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## IMPACTS OF WASTEWATER USE IN AGRICULTURE ON HEALTH AND ENVIRONMENT

Dr. Puttaswamaiah S \*; Dr. Narasimha Murthy D\*\*

\*Associate Professor,  
Department of Economics,  
Bangalore University, INDIA  
Email id: sputtaswamy@gmail.com

\*\*Bangalore University Post - Graduation Centre,  
Ramanagara, Karnataka INDIA

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### ABSTRACT

*Urbanization, a promoter of economic development also produces large quantity of wastewater, which has become a major source of irrigation in several countries. Indeed, use of wastewater in agriculture is increasing particularly in water scarce rural areas adjacent to urban areas. Wastewater flow in natural drains and application in agriculture cause health and environmental impacts, besides economic returns to farmers. Present study examined health and environmental impacts of wastewater use in agriculture in rural areas adjacent Bangalore City in Karnataka. The study observed that urban wastewater application caused health and environmental impacts.*

**KEYWORDS:** *Urban Wastewater, Health Impacts, Environmental Impacts, Bangalore, Crop Loss.*

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### REFERENCES

Abegunrin, Abegunrin (2013), "Effect of Kitchen Wastewater Irrigation on Soil Properties and Growth of Cucumber (Cucumis Sativus)." *Journal of Soil Science and Environmental Management* Vol. 4(7), page 139–45. Available at: [https://academicjournals.org/article/article1385972989\\_Abegunrin%20et%20al.pdf](https://academicjournals.org/article/article1385972989_Abegunrin%20et%20al.pdf)

Alebel B. Weldesilassie, Oliver Frör, Eline Boelee, and Stephan Dabbert (2009), The Economic Value of Improved Wastewater Irrigation: A Contingent Valuation Study in Addis Ababa, Ethiopia, *Journal of Agricultural and Resource Economics* 34(3):428–449.

Available at: [https://www.researchgate.net/publication/46536015\\_The\\_Economic\\_Value\\_of\\_Improved\\_Wastewater\\_Irrigation\\_A\\_Contingent\\_Valuation\\_Study\\_in\\_Addis\\_Ababa\\_Ethiopia](https://www.researchgate.net/publication/46536015_The_Economic_Value_of_Improved_Wastewater_Irrigation_A_Contingent_Valuation_Study_in_Addis_Ababa_Ethiopia)

Jeroen H.J. Ensink, R.W. Simmons and Wim van der Hoek, *Wastewater Use in Pakistan: The Cases of Haroonabad and Faisalabad (IWMI)*

McCartney, Matthew, Christopher Scott, Jeroen Ensink, BinBin Jiang, and Trent Biggs (2008), "Salinity Implications of Wastewater Irrigation in the Musi River Catchment in India." Ceylon Journal of Science (Biological Sciences) Vol. 37(1), page 49.

Available at:  
[https://www.researchgate.net/publication/228687850\\_Salinity\\_Implications\\_of\\_Wastewater\\_Irrigation\\_in\\_the\\_Musi\\_River\\_Catchment\\_in\\_India](https://www.researchgate.net/publication/228687850_Salinity_Implications_of_Wastewater_Irrigation_in_the_Musi_River_Catchment_in_India)

Scott C.A., N.I. Faruqui and L. Raschid-Sally (2007), Wastewater Use in Irrigated Agriculture: Management Challenges in Developing Countries, in Wastewater Use in Irrigated Agriculture – Coordinating the Livelihood and Environmental Realities, ed. by Scott C.A., N.I. Faruqui and L. Raschid-Sally, CAB International Available at: <https://www.idrc.ca/sites/default/files/openebooks/112-4/index.html>).

Ursula J, Blumenthal, Peasey Anne, Guillermo Ruiz-Palacios and Duncan Duncan Mara (2000), Guidelines for Wastewater Reuse in Agriculture and Aquaculture: Recommended Revisions based on new Research Evidence, Task No. 68 Part I.

Available at:  
[https://www.researchgate.net/publication/237707231\\_Guidelines\\_for\\_Wastewater\\_Reuse\\_in\\_Agriculture\\_and\\_Aquaculture\\_Recommended\\_Revisions\\_Based\\_on\\_New\\_Research\\_Evidence](https://www.researchgate.net/publication/237707231_Guidelines_for_Wastewater_Reuse_in_Agriculture_and_Aquaculture_Recommended_Revisions_Based_on_New_Research_Evidence)