Creative Commons License





Sandec Sanitation Wa

Sanitation, Water and Solid Waste for Development



To view a copy of this license, visit http://creativecommons.org/licenses/by/4.0



You are free to:



Share – Copy and redistribute the material in any medium or format

Remix – Remix, transform, and build upon the material for any purpose, even commercially

Under the following conditions:

Attribution – You must give appropriate credit to CAWST and Eawag-Sandec, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests that CAWST and Eawag-Sandec endorses you or your use. Please include our website: www.cawst.org and www.sandec.ch.

CAWST and Eawag-Sandec will produce updated versions of this document periodically. For this reason, we do not recommend hosting this document to download from your website.

CAWST and Eawag-Sandec its directors, employees, contractors, and volunteers do not assume any responsibility for, and make no warranty with respect to, the results that may be obtained from the use of the information provided.





This presentation is used with Lesson Plan Integrated Planning in the Introduction to Faecal Sludge Management Trainer Manual

Available at www.cawst.org/resources and www.sandec.ch

Integrated Planning for Faecal Sludge Management

2016 JULY





Sandec

Sanitation, Water and Solid Waste for Development

Learning Outcomes

- Discuss the importance of integrated planning for faecal sludge management.
- Discuss what is included in the planning process for faecal sludge management.
- Identify three key characteristics of a planning framework for faecal sludge management.





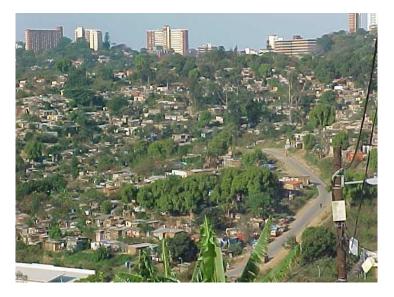
Integrated Planning in South Africa and the Philippines







- Durban in South Africa is very complex:
 - Sewered city centre
 - Informal settlements within 5 km of the city center
 - Rural areas within 20km of the city
 - Challenge for providing sanitation services to all









Credits for content and pictures: Teddy Gounden, Manager at eThekwini Municipality for Water and Sanitation.

<u>Durban is innovative</u>

 Urine Diversion Dehydrating Toilets (UDDTs)

Durban is adaptive

 Realization that faecal sludge from UDDTs and pit latrines requires management









Durban is integrative

 Integration of the civil society, universities, research institutes and the private sector

<u>Durban is innovative</u>

- Collection and transport models for faecal sludge and urine
- Piloting of new treatment technologies and use options for faecal sludge
 - LaDePa
 - Black soldier fly larvae







Credits for content and pictures: Teddy Gounden, Manager at eThekwini Municipality for Water and Sanitation.

<u>Durban is integrative</u>

- Providing equitable services to all requires community engangement, education and a variety of solutions
 - Ablutions blocks for dense informal settlements









Integrated Planning in the Philippines



City	Institutional arrangement	Sanitation tariff	Treatment technologies	
Dumaguete (120k people)	Public-sector partnership	0.02 USD/m³ water	Faecal sludge	Non-mechanized dewatering, lagoons and wetlands
San Fernando (250k people)	Public-private partnership	Flat property tax	Faecal sludge	Partially-mechanized dewatering, anaerobic baffled reactor and lagoons
Manila Water – Dagatdagatan (1.5+ Mio. people)	Private company, in concession with national government	20% of water bill	Faecal sludge & Waste water	Mechanized dewatering, lagoons and wetlands
Manila Water – South (1.5+ Mio. people)				Mechanized dewatering, activated sludge

Robbins, D., Strande, L., Doczi, J. Opportunities in Fecal Sludge Management for Cities in Developing Countries: Experiences from the Philippines. Water 21, December, 2012.





How we can support you!

Contact CAWST and Eawag-Sandec for support on using and adapting our education and training resources for your work.

- Opper 424 Aviation Rd NE, Calgary AB T2E 8H6, Canada
- + 1 403 243 3285
- support@cawst.org
- <u>www.cawst.org</u>



Visit <u>www.cawst.org/resources</u> and <u>www.sandec.ch</u> for:

- Latest updates to this document
- Other workshop & training related resources
 - Überlandstrasse 133
 CH-8600 Dübendorf, Switzerland
 - +41 (0)58 765 55 11
 - info@sandec.ch
 - <u>www.sandec.ch</u>



SandecSanitation, Water and
Solid Waste for Development