

Wastewater Irrigation and Health

Assessing and Mitigating Risk in Low-income Countries

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Edited by Pay Drechsel, Christopher A. Scott, Liqa Raschid-Sally, Mark Redwood and Akiça Bahri

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The book can be read online under:
www.idrc.ca/openebooks/475-8/



Pb • £34.95 £28.00

9781844077960

400 pages • December 2009

Pay Drechsel is Global Theme Leader on Water Quality, Health and Environment at the International Water Management Institute (IWMI), Sri Lanka.

Christopher A. Scott is Assistant Professor of Water Resources Policy and Geography & Development at the University of Arizona, USA.

Liqa Raschid-Sally is Senior Wastewater Irrigation Expert at IWMI, Ghana.

Mark Redwood is the Urban Poverty and Environment Program Leader at the International Development Research Centre (IDRC), Canada.

Akiça Bahri is Director for Africa at IWMI, Ghana.

'This book represents the best modern innovative thinking on the topic and symbolizes an important turning point in the history of wastewater reuse in irrigation as a major contributor to water and nutrient conservation, public health and welfare.'

Hillel Shuval, Hadassah Academic College and Hebrew University, Jerusalem, Israel

'This is a tremendously useful book with its clear focus on developing countries where wastewater treatment does not work. It is also a great resource for students.'

Sasha Koo-Oshima, Food and Agriculture Organization of the United Nations

'This book is a very useful background publication for students and professionals who would like to critically assess the interaction between public health, wastewater treatment and reuse in agriculture.'

Thor Axel Stenström, Swedish Institute for Infectious Disease Control, Stockholm

In most developing countries wastewater treatment systems are hardly functioning or have a very low coverage, resulting in large scale water pollution and the use of very poor quality water for crop irrigation especially in the vicinity of urban centres. This can create significant risks to public health, particularly where crops are eaten raw.

Wastewater Irrigation and Health approaches this serious problem from a practical and realistic perspective, addressing the issues of health risk assessment and reduction in developing country settings. The book therefore complements other books on the topic of wastewater which focus on high-end treatment options and the use of treated wastewater. This book moves the debate forward by covering also the common reality of untreated wastewater, greywater and excreta use. It presents the state-of-the-art on quantitative risk assessment and low-

cost options for health risk reduction, from treatment to on-farm and off-farm measures, in support of the multiple barrier approach of the 2006 guidelines for safe wastewater irrigation published by the World Health Organization. The 38 authors and co-authors are international key experts in the field of wastewater irrigation representing a mix of agronomists, engineers, social scientists and public health experts from Africa, Asia, Europe, North America and Australia. The chapters highlight experiences across the developing world with reference to various case studies from sub-Saharan Africa, Asia, Mexico and the Middle East. The book also addresses options for resource recovery and wastewater governance, thus clearly establishes a connection between agriculture, health and sanitation, which is often the missing link in the current discussion on 'making wastewater an asset'.

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