

## ***A Comparison of Waste Management Practices between Bangladesh, Japan and Sri Lanka***

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Bangladesh, Japan, and Sri Lanka are three Asian countries that face challenges in waste management due to population growth and infrastructure issues. The three nations produce 0.25-1 kg/day of waste per person and waste types vary, such as combustible, non-combustible, recyclable, and industrial waste, while organic waste is the major type of waste produced in all three countries. In Japan, waste treatment is mainly done through incineration and landfilling. Bangladesh has three systems of waste management: formal, informal, and community. The main methods of waste management in Sri Lanka are open dumping and landfilling, while incineration is practised only for hospital and industrial waste. Despite extensive policy frameworks, implementation challenges persist, including poor waste segregation, inadequate infrastructure, and limited private sector involvement. Health and environmental effects of improper waste management include respiratory illnesses, groundwater contamination with heavy metals, and effects on wildlife. Japan's active community engagement in waste management is an example of a successful intervention in comparison to the practices in Bangladesh and Sri Lanka. However, challenges remain in waste segregation, composting, and policy execution due to infrastructure issues and resource constraints. Overall, integrated approaches addressing infrastructure, governance, and public awareness are essential for sustainable waste management in these countries.

**Keywords:** Incineration, Policy, Solid Waste, Waste Management