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Eco-Hammam Initiative: Replicating the FSAC Model for Sustainable Wastewater Treatment and Resource Reuse in Dar Bouazza, Morocco

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Abstract : In the context of the increasing water resource scarcity in Morocco in recent years, the use of unconventional resources has become imperative. Although efforts have been made in the field of sanitation in urban areas, rural areas, due to their specificities, such as scattered dwellings and limited accessibility, suffer from a lack of basic infrastructure. This work focuses on replicating the Faculty of Sciences Ain Chock (FSAC) model for the treatment and reuse of wastewater from a peri-urban traditional hammam in Casablanca, specifically in the municipality of Dar Bouazza. This initiative is part of the Eco-Hammam project, which aims to minimize the negative impacts of traditional hammams in terms of irrational and uncontrolled consumption of water and wood energy resources. To achieve this, a comprehensive environmental diagnosis of all hammams in the municipality of Dar Bouazza, our study site, has been undertaken. Then, a feasibility study is also conducted to assess the possibility of replicating the FSAC mini-station to treat the wastewater of the selected pilot hammam, namely, My Yacoub II.

Keywords : water resource scarcity, unconventional resources, sanitation, per-urban areas, rural areas, basic infrastructure, replication, reuse of wastewater, traditional hammam, Casablanca, Municipality of Dar Bouazza, negative impacts, environmental diagnosis, feasibility study, pilot hammam, My Yacoub II
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