Chapter 18
Gender and Waste Utilization and Reuse: A Case of Youth Population

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ABSTRACT

The importance of reuse and recycling waste at all age groups and genders plays a prominent role towards conserving the environment. In India 19.2% of population belongs to the age group of 15-24 years, which is considered a youth population. The research attempts to understand the practice of reusing and recycling of waste among the male and female youth population. The study investigates and documents the five waste materials that can be recycled: textile, paper, plastic, glass, and e waste. The study is conducted in Bhopal city through direct and focus group discussion. The primary survey is conducted in institutes and schools of Bhopal to capture the ground realities. The outcome of the research depicts the variation is reuse and recycle among the male and female group of the youth population.

1. INTRODUCTION

Gender mainstreaming in urban planning is an important approach to ensure that the needs and concerns of both women and men are considered in the design and development of urban spaces (Richardson & Mitchell, 2010). This is particularly important in the context of achieving Sustainable Development Goal 11, which aims to create safe, resilient, and sustainable human settlements (Smit et al., 2017). One

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important aspect of this goal is to ensure that all residents have access to healthy and safe environments (Bick et al., 2018).

In India, one of the major challenges faced by urban areas is the growing problem of municipal waste management. With an increasing urban population and a high consumption lifestyle, the amount of solid waste generated is rapidly increasing, leading to environmental pollution and other negative impacts. India is facing a significant challenge in managing its municipal solid waste (MSW) (B. K. Sharma & Chandel, 2021). The country generates over 62 million tons of MSW annually, and this number is projected to increase to 165 million tons by 2030 (Robles, Roxana & Hinostroza, 2015; Prajapati et al., 2021). The majority of this waste is not properly collected, transported, or treated, resulting in environmental and public health hazards. One of the major challenges in managing MSW in India is the lack of proper infrastructure for collection, transportation, and treatment of waste. Many urban areas in the country do not have proper waste collection systems in place, leading to the accumulation of garbage on streets and in open spaces (Abuga & Raghava, 2021). This not only creates a public health hazard but also leads to the proliferation of disease-carrying insects and rodents (Bui et al., 2023). Additionally, a significant amount of MSW is not transported to designated disposal sites, leading to the illegal dumping of waste in open spaces and water bodies (Halder et al., 2022). Another major challenge in managing MSW in India is the lack of proper treatment facilities. The majority of the waste generated in the country is either left to decompose in open spaces or burned in the open, releasing toxic pollutants into the air and water. This not only causes environmental damage but also poses a significant health risk to nearby communities. The lack of proper treatment facilities also means that the valuable resources present in the waste, such as metals and plastics, are not being recovered and recycled. The Indian government has taken some steps to address the challenge of MSW management, such as launching the Swachh Bharat Abhiyan (Clean India Campaign) in 2014. However, the implementation of this program has been hampered by a lack of funding and coordination among various government agencies. Additionally, there is a lack of awareness and education among the public about the importance of proper waste management and the role they can play in reducing the problem. In conclusion, India is facing a significant challenge in managing its municipal solid waste. The country generates a large amount of waste, and the majority of it is not properly collected, transported, or treated. This leads to environmental and public health hazards. The Indian government has taken steps to address the problem, but there is a need for more funding, coordination, and public education to effectively manage MSW in the country.

Recycling is seen as one of the most effective strategies for reducing these impacts, as well as reducing costs associated with waste transport and disposal (Bui et al., 2022).Recycling has been considered as the most important strategy to decrease waste negative impacts on the environment for several reasons. First, recycling conserves natural resources by reducing the need to extract new raw materials from the earth. This helps to preserve forests, oceans, and other natural habitats, as well as reducing the energy required to extract and process new materials. Additionally, recycling can help to reduce pollution and greenhouse gas emissions by reducing the need for energy-intensive manufacturing processes. Another key benefit of recycling is that it can help to reduce the amount of waste that ends up in landfills. Landfills are a major source of pollution and greenhouse gas emissions, and they can also be a threat to public health if they are not properly managed. By recycling materials such as paper, plastic, and metal, it is possible to reduce the amount of waste that ends up in landfills, thus reducing the negative impacts on the environment. Recycling can also create jobs and boost local economies. When materials are recycled, they are often processed and manufactured into new products, which creates jobs in the recycling and manufacturing industries. Additionally, when materials are recycled locally, it can reduce the need to