ABSTRACT
The Sundarbans is a rich biodiversity with tidal mangrove forest in the world. It is a part of deltaic plain of fluvial marine deposits of Ganges–Brahmaputra basin. The main aim of this study is to identify the best Supervised Classification method using linear regression model. Thus main focus goes to three supervised classification methods; these are Minimum Distance, Maximum Likelihood and Parallelepiped. We use linear regression model with NDVI (Normalized Differenced Vegetation Index) value and different classification area. Here we found that Maximum Likelihood classification is more accurate comparison to others, depends upon regression coefficient and ground based observation.

KEYWORDS: Linear Regression Model, Normalized Difference Vegetation Index (NDVI), Remote Sensing, Supervised Classification.