LIST OF TABLES

Table	Description	Page
2.1	Details of sensors used for Land use and Land cover mapping and aquaculture developments studies	23
2.2	Details of previous documentation on Remote Sensing and GIS based site selection for aquaculture	28
2.3	Guidelines/standards for waste water management for Indian aquaculture farms	29
3.1	Soil groups of the study area and their description	34
4.1	General information of collateral datasets used in the study	43
4.2	Details of classification scheme (w.r.t NRSA,1995)	45
5.1	Land use and Land cover statistics for 2008, 2012 and 2016	70
5.2	Summary of the statistic of Land use and Land cover conversion for the period 2008-2016	76
5.3	Change detection/ transition matrix between 2008 & 2012	79
5.4	Change detection/ transition matrix between 2012 & 2016	80
5.5	Blockwise statistics of shrimp farm in the year of 2008, 2012 and 2016	82
5.6	Gram Panchayat wise statistic of shrimp farm for the year of 2016	85
5.7	Plot wise convertion of brackish water tanks/ponds from other classes during 2008 to 2016 of Purba Amtolia Mouza (JL-No.447)	88
5.8	Transition matrix between predicted Land use and Land cover of 2016 and observed Land use and Land cover of 2016	91
6.1	Selected project action and environmental elements from Leopold Matrix	101
6.2	Temporal variation of block wise distribution of different classes of waterbodies for the period of 2008 to 2016	104
6.3	Block wise soil salinity and pH in agricultural field nearer to shrimp farm	107

6.4	Water salinity and pH in shrimp pond, river/stream/canal and tube-well of shrimp farm hot spot area of the study area for the year of 2012 and 2016	110
6.5	Average (and range) cost of farming in Rs/acre of shrimp production	117
6.6	Average (and range) cost of farming in Rs/acre of paddy production	118
6.7	Cost and return of shrimp culture and paddy farming	118
6.8	Use of labour in traditional and scientific shrimp farming (man-days/acre) across different categories of shrimp farm	120
6.9	Block wise variation in agricultural land for the study year 2008, 2012 and 2016	121
6.10	Environmental impacts evaluation on five coastal blocks using Leopold Matrix	128
7.1	Details of criteria and constraints for shrimp culture site selection	136
7.2	Details of Saaty's scale	137
7.3	Random Inconsistency Indices (RI), (source: Saaty, 1980)	139
7.4	Pair-wise comparison matrix used for assessment of the relative importance of factors effecting the site selection for shrimp culture in the study area	139
7.5	Normalized matrix of the pair-wise comparison matrix	140
7.6	Relative weights for different factors	140
7.7	Details of areal distribution of each factor for potential site selection	147