

SCP/LA21 GLOBAL MEETING 2005

GLOBAL ISSUES – LOCAL ACTORS

DAR ES SALAAM CITY: WASTE WATER AND COASTAL POLLUTION

**Prepared and presented by
Julius Maira and Anna Tesha
EPM Dar es Salaam
June 29, 2005**

DAR ES SALAAM

- **Area: 1800 Sq. kms.**
- **Population: 2.5 Mil**
(census report, 2002)
- **Growth rate 4.3% p.a.**
- **Governance: One City**
with 4 local councils

Background

There are two types of of waste water Management in Dar es Salaam City;

1. Sewerage system and
2. On-site Sanitation

Sewerage system

- Built in 1950's
- Serve approximately 10% of the population in the CBD, surrounding N'hoods and some Institutions
- Direct discharge to the sea through an old 1km long and 1m diameter outfall.

On-site Sanitation

1. Over 90% of Dar es Salaam population are served with pit latrines and septic tanks,
2. 87% of the on-site sanitation served through cesspit emptying offered by public and private operations
3. The current pit emptying charges range between US\$ 15 - 20 per trip

On-site Sanitation cont'd...

4. In high ground water table, emptying is done twice or more a month making the service expensive for low and middle income population leading to direct discharge into rivers, streams and storm water drains

Waste water generation

A) Domestic

- The city consumes 160mil litres per day
- 80% (approx 130mil litres) of the consumed water, is turned to waste
- 22mil litres of waste is managed through conventional sewerage system and about 0.6mil litres managed on site sanitation

B) Industrial

Some have no on site pre-treatment, hence discharge directly into streams and rivers

C) Other urban activities

- Garages and car wash (oils)
- Urban agriculture (chemicals)
- Fishing (oils and poisons)
- Crude dumping of solid waste (leachate)
- Oil storages and transportation

Why Manage Waste Waters?

To Avoid and/or Prevent:

- **Water contamination**
- **Soil contamination**
- **Crops contamination/Urban agricultural**
- **Outbreaks of waterborne diseases like Cholera, typhoid, diarrhea etc**

... if not managed, will reach the sea through the outfall, streams and rivers and cause coastal pollution leading to loss of biodiversity and destruction of ecosystem

Strategies

- Privatization of pit emptying services
- Rehabilitation of existing sewerage system & oxidation treatment ponds
- Raising community awareness using Improved House Hold toilets
- Establishment of modern car wash facilities
- Construction of new sewerage system

Strategies cont'd...

- Developing a sanitary land fill
- Enforcement of existing by-laws and principal legislation
- Adoption of cleaner production technology
- Enactment of the National Environmental Management Act (NEMA) of 2004