Monitoring the Natural *Sal* Forest Cover in Central Bangladesh by Temporal Landsat Imagery 1972-2010

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Modhupur *Sal* (*Shorea robusta*) forest, the largest natural *Sal* forest area of Bangladesh, is a crucial ecological resource situated in the central part of the country. This unique natural forest belongs to tropical moist deciduous forest type. It harbors a good number of native flora and fauna. Unfortunately this forest is heavily encroached. Current study investigated and quantified the destruction in areal extent of natural *Sal* forest of Modhupur using Landsat satellite data of 1972, 1989 and 2010. Post classification change analysis technique was used to quantify the natural *Sal* forest coverage to know the loss of forest cover. The result showed that the extent of original natural *Sal* forest was depleted by 64% and 31% in the year of 2010 and 1989 respectively compared to that of 1972. The study presented a successful usage of freely available Landsat data to monitor forest cover change which could be followed for low cost but effective monitoring of forests and other natural resources in Bangladesh and other parts of the globe. Alarming evidence of mass destruction of natural *sal* forest revealed by this study is indicative to emphasize in taking adequate measures for protection and regeneration of natural *Sal* forest in Modhupur for environmental sustainability.