(TANZANIA-MRV CONTEXT)

Forest Resource Assessment, Monitoring, Reporting & Verification

Collaborators:-

1. www.mnrt.org 2. www.fao.org 3. www.metla.fi 4.www.sua.net

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National REDD Task Force

www.reddtz.org

[1] Forest and Beekeeping Division, Ministry of Natural Resources & Tourism

[2] Food and Agriculture Organization of the United Nations

[3] Finnish Forest Research Institute, Vantaa

[4] Sokoine University of Agriculture, Morogoro

APPROACH
BROADENING THE FOCUS

- **Earlier:** Timber supply
- **Recently:** REDD+ (Biodiversity, carbon, GHG Sustainable forest management):

MULTISOURCE APPROACH

- 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 re-measurements.

  - ***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 powerful tool 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;**

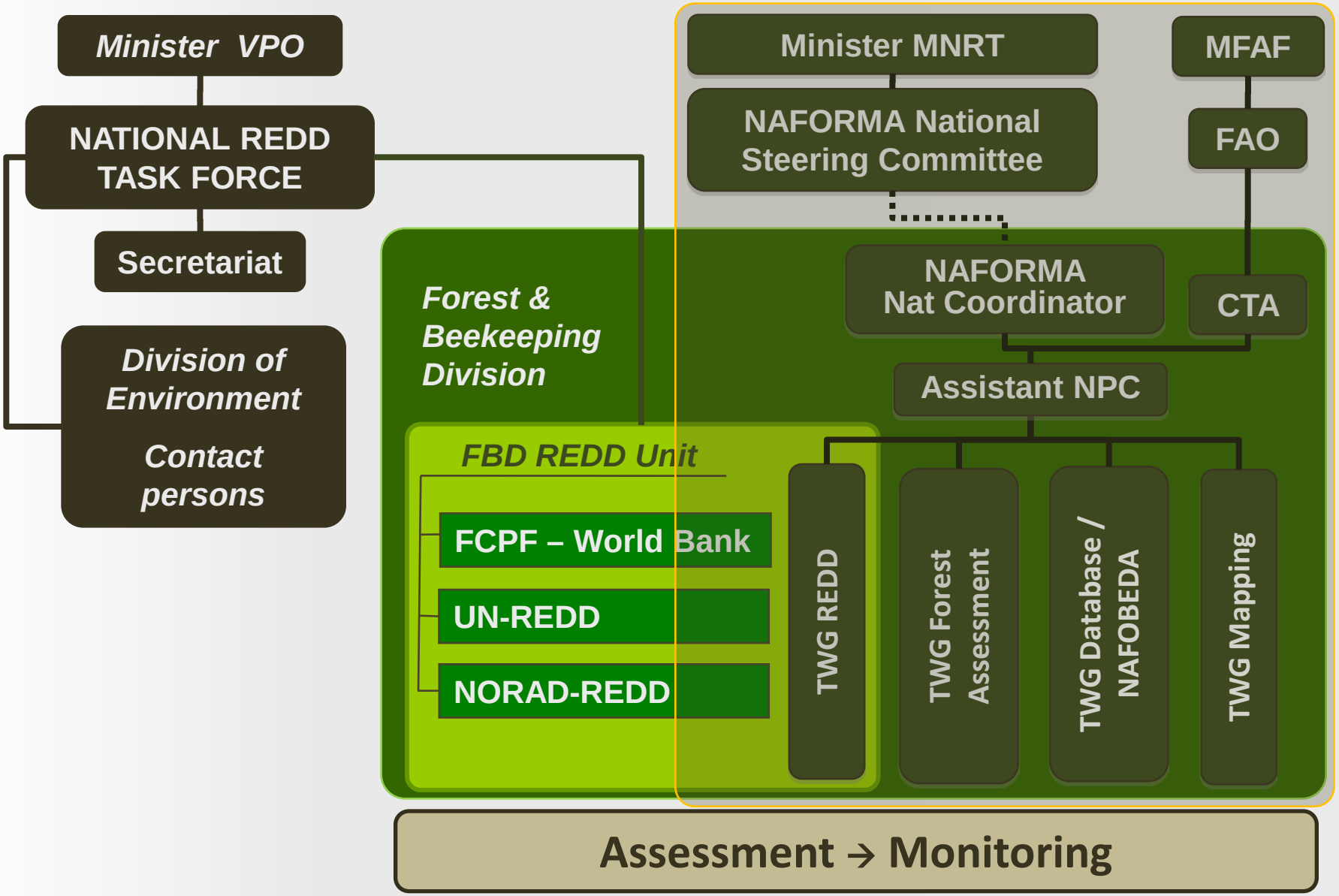
ii. **Develop options for efficient sampling designs to make estimates for national and District level for core SFM / carbon pool:**
   - **with improved efficiency and accuracy/precision;**
   - **providing reliable information at National & District Level;**
   - **improving the FAO NFMA methodology;**
   - **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).**

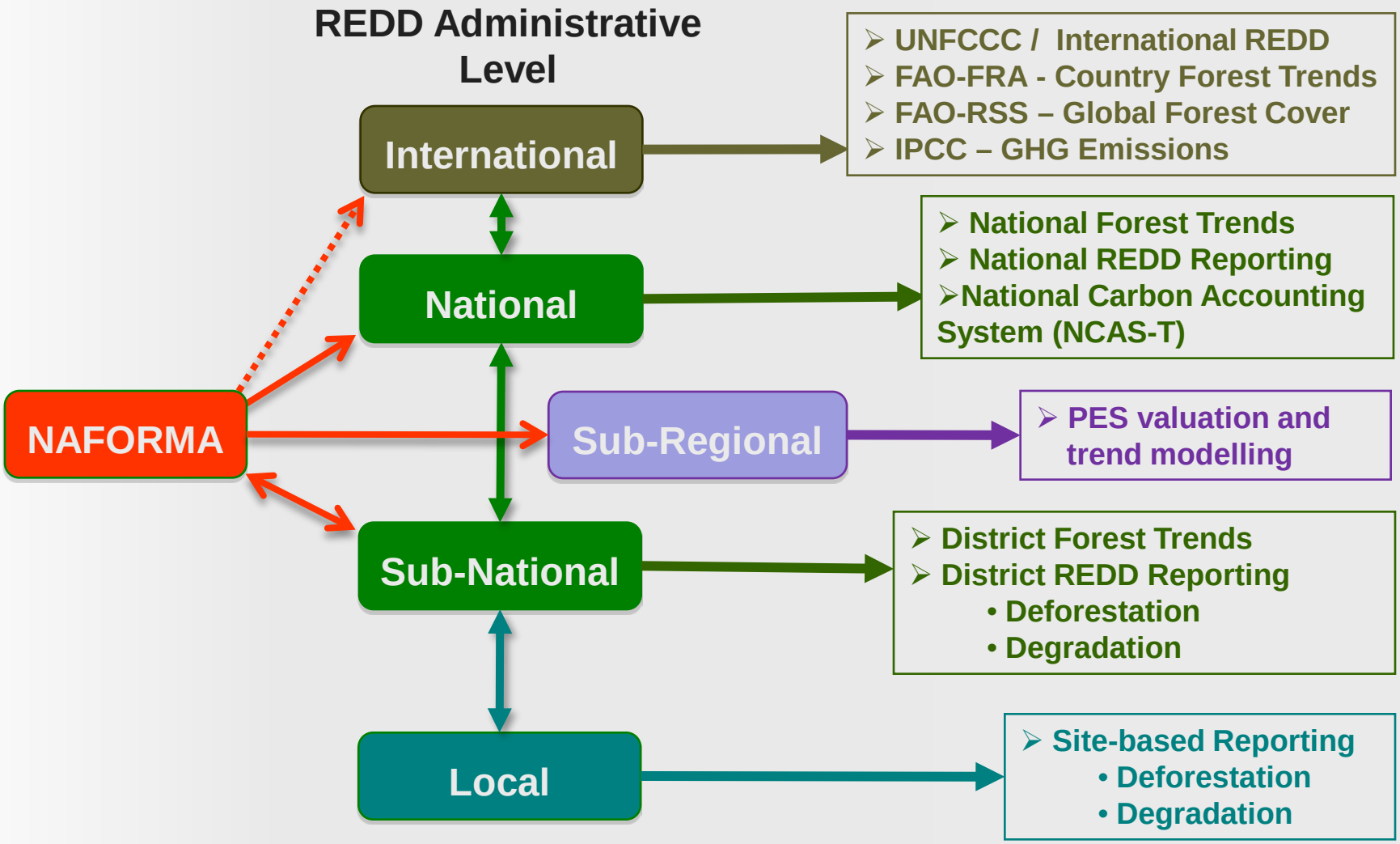
NAFORMA APPROACH

NATIONAL INSTITUTIONAL LINKAGES



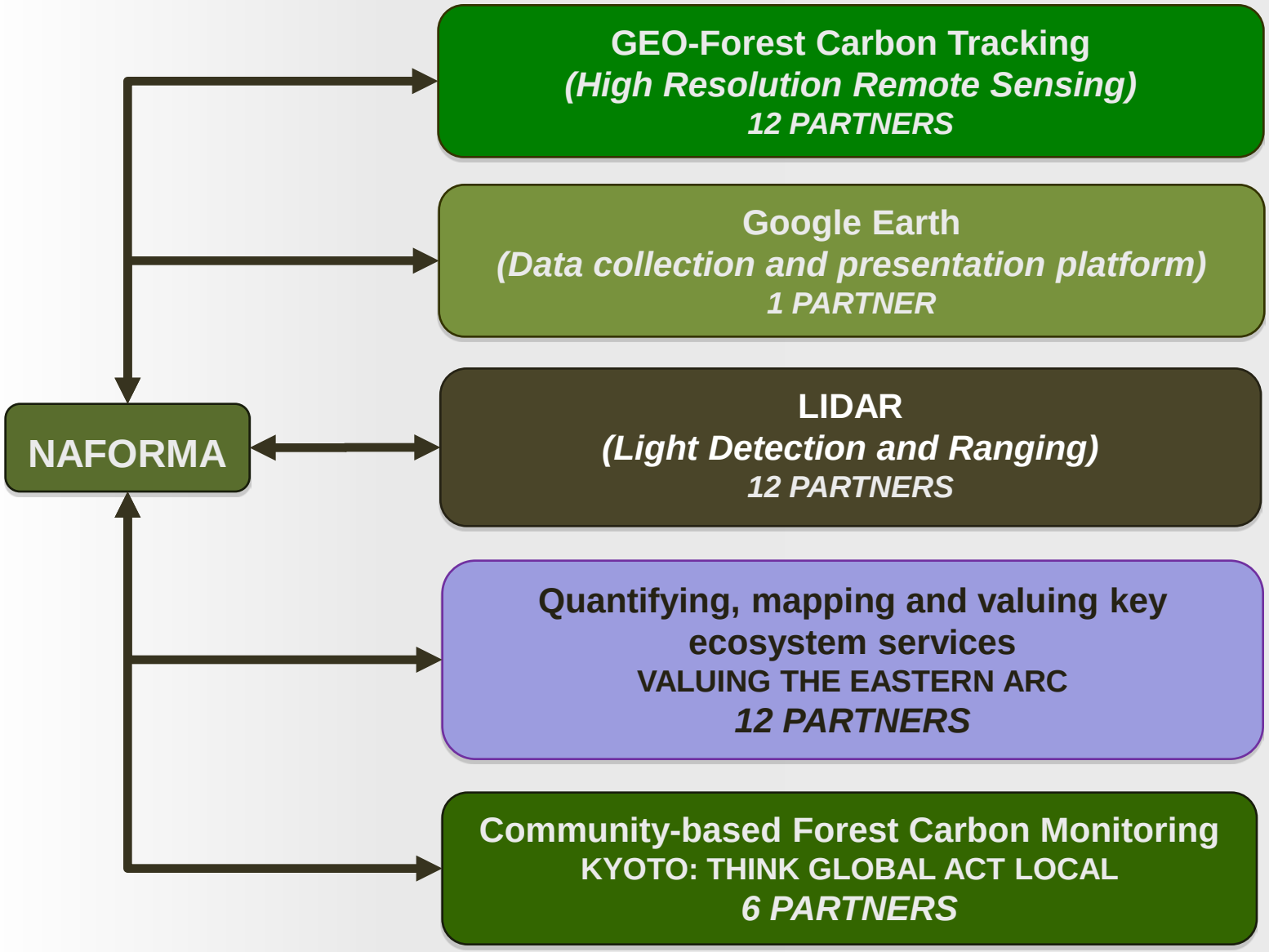
NAFORMA APPROACH

REDD FEEDINGS AND OUTPUTS



NAFORMA LINKAGES

COLLABORATIVE APPLIED RESEARCH



REDD