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Lignes directrices 2006 du GIEC pour les inventaires nationaux de gaz à effet de serre: Secteur AFOLU (Agriculture, Foresterie et autres Utilisation des Terres)

Par Dr Maguette KAIRE
Expert forestier
Centre Régional AGRHYMET





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Outline

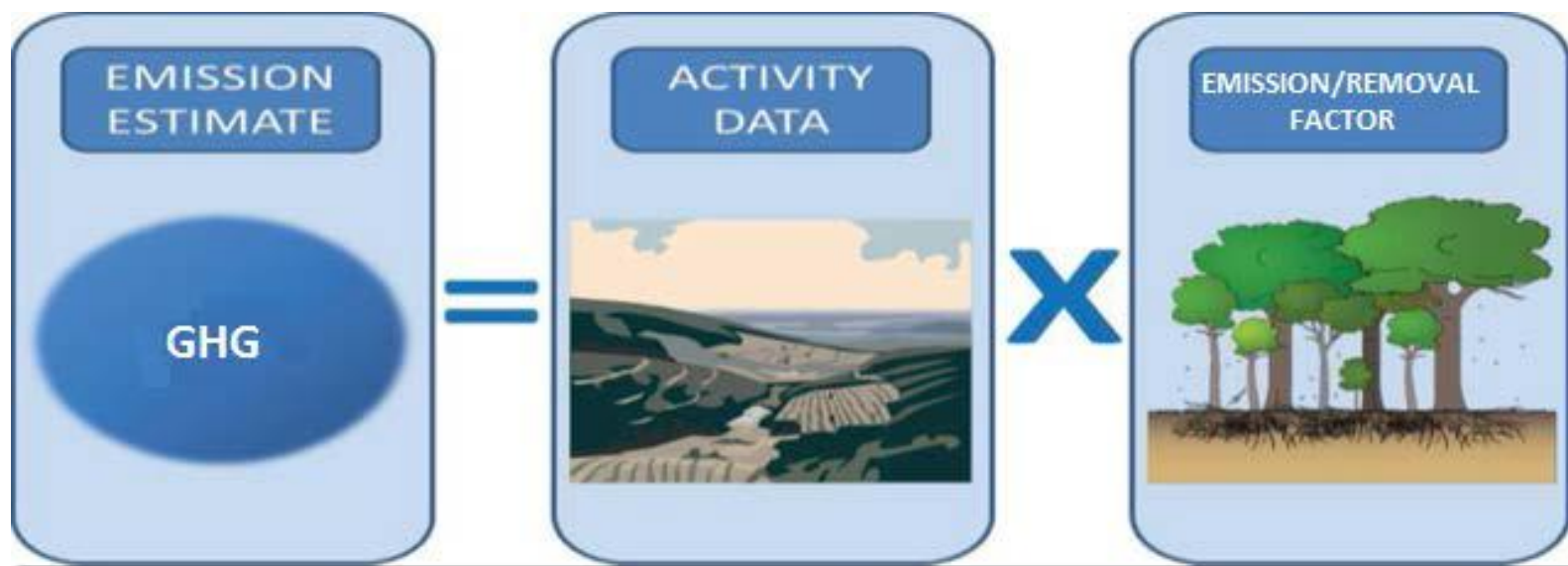
- Key IPCC principles for estimating E/R
- AFOLU sector
- Evolution of IPCC guidance in AFOLU
- Sub sectors of AFOLU
 - Livestock
 - Land
 - Non CO2 from Land
- Reporting and documentation
- IPCC inventory Software 2006





Key IPCC principles for estimating E/R

The simplest methodological approach consists of combining information on the extent of human activity (called activity data-AD) with coefficients that quantify emissions/removals per unit activity(AF)





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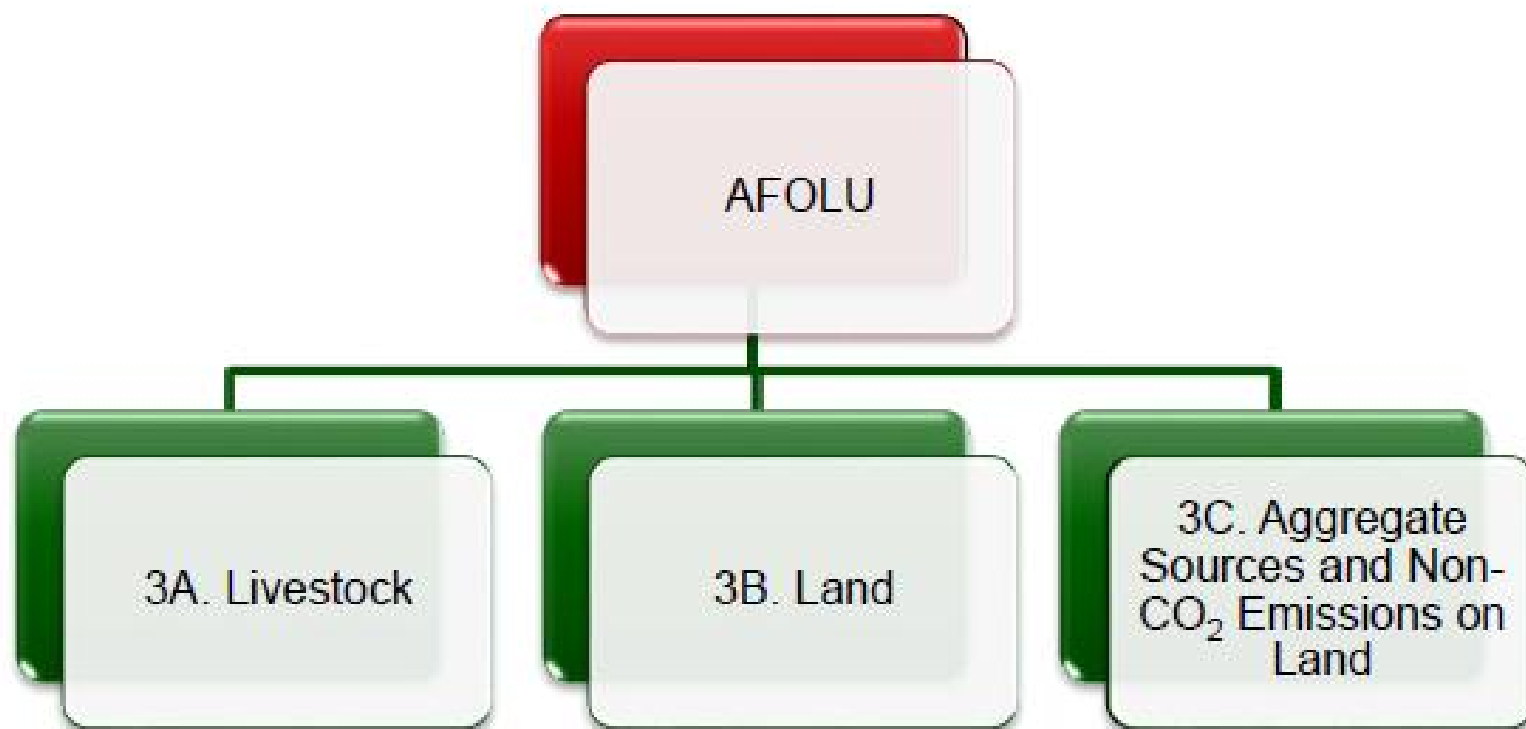
AFOLU

- AFOLU represents 20-24% of net anthropogenic emissions, equivalent to 10-12GtCO₂ eq/yr (AR5–based on the 2010 GHG inventory datasets).
- A significant proportion of GHG emissions/removals in the AFOLU sector come from developing countries



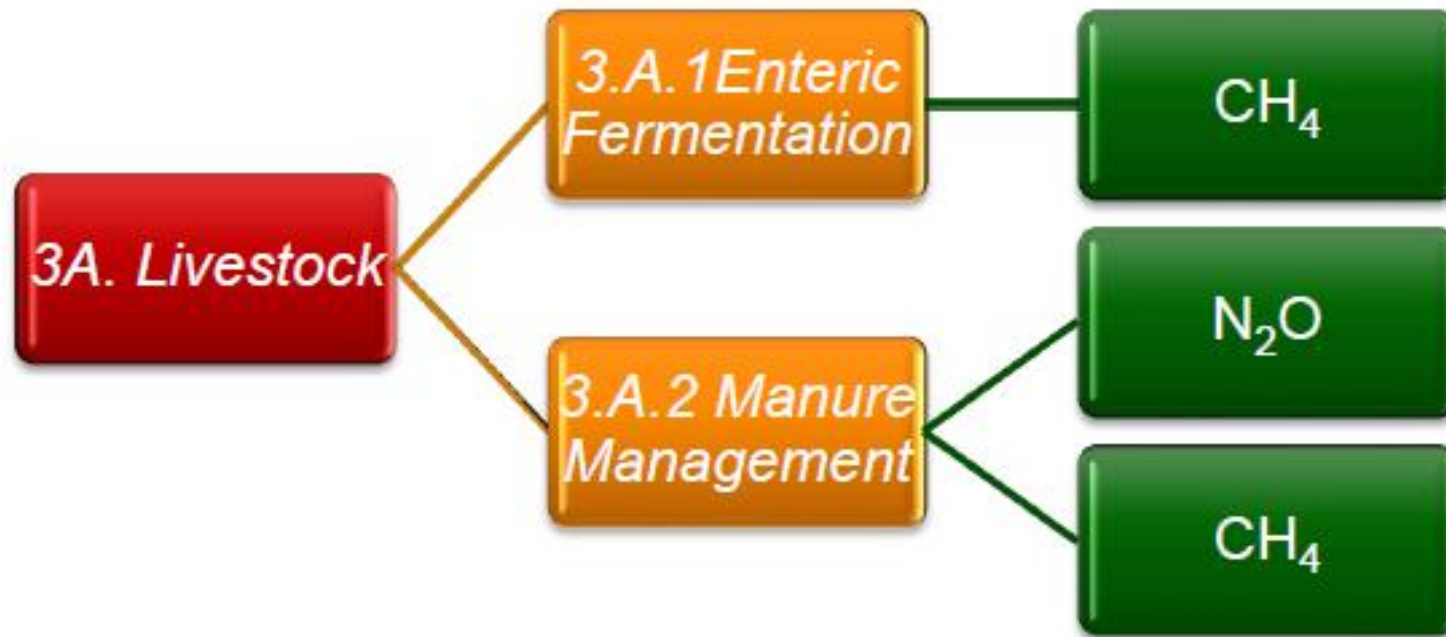


Agriculture Forestry and Other Land Use (AFOLU)



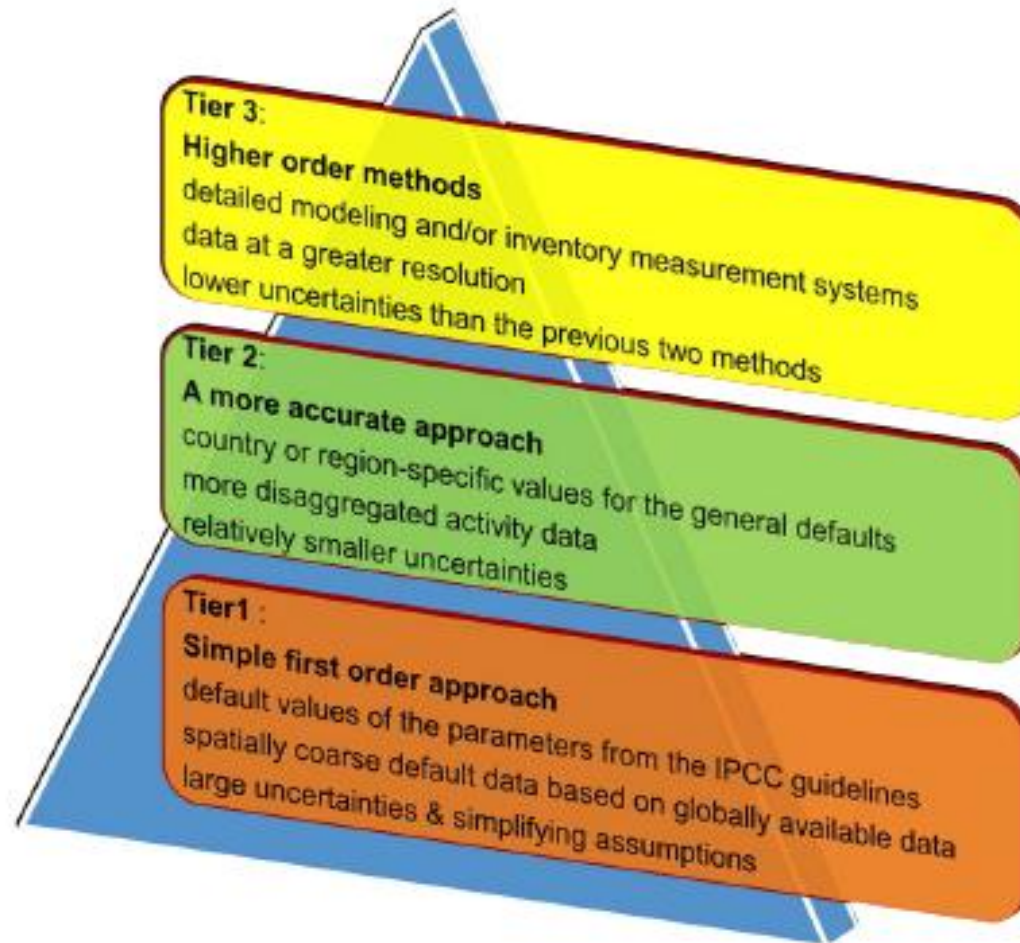


3A. LIVESTOCK





Three methodological Tiers





Choice of emission factors

- Tier 1 method requires default EFs for the livestock subcategories according to the basic characterization scheme.
- Tier 2 methods require country-specific EFs estimated for each animal category based on the gross energy intake estimated using the detailed data on animal feed and performance and methane conversion factor for the category.





Choice of activity data

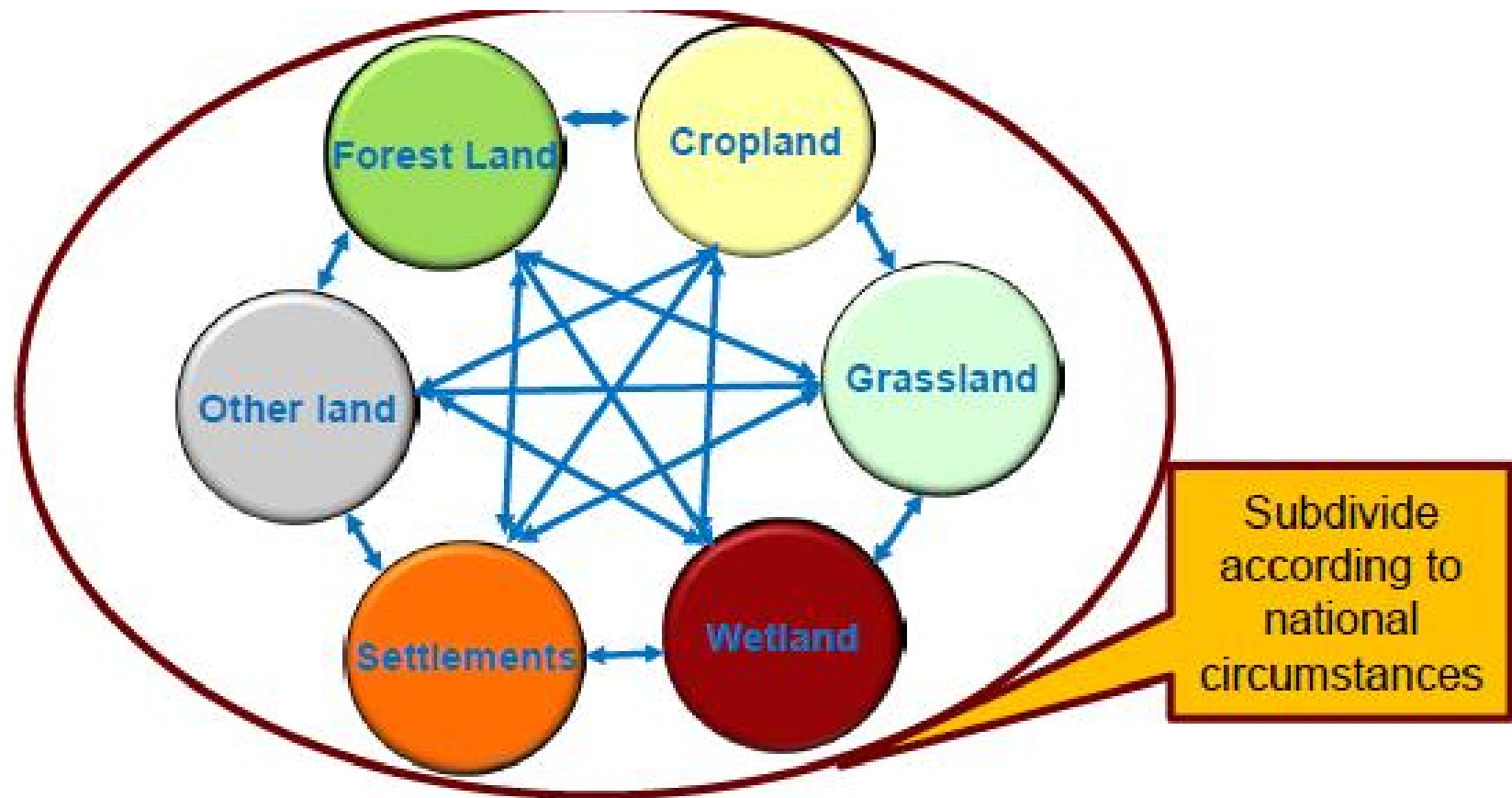
- Tier 1 method requires collection of livestock population data according to **basic characterization**.
- Tier 2 method requires animal population data according to single livestock enhanced characterisation depending upon the most **disaggregated data** requirements between enteric fermentation and manure management categories.





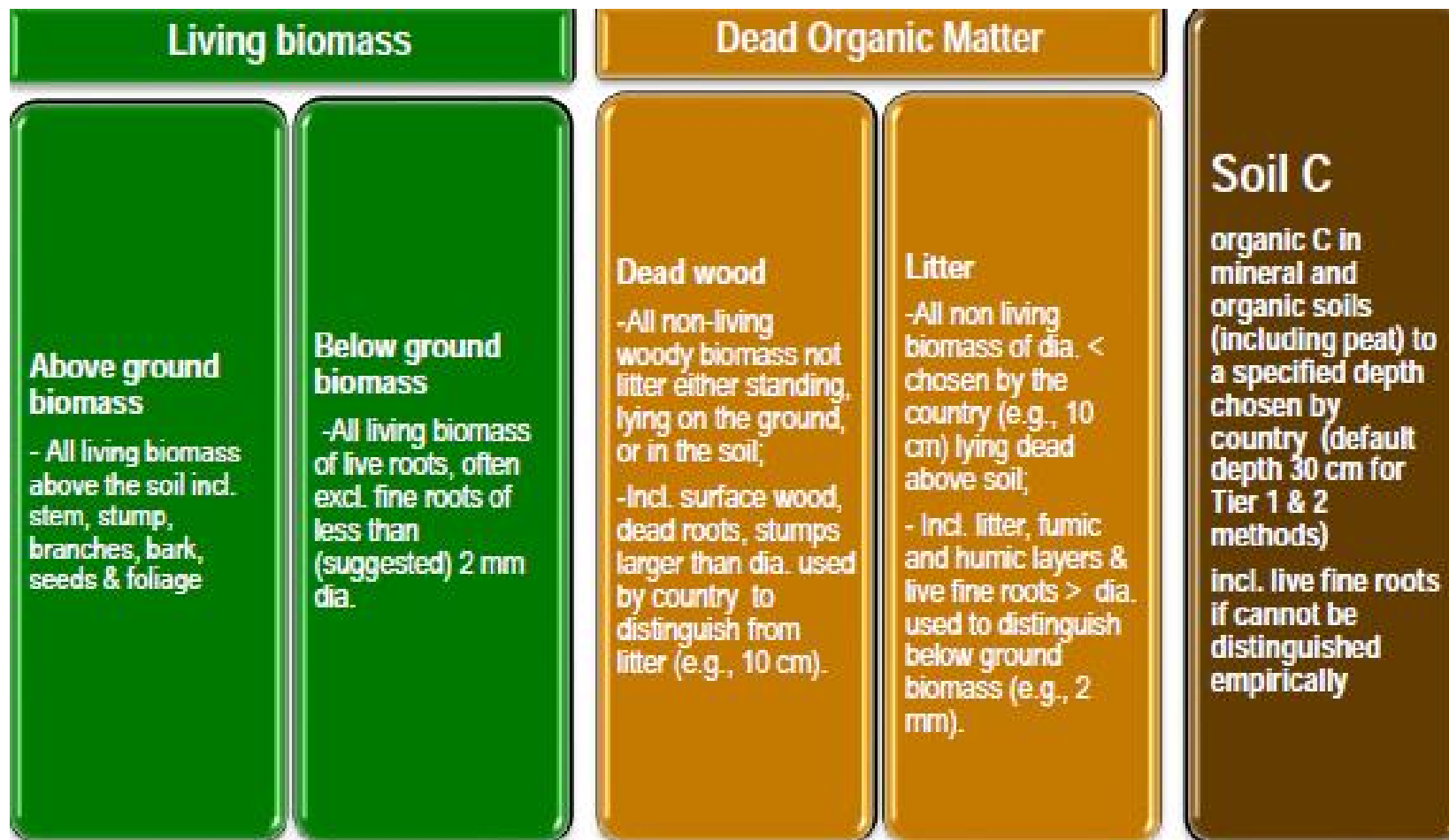
3B. LAND

- Stock changes of C pools are estimated and reported for the **Six “top-level” land-use categories**



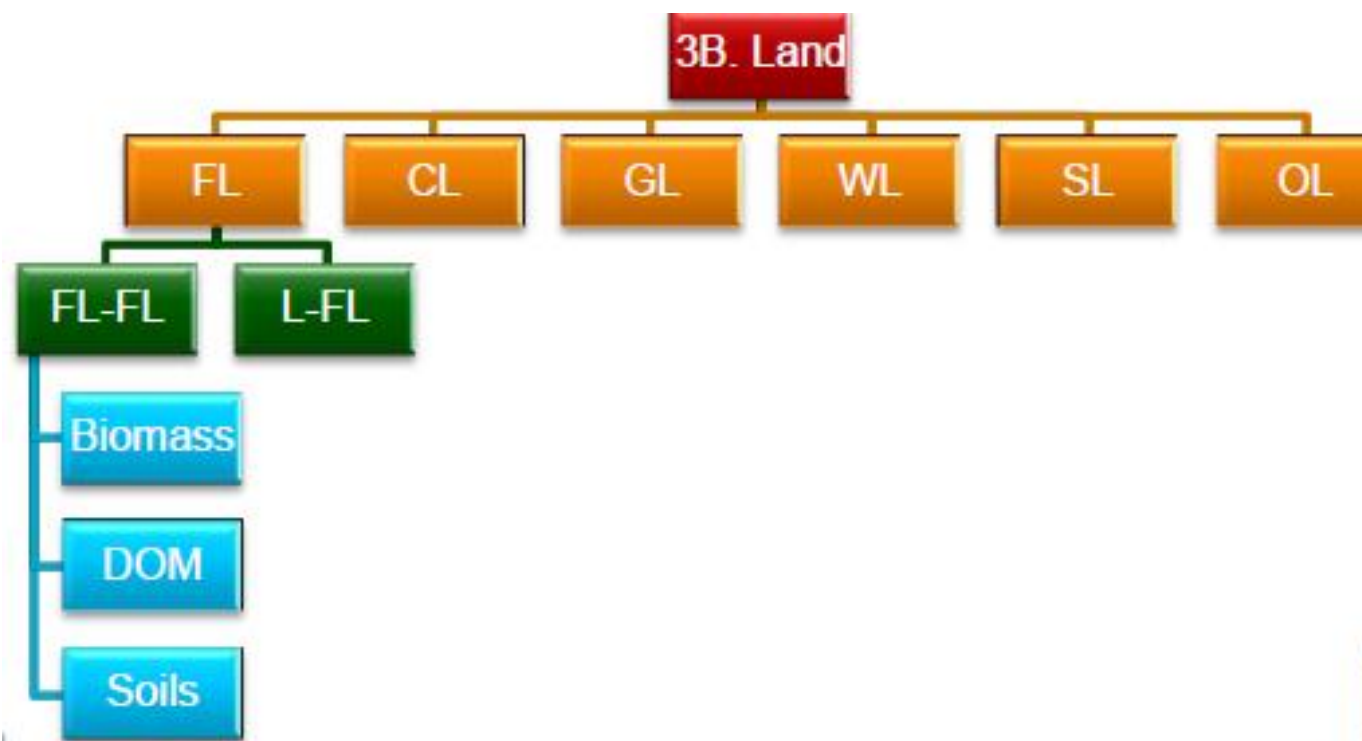


Carbon pools



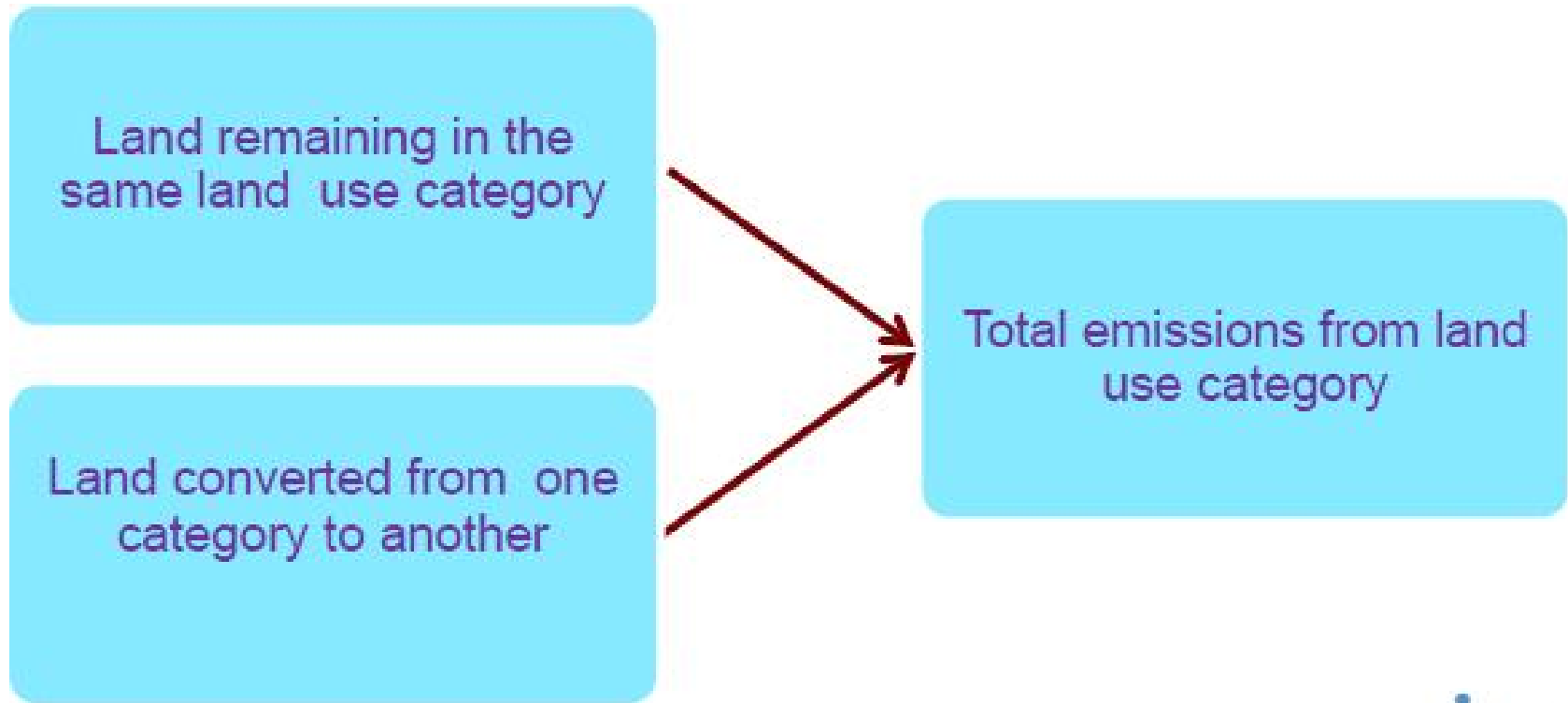


Land-use subcategories and carbon pools



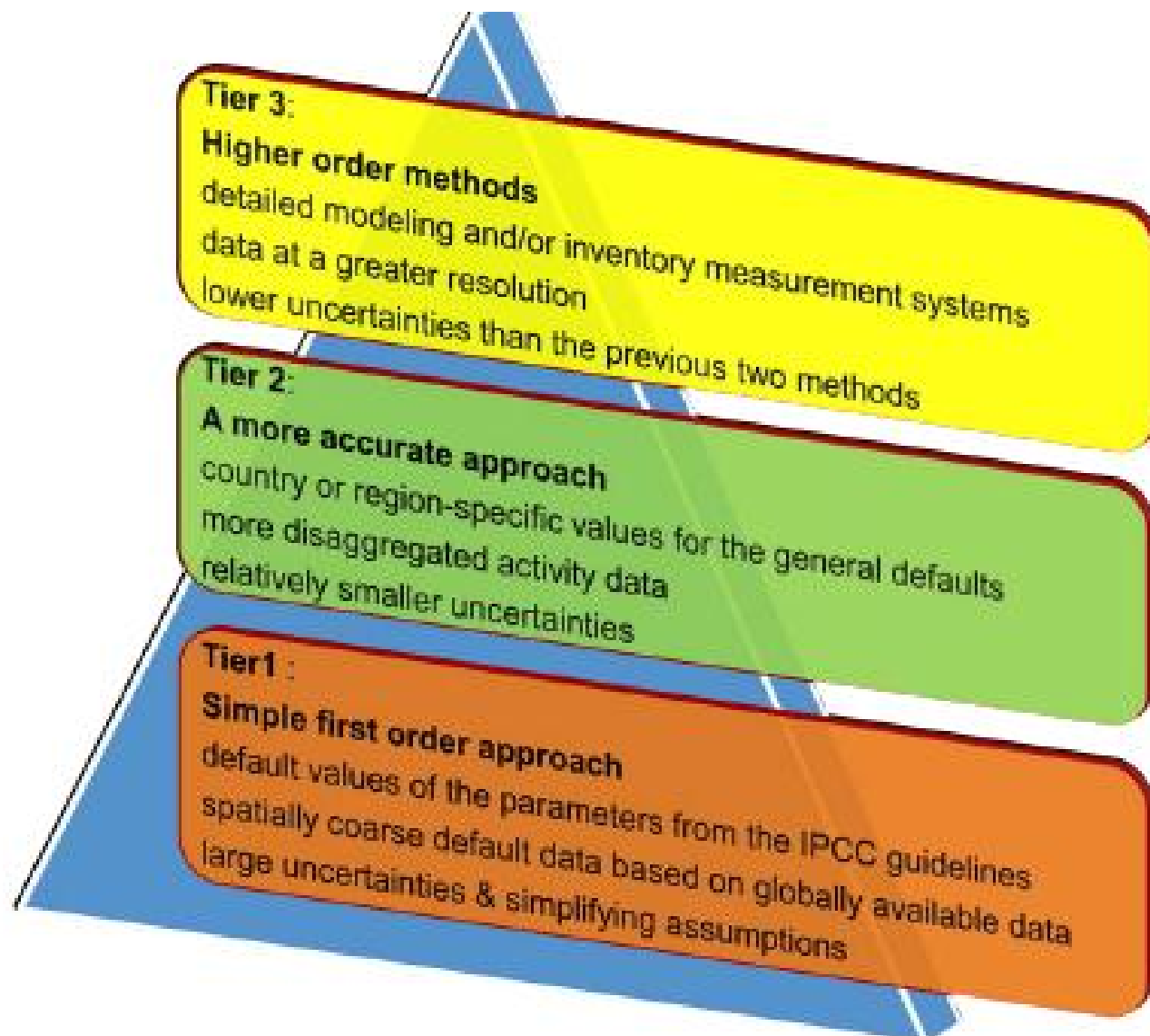


Total estimates for GHG are made up of subdivisions of land use categories





Three methodological Tiers





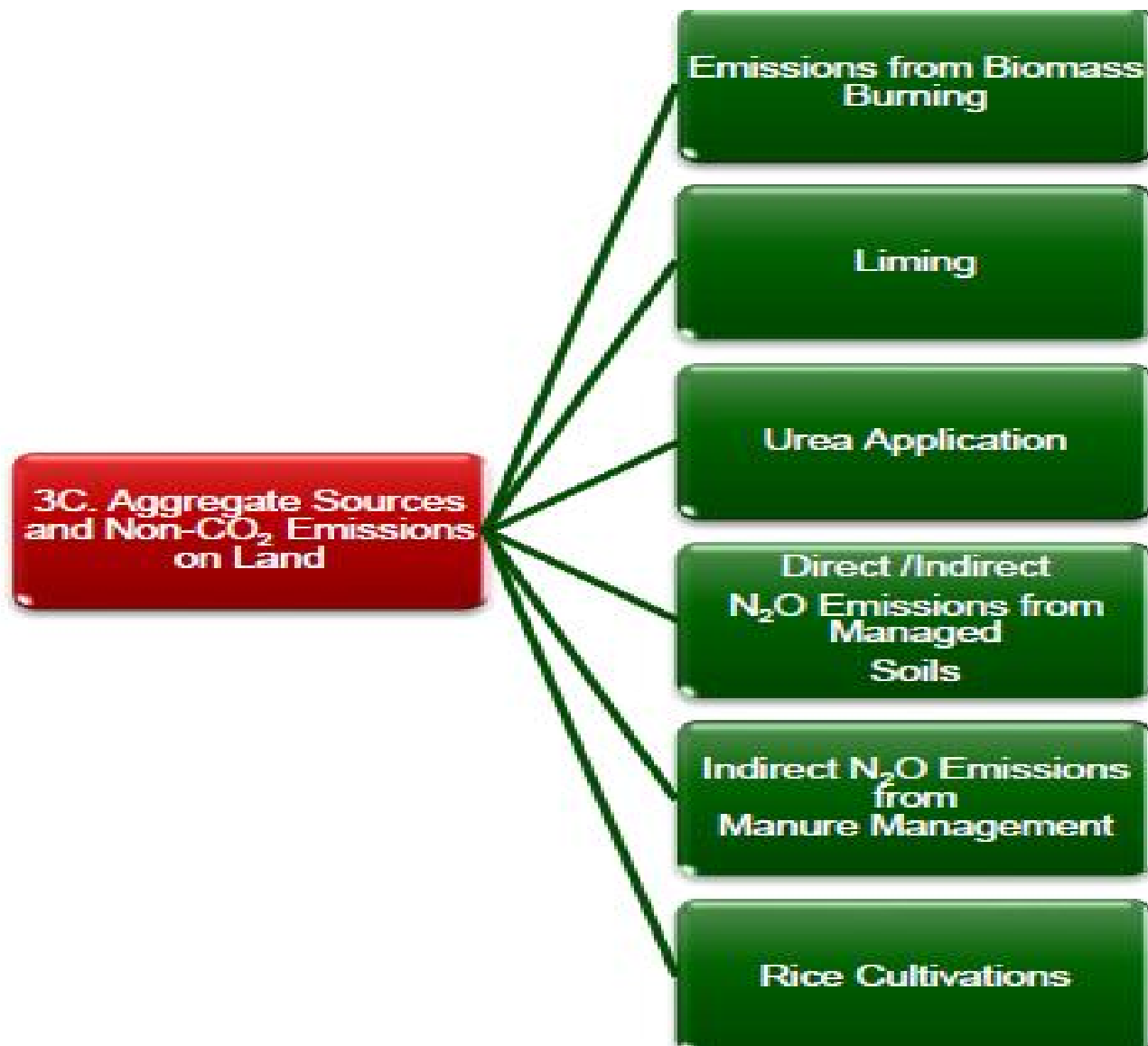
Cross Cutting issues-QA/QC

- It is *good practice* to perform quality control checks through **Quality Assurance (QA)** and **Quality Control (QC)** procedures, and expert review of the emission estimation procedures.
- QA/QC procedures should be clearly documented for each land-use subcategory (e.g., FL-FL and L-FL etc.).





3C. AGGREGATE SOURCES AND NON-CO₂ EMISSIONS ON LAND





Summary-Key messages (AFOLU)

- Land use and management have significant impact on GHG E/R
- AFOLU E/R significant in most developing countries
- 2006 IPCC Guidelines refer to sources and sinks associated with GHG emissions/removals from human activities on managed land
- The flux of CO₂ to/from atmosphere is assumed to be equal to changes in carbon stocks in existing biomass and soils
- Changes in carbon stocks can be estimated by establishing rates of change in land use and practices that bring about change in land use
- Estimating carbon stocks in land-use categories:
 - That remain in same land use category
 - That have been converted to another category





Summary-Key messages (AFOLU)

- The IPCC identifies 5 carbon pools for each land use category, carbon stock changes and E/R are estimated for each of the carbon pools
- Use of Tier structure and land representation
- Choice of methods for estimation of GHG for FOLU sector
- Select method of estimation (equations), based on tier level selected, quantify emissions/removals for each land-use category, carbon pool
- The total CO₂ emissions/removals from C stock changes for each LU category is the sum of those from the two subcategories
- Cross-cutting issues





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- Guidelines in all UN languages can be downloaded from:

<http://www.ipcc-nggip.iges.or.jp/>

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ATTENTION**

