

**Trajectory of Aquaculture Growth and Agriculture Risk with Predicted Scenario in the
Western Bank of Hooghly Estuary using Remote Sensing and GIS – A Review**

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Abstract

Aquaculture farming is at its boom in the last two decades. Most of the rivers and canals are banked with aquafarms globally with India as no exception. India ranks third in the world in aquaculture production. East coast indicates significant growth of aquaculture farms in the past few decades. The western bank of Hooghly estuary is one of the noted zones for aquaculture farming. This paper detailed the growth of aquafarms in the above mentioned coastal zone in the last few decades along with predicted scenarios in the next two decades. The impacts of increasing aquafarms in the inland, river banks and along the coast were also discussed in the paper. Temporal analysis and predictions were done using Remote sensing and GIS techniques along with CA-MARKOV land use/land cover prediction model.

Keywords: *Aquaculture Farms; Hooghly Estuary; Temporal analysis; prediction model*