> through the adoption of <u>rudimentary tools</u> and <u>techniques</u>

## ■ 1980 – 2005

Focus – cost recovery- <u>pay-as-you - dump</u>, also known as <u>variable</u> rate or <u>unit based pricing</u> under the Structural Adjustment Programme

## 2006 - 2020

Focus – cost recovery and profit - the polluter-pays-principle under urban entrepreneurism

## Waste collection architecture



# **Characteristics of high-income areas**



- Mainly through <u>House-to-House</u>
- Average waste per capita <u>0.9 kg/d</u>
- Average waste density <u>0.3 t/m<sup>3</sup></u>
- Average persons/house <u>7</u>
- Frequency of collection <u>1/week</u>





# **Characteristics of middle-income areas**





Mainly through - House-to-House

Average waste per capita - <u>0.6 kg/d</u>

Average persons per house - 15-20

Frequency of collection – <u>1/week</u>



# **Characteristics of Low-income areas**





- The use of communal container collection (CCC)
- Average waste production per capita 0.5 kg/d
- Average persons per house 50
- Frequency of collection per week 3–6 times

# **Waste collection outcomes**



# Waste collection impact — low-income areas

## Exhibiting cities within a city

- clean affluent areas vrs insanitary poor areas
- Manual collection of sacks
- No plastic bins available
- Accra, Kumasi, Tema and Sekondi-Takoradi generate about 4.500 tons per day
- About 60% waste is collected while
  1.800 tons per day is disposed
  irresponsibly









# Waste collection impact — low-income areas

- The current public infrastructure is not suitable to manage the daily waste streams, and not designed to meet the future needs of Ghana
  - Current policy over emphasizes solid waste collection at the expense of waste management









# **Institutional (in)congruence**

- The challenges associated with Pay-as-you-throw
  - The distance decay
  - The skip challenge
  - The assemblymen 'WAHALA'
- The backlash of neoliberalism and entrepreneurism
  - The strategy for pricing <u>SWC</u> and <u>disposal services</u> is analogous to that used by local utilities <u>electricity</u>, <u>gas</u>, <u>water</u>, and <u>sanitary sewer services</u> where customers pay for what they use, except in this case, <u>citizens pay for how much they throw</u> <u>away</u> or <u>find somewhere to throw your waste</u>



# **Institutional (in)congruence**

- The <u>polluter-pays-principle</u> does not make room for recalcitrant polluters
- Service providers are handicap in handling nonsubscribers
- The environment and open drains are the ultimate losers



## **Institutional (in)congruence**

#### ■ The '<u>waste bans</u>'.

- Prohibit the disposal of hazardous and hospital waste on landfills
- By emphasizing prohibitions also calls for well-established and wellinfrastructured pathways which are non-existent

#### A private transfer station



# **Prospects of SWM in Ghana**



# **ESPA** has overwhelming local capacity

#### • The need to control the **<u>Big Elephant</u>** in the industry

- Adopt and implement comprehensive SWM <u>practices</u> and <u>processes</u> backed by appropriate infrastructure and enforceable policy
- Leverage and synergize <u>ESPA</u> overwhelming capacity for efficient and effective SWM – managing generation, storage, sorting, recovering, reuse, recycling, reprocessing, collection, transport, treatment, and <u>disposal</u> of all wastes,
  - ESPA has over 80 members nationwide in different segments of of the waste management chain
  - ESPA has about 46 members in sanitation services

# Conclusion



## Conclusion

While we must avoid rigid conservatism, our quest for modernity and technology must necessarily be rooted in our noble traditions and local knowledge MMDAs are as heavy and slow as the elephant in movement (bureaucratic)



# **For Your Attention**