

SOLID WASTE MANAGEMENT: - A CASE STUDY WITH SPECIAL REFERENCES TO RAJOURI DISTRICT

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ABSTRACT:-

Municipal strong waste management is part of public health and sanitation, and is entrusted to the municipal government for execution. Municipal Solid waste control (SWM) has turn out to be acute problem in India because of rapid urbanization and out of control boom fee of population. Municipal Solid Waste (MSW) is the trash or garbage that is discarded day to day in a human agreement. According to MSW Rules 2000, MSW includes business and home wastes generated in a municipal or notified areas in either strong or semi-solid form apart from commercial hazardous wastes but together with treated bio-medical wastes. Waste technology encompasses sports in which substances are recognized as not being of cost (being within the gift form) and are either thrown away or amassed together for disposal Municipal Solid Waste includes the following varieties of waste: Treated Biomedical Waste, Horticultural Waste, Construction & Demolition Waste, Road Sweeping Waste, General House Hold Waste (including Kitchen Waste), Drain Silt/Waste, Market and Commercial Waste, Institutional Waste, Slaughter House Waste and Dead Animals, Sludge from STPs (sewage treatment plant)and ETPs (effluent treatment plant) ,besides other the alternative types of waste observed in urban settlements are; Industrial or Hazardous Waste, Bio-Medical or Hospital Waste and E-Waste. Municipal Solid Waste Management(MSWM) incorporates of waste segregation and garage at source, primary collection, secondary storage, transportation, secondary segregation, resource recovery, processing, remedy, and very last disposal. Therefore Municipal Solid Waste Management (MSWM) refers to a systematic method that of solid waste. Though Solid Waste Management (SWM) is an age vintage provider furnished with the aid of the urban nearby our bodies (ULBs), efficient municipal stable waste management advantages in retaining hygienic conditions leading to lesser health troubles, better living surroundings, improved economic prosperity in the area, aesthetically cleaner surroundings with cleaner drains for storm water flow, cleaner water sources and safer neighbourhoods. So the importance of solid waste management can not be undermined . The failure of SWM can result in serious health problems and environmental degradation,. Municipalities have overall responsibility for solid waste management (SWM) in their cities.

Rajouri – profile of the city>-

The study area lies in between the Municipal limits of Rajouri Town, The Line of Control area

of Jammu, and Kashmir State. Jammu and Kashmir is the Northwestern state of India, located between 32.17" and 36.58" North Latitude and 74.26" and 80.30" East Longitude.

The state's total area, including 120849 km² and under the unlawful occupation of China and Pakistan, is 222236 km². The state is divisible into three regions viz Jammu, Kashmir, and Ladakh, each drained by a well-defined Riverine system. The Jammu region is divisible into eight districts: Jammu, Kathua, Udhampur, Doda, Poonch, Samba, Reasi, and Rajouri. Rajouri is one of Jammu and Kashmir State's hilly districts, bounded by district Poonch in North, district Jammu in South, and district Udhampur in East and PoK (Mirpur) in the West.

The district lies between 32 0-58' & 33- 35' latitude and 74-81' longitude covering an area of 2630 km² with an altitudinal variation of 490–6000m asl. The District Rajouri has six tehsils and nine blocks with four small towns, having an urban area of 18 km.

The study has been conducted in the Municipality limits of Rajouri. Rajouri is a town and a municipal council in the Rajouri district in Jammu and Kashmir. Rajouri town is located at 33.38°N 74.3°E. It has an average elevation of 915 meters (3001 feet). The city is home to about 40 thousand people, according to the 2011 census. About (65%) are male, and (35%) are female.

The total geographical area of the Rajouri (MC) municipal committee is 13 km². The population density of the city is 2288 persons per km². There are 17 wards in the city; among them, Rajouri Ward No 13 is the most populous ward with a population of 8359, and Rajouri Ward No 03 is the least populous ward with a population of 793. There are 4364 households in the city, and an average of 7 persons live in every family.



SOLID WASTE DISPOSAL AND MANAGEMENT SYSTEM IN RAJOURI TOWN

As per information given by Municipal Committees, following action areas have positive outcome: District Environment Plan-2021

For the Municipal Committees and Tourism authority present in the district Rajouri following actions areas have positive outcome:-

S.No.	Action Areas	Outcome
1.	Segregation of Waste	Being Initiated
2.	Door to Door Collection	Being Initiated
3.	Linkage with Recyclers	Being Initiated
4.	Authorization of Waste Pickers	Being Initiated
1.	Issuance of ID Card	Being Initiated
2.	Composting of Wet Waste	Being Initiated

Table V. Step being Initiated for Solid Waste Management

The following action areas have to be improved or they have to be included in the future plans:

S.No.	Action Areas	Outcome
1.	Mechanical Road Sweeping	Being Initiated
2.	Use of Sanitary Landfills	Being Initiated
3.	RDF (Refuse Derived Fuel)	Being Initiated

The rural area in District Rajouri has the Solid waste material which generally contains the waste material from Kitchen, agriculture waste and domestic animal dung. All these materials are being used for making manure by the farmers.

Moreover, in compliance to Hon'ble NGT order passed in O.A 303/2018 dated 16.01.2019, land in respect of all 05 MCs across district has been identified for setting up for processing/ material facility as per SWM Rules, 2016.



Disposal of Non-Biodegradable Waste in Study Area

Plastic Waste Management (PWM)

Plastic waste is a global matter of concern. Plastic products have become a vital part of our day to day life. Discarding the plastic after used is termed as Plastic Waste. In the terms of PWM, the following action areas have positive outcome in respect of the Municipal Committee in the District.

S.No.	Action Areas	Outcome
1.	Door to Door Collection	Being Initiated
2.	Prohibiting Sale of Carry Bags Less than 50 Micron of thickness	100%
3.	Ban of Single Use plastic	Implemented

Steps for Plastic Waste Management

The following action areas have to be improved or to be included in the action plan for PWM:

Action Areas	Outcome
Authorization of PW Pickers	Being Initiated
PW Collection Centers	Being Set up
Linkage with NGOs	Being Initiated
Use of Ply waste	Being Initiated

Action Plan/Mitigation Measures in General

1. Initialization of Queries
2. Cleaning of System
3. Cleaning & Sanitation Drive in Govt. offices & premises.
4. Awareness & Involvement of People
5. Urban Sanitation
6. Rural Sanitation & village Sanitation, village wise cleaning
7. Fine for unhygienic conditions.
8. Segregation at source
9. Door to Door Collection of Garbage
10. Assistant Commissioner Development shall device strategy for the same

With the involvement of PRIs, Lok –Mitras

Conclusion:-

Therefore to achieve the objectives under Municipal Solid waste (Management & Handling) Rules 2000, PMC needs to prepare a macro and micro plan which would identify the problems in better management of solid waste and accordingly prepare a broad strategy .

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