

Mapping and Monitoring of Forest in parts of Sudan using Remote Sensing and GIS

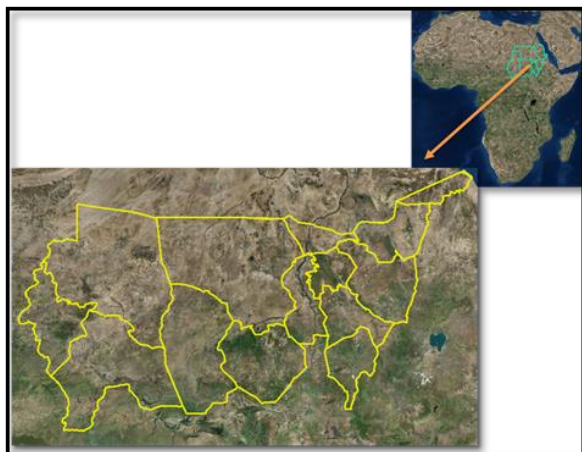


Fig.1 State Boundaries, Sudan

Business Need:

Forests as natural resource play a central role in the economic, social, and cultural development of any country. As the valuation of forest resources has evolved, the management tasks for forest managers and policy makers have grown increasingly complex. Effective management of forest resources requires reliable and timely information about the status and trends of forest resources.

The business requirement was to classify the ortho-rectified multi-temporal satellite image to map the Forest area.

Inputs Used:

- RapidEye Satellite Images (Resolution-5m)
- Ortho-rectified Satellite Images
- Area Boundaries

Business Solution:

Satellite images were used to classify the Forest area with approach of hybrid classification methodology. The Trees, Pasture and Agriculture class are segregated out from previously classified images.

In the next step, these maps were sent for field validation. After field validation, necessary modification was done and final maps were created.

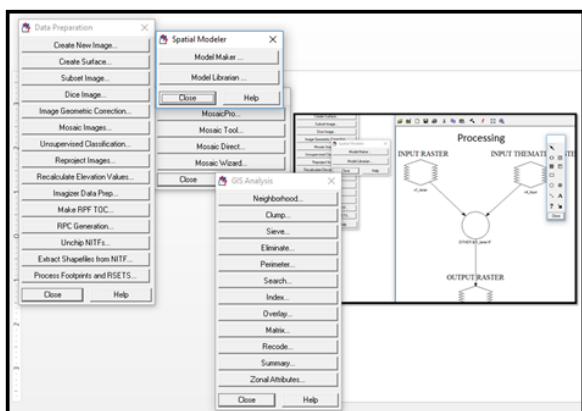


Fig2. Processing

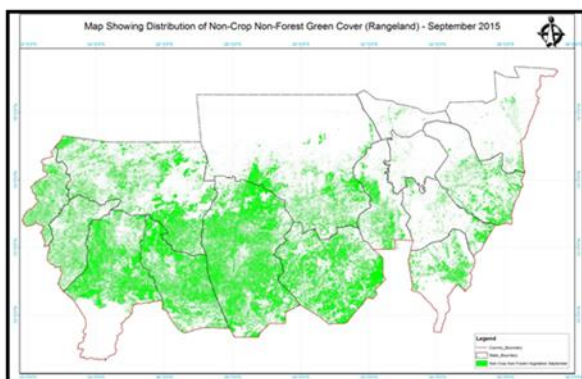
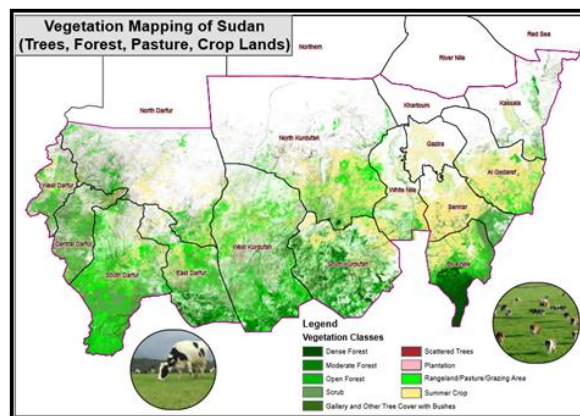


Fig3. Non Crop, Non-forest Green Cover



Project Shipment:

The following shipments were made-

- i) Forest Map
- ii) Project Report