VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI- 590 018



MICRO PROJECT REPORT

ON

"GREY WATER RECYCLING AND REUSE"

Submitted By,

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DEPARTMENT OF CIVIL ENGINEERING **CERTIFICATE**

This is to certify that the Micro-Project entitled "GREY WATER RECYCLING AND REUSE" has been Successfully Completed

By

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The bonafide students of Department of Civil Engineering, Alva's Institute of Engineering and Technology, affiliated to VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI, during the academic year 2020-2021. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report. The report has been approved as it satisfies the academic requirements in respect of Micro-Project work prescribed for Bachelor of Engineering.

Mr. Varadaraj K S Mini Project Guide

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Abstract

Main focus of the present work is placed on describing and illustrating a wide range of grey water management and treatment options to facilitate informed decision-making when confronted with the task of developing a sanitation concept. This report is not a design manual for grey water management systems, although design principles and construction plans of treatment chains are provided whenever possible. The report mainly aims at sensitizing and encouraging national, regional and municipal water and environmental sanitation authorities and agencies to integrate grey water management into their development policies and programmers. NGOs working in the field of environmental sanitation are invited to include grey water management into their neighborhood upgrading projects. This report will hopefully support them in their efforts and provide assistance to house owners during pre-selection of grey water management schemes adapted to their specific requirements and prior to soliciting expert advice. This report prepared as an activity of a project conducted at the Projects Developments and Scientific Research Technology Center (R&D TECH) a privet research center located in Upper Egypt and funded by the GIZ. The report consists of four chapters. Chapter one includes general introduction about grey water definition, uses, recycling health concerns, volumes, resources, and characteristics. Chapter two summarizes the different grey water treatment methodologies based on literature review. Chapter three represents case study for the application of grey water treatment systems in some developing countries. Chapter four, deals with the evaluation of different grey water treatment systems produced commercially worldwide. In addition, based on the obtained data, R&D TECH team developed an evaluation strategy for these systems based on specific grading ranking system and finally. As an outcome form the project, R&D TECH designed a software to be used for cost analysis gray water treatment systems