MAPPING OF FOREST AND NON FOREST BY DIGITAL CLASSIFICATION

A Report submitted in partial fulfilment

for the award of the Degree of

Master of Geography in School of Liberal arts

by

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Pursued in



NORTH EASTERN SPACE APPLICATIONS CENTRE

to



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BONAFIDE CERTIFICATE

This is to certify that the project report entitled "Mapping of Forest and Non Forest by Digital Classification" submitted by Paul Debbarma to the North Eastern Space Applications Centre, Umiam, Shillongand Noida International University, GautamBudh Nagar, in partial fulfillment for the award of the degree M.A(Geography) in School of Liberal Arts, is a bonafide record of the project work carried out by him undermy supervision from 15/1/2019 to 26/4/2019.

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April, 2019

DECLARATION BY AUTHOR

This is to declare that this report entitled "**Mapping of Forest and Non Forest by Digital Classification**" has been written by me. No part of the report is plagiarized from other sources. All information included from other sources have been dulyacknowledged. I aver that if any part of the report is found to be plagiarized, I shall takefull responsibility for it.

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ABSTRACT

Forest cover change analysis between 2001,2004 and 2011 was conducted in the selected study area using remote sensing refetrences by goggle earth map. Information was extracted from various multi spectral satellite images and different digital maps.

The objective of the study were to detect the temporal forest cover change by digital classification of satellite image and Mapping of forest and non-forest were also done. The water bodies were also observed in the digital classification for analysis of change detection. The time series of 2001,2004 and 2011 of Landsat 4-5 images to produce land cover map in general and forest cover map in particular. Supervised classification were applied for the comparison of change detection methods were employed.

In addiction to this, the supervised classification of images shows the change detection analysis of the forest and non forest cover in the study area. The result showed that the last 10 years of changes, the forest cover has been declined and non forest has increased in a great number. Therefore, in order to reduce the forest cover change, remedial actions are recommended.

CONTENTS

1. CHAPTER-1 : INTRODUCTION
1.1 OBJECTIVES 2
2. CHAPTER-2: LITERATURE REVIEW
3. CHAPTER-3: DATA USE AND METHODS6-Error! Bookmark not defined.
3.1. Study Area 6-8
3.2. Data Used 9
3.3. Methodology Error! Bookmark not defined.0-11
4. CHAPTER- 4: RESULTS AND DISCUSSIONError! Bookmark not defined15
4.1. Classification of satellite image 2001 Error! Bookmark not defined.2
4.2. Classification of satellite image 2004 Error! Bookmark not defined.3
4.3. Classification of satellite image 2011 Error! Bookmark not defined.4
4.4:Analysis Of 2001,2004 And 2011 Classification15
Conclusions
References

LIST OF FIGURES

Fig.3.1: Study Area	6
Figure.3.2:Methodology Chart	11
Figure.4.1:Supervised Classification of 2001	12
Figure.4.3:Supervised Classification of 2004	13
Figure.4.5:Supervised Classification of 2011	14
Figure.4.7:Land use of 2001,2004 and 2011	15

List of Tables

Table 3.1:Details about the Bands	
Table.4.4: Land use of 2001,2004 and 2011	