GeoWeb at the Service of Household Waste Collection in Urban Areas

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Abstract : The complexity of the city makes sustainable management of the urban environment more difficult. Managers are required to make significant human and technical investments, particularly in household waste collection (focus of our research). The aim of this communication is to propose a collaborative geographic multi-actor device (MGCD) based on the link between information and communication technologies (ICT) and geo-web tools in order to involve urban residents in household waste collection processes. Our method is based on a collaborative/motivational concept between the city and its residents. It is a geographic collaboration dedicated to the general public (citizens, residents, and any other participant), based on real-time allocation and geographic location of topological, geographic, and multimedia data in the form of local geo-alerts (location-specific problems) related to household waste in an urban environment. This contribution allows us to understand the extent to which residents can assist and contribute to the development of household waste collection processes for a better protected urban environment. This suggestion provides a good idea of how residents can contribute to the data bank for future uses. Moreover, it will contribute to the transformation of the population into a smart inhabitant as an essential component of a smart city. The proposed model will be tested in the Lamkansa sampling district in Casablanca, Morocco.

Keywords : information and communication technologies, ICTs, GeoWeb, geo-collaboration, city, inhabitant, waste, collection, environment
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