

Spatial Planning Strategies for Bio-Medical Waste Management-A Case of Thiruvananthapuram District

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ABSTRACT

Healthcare facility is an area wherein diagnosis, treatment or immunization of human beings is provided despite of the size and type of healthcare system. India being a developing nation, the possibility of escalation of healthcare facilities and hence the generation of bio-medical waste can be experienced in near future. With a boom in novel coronavirus disease (Covid 19) the quantity of bio-medical waste is anticipated to boom in close to destiny. A detailed study of bio-medical waste treatment and disposal measures across different states of India are studied and it is found that Kerala has two existing treatment and disposal facilities such as Kerala Enviro Infrastructure Limited (KEIL), Ernakulam and initiative by Indian Medical Association, IMAGE, Palakkad. In a state like Kerala, where 27 percentages of healthcare facilities are located, safe transportation, treatment and disposal of bio-medical waste in appropriate areas are vital for the prevention of spread of virus in the environment. This study aims to identify and establish the need of spatial analysis of bio-medical waste treatment and disposal sites in Kerala by carrying out synoptic study of quantitative and qualitative aspects of bio-medical waste along with expert interviews to establish the need and find out suitable locations for disposal of bio-medical waste. Recommendations and methodology for treatment and disposal of domestic bio-medical waste is also worked out which can be further used for formulation of policies.

Key Words Bio-medical waste management, Geo-Spatial Analysis