

## **LIST OF ABBREVIATION**

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AI: Artificial Intelligence

ANN: Artificial Neural Network

BI: Built-up Index

BSI: Bare Soil Index

CA: Cellular Automata

CBD: Central Business District

CGWB: Central Ground Water Board

DCB: Dug cum Bore well

DN Value: Digital Numbers

ESRI: Environmental Systems Research Institute.

GA: Genetic Algorithm

GCP: Ground Control Point

GIS: Geographical Information System

GPS: Global Positioning System

IMD: Indian Meteorological Department

LST: Land Surface Temperature

LULC: Land Use Land Cover

MLP: Multi-Layer Perceptron

MSS: Multispectral Scanner

NCR: National Capital Region

NDBI: Normalized Difference Built-up Index

MNDBI: Modified Normalized Difference Built-up Index

NDVI: Normalized Difference Vegetation Index

NDWI: Normalized Difference Water Index

NRSA: National Remote Sensing Agency

NUIS: National Urban Information System

PA: Patch Area

PCA: Principal Component Analysis

RS: Remote Sensing

SLEUTH : Land use, Exclusion, Urban extension, Transportation and Hill shade – model.

TM: Thematic Mapper

VMC: Vadodara Municipal Corporation

VUDA: Vadodara Urban Development Authority

QGIS: Quantum Geographical Information System

TP: Town Planning

USI: Urban Sprawl Index

LAC: Land Absorption Coefficient