

Small-scale Sanitation in Egypt: 10 Points to Move Forward

In the framework of its advisory role to the Egyptian Government, the SECO-funded ESRISS Project issued a policy brief addressing the situation of small-scale sanitation in Egypt. Two recommendations, in particular, economies of scale and standardisation, are key if small-scale sanitation is to thrive. Philippe Reymond¹, Christoph Lüthi¹, Rifaat Abdel Wahaab², Moustafa Moussa³

Since before the Arab Spring, the Egyptian-Swiss Research for Innovation in Sustainable Sanitation Project (ESRISS) has supported the Egyptian Holding Company for Water and Wastewater (HCWW) and the Integrated Sanitation and Sewerage Infrastructure Project (ISSIP), funded by the World Bank, in developing upscalable small-scale sanitation strategies in the Nile Delta. The last Egyptian presidential election led to the establishment of a new Ministry of Water and Sanitation Utilities (MWSU) and a political will to develop small-scale sanitation solutions. Clear guidance is needed to promote sound development; thus, ESRISS published a policy brief [1], based on a thorough assessment of the challenges of small-scale sanitation in Egypt [2]. It identified the following 10 key action items:

1. Development of a clear institutional strategy

Isolated initiatives and lack of commitment by government agencies largely prevent wide-scale replication of successful sanitation planning; none of the effective approaches tested so far have been institutionalised. Developing a clear integrated strategy, including input from all stakeholders, is important.

2. Standardisation of treatment units

Wide-scale replication implies standardisation and production of prefabricated units. This would bring economies of scale, reduction of costs, reduction of the time needed for project preparation and

implementation, and an increase in the quality of the infrastructure.

3. Centralised O&M management under HCWW leadership

Small-scale systems should be centrally managed, either by HCWW or a professional private company. Establishing an effective management scheme requires determining the minimum number of villages to be served, i.e., the “critical mass”

4. Selection of appropriate collection and treatment options

Sanitation options for each village should be tailor-made and based on: good planning, including adapted design criteria; feasible management schemes; and comparison with life-cycle cost analysis.

5. Adaptation of laws, regulations and Codes of Practice

Existing laws, regulations and Codes of Practice prevent the sound development of small-scale sanitation systems. An incremental approach should replace the current “all or nothing” philosophy.

6. Move beyond “business as usual”

Conventional wisdom says that “contractors do not like to go for small-scale systems because there is little money for a big effort”. Actually, small-scale sanitation is profitable in terms of economies of scale.

7. Development of baseline data

The lack of baseline data about rural sanitation has led to inadequately designed infrastructure. Records of wastewater quantity and the characteristics specific to each village should be kept.

8. Focus on preliminary assessments

Thorough preliminary field assessments, leading to realistic design parameters, are key for cost-effectiveness and sound estimates. Planning should prioritize modular, flexible systems given the high uncertainty of future social developments.

9. Improvement of the project management cycle

Terms of reference, and tendering and bidding procedures should allow for flexibility, innovation and the inclusion of small stakeholders. Complicated procedures favour big consultancy firms that are specialists in meeting donor requirements, but not in small-scale sanitation. The accountability of consultants and contractors should be increased. Performance-based contracts should become the norm, and monitoring and evaluation must be strictly enforced.

10. Transparency and dissemination of lessons learned

Lessons learned are few and far between in Egypt. It is recommended that HCWW create an online document library on its website to prevent consultants from re-inventing the wheel and/or selling the same report to different parties.

In the coming months, the ESRISS Project will further its analysis of sanitation system scenarios and its *Material Flow Analysis* model to better forecast the quantity and characteristics of wastewater in small settlements. Policy work will be driven by demand and the political decisions of MWSU and HCWW.

[1] Reymond Ph., Abdel Wahaab R., Moussa M. (2012): Small-scale Sanitation in Egypt – 10 Points to Move Forward. Research for Policy Brief. Eawag.

[2] Reymond Ph. (2012): Small-scale Sanitation in Egypt: Challenges and ways forward. Eawag.



Photo 1: Village scene in Beheira Governorate, Nile Delta.

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