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START-UP OF THE DOOR-TO-DOOR MUNICIPAL SOLID WASTE SEPARATE COLLECTION SERVICE IN A LARGE METROPOLITAN AREA

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Abstract

The study describes the start-up phase of the door-to-door separate collection service of municipal solid waste (MSW) in a large metropolitan area, analysing not only the performance in terms of separately collected waste but also the feedback from citizens on how to improve it. For the scope, the case study of the city of Bari (Southern Italy) was considered. The methodological approach involved primarily the subdivision of the entire municipality into eight homogeneous territorial zones (HTZ) considering population density and space availability. Additionally, each HTZ was decomposed into unitary areas, which in turn were classified according to the degree of feasibility in implementing door-to-door separate collection. During the first year of operation, results showed excellent performance in terms of separately collected waste (>80%) highlighting the goodness of the adopted technical approach as well as the convenience in acquiring feedback from users during the start-up of the service. While expressing positive satisfaction about the door-to-door system, users consider the adopted sanctioning and control system to be critical. The same was considered insufficient to deal with the well-known phenomenon of "waste tourism".

Keywords: citizen involvement, door-to-door collection, municipal solid waste, service performance, start-up

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