

# Towards Integrated Urban Water Management in Accra

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# Outline

- Setting the Context (IUWM)
- Highlights: Key Findings and Recommendations
  - Overview of Water Service Delivery
  - Overview of Sanitation Service Delivery
  - Overview of Stormwater Management
  - Institutional Issues
- Conclusions about Document



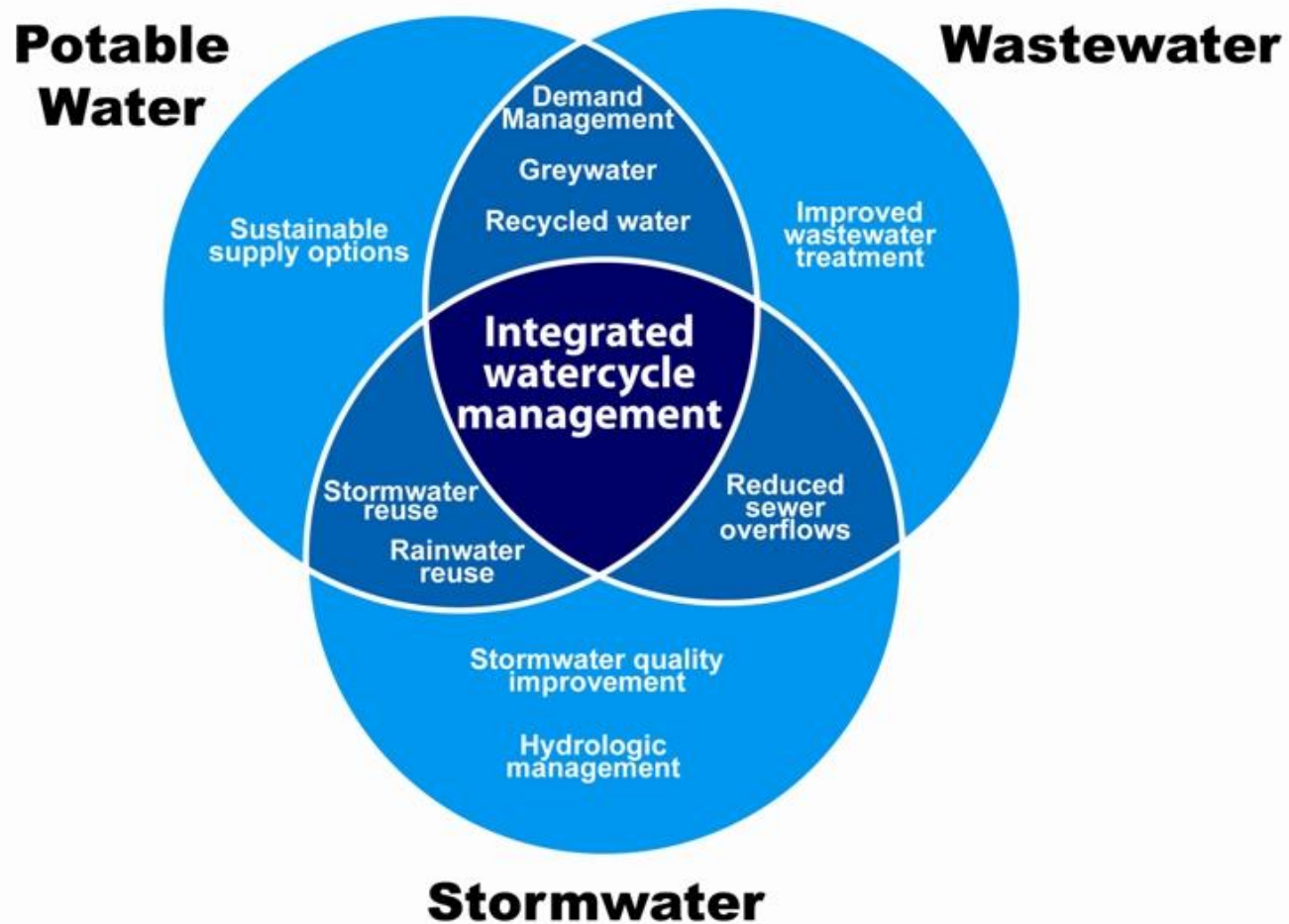


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# Integrated Urban Water Management in Accra



# The challenge

- Poor water supply
- Low sanitation coverage
- Open defecation
- Pollution of water bodies
- Use of polluted water for Agriculture
- Flooding



Pics: Courtesy O.Cofie (IWMI)

# Recommendations from SWITCH Learning Alliance Stakeholders

Need a broader vision beyond building new plants and revamping of plants to see how to close the gaps/ deficit for water supply and wastewater treatment/institutional issues/financing

# Institutional Issues (City Level)

- Need for greater Accountability in the system
- Resolve ambiguities on responsibilities for service provision
- Need of a “Greater Accra Metropolitan” coordination platform
  - city wide planning for the development of water and sanitation services
  - promote interaction among key city level stakeholders
  - platform to coordinate, harmonise and monitor the overall strategic vision for the city
- Inter-Municipal level planning should be encouraged

# Current Water supply situation

Resources

Infrastructure

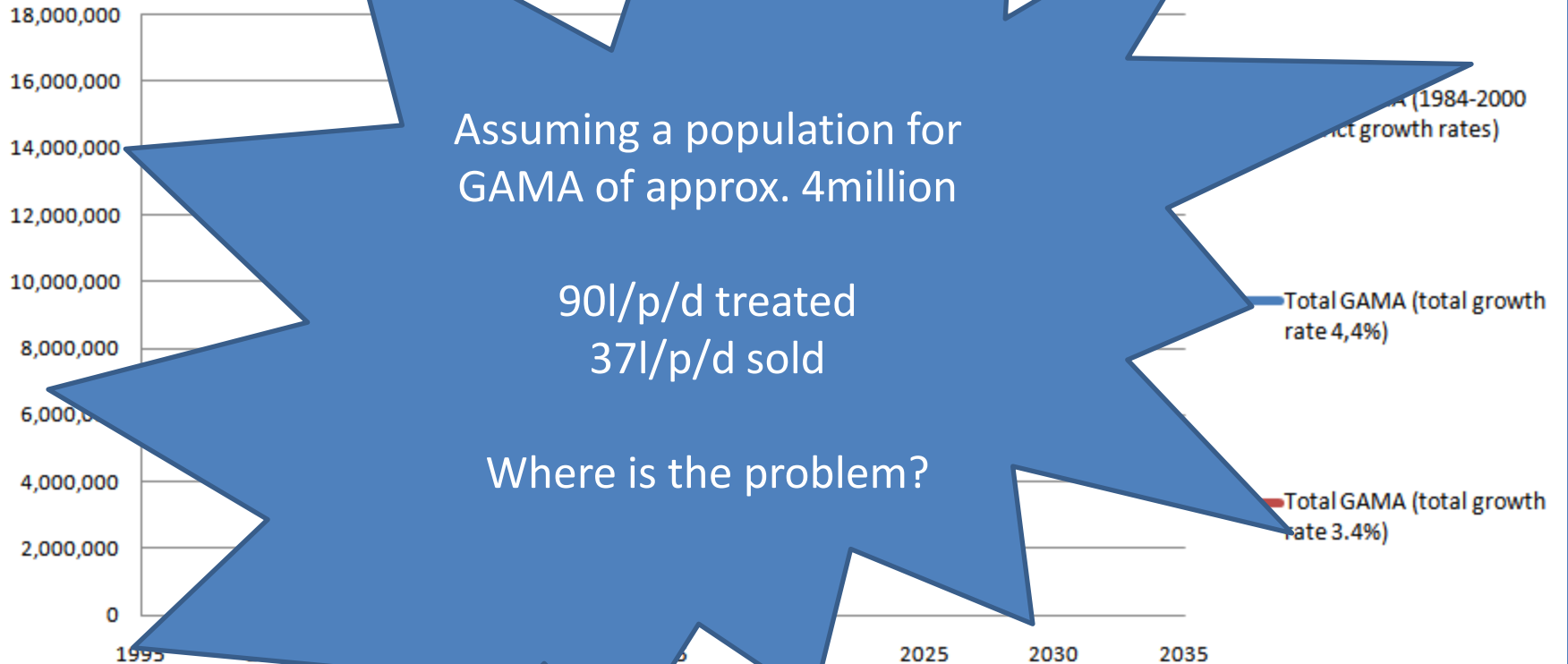
Demand

Access

Surface water

Capacity: 430.310 m<sup>3</sup>/day

Amount of water sold in



Rain water

2.15 km<sup>3</sup>/year

Capacity: 4 x 1000 m<sup>3</sup>/day  
Production: 4 x 274 m<sup>3</sup>/day

Private producers

Capacity: 5x 65 m<sup>3</sup>/day

Amount sold. about 4 x 170 m<sup>3</sup>/day

Private producers

Max amount sold: about 5x 65 m<sup>3</sup>/day  
GAMA



- Result of Old way of thinking



theyellowlines.wordpress.com

- What will we do to someone who loses 50% of our oil revenue?



24th May 2011 12:07:51 by Suleiman Mustapha

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### No Revenue Loss On FPSO - GNPC



The FPSO Kwame Nkrumah at the Jubilee Oil Fields.

The defective measuring instrument on FPSO Kwame Nkrumah does not threaten the ability to track crude exports, the operators said, in a move to assuage fears that Ghana's oil revenues could be hit.

An ultrasonic metre that monitors oil export flows has not worked since the first oil was drilled December last year. The failure has sparked concerns that Ghana could fail to capitalise fully on its crude production.

"We assure the public that the measurement systems in place are accurate," Ghana National Petroleum Corporation (GNPC) and UK-listed Tullow Oil, the Jubilee Field's operator, said in a joint statement.

# Improving Supply through current system

- Enhancement of the capacity of the piped system to increase water quantity
- Improving management in order to decrease physical and commercial losses
- There is a need for the acknowledgement and formalization of (informal) service delivery models beyond household connections
- Reviewing mechanisms to recover the O&M and capital investment costs for different service delivery models (cross subsidizing etc)

# Overview of Current Sanitation Situation

Resources

Infrastructure

Demand

Access

- From diagram we see lack of treatment capacity (capacity for treatment is only about 17% of demand)
- Almost all treatment plants are not functioning
- Use of unsafe facilities
- Large number of people using public toilets
- number of houses making use of septic tanks
- Onsite sanitation (management of on-site sanitation system is important)

Ocean

Gro

Average  
Monthly  
Expenditure  
(US\$)

0.6-6

0.87

0.75

0.21

48

# BEACH WAHALA!

KORLE-GONNO  
SHIT UNLOADING  
HARBOUR

KORLE-G CHAIN BEACH RESORTS

SHIT  
TRUCK

DONT WORRY,  
SEA WATER DEY  
NEUTRALIZE THE SHIT  
AND BLACK RUBBER

BEWARE  
OF SHIT FLU 000

CHARLIE, I TOUCH  
SOMETIN LIKE SHIT...  
OR EBI SAUSAGE?

AKOSUA



# Improving Sanitation

- Promoting different options for sanitation for different contexts
  - Promoting different options for sanitation for different contexts
  - Improvements should be across the whole chain from point of generation to treatment and disposal
- Re-evaluating existing sanitation options
- Using advanced treatment options as a final resort

# Storm Water Drainage

## Resources

Sakumo I Lagoon

Panbros saltpan

## Infrastructure

Densu basin

## Demand

## Flooding in the city: the blame game

By Bertha Akosua Darteh

### What Blame Game?

We, the residents of Accra and other big cities I might add, are very interesting. When the floods come, we are suddenly awakened from our deep slumber into an emotionally charged frenzy of blame games. "It is the assembly" ..., "it is those who build in water

ways" ..., "it is the open drains..." (is it the drain itself or the attitude of the people who dump refuse in drains. Even when it is covered they still lift up the cover to dump refuse into them). We are so charged up during the floods but Right after the floods have subsided what do we see? After a few recce tours by the "big" men, we all go back into

hibernation, waiting to be roused by the next season of floods. Everybody blames someone but at the end of the day nobody takes the responsibility for what anybody could have supposedly done to solve the problem.

Mokwe

Sakumo II (East)

Partly lined

Sakumo II Catchment:  
3230 m<sup>3</sup>/s

# Storm water Management

- Is Demolition the only solution?
- A large part of uncollected solid waste finds its way to storm drains
- Capacity of storm drains are limited
- Storm drains have also been converted to “sewers”
- Settlements in flood plains
- Adoption of SUDS options – low cost-high impact solutions

# Other Points about Document

- Results of stakeholder interactions and literature review ; was validated through SWITCH Learning Alliance Meetings
- Presents options for solving issues in IUWM
- Gives some pointers for Strategic planning\*
  - MMDAs
- Assessment of intervention projects
  - Sector agencies, DPs and general practitioners in the sector
- Informative - for referencing
- Academic purposes and research
  - useful hand book for students and professors
- Consultancy, proposal writing



# Merci

- SWITCH Learning Alliance Members
- **Developing a sense of ownership for a common vision in water and sanitation**



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