Acknowledgement

I take this as the best opportunity to remember and sincerely express my gratitude to all those who took incredible part in completing this work.

I am deeply indebted to acknowledge my research Guide Dr. S. Asokan M.Sc., M.A., M. Phil., Ph.D., Associate Professor of Zoology and Wildlife Biology, AVC College, Mannampandal for his valuable guidance, scholarly advice, immense support and constant supervision of my Ph.D. program. It was indeed a great pleasure for me to work under his guidance.

I express my sincere thanks to Dr. K. Thiyagesan, Principal of AVC College (Autonomous) Mannampandal, for providing all facilities in the College during my study period.

I am thankful to Dr. M. Varadharajan, HOD i/c of Zoology and Wildlife Biology, AVC College, (Autonomous) Mannampandal, for the facilities provided in the department during my study period.

It is my pleasure to thank the management and the Principal Dr. G. Jonas Gunasekaran, TBML College, Porayar, for his help and encouragement in various ways throughout the period of my study.

I extend my sincere thanks to Dr. A. S. Paul Ravindran, HOD of Zoology, Prof. Mrs. Premavathy George, former HOD of Zoology, Prof. Mr. Anren Peter, former HOD of Botany and Associate Professor Dr. (Mrs) A. Christy Ponni, Dr. Paul Jeevanandham and Assistant Professor (Late) Mr. T. Osbornpeter, Mrs. C. Jeevaselvasundari, Mr. M. Bharathy, Dr. S. Chandiran, Department of Zoology. Dr. A. Indirajith Department of Botany and Lab Assistants, Department of Zoology and Botany, TBML College Porayar, for their affectionate encouragement, support and prayers.
I extend my gratitude to the staff members, Department of Zoology, AVC College, Mannampandal for their encouragement and hospitality.

I would like to thank Dr. U. Balasubramanian, HOD of Zoology AVVM Sri Pushpam College, Poondi and Dr. Mrs. Madhuraimozhi Govindarajalu, Associate professor in Zoology, ADM College for Women, Nagapattinam, Doctoral committee members for their valuable suggestions and encouragement.

I am truly grateful to Mrs. T. Udayammai, Deputy Registrar of Bharathidasan University, Trichy, Mr. Swaminathan, former, statistical officer, Karaikal and Mr. V. Karuppaiai Pillai, Department of Maths, AAGA College, Karaikal, for their affectionate encouragement, support and timely helps.

I am very much thankful to Dr. T. Balasubramanian, Director, CAS, Dr. P. Anandaraman, Senior Professor, CAS, Dr. K. R. Arumugam, Dr. T. Anbazhagan, Dr. N. Vengadesh Perumal, Miss. A. Hemalatha and Miss. G. Karthiga Devi, Research scholar, CAS in Marine Biology, Annamalai University for their assistance in providing literature collections and valuable suggestions and comments.

I gratefully acknowledge my sincere thanks to Mrs. Asokan, Prof. Mrs. Karuppaia, Prof. Mrs. Jeevanandham, and Mr. K. Chidambaram, Mr. J. Rajendirakumar. Dr. M. Rajasegar, Mr. K. Balaji, Sub-Inspectors of fisheries, Karaikal. Prof. Mr. Chinnaiyan, Prof. Mr. Kesavamani, TBML College Porayar. Mr. Kamalkanth, Research scholar at Annamalai University. Mrs. K. Chitrapiya, Research scholar in AVC College and Mr. Charless and Mr. Kalaiyarasan, for their constant help whenever I needed them.

I am profoundly thankful to Dr. K. Shanmugavadivel, Professor in Statistics, St. Joseph College, Trichy, for his guidance in the statistical analysis.
My most sincere appreciation and thanks go to my dear friends Dr.(Mrs.) R. Aruna Devi, Assistant Professor in Zoology, St. Thomas College, Kerala. Dr. K. R. Saravanan, Scientist, MSSRF constant for their suggestions, keen interest for their critical comments.

My special thanks go to Mr. M. Noorul Hasane and Mr. M. Dawood, Department of Statistics, Pondicherry and Er. G. Kokilrajah for collection of rainfall data and photos of satellite views, for their continuous support and assistance at every step of my research work.

I received help from several of my teachers, friends and relatives during various stages of the research program. I am grateful for their companionship, encouragement and selfless help.

I take this opportunity to express my heartfelt thanks to my beloved husband Mr. Thirunavukarasou and my lovely child master T. Balavigneswaran for their patience, encouragement, support and help throughout my research period.

Last but not the least, I owe a special debt to my affectionate grandparents, parents, (Mr. V. Devarajan and Mrs. D. Jayalakshmi), in-laws (Mr. (Late) Ramiyan, Tmt. R. Dhanalakshmi, Mr. (Late) S. Sivakadatcham and Mrs. Gunapushanam), my sisters, sister-in-laws, brother-in-laws and my cousins for their encouragement, love, sympathetic support in all possible ways during the travails of my study period.