



"Gheorghe Asachi" Technical University of Iasi, Romania



MANAGING SOLID WASTE IN SCHOOLS AND HIGHER EDUCATION INSTITUTIONS OF THE WEST BANK AND GAZA STRIP IN PALESTINE

Issam A. Al-Khatib^{1*}, Fathi M. Anayah², Mahmoud Al-Oqaili³

¹*Institute of Environmental and Water Studies, Birzeit University, Birzeit, West Bank, Palestine*

²*Faculty of Engineering and Technology, Palestine Technical University – Kadoorie, Tulkarm, West Bank, Palestine*

³*Universal Institute of Applied and Health Research, Nablus, West Bank, Palestine*

Abstract

Solid waste management (SWM) is one of the major environmental challenges for developing countries including Palestine. Raising awareness of students from schools and higher education institutions (HEI) on reducing, reusing, recycling, and recovering solid waste is essential to build sustainable educational environment. The aim of this study is to assess SWM in schools and HEI of the West Bank and Gaza Strip in Palestine. The SWM data were taken from an educational environment survey of the Palestinian Central Bureau of Statistics in 2014. The study discussed many SWM issues such as periodicity of solid waste collection, and the result showed that >50% of the institutions collect its waste daily. Generally, the responsibility of solid waste collection was on the janitor in all HEI and most schools; but shared with students in fewer schools. Local authorities typically transported solid waste to waste disposal sites that can be open and affect public health and the environment negatively. The results confirmed the need to raise awareness of students on SWM via educational programs to reduce, reuse, recycle, and recover solid waste. Given Palestine's unique socio-economic challenges and limited waste management infrastructure, raising awareness about SWM in educational institutions is critical for promoting public health, environmental sustainability, and fostering a culture of responsibility among future leaders. Policy and decision makers at educational institutions of Palestine should encourage such pro-environmental practices among students to create green campuses and achieve sustainable development goals.

Key words: educational program, Palestine, raising awareness, solid waste management, student

Received: September, 2023; Revised final: October, 2024; Accepted: November, 2024; Published in final edited form: July, 2025

* Author to whom all correspondence should be addressed: e-mail: ikhatib@birzeit.edu; Phone: +9702982120; Fax: +9702-2982120