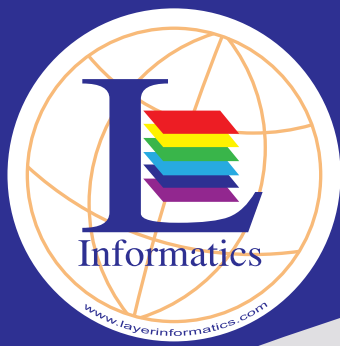




LAND USE LAND COVER MAPPING

A Case Study



CHALLENGES:

- The first challenge was to integrate or even replace visual interpretation of Satellite imagery. An Interpretation with respect Land use & land cover with low resolution Satellite imagery is very quite challenging.

INTRODUCTION:

In the present day world, Land Use and Land Cover mapping is of great significance in scientific, scholarly research, planning and management. Regional land use pattern reflects the character of interaction between man and environment and the influence of distance and resources based on mankind's basic economic activities. Remotely sensed satellite images provide a synoptic overview of the whole area in a very short time span.

KEY ASPECTS:

- Preprocessing of the image data
- Image interpretation
- Classification / Featurisation
- Drawing cleanup & Topology
- QC/QA

METHODOLOGY:

➤ Preprocessing of the image data

In order to derive the Planimetric features for mapping from satellite image data, all the topographic objects that are of relevance for the certain map scale have to be identified and located with sufficient accuracy.

➤ Image interpretation

Manual photo-interpretation is effective for integrating the photographic elements of tone, hue, texture, shape, size, pattern, shadow and geographic context. We were better able to integrate our intimate field knowledge into the interpretation process. Based on visual analysis of the imagery and parcel information.

➤ Classification / Featurisation

Land use is the human modification of natural environment or wilderness into built environment such as fields, pastures, and settlements. Land cover is the physical material at the surface of the earth included grass, asphalt, trees, bare ground, water, etc.

➤ Drawing Cleanup & Topology

To check the overshoots, undershoots, overlapping, 0length objects, dangles and pseudo notes Drawing cleanup will be carried out and to create polygon features topology will be done.

➤ QC/QA

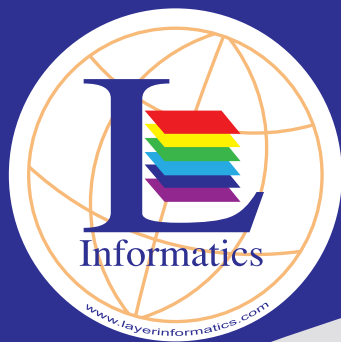
Quality control involved cross-checking the feature boundaries to ensure accurate and consistent interpretation. Also important was the confirmation of feature codes/labels, polygon closures, and where applicable, line feature continuity among many other topological issues.

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LAND USE LAND COVER MAPPING

Page 2

TESTIMONIALS:

As always, thank you and your staff for the quick turn-around time. Please pass my appreciation on to your staff who worked on this.

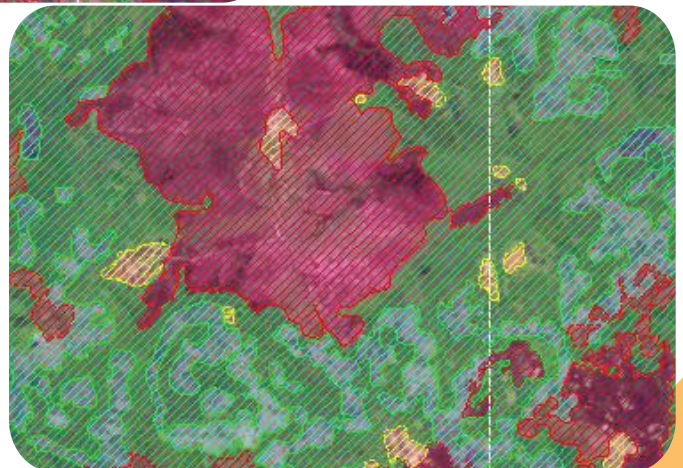
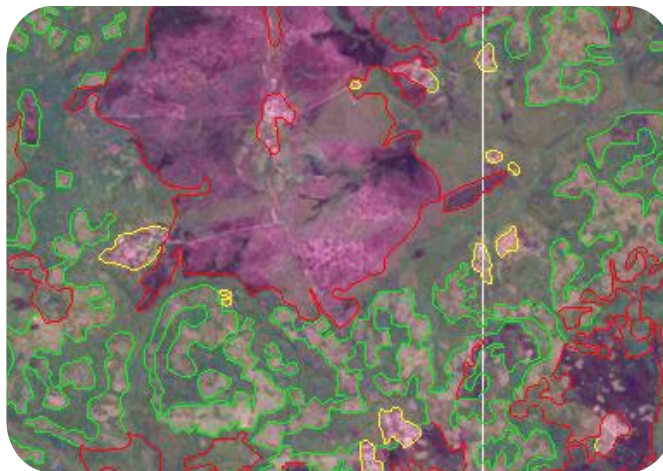
TECHNOLOGY:

- AutoCAD Map 2004
- ArcGIS 9.3
- Erdas Imagine 9.2

APPLICATION:

- This leads to quick and truthful representation of the real world in the best possible manner. It provides an insight to coordinate relationship among transportation, residential, industrial and recreational land uses.
- Providing broad-scale inventories of natural resources and monitoring environmental issues, including land reclamation, mangrove restoration, disaster relief, water quality and planning economic development.

SCREEN SHOTS:



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Scotland, UK.

US Office:

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Middle East Office:

Doha, Qatar.



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