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**LAND-SEA INTERACTIONS IN THE FRAMEWORK OF
MARITIME SPATIAL PLANNING:
COX'S BAZAR COAST, BANGLADESH**

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LIST OF ABBREVIATIONS

LSI	Land sea interaction
MSP	Maritime spatial planning
DEM	Digital elevation model
SRTM	Suttle radar topography mission
USGS	United States Geological Survey
CVASU	Chattogram Veterinary and Animal Sciences University
BBS	Bangladesh Bureau of Statistics
CB	Cox's Bazar
KDI	Kutubdia Island
MKI	Moheshkhali
STI	St. Martin Island
BOB	Bay of Bengal
NASA	The National Aeronautics and Space Administration
QGIS	Quantum Geographical Information System
WGS84	The World Geodetic System 1984
DEMON	Digital elevation model Networks

ABSTRACTS

An effective maritime spatial planning cannot be achieved and prepared without proper examining the uses and activities between the land and sea. Land-Sea Interaction (LSI) through marine spatial planning framework provides clear concept about inter management conflicts among the present uses and activities and most possible recommendation for minimizing conflicts which helps to make a balance between the ecological and economical status. This research was carried out in three major islands of southeastern Bangladesh coast of named Kutubdia, Moheshkhali, and Saint Martin in Cox's Bazar district during 2019-2020. This study is very essential for significant to determine the elevation level of these regions and take necessary steps in future to protect and development those regions and explore the blue economy in Bangladesh. Using the Shuttle Radar Topography Mission (SRTM) satellite data with a 30 m resolution Digital Elevation Model (DEM) processing procedure was performed for understanding the contour profile to make a decision about the elevation height of these regions with the help of software QGIS 3.6.1, ArcMap 10.5 and ArcView 10.6. There were about 225 interaction issues found between the coastal land uses and maritime spatial uses through matrix analysis whereas land-sea interactions were characterized of which 79 without conflicts, 61 weak conflicts, 60 strong conflicts interaction were found. The maximum elevation was 14 m, 75 m, and 28 m which covered approximately 0.36, 0.2, and 0.004 area of Saint Martin, Moheshkhali, and Kutubdia, respectively. To enhance sustainable uses and activities, conflict should be reduced through pollution minimizing, well maritime spatial planning, and maintenance of existing laws and regulations.

Keywords: Land sea interactions, elevation, Contour profile, matrix analysis, Maritime spatial planning.