

Assessment, Valuation, Mapping and Monitoring Biomass and Carbon Stocks

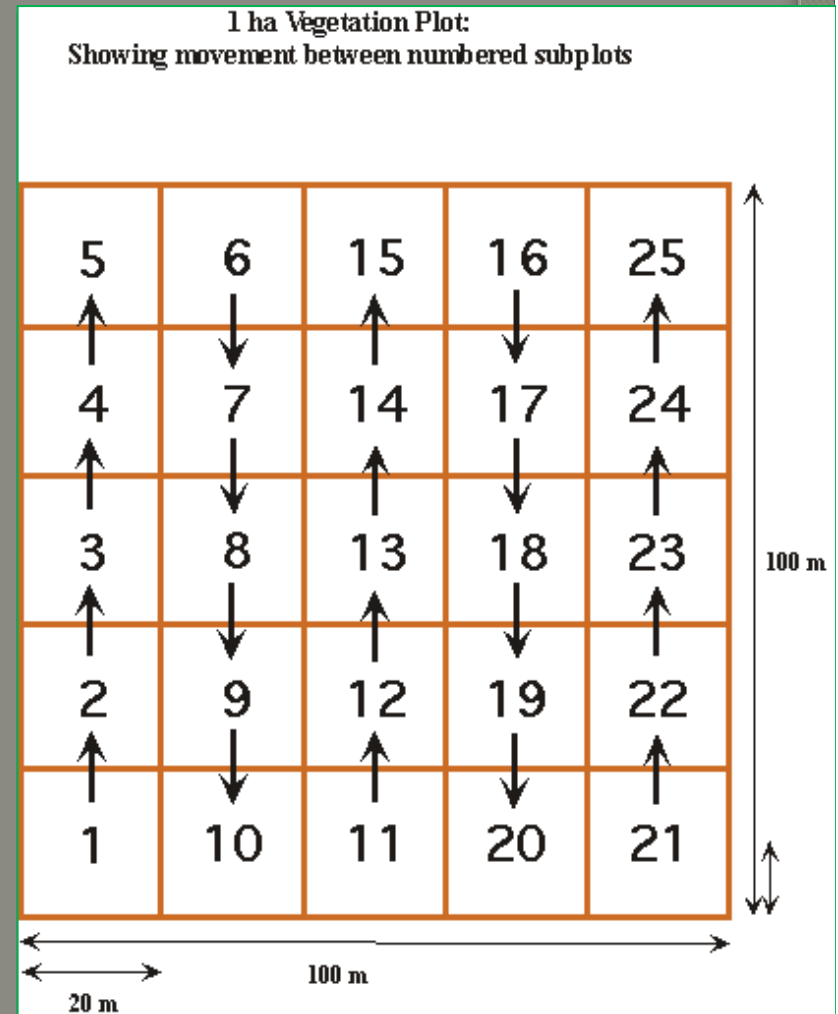
Prof. PKT Munishi, Shadrack Mwakalila, Deo Shirima et al



VALUING THE ARC

Assessment and Monitoring of Carbon

- Data Sources:
 - Literature Data
 - Field estimates of C for Different Land Cover Types
 - Includes Participatory C Assessments
 - Measurements on 1 Ha Permanent Sample Plots to enable future monitoring
 - (Tropical Ecology Assessment and Monitoring (TEAM))



Carbon Assessment & Measurements

- Use 5 pools of Carbon for each land cover
 - Aboveground
 - Belowground
 - Organic matter
 - Dead material

- Stratified by **Elevation**
 - 300 m elevation bands
 - Valley Bottoms – ridge tops
 - Consideration of Aspect (if necessary)



Carbon Assessments and Measurements

- Stratified by **Cover Types**

- Evergreen Forests
- Woodlands – Miombo, Acacia
- Thickets
- Cultivated land – mixed crops/Agroforests

- Assess Degradation



Assessment and Measuring Carbon Stocks

- Tree and Plot Volume

- Base on existing or developed allometric models

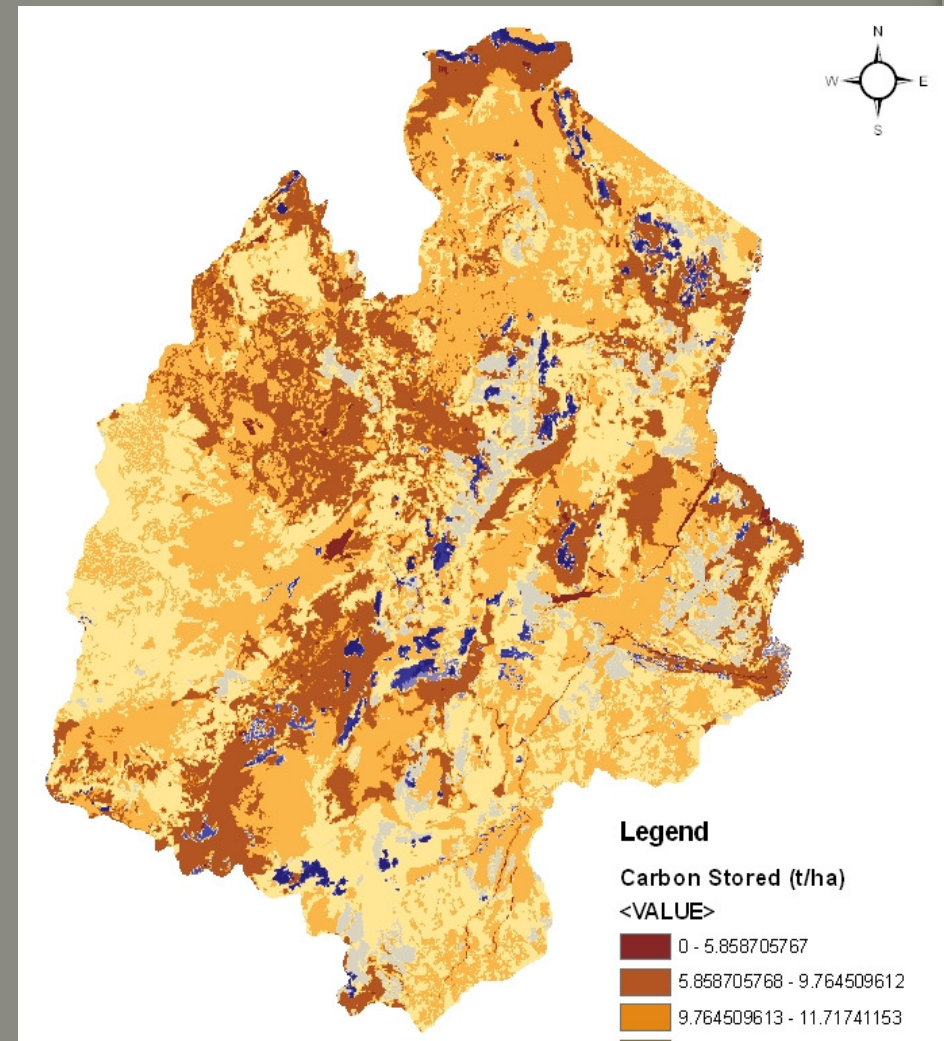
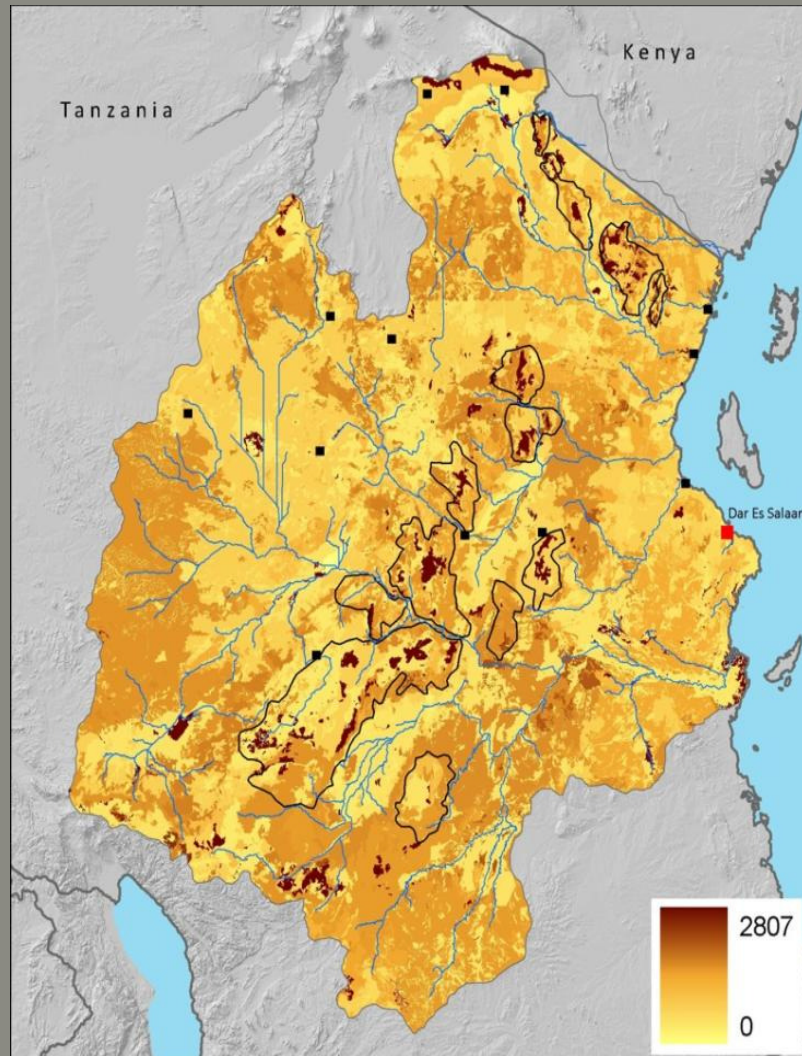
- Compute Biomass

- Base on existing allometric models
- Base on developed allometric models
- Base on volume and wood density
(wood basic density - species specific and/or general)

- Carbon – 49 – 50% biomass

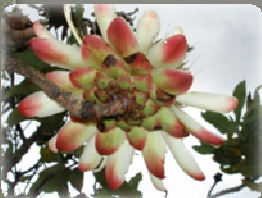
- Mapping C Distribution – InVest model

Preliminary Carbon Maps





**THANKS –
ASANTE**



VALUING THE ARC