

ENVIRONMENTAL BURDEN DUE TO TOBACCO PRODUCT WASTE



Objectives

The study was carried out to assess the environment burden in terms of plastic, paper, foil and filter waste, posed by various smoked and smokeless tobacco products at National and State levels.

Methodology

A cross-sectional survey was conducted in 33 districts of 17 states and UTs across the country. After exclusion of duplicates, 200 unique tobacco products including 70 cigarette brands, 94 bidi brands and 58 smokeless tobacco brands were procured from across the country to ensure representation and generalizability from all the geographic regions of the country. Gross weight and segregated weights of the plastic, paper, foil and filter content were taken from the procured samples and were correlated with the data from GATS-2 survey to arrive at the final results.

Prevalence of Tobacco Use

- Current tobacco users in India - 28.6%
- Current Cigarette smokers in India - 4.0%
- Current Bidi smokers in India - 7.7%
- Current SLT users in India - 21.4%

*Source: Global Adult Tobacco Survey II: India 2016-17 Report



Plastic waste produced by tobacco use is equivalent to 77 million standard plastic buckets

2.2 million trees are cut annually to be used for Paper packaging, with waste equivalent to the weight of 119 million notebooks



Key Findings

Prevalence (Puducherry)

- Total current tobacco users is 11.2 percent.
- Current Cigarette smokers is 5.2 percent.
- Current Bidi smokers is 2.2 percent.
- Current SLT users is 4.7 percent.

*Source: Global Adult Tobacco Survey: India 2016-17 Report

Plastic waste generated

- The total annual plastic waste generated by Cigarettes is 2.88 tonnes.
- The total annual plastic waste generated by Bidis is 2.30 tonnes.
- The total annual plastic waste generated by SLTs is 15.22 tonnes.
- Thus, the total annual plastic waste generated by all forms of tobacco products amounts to 20.39 tonnes.

Paper waste

- The total annual paper waste generated by Cigarettes is 44.27 tonnes.
- The total annual paper waste generated by Bidis is 1.96 tonnes.
- The total annual paper waste generated by SLTs is 12.28 tonnes.
- Thus, the total annual paper waste generated by all forms of tobacco products amounts to 14.23 tonnes.

Foil waste

- The total foil waste produced per year by tobacco products (Cigarettes) is 8.56 tonnes.

Total annual waste by all tobacco products in the country

- Cigarettes - 40,846 tonnes
- Bidi - 13,770 tonnes
- Smokeless Tobacco - 115,715 tonnes
- Total - 1,70,331 tonnes

Filter waste

- The total annual filter waste generated by Cigarettes is 1.85 tonnes.
- The total annual filter waste generated by Bidis is 0.01 tonnes.
- Thus, the total annual filter waste generated by all forms of tobacco products amounts to 1.86 tonnes.

Total Waste generated

- Total waste (Paper + Plastic + Foil + Filter) generated by all the tobacco products per year is 89.31494205 tonnes.
- Total waste produced per year by Cigarette is 57.55 tonnes.
- Total waste produced per year by Bidi is 4.27 tonnes.
- Total waste produced per year by SLT 27.49 tonnes.

Equivalent

- Plastic : 20390 Buckets
- Paper : 352 Trees
- Paper : 19027 Notebooks
- Foil : 1 Chartered Aircraft
- Filter : 12363 Tshirt



Filter waste produced is equivalent to 9 million standard adult sized t-Shirts

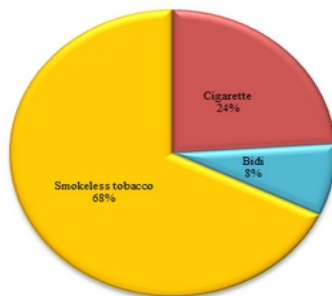
33 Boeing 747 aircrafts can be made of the aluminium waste produced annually



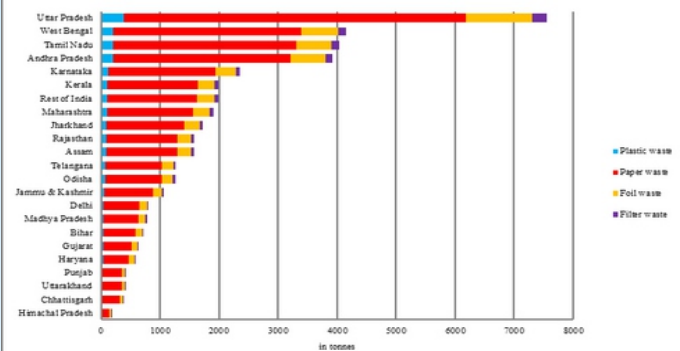
Total waste produced from tobacco use is equal to the weight of 100 Statues of Unity



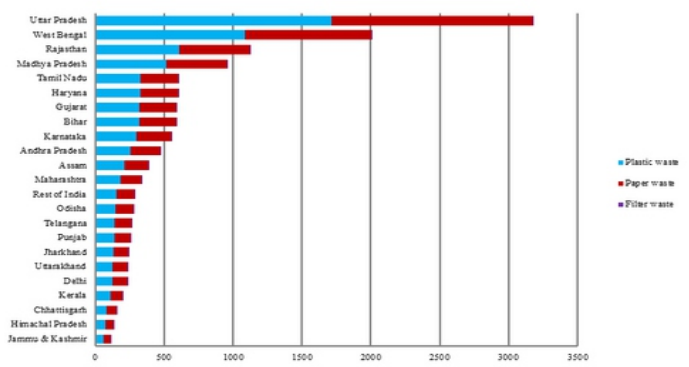
Contribution of different tobacco types to the overall tobacco waste (in %)



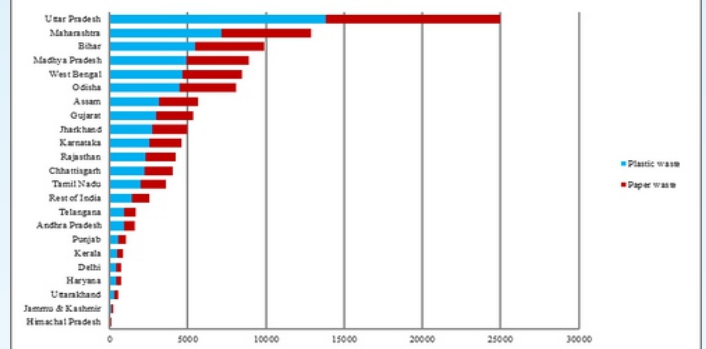
Distribution of annual waste by different components of cigarette (in tonnes)



Distribution of annual waste by different components of bidi (in tonnes)



Distribution of annual waste by different components of smokeless tobacco (in tonnes)



Recommendations

- Tobacco product wastes are diverse in nature. A comprehensive policy deterrent and a financial levy is needed, that is borne by the manufacturers.
- Given the enormous cost incurred for cleaning of the tobacco product wastes (TPWs), greater sensitization of stakeholders for effective implementation of existing regulations and adopting stronger norms to reduce its environmental impact is need of the hour.
- No tobacco product fully complies with environmental laws. Tobacco companies and their shareholders must take full responsibility to reduce the environmental burden of their products.
- The violations of the existing environmental laws and policies related to solid wastes/packaging should be strictly monitored, reported and regulated to ensure compliance therewith
- Given the irreversible impact of plastics on the environment and the human body, the unnecessary plastic waste generated from the tobacco products, is needs stronger and urgent policy shift for its effective elimination.