

Sustainability in Municipal Solid Waste Management System using multi-objective optimization model

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Abstract

Lifestyle changes and increased demand lead to higher generation of Municipal Solid Waste (MSW). Due to complexity associated with handling MSW, generates the challenge for sustainable development. This study discusses the application of Multi-Objective Optimization (MOO) in MSWM system for achieving sustainability. MOO model considers different objectives such as environmental impact, economic cost and social welfare simultaneously. The MOO problem helps the practitioners and academicians to develop system based on the balance among different objectives.

Keywords

Municipal Solid Waste Management System, Sustainability, Multi-Objective Optimization

Biographies

Rajat Agrawal. is a Professor in the Department of Management Studies at IIT Roorkee, India. He has published journal and conference papers. He has completed research projects with THDC India ltd.,ICMR New Delhi ,India. His research interests include Operations Management: Supply Chain Management, Quality Management, Inventory Management, Manufacturing Strategy, IPR, Innovation, Business Models, Entrepreneurship: IP Management, General Management: Indian Models of Management, Ethics in Management, Spirituality.

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