

ACKNOWLEDGEMENTS

In the course of my research I have come into contact with several people who have contributed directly or indirectly to the completion of this thesis. Foremost, I would like to express my deep sense of gratitude to my guiding teacher Prof. G. Prathapasenan for accepting me as his doctoral student and for his everlasting inspiration and guidance.

I would like to acknowledge Dr. Shailesh Nayak, Group Director, MWRG/RESIPA, SAC whose constant encouragement, thorough scrutiny of my work and valuable guidance helped me complete this work.

I owe a great deal to Dr. Anjali Bahuguna, Scientist 'SF', MWRG/RESIPA, SAC and immediate supervisor in the project for introducing me to the world of mangroves, for her meticulous guidance, discussions, constructive criticism, constant encouragement and bearing all the tantrums I gave her.

I would like to acknowledge Director, SAC for granting me permission to carry out the research work and providing all the facilities required for the purpose, Dr. R.R. Navalgund, then, Dy. Director, RESA and present Director, NRSA, Hyderabad and Dr. M. Mohan, Head, Marine Sciences and Coastal Environment Division, SAC, for having a keen interest in the project.

I am extremely grateful to Prof. M. Daniel, Head, Department of Botany, The M.S. University of Baroda, for his constant encouragement and for allowing me time and facilities for completing this work.

This work introduced me to a great friend Dr. Benidhar Deshmukh who while allowing me to fly with my ideas kept my feet firmly on the ground. He not only taught me the finer points of remote sensing but was a constant companion in almost all my field visits. He was always there to lift my spirits whenever they were down. No words can thank him enough for all he has done to enable me to complete this work.

Ground truthing involved many helping hands and in particular I would like to thank Dr. R. J. Asari and Shri Jani, Marine National Park (MNP), Jamnagar, for granting me permission to work in the study area and Dr. H. S. Singh, Dr. B. H. Patel, Dr. Y. Prasanna, Jayprakash Patel, Suresh Patel, Sachin Chavan, Harshad Salvi and Pinkesh Patel of Gujarat Ecological Education and Research Foundation, Gandhinagar and the MNP staff for providing assistance for field surveys. I would also express my gratitude to Dr. B. H. Patel for his constant encouragement.

Discussion on the various aspects of mangrove research with scientists of various research institutes like National Institute of Oceanography, Goa; Botanical Survey of India, Kolkata; Andhra University, Vishakhapatnam; Institute

of Wetland Management and Ecological Design, Kolkata and Central Agriculture Research Institute, Port Blair have immensely helped in my understanding of this unique ecosystem.

I am grateful to Shri M. C. Gupta and Shri Maroo for helping me in the GIS analysis and for providing me the necessary laboratory facilities, Shri Markand Oza for many useful suggestions on digital image processing, Shri R. M. Dwivedi, Dr. I. M. Bahuguna, Shri Bhanderi, Shri H. B. Chauhan and Shri H. U. Solanki for providing advice and helpful comments on various issues during the course of the research.

I am also grateful to Dr. Arun Arya, Dr. Neeta Pandya and Dr. N.S.R. Krishnayya, Dept. of Botany, the M. S. Univ. of Baroda for their constant encouragement. I would also like to thank Dr. Susy Albert, Dr. Darshika Shah, Dr Tanushree Chatterjee, Dr. Chitra Arya, Shri Tushar Parmar and others colleagues at the department for their constant help in completing this work.

The financial support that made this undertaking possible came from the project fund of the Integrated Coastal and Marine Area Management (ICMAM) programme of Department of Ocean Development (DoD), Govt. of India.

I must acknowledge with sincere thanks the generous help and suggestions I received from my friends Dr. Jitendra Gavali, Yaswant Pradhan, Sushil and K. P. Naushad during the entire course of the research work. Dr. Jitendra Gavali is also acknowledged for helping with the illustrations.

Completion of this work would not have been possible without the love, moral support and wonderful and whole-hearted cooperation of my friends Shilpa, Ashutosh, Subhash, Manju, O. M. Murli, C. R. C. Nagur, Viral Parikh, I. Suresh, Indrani Das, Indrani Chaudhuri and Sanjay.

Appreciations are also due to my friends Mihir, Bintu, Babu, Thomaskutty, Devendra, Ramanuj, Arvind, Mukesh, Jaishankar, Nethaji, Ajay, Maulik, Mona, Beenal and for their willing assistance.

I would also like to thank Mr. Jatil Thakor for keeping my computer working despite whatever I do to it and always responding to my frantic calls during emergencies.

This work would not have been possible without the love and affection of my mother. My wife who endured my absence in moments when she needed me the most provided the unwavering encouragement, inspiration, freedom and support required for me to reach my personal goals and aspirations.

Dharmendra Govindlal Shah