



Water International >

Volume 36, 2011 - [Issue 4](#): Wastewater use in Agriculture: Economics, Risks and Opportunities

1,463 21

Views

CrossRef citations to date

4

Altmetric

Articles

Meeting the challenge of wastewater irrigation: economics, finance, business opportunities and methodological constraints

Dennis Wichelns  & Pay Drechsel

Pages 415-419 | Published online: 10 Aug 2011

 Cite this article  <https://doi.org/10.1080/02508060.2011.593732>

Sample our
Geography
Journals
>> [Sign in here](#) to start your access
to the latest two volumes for 14 days

 Full Article

 Figures & data

 Citations

 Metrics

 Reprints & Permissions

Read this article

 Share

Abstract

Many farmers in developing countries use treated or untreated wastewater to irrigate crops, partly in designated irrigation schemes, but mostly on large areas of small farms located along streams passing through or near cities. Much of the wastewater use is informal and unplanned, as farmers divert water from streams that carry untreated or partially treated effluent from cities and towns. The farmers generate good revenue by selling fresh produce that, otherwise, might not be available in urban markets.

However, wastewater irrigation also creates health risks for farmers, their families, and consumers. Public officials must consider those risks and the values generated through wastewater irrigation, as they implement policies to protect farmers and consumers from the negative health impacts. Given the increasing scarcity of fresh water in many urban and peri-urban areas of developing countries, the increasing demand for food,

and the persistent desire to improve the livelihoods of small-scale farmers, the decisions faced by public officials will require careful analysis. To that end, we describe in this special issue the economics, finance, business opportunities, and methodological constraints that pertain to wastewater irrigation in developing countries.

Keywords:

- agriculture
- business models
- effluent
- farming
- livelihoods
- reuse

Notes

1.Stream water, which often is more diluted, might be less risky than water in canals and drainage ditches.

Related research

People also read	Recommended articles	Cited by 21
------------------	----------------------	----------------

Information for

[Authors](#)

[R&D professionals](#)

[Editors](#)

[Librarians](#)

[Societies](#)

Opportunities

[Reprints and e-prints](#)

[Advertising solutions](#)

[Accelerated publication](#)

[Corporate access solutions](#)

Open access

[Overview](#)

[Open journals](#)

[Open Select](#)

[Dove Medical Press](#)

[F1000Research](#)

Help and information

[Help and contact](#)

[Newsroom](#)

[All journals](#)

[Books](#)

Keep up to date

Register to receive personalised research and resources by email



[Sign me up](#)



[Copyright © 2025](#) [Informa UK Limited](#) [Privacy policy](#) [Cookies](#) [Terms & conditions](#)

[Accessibility](#)



Taylor & Francis Group
an **informa** business

Registered in England & Wales No. 01072954
5 Howick Place | London | SW1P 1WG