Monitoring Biomass in the Tanzanian Miombo Woodlands Using Satellite Imagery

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- Site: Mbola, Tanzania

- Relating tree DBH & biomass with allometric equations → forest carbon estimate

- R-IR-B Landsat bands can be overlaid to create false-color image that distinguishes between areas with and without vegetation

- Normalized Difference Vegetation Index (NDVI) based on red and near-IR bands also highlights vegetation

- Pixel classification system still being developed

Quickbird Image of Mbola with LDSF Plots

Landsat image of surrounding area

Legend

- • Plot
- Forest Boundary
- Village Boundary
- Road

Estimated Biomass
Forest area: 4861 ha
Biomass: 225,753 t
Std. Error: 48,953 t
Carbon: 112,877 t

0   1   2   4
Kilometers