

**ASSESSMENT OF FOREST COVER CHANGE USING GEO
SPATIAL TECHNOLOGY IN DISTRICT ABBOTABAD**



BY

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ABSTRACT

Forests are an important natural resource which should be conserved on priority basis for sustainable environmental management. However, escalating levels of anthropogenic disturbances have exerted tremendous pressure on the forests. Due to the increase in human and cattle population and widespread rural poverty, forests all over the globe are subjected to enormous pressure resulting in deforestation and degradation. The objective of this study was assessment of the forest cover change in the district Abbottabad Khyber Pakhtun Khuwa Pakistan through Remote sensed data of year 1998, 2007 and 2013. Considerable increase in forest cover area was observed from the period 2007 to 2013 the initial data was for the year 1998. The total covered area of forest in 1998 was 105867 acre and in year 2007 it was increased to 145876 acre. Further in year 2013 forest cover area was 156987 acre. The difference in percentile calculated for forest was 23.98 % in the year of 1998, 33.08 % in the year of 2007 and 35.57 % in the year of 2013. The increase in forest cover was due to the fact that forest many environment related projects has been carried out and mass plantation was done in the form of Reforestation especially in reserved forest, due to which the shrubs/bushes observed in year 1998 was 24.87 % of study area and in year 2007 and 2013 there was decrease, because it is converted into forest in 2007-2013. Shrubs and bushes area was 21.57% and 14.80 % in the year 2007 and 2013 respectively.

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ABBREVIATIONS

AJK	Azad Jammu and Kashmir
ASTER	Advanced space borne thermal emission and reflection radiometer
DI	Disturbance index
ETM	Enhanced thematic mapper
GDEM	Global digital elevation model
GIS	Geographic information system
GPS	Global positioning system
IPCC	Intergovernmental panel on climate change
ITTO	International tropical timber organization
KPK	Khyber PakhtunKhuwa
LULC	Land use and Land cover
MAGI	Marylandgeographic information
NAIP	National agricultural imagery program
RVI	Ratio vegetation index
RS	Remote sensing
RUSLE	Revised universal soil loss equation
SFM	Sustainable forest management
UNFCCC	United nation's framework convention on climate change
TDNP	Tam Dao National park

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