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## The Dead Alexandrian Historic Vein: The Revitalization of Mahmoudiyah Canal 'The Forgotten Environmental Asset'

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Abstract: In 1818, a seventy-five kilometer long canal was dug (called the Mahmoudiyah canal) connecting between Alexandria city in Egypt and the western branch of the Nile. It was a productive resource and vital to its environment, context, transportation, and recreation. It played a significant role in people's lives and Alexandria city's shape. The canal, which was the main vein of goods' transporting from Alexandria's seaport to the different parts of Egypt, was still in use today as a major source of clear water in the city. But nowadays, Mahmoudiyah canal is converting into 'dead waterway'. The canal became sources of pollution as a result of solid and industrial waste thus causing many diseases, destroying communities and biodiversity, with urban invasion, the loss of community aesthetic value and healthy environment. Therefore, this paper aims to propose an urban strategy, as a solution to revive the forgotten canal, through recreating a cultural promenade on its shore. The main aim of this research is to formulate decent quality of life, unpolluted space, an area gathering the city space for nature, tourism and investments. As a case study, this paper investigates Mahmoudiyah canal through urban and ecological analyses, aiming to design an urban strategy for reviving it by creating a cultural promenade enriched with public spaces and green areas, which can most probably enhance the quality of life, city re-living and development. Community participation is also considered as vital and intrinsic implementation stage. The empirical research involved using several data assembly methods such as interviews, mental mapping, structural observations and questionnaires. The paper ends with a set of conclusions leading to proposals for the Mahmoudiyah canal revitalization considering the complex challenges and processes of sustainable regeneration focusing on city's rehabilitation and lost identity.

Keywords: Mahmoudiyah canal, community aesthetic value, city re-living, cultural promenade

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