





Nation-Wide Assessment of Decentralised Sanitation Initiatives:

Enabling Environment and Ways towards Wide-Scale Replication Scenarios

Egyptian-Swiss Research for Innovations in Sustainable Sanitation (ESRISS)



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Eawag: Swiss Research Institute for Aquatic Science and Technology



ESRISS' scope & methodology



Development a wide-scale replicable model

for small-scale sanitation in the Nile Delta

WHAT WE DID:

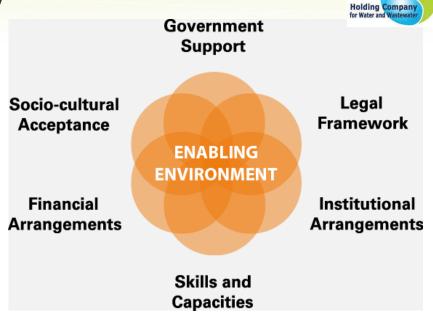
- 1. Assess the **challenges and success factors** of past small-scale sanitation initiatives in Egypt:
 - (i) Interviews with key-stakeholders of the sector
 - (ii) Thorough literature **review**;
 - (iii) Selection of the **most prominent initiatives**, **field visits**, assessment with **evaluation questionnaire** and **sampling campaigns**





ESRISS' scope & methodology

2. Systematic assessment using the **enabling environment framework**



- 3. Development of a data baseline for rural areas
 - ⇒ Surveys and interviews in villages to assess **practices**
 - ⇒ Characterisation and quantification of wastewater in ezbas
 - ⇒ Prediction model based on **material flow analysis** (MFA)

... leading to lessons learnt and recommendations





Lessons learnt



- 1. Development of a clear institutional strategy
 - ⇒ Isolation of existing initiatives
 - ⇒ Pivotal role of HCWW and Affiliates
 - ⇒ Advantages of collaborating with MWRI
 - ⇒ Ensure **full-cost recovery** mechanisms for small-scale systems

2. Standardisation of collection & treatment units

ECONOMIES OF SCALE!

- ⇒ Adopt a mass-production strategy
- ⇒ Explore the concept of locally produced prefabricated units

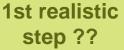
Reduce time, increase quality, reduce costs, movable

- 3. Centralised O&M management under the leadership of HCWW
 - ⇒ Specialised unit in HCWW with sub-units in Affiliates or sub-contracting to service provider (PPP)

REACH THE CRITICAL MASS







LAW 48





FILTER PRESS



Federal Department of Economic Affairs FDEA State Secretariat for Economic Affairs SECO



Lessons learnt



- 5. Adaptation of laws, regulations and Codes of Practice
 - ⇒ Go for an incremental approach
- 6. Move beyond "business as usual"
 - ⇒ Small-scale sanitation is a profitable business!
 - ⇒ New market opportunity (construction and management)
- 7. Development of a data baseline
 - ⇒ Wastewater quantities and characteristics according to settlement features
- 8. Insist on preliminary assessments of each village





Lessons learnt



9. Improve project management cycle

- ⇒ Foster innovation
- ⇒ Foster an integrated approach
- ⇒ Improve contract management
- ⇒ Monitoring and evaluation must be strictly enforced

10. Transparency and dissemination of lessons learnt

- ⇒ Analyse and document performance
- ⇒ Online library on HCWW website





Way forward



THE CRITICAL ISSUE IS MANAGERIAL, NOT TECHNICAL

- Solutions should be tailor-made and based on:
 - 1. Planning
 - 2. Management scheme
 - 3. Economy of scale
 - 4. Life-cycle cost analysis

HOW MANY UNITS, WHO CAN FABRICATE IT, WHO CAN MANAGE IT?

- Priority is to work on the **conditions** which will **enable** small-scale sanitation





Conclusion



A SYSTEMATIC NATION-WIDE ASSESSMENT:

- Provides the opportunity to collect and analyse all the available experience within a region, often not done because of the lack of coordination of sanitation stakeholders
- 2. Helps to **coordinate stakeholders**' efforts
- 3. Leads to conclusions on **how to create a more enabling environment** for decentralised sanitation





Conclusion



THE ENABLING ENVIRONMENT FRAMEWORK

AS A TOOL TO STRUCTURE AND STANDARDISE SYSTEMATIC ASSESSMENTS...

... could be used as a **reference** to better allow **comparisons** between countries and regions

Example: « ESRISS nation-wide assessment of decentralised sanitation in Egypt »

To be published soon on: WWW

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