



ACKNOWLEDGEMENTS

This Ph.D. Thesis may not have been completed without the help of many people. Their constant inspiration, guidance and support allowed me to turn my dreams into reality.

Firstly, I would like to convey my sincere and deep gratitude to my guiding teacher, Dr. Pradeep C. Mankodi. His invaluable guidance, inspiration and enthusiastic approach towards life gave me strength to overcome all the difficulties that arose during this thesis. I consider myself fortunate to have been blessed by an outstanding supervisor.

I am thankful to the Heads of the Department of Zoology, Prof. A.V. Ramchandran and Dr. G. S. Padate for extending necessary facilities in the department during my period of work.

I am sincerely thankful to Prof. Nikhil D. Desai, Head, Department of Geology and the Dean, Faculty of Science, and Principle investigator “Coastal Zone Studies Project”, for allowing me to take up this assignment along with that project, and contributing to my work significantly in terms of data gathering and interpretation. I would also like to thank him for providing the laboratory facilities, satellite data, and the software for data analysis. His constant guidance and encouragement were highly appreciated.

I would like to acknowledge the guidance and encouragement provided by Dr. Dharmendra G. Shah, Co-investigator “Coastal Zone Studies Project”,

Department of Botany. He also introduced me to the field of Remote Sensing and taught me its principles. Discussions with him have enhanced my understanding of the ecology and interaction of animal plant relationships.

Coral Reef Remote Sensing was introduced to me by Dr. Anjali Bahuguna, Scientist SF, Space Applications Center (SAC), ISRO, Ahmedabad. Her thorough knowledge and experience in the field of coral reefs and remote sensing clarified many questions. During my stay at SAC, I came in contact with Ms. Nandini Ray Chaudhury, Scientist SD. Meeting her was like meeting a likeminded person. She helped me in learning the software and data interpretation of the satellite images of coral reefs. Several long discussions with her were inspiring.

I am thankful to Dr. Ajai, Group Director, Marine and Earth Sciences Group, and Mr. R. M. Dwivedi, Head, Marine Biology Division, for allowing me to take the training and understanding of such a vast topic at the SAC, ISRO.

My field work would not have been possible without necessary permissions provided by the Marine National Park Authorities, allowing me to undertake the ground verification and data collection.

I am extremely thankful to SAC, ISRO, Ahmedabad, for the financial support of the project "Coastal Zone Studies". I am also very grateful to The Maharaja Sayajirao University of Baroda for the excellent education environment provided to me throughout my Higher education.

I would also like to thank Dr. Kauresh D. Vachhrajani for encouraging me throughout my graduation, post graduation and research years, for his keen interest in my academic development, and for motivating me to pursue my goals without hesitation.

I have been blessed with the company of great friends and fellow researchers, and I thank them for their immense support and encouragement – Sweta Bhatt, Shreestuti Tattu, Darshee Baxi, Chandresh Dave, Ami Desai, and Rupal Brahmbhatt. Their suggestions, discussions, ideas and cheerful attitudes made my difficult task seem easier. I would also like to thank Khushali Pandya for her help extended to me during the preparation of this thesis.

This Thesis would not have been possible without the support and encouragement from my lovely family members.

I have been lucky to have received the blessings of two great men – my grandfather, Pravinchandra Bhattji, and my grandfather in law, Shankerlal Trivedi. Their belief in me gave me the strength to diligently pursue my work. The love and support of my parents, Sudhanshu and Kalindi Bhattji, has allowed me to pursue my dream of higher education and continue my desire to be in the field of research. Their continuous support allowed me to cope with the problems and stress of my long journey. Their trust in me always encouraged me to keep my goals at the highest altitude.

My work is incomplete without the love and support I received from my in-laws Jagdish and Hemlata Trivedi. Their positive attitude and optimism towards life prevented last-minute stress. The very important lesson I learnt from them during my journey is to continue having faith in God and to trust in my own abilities.

I am also extremely thankful to my younger brother Darsh. His constant love, support and help in drafting and printing of the thesis were invaluable.

My sister-in-law Amruta's contribution is also appreciated for her support and help in proof reading the document.

Most importantly, this thesis would never have been completed without the support of my husband, Siddharth. His constant support, help and guidance made it possible for my thesis to be completed to the best of my ability. His love, affection and positive attitude towards life have always been an inspirational force for me.

Finally, I thank God almighty for blessing me with good health, a clear mind and optimism during the period of my study for the successful fulfillment of this research work.

Last but not least; I am thankful to all my well wishers for their blessings.



Nayruti S. Bhattji

Vadodara.