Acknowledgements

I was blessed with people from varied quarters who helped me in several ways throughout my research period. It gives me immense pleasure to convey my profound gratitude and respect to all these people who have supported me right from the beginning till the end.

First and foremost, I would thank the God Almighty, the merciful and the passionate. The wisdom, courage, self-confidence and patience given by my God have been the pillar behind this effort and helped me complete this research work and not letting me down at the time of crisis.

The journey would have been impossible if it wasn’t for a good mentor and at this moment I would like to express my deep and sincere gratitude to my guide Dr. Nirmal Kumar J.I., Professor and Head, P.G. Department of Environmental Science and Technology, ISTAR, who had offered me the opportunity to start my research work on such an interesting and applied subject. Without his valuable guidance, constant motivation, generous support, and enthusiasm with which he solved my difficulties, this research would have never been completed. It is also my privilege to express a deep sense of gratitude to my guide Professor Nirmal Kumar, J.I. for providing me financial support and selecting me in the research project sponsored by FES (Foundation of Ecological Security, Anand) as a Junior Research Fellow.

I would like to convey my eternal gratefulness to Dr. Rita N. Kumar, HOD, Department of Biological and Environmental Sciences, NVPAS. Her wide knowledge and her logical way of thinking have been of great value for me.

I owe with humility my indebtedness to Dr. V.S. Patel, Director, SICART, Vallabh Vidyanagar, who encouraged me and gave valuable suggestions. I am also highly thankful to Dr. B.G. Patel, Director, ISTAR and former VC Sardar Patel University (SPU), Vallabh Vidyanagar, for his blessings. I warmly thank late Dr. G. R. Kaundinya, EX Director, ISTAR for his moral support and cooperation. I am grateful to all the officials of Sardar Patel University (SPU) for considering my request for registration for Ph.D and process for thesis evaluation.
I owe deepest thanks to my research group members, in particular, Dr. Hiren Soni for his support during initial field visits, Mrs. Manishita Das, Mr. Shailendra Viyol, Mr. Rohit Bhoi, Mr. Sajish P.R., Mrs. Manmeet Kaur, Mr. Kanti Patel, Mr. Basil George, Mrs. Anubhuti Bora, Ms. Sudeshna Chakraborty and Ms. Rajal Patel for their direct or indirect help. I also wish to thank Mr. Vikram Singh and Mr. Nisarg Chaudhary for helping me in field work. I am also thankful to Mr. Hitesh Patel and Mr. Ritesh Patel and the other non-teaching staff of ISTAR for their assistance in course of the work.

I would like to express my gratitude towards my family especially my mother who has been a constant source of inspiration and support throughout the research period. I am also obliged to my dear friend Mr. Thomas A. for his help and motivation all through the thesis. Last but not the least, I wish to express my feelings to all those people who have directly or indirectly helped me in achieving this dream and made it a successful reality.

The figures of some maps and species used in the thesis from different sources (Google images, Google Earth) are highly acknowledged.