The importance and need for faecal sludge management has been recognised worldwide. One major gap in developing appropriate and adequate faecal sludge treatment and monitoring techniques is the ability to understand faecal sludge characteristics, its quantification and correlation to source population. Faecal sludge characteristics are highly variable, but as standard methods for sampling and analysis do not exist, results are not comparable and hence the actual variability is not yet fully understood.

Due to the lack of standard methods for sampling and analysis of faecal sludge, standard methods from other fields, such as water, wastewater and soil science are usually applied. However, these methods are not necessarily the most suitable for faecal sludge, and have not been specifically adapted for that purpose. Characteristics of faecal sludge are typically different from these other matrices by orders of magnitude. The methods for faecal sludge sampling are also greatly complicated by the wide range of technologies in each local context, and the heterogeneity within systems. Another gap in existing knowledge is how to quantify faecal sludge on a city-wide scale, or scale relevant for the design of treatment technologies. Moreover, the lack of standardisation complicates the transfer of knowledge and data between different regions and institutions as the results are not comparable. This illustrates the urgent need to establish common methods and procedures for faecal sludge characterisation and quantification.

This book aims to address these challenges and provide a basis towards standardized methods for characterization and quantification of faecal sludge from onsite sanitation technologies, including sampling techniques and health and safety procedures for faecal sludge handling. It also aims at improved communication between sanitation practitioners, comparative faecal sludge database, and improved confidence in the methods and obtained results. The book will be beneficial for researchers, laboratory technicians, academics, students and sanitation practitioners.

Edited by

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