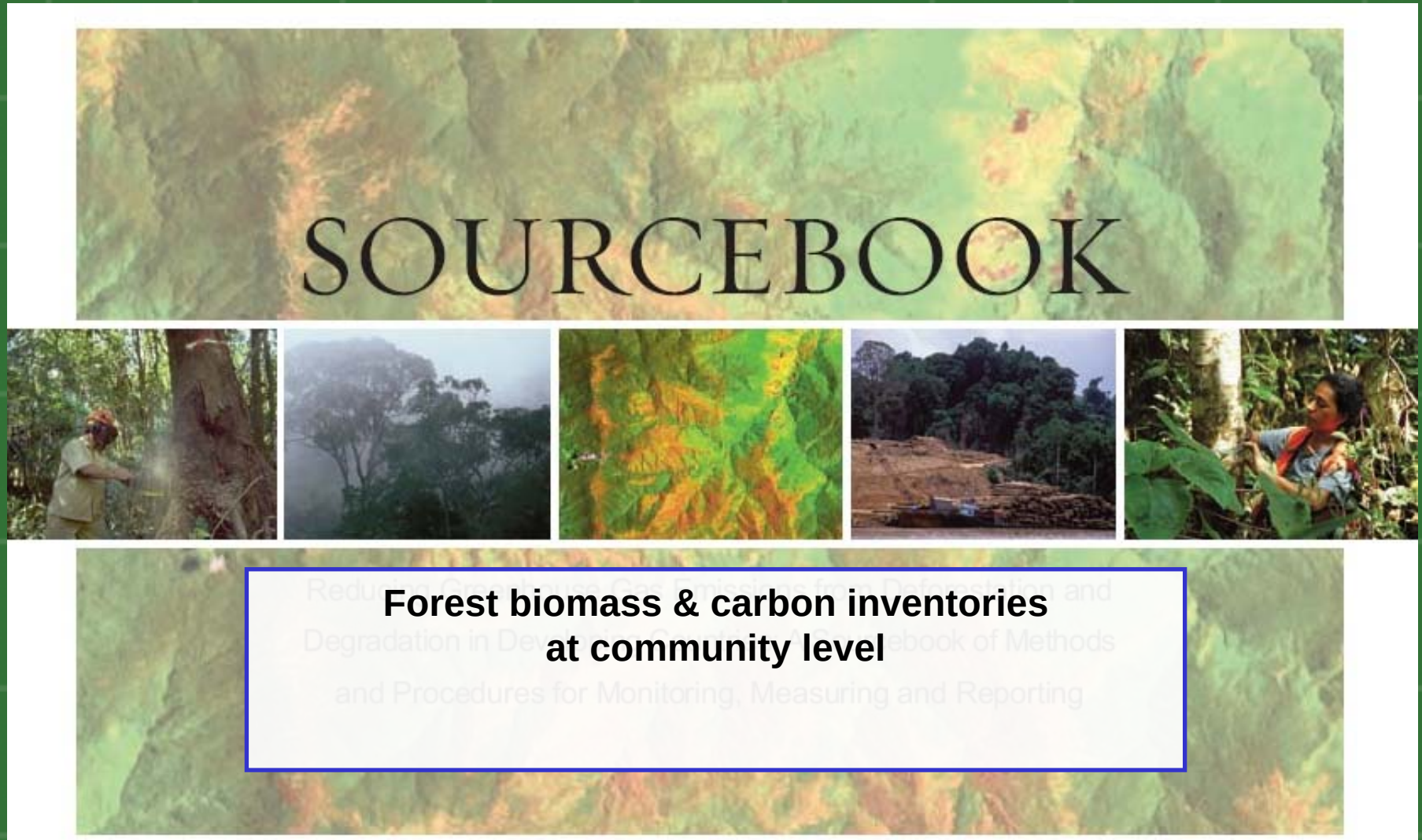
Sourcebook version COP14



http://www.gofc-gold.uni-jena.de/redd

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Rationale for involving communities

- The management of local forest resources by organized community groups has proven to be very successful
  - Ownership
  - Long-term commitment
  - Social / Cultural pressure
- It is the ethical thing to do

Secondary uses of the forest

- Many communities rely on the forest for sustenance or livelihood
- Such uses may be combined with REDD
  - They may be complimentary
  - They can increase the “productivity” of the forest
  - Together they can be a viable alternative for deforestation or forest degradation

Carbon assessment by communities

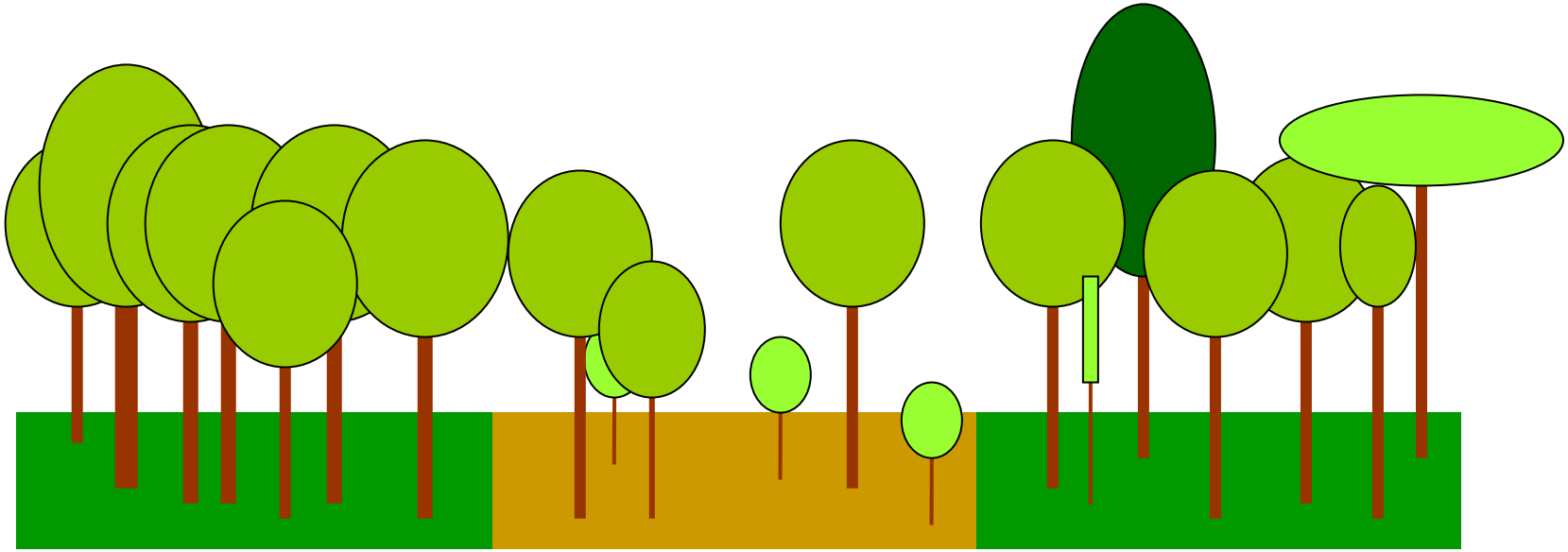
- With very little training and support, communities can accurately assess basic parameters of the forest
  - Tree count
  - Species identification
  - DBH measurement
- Cost of assessment is between $1 ~ $4 per hectare per year
- Potential for collecting large volumes of data

Data collection procedures

- Communities do not need much training to collect data
- Plot and data management requires support
  - Support can be provided by NGOs that serve multiple communities
  - Equipment to support data collection is ever more accessible and affordable: GPS, PDA, smart phone
  - NGOs can help share equipment between communities

Supporting the communities

- The communities need support at various levels beyond simple measurement to successfully contribute to REDD data collection
  - Forest resources need to be stratified into relatively homogeneous units
  - Sampling plots need to be established
  - Development fo allometric equations, etc
  - Data management mechanism



Landscape Thousands of hectares

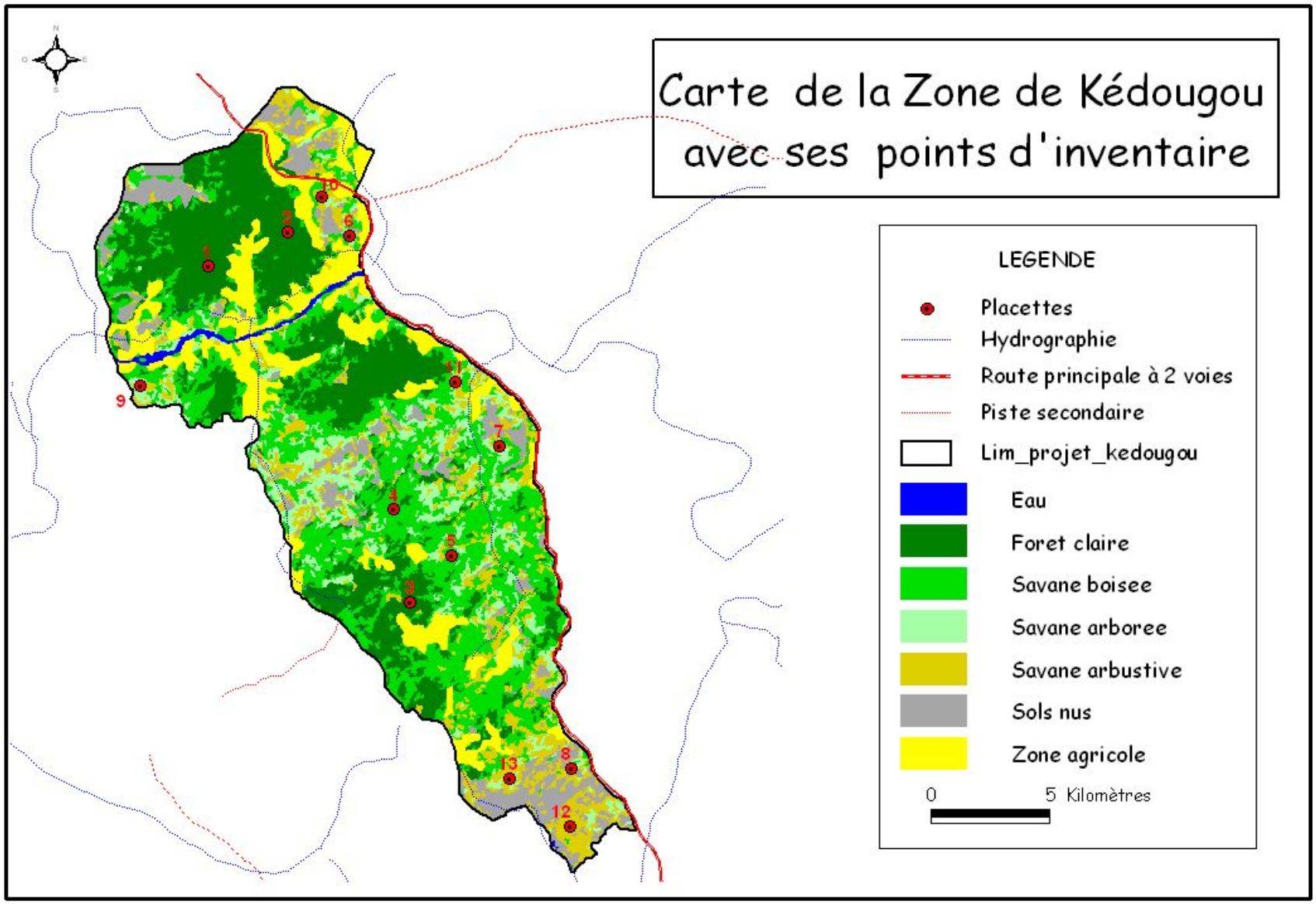
Variety of forest types
Biomass: average
St. dev.: **high**

Stand Less than 1,000 ha

Dense, natural forest
Biomass: high
St.dev.: **low**

Degraded forest
Biomass: low
St.dev.: **low**

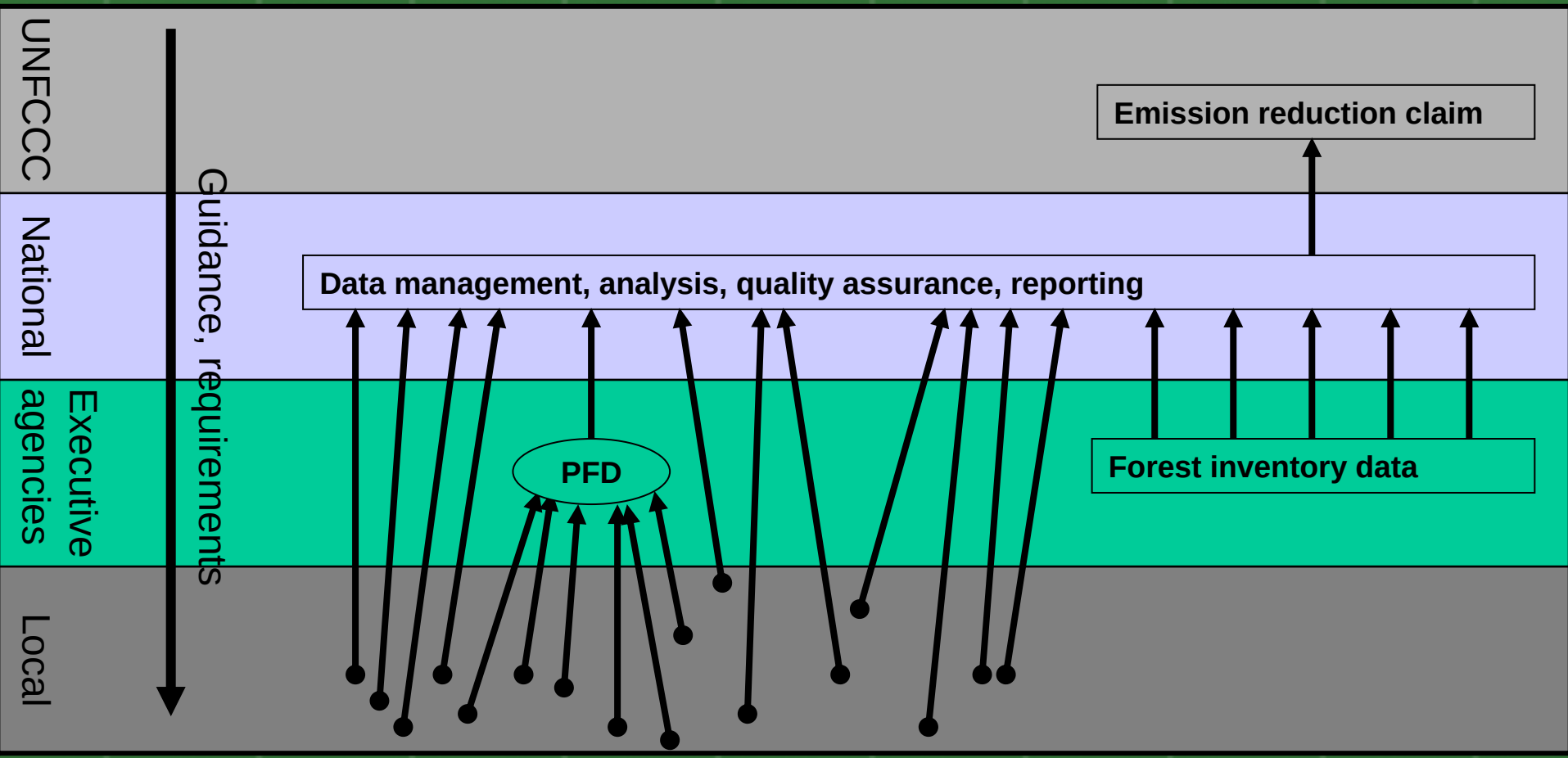
Dense, mixed forest
Biomass: high
St.dev.: **high**


Carte de la Zone de Kédougou
avec ses points d'inventaire
LEGENDE
Placettes
Hydrographie
Route principale à 2 voies
Piste secondaire
Lim_projet_kedougou
Eau
Foret claire
Savane boisee
Savane arboree
Savane arbustive
Sols nus
Zone agricole
0
5 Kilomètres
1
2
3
4
5
6
7
8
9
10
11
12
13

Supplementary data

- Supplementary data collection by a professional party can increase accuracy
  - Wood density, free branch height, total tree height
  - Development of allometric equations
- Large-scale data collection opens up opportunities for statistical analysis and filtering of data
  - Check accuracy: temporal, spatial
  - Large volume of data can increase level of confidence and reduce error of the estimate

Data management for REDD



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Data quality assurance

- Data has to be checked for consistency over time and spatially
  - Remove measurement or reporting errors
  - Check if there are consistent errors from a location
    - Is the stratification wrong?
    - Does the community receive support or training?
- Data are grouped in large homogeneous units for reporting
  - Multiple measurements give indication of variability and accuracy of the measurement
  - If the accuracy is too low:
    - Refine the stratification
    - Add more measurements
    - Improve quality of measurements
- Data quality assurance requires specially trained staff
  - Forest ecologists: stratification, evaluation of measurements
  - Statisticians: error analysis, sampling scheme design, QA indicators

Connecting the dots

- The data that are collected by local communities are collated at higher levels in the national hierarchy and ultimately used to compute national emission reductions
- National governments want an independent validation mechanism
  - Most likely linked to national forest inventory and based on remotely sensed data sources
- Validation at the international level will require remote sensing
  - Objective methods, prior agreement
  - Uniformly applicable
  - Repeatable
  - Potentially lower transaction costs

TSD Technology and Sustainable Development

ITC

ENDA

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