

Management of Urban Wastewater in the City of Maradi (Niger): The Case of Domestic Wastewater

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Abstract : Uncontrolled urbanization of African cities, plus the lack of municipal waste management services in these cities, generate landscapes become places of multiple and varied interactions between health and environment. In this sense, under strong urban growth in a context of sub-equipment sanitation, the city of Maradi doesn't escape to this situation which results in the spread of pollution (release of unpleasant odors, proliferation of mosquitoes) and many diseases posing multiple health problems. Our study focuses only on liquid waste especially domestic wastewater. To study the different domestic wastewater management options in the town of Maradi, a survey was conducted among 340 households in 17 districts. We note in most cases a crucial of waste management infrastructure (drainage and wastewater treatment) at the city. Thus, only the individual sanitation facilities are used. In the town of Maradi, in addition to the storm drains, there are, in old districts, ditches that discharge wastewater and unfortunately end up in rivers without treatment. Domestic wastewater total production is estimated at 86,761.28 m³ per day. This water is mostly from laundry activities, bathing, dishes, and is discharged in large part through the streets, by more than 60% of households. Also, pit emptying is performed at 39.11% by the vehicle Peugeot tank. The quality of service rendered by an actor is very important to encourage households to join. Existing autonomous sanitation facilities are poorly designed and poorly maintained. Fecal sludge is dumped in a hole near saturated latrines; this work is mainly done by manual scavengers or dumped in fields or on nearby vacant land concessions.

Keywords : management, urban wastewater, domestic wastewater, Maradi, Niger

Conference Title : ICEEWM 2015 : International Conference on Environment, Energy and Waste Management

Conference Location : Paris, France

Conference Dates : July 20-21, 2015