

# Reviews and resources

## **Sustainable Sanitation in Cities: A Framework for Action**

C. Lüthi, A. Panesar, T. Schütze, A. Norström, J. McConville, J. Parkinson, D. Saywell and R. Ingle

2011, Papiroz Publishing House, The Netherlands, available for free download from [http://www.eawag.ch/forschung/sandec/publikationen/sesp/dl/sustainable\\_san.pdf](http://www.eawag.ch/forschung/sandec/publikationen/sesp/dl/sustainable_san.pdf)

There is increasing recognition that the most significant sanitation-related problems in poor countries are often those experienced by low-income city dwellers. At the same time, partly driven by concerns about resources, many individuals and organizations have promoted a more 'ecological' approach to sanitation. This emphasizes the need to 'close the loop' so as to return nutrients to the environment rather than storing them in pits or flushing them via rivers to the sea.

*Sustainable Sanitation in Cities: A Framework for Action* aims to bring these concerns together to inform and guide city-wide efforts to provide sustainable sanitation solutions. It starts from two basic premises, that 'ecological' approaches to sanitation must be central to any efforts to achieve sustainable urban futures and

that initiatives in sanitation, solid waste management, and urban planning must be linked.

After a general introduction, the book reviews the existing situation, focusing on the phenomenon of slums and the realities of urban sanitation, before drawing attention to the need to conserve nutrients in order to ensure sustainability. Chapter 3, suggestively entitled 'Looking Back to Move Forward', provides a brief summary of the history of sanitation, focusing particularly on systems that incorporated excreta reuse. Chapter 4 deals with sustainability in the urban context, focusing first on concepts and definitions of sustainability. Chapter 5 tackles the issue of how to provide a framework for urban complexity, suggesting that IWA's Sanitation 21 planning framework provides a suitable basis for analysis of sanitation in urban centres. It goes on to briefly describe an approach to understanding and analysing the urban context, using a distinction between household, neighbourhood, city, and beyond-city levels that is similar to that used in the Household Centred Environmental Sanitation (HCES) approach. The suggested approach is strategic in that it suggests the need to identify

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entry points for action rather than immediately attempting to tackle the problems faced by cities as a whole. This is eminently sensible.

Chapter 6 deals with planning for sustainable sanitation, arguing for an approach that is both integrated and participatory. This requires a 'communicative' approach to planning. While this approach to planning is widely advocated by academics, there are perhaps further questions to be asked about how it works in practice, particularly where society and government systems are fairly hierarchical. The book gives an example of the combination of bottom-up and top-down, strategic and participative planning but this is one area in which much more needs to be done before we can say that we have really met the challenge of moving towards more sustainable cities.

Chapter 7, which deals with sustainable sanitation systems includes several clearly presented 'system templates' showing the way in which the various elements in various sanitation systems are linked, providing a tool that readers can usefully use to assess their own sanitation options. They include examples from both 'developed' and 'developing' countries, as indeed do the examples in Chapter 4. These templates should be a very useful tool for planners but they do not, and indeed are not intended

to, deal with the factors that constrain sanitation delivery in the real world. These are partially dealt with in the next chapter, entitled 'putting plans into practice', which provides an interesting, albeit necessarily brief introduction to concepts like sanitation marketing, supply chains, and the need for a supportive, enabling environment.

Overall, the book is a welcome addition to the sanitation literature. While the main focus is on the need for sustainable sanitation in rapidly growing 'Southern' cities, its clear message is that sustainability is a concept whose time has come in cities throughout the world. Its vision is one that many will already share. For those who are new to its approach, it provides an accessible introduction to sustainability concepts. The challenge for those who use it to guide their efforts in the field will be to find workable ways of changing attitudes and improving systems, without which it will be difficult to move to a scale that will meet the needs of the millions of poor urban dwellers who currently lack adequate sanitation facilities. It can be downloaded free of charge from a number of websites, including those of the Stockholm Environment Institute and Susana.

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**Climbing the Water Ladder:  
Multiple-use Water Services for  
Poverty Reduction**

B. van Koppen, S. Smits, P. Moriarty, F. Penning de Vries, M. Mikhail and E. Boelee  
2009, IRC Technical Paper Series, No. 52, 216 pages, ISBN 978-90-6687-069-7

This well written book addresses a very important and relevant topic especially in developing countries where water access is limited by physical and economic scarcity. The multiple-use water services (MUS) approach complements integrated water resources management (IWRM), which has become especially relevant in the context of climate change. But the fact that the MUS approach focuses on the specific needs of water users and aims to improve wellbeing and socio-economic status makes it a better tool for poverty alleviation. Besides its relevance, the simplified nature of the book makes it easily accessible to a wider audience including academics, policy-makers, and non-professionals.

The book contains various case studies which enrich the text by presenting experiences in diverse contexts. However, no references are provided for some of the quantitative statistics presented. The economic cost-benefit analysis for household and community-scale MUS presented in Chapter 3 provides

a foundation for further work on this issue, but could have been improved if findings on the relationship between household water consumption and their willingness to pay had been included. It would also have been useful to show the relationship of willingness to pay for water against characteristics of the water service such as reliability, rates of default of household payments, and the quantity of water used. Additional improvements would be to assess the costs and benefits of multiple uses on livelihoods and the environment within a temporal framework.

One of the most important chapters describes the approach towards the creation of a supportive environment for scaling up MUS at local, national, and international levels. Although the boundaries between the chapters are not very clear and a synthesis at the end of each chapter to summarize the salient findings would have been helpful, the book covers an important topic and puts a good foundation on the MUS concept on which future work can build. The publication is available for download from the IRC website ([www.irc.nl](http://www.irc.nl)) or can be ordered for postal delivery from the IRC.

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