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Title	Assessment of wastewater production and reuse in the peri-urban areas of Faisalabad, Pakistan
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Author(s)	Sarfraz Munir ¹ , Muhammad Mukhtar, Ensink H. Jeroen, Shahzad Mahmood
Address	International Water Management Institute, 12-km Multan Road, Chowk Thokar Naiz Baig, Lahore-53700, Pakistan.
Telephone	++92-42-5410050
Fax	++92-42-5410054
Mobile	
E-mail	s.munir@cgiar.org
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Assessment of wastewater production and reuse in the peri-urban areas of Faisalabad, Pakistan

In the recent decades wastewater is becoming a very important source of irrigation water because of unreliable and scarce fresh water supplies. Wastewater irrigation gives dual benefit, on one hand it provides a safe disposal to the wastewater and on the other hand it supplements farmers irrigation supplies with nutrient rich water, which decreases substantially the fertilizer costs as well. Faisalabad is one the major industrial cities of the Pakistan, comprising about 2.0 million population and generating enormous amounts of wastewater.

A multidisciplinary study on the of wastewater irrigation was initiated by IWMI in mid- 2001 with the overall objective of performance assessment of the wastewater irrigation in the peri-urban irrigated areas. The assessment of wastewater production and its reuse was its core component. The wastewater flows from the city were monitored about for a one year period from August 2001 to June 2002. A large number of field visits were paid and a number of farmers were interviewed to estimate the wastewater irrigated areas and the crops grown. For detailed analysis of flows and crops a wastewater irrigation site, the Narwala Road site, which was irrigated by PS-3 Chakera, was selected and monitored in detail.

Results show that Faisalabad's wastewater can be divided into two categories, the Municipal (domestic) wastewater and the Industrial wastewater, generally flowing on the western and eastern side of the city respectively. An enormous amount of wastewater was produced from the city and almost at every disposal site/channel wastewater irrigation took place irrespective of the domestic or industrial sources of wastewater. Anyhow farmers were more inclined towards the domestic wastewater. Knowing the importance of the domestic wastewater WASA used to sell this water to farmers. Almost at every wastewater disposal site no infrastructure was provided for irrigation purposes. To get wastewater for irrigation farmers just made holes in wastewater channel's sidewalls. Wastewater sometime flow against the natural slope which creates problems for irrigators.

¹ Junior Researcher Water Management, International Water Management Institute, 12-km Multan Road, Chowk Thokar Naiz Baig, Lahore-53700, Pakistan. Web: www.iwmi.org