

Project Report on
SOLID WASTE MANAGEMENT IN SLUMS OF BAGEPALLI
35S0401



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ABSTRACT

The urbanization process grew rapidly bringing with it not only affluence to people but also many undesirable social ills like creation of slums, accumulation of municipal waste products, changes in the ecosystem causing immense strain on the environment. Slums are the real culprit for the outbreak of many epidemics with their characteristic features like poor housing structure, congested lanes, waste strewn all-around, with lack of any sanitary facilities. The awareness about management of solid waste bears immense importance as it can reduce the consequences of improperly disposed waste products. Keeping this in view an attempt has been made in the present. Keeping this in view an attempt has been made in the present study to carryout studies on characterization and management of solid waste in slums of Bagepalli, chickabalapur.

In the present study, three slums of Bagepalli in chickaballapur were considered. The Socio economic structure, demographic status, occupational pattern and migration aspects of the selected slums were analyzed. As the occupational structure shows the standard of living of these slums dwellers is very low because of there low level of skills and low income they earn. The study of demographic details shows the slum contains heterogeneous mix of people with people from different religions, different occupations, speaking different languages etc. conglomerating in this small stretch area. The overall literacy is 31%, male literacy rate is 16% and females is 15%. The consequences of these elements on waste management are elucidated.

Samples of solid waste were collected from these areas and the same was analyzed for physical and chemical properties. It was observed that the total quantity of generated waste 651.36 Kg/day (0.29 kg/capita/day), 328kg/day (0.26 kg/capita/day), and 676.62 kg/day (0.23kg/capita/day) in AK colony, AD colony and Labour colony respectively. The average density of solid waste in the study area was found to be 381.03kg/m³. The total waste generated is 8.5 tones /day, with generation rate of 0.25kg/cap/day. The characterization process has revealed that municipal solid waste contains about 32.29% of compost matter followed by dirt and ash (29.51%) when compared to other constituting parameters. The chemical composition of solid waste showed that solid waste has pH of 8.28; moisture content 31.23%; organic matter 24.05%; organic carbon 20.625;kjedhal nitrogen 0.74% phosphorous 0.71%; potash 1.49%; calorific value 1242.83%; and C:N ratio 47%.