

PREFACE

Since very long time, I have been always conscious about water as how it is being utilized and wasted in our society. Such was my consciousness about water conservation that led me to perform experiment for evaluating impacts of drip irrigation system in Kutch region as a part of my dissertation of M.E. Studies (in 1994). This study was about utilization of water in most scientific manner. But what about the water which is becoming waste after its domestic usage? So, still I was thirsty and kept on thinking about how to reuse the same in most scientific manner so that more and more area can be brought under irrigation using wastewater as alternate source and at the same time environmental safety can be ensured during its reuse. With this objective in mind I initiated my work by making first visit to Jaspur Treatment Plant (in 2000) where wastewater of Gandhinagar city is collected and treated upto secondary treatment level and finally discharged. I have made an extensive survey on prevailing reuse of wastewater after its disposal from treatment plant. I felt that this would be key area for research where we can explore possibilities for using wastewater in agriculture with different blends. As such I approached Prof. G. S. Parthasarathy to seek guidance about how to implement this concept in reality. I was encouraged and guided by him to decide a line of action for research work in said area. To have final shape, it was decided to approach to Dr. S. Raman (Professor of Soil and Water Conservation, G.A.U., Navsari). The experimental design for research project was decided as a result of our collective efforts. The proposal for research project was made and put forward to Nirma University to avail financial assistance for carrying out research in said thrust area.

Nirma University is always committed to carry out research activities which have relevance to societal needs and the developmental programme of the nation.

and as such a grant of Rs 3,50,000 was sanctioned (in 2002) for undertaking this research project.

Looking to the beneficial aspects of the research project, Gujarat Water Resources Development Corporation, Gandhinagar also came foreword to consider our request for providing free transportation of canal water and sewage for conducting this research.

Comprehensive research work was carried out for three successive years (2002-03, 2003-04 and 2004-05) I am sure that outcome of this research work will help in exploring possibilities to increase irrigation potential through well planned coordination of sewage water, ground water and surface water resources. Hence, I dream that our country will significantly prosper with rise in GDP as a result of rise in irrigation potential to a great extent in the near future