## Entering Rocinha: a study on solid waste management in a slum of Rio de Janeiro (Brazil)

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Solid waste management (SWM) is recognized worldwide as an important issue to deal with in pursuing livability. The favela (slum) of Rocinha represents a good synthesis of all challenges which can be encountered in this field: high population density, lack of space and narrow streets, residents struggling with low incomes. In Rocinha, services coverage is lacking and unsatisfying in many sectors, including SWM. In this study, we investigate the reason for this inadequacy. Waste streams have been analyzed as a first step. The second step was the description of the SWM system and of its criticalities. All accessible information has been used and Geographical Information Systems (GIS) played an important role in the data processing. In the final discussion, we suggest a small-scale and decentralized waste management network, collaborating with the centralized collection system. This study is a piece of the project Polimipararocinha of Politecnico di Milano (Italy) which pursues the overall urban re-qualification of Rocinha.