

(TANZANIA-MRV CONTEXT)

Forest Resource Assessment, Monitoring, Reporting & Verification

Collaborators:-

1. www.mnrt.org 2. www.fao.org 3. <u>www.metla.fi</u> 4.www.sua.net Presented by: Mr G. Kamwenda National REDD Task Force <u>www.reddtz.org</u>

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APPROACH BROADENING THE FOCUS

• Earlier: Timber supply

MULTISOURCE

APPROACH

• <u>Recently</u>: REDD+ (Biodiversity, carbon, GHG

Sustainable forest management):

- Economic, Environmental & Socio-cultural benefits

with 7 thematic elements

- Extent of forest resources
- > Biological diversity
- Forest health and vitality
- Protective functions of forest resources
- Productive functions of forest resources
- Socio-economic functions of forest resources
- Institutional and legal framework





NAFORMA/MRV-METHODOLOGY

- Forest inventory based on *Permanent Sample Sites* is the backbone of NAFORMA/MRV:
 - Biophysical component
 [direct measurements and observations]
 - Provides information on extent and condition of the Forest and TOF resources.
 - Captures Deforestation and Forest Degradation though remeasurements.
 - Socioeconomic Component [interview based (key informants / transect walks / household interviews]
 - Provides knowledge about the human factors that affect changing forest conditions in a country driving forces for forest change.
 - Potential REDD+ linkages (ecosystem services).
 - Both together, a <u>powerful tool</u> in assessing the effectiveness of policies aimed to improve forest conditions and policy development





NAFORMA/MRV APPROACH BIOPHYSICAL SURVEY DESIGN - REQUIREMENTS

Biophysical survey design involve adaptation of innovative methodologies and a range of data sets (Multi-source)

- i. Analyze the existing remote sensing material, digital map and inventory data available for planning and field measurements;
- ii. Develop options for efficient sampling designs to make estimates for national and District level for core SFM / carbon pool:
 - with improved efficiency and accuracy/precision;
 - providing reliable information at National & District Level;
 - improving the FAO NFMA methodology;
 - using multi-source input data.
- iii. Develop study feasibility and efficiency models for each sampling option: including accuracy/reliability estimates, cost, time, staff and technical skills, transportation and access, and feasibility for long term monitoring.
- iv. Develop recommendations for reliable multi-source forest inventory data providing information at District Level (e.g. how field plots can be integrated with RS and available digital maps to provide better estimates for core SFM parameters).



NAFORMA APPROACH NATIONAL INSTITUTIONAL LINKAGES



Assessment → Monitoring

NAFORMA APPROACH REDD FEEDINGS AND OUTPUTS





NAFORMA LINKAGES COLLABORATIVE APPLIED RESEARCH

GEO-Forest Carbon Tracking (High Resolution Remote Sensing) 12 PARTNERS

Google Earth (Data collection and presentation platform) 1 PARTNER

> LIDAR (Light Detection and Ranging) 12 PARTNERS

Quantifying, mapping and valuing key ecosystem services VALUING THE EASTERN ARC 12 PARTNERS

Community-based Forest Carbon Monitoring KYOTO: THINK GLOBAL ACT LOCAL 6 PARTNERS



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