#### Methodologies Workshop

BioCF Training Seminar Washington Sept 2005

# Methodologies

- We have the benefit of past experience in the energy sector
- We have the disadvantage of the past experience of the energy sector
  - The energy sector has a number of quite different projects (renewables v. efficiency v. landfill). Baselines are often fundamental to the project in calculating changes in supply/ demand etc
- LULUCF has not such a wide range of project types or at least the components of each project have much more in common
  - Should LULUCF have focused more on QC/QA than spelling everything out
  - Would a "toolbox" approach have worked?
- But the EB must have "methodologies"
- So must the DoEs as they have to report according to them

#### How much detail?

- We should not have to write forest/ecology text books
- There appears to have been a tendency by reviewers to ask for more or more detail; especially if you encourage them by being detailed in some sections
- How much can we assume professional judgment?
  - The application of the Methodology is assessed by the DoE

#### Measurement in energy sector

- Read xxx electricity meters (xxx defined in previous section)
  - If too dark to see meter ...
    - Seek a light switch If not found ...
    - Turn on torch
    - Point at meter
  - If covered by spider web
    - etc etc

#### Some pointers - General

- Avoid previous mistakes
- Keep it as simple as possible but no simpler
- Deal with every element even if it is a one sentence statement that (e.g.) the section does not apply
- Re-use elements from existing methodologies
- Keep it concise and do not duplicate either your own or other's material (refer to the sections in other methodologies or quote it directly)
- Be systematic (write a cook-book)
- Get Baseline methodology right first
- Check; check; check
- Consult; seek review
  - Try to shoot holes in your own methodology before submitting

# Some pointers - Methodology

- Methodology should be generic
  - Do not provide data specific to your project (e.g. yield tables)
  - Think beyond your own project to a generic methodology
  - You may need to provide detail that is not necessary for your own project (e.g. a procedure to track leakage from displacement of grazing animals that does not arise in your project but may in others)
  - The PDD acts as a demonstration that it is feasible and how the detail will be fleshed out
- Conservativeness may be easier to achieve than a detailed uncertainty analysis
  - Conservative rule-of-thumb deductions (c.f. Moldova previous AR rate)
  - Beware that you don't commit yourself to huge write offs (especially with leakage)

#### **Broad Questions**

- How do we handle Methodology submissions and PDD development process?
- How to cooperate as a group?
- How to handle what we might see as incorrect feedback from AR Panel and reviewers?
- Pointers to a successful submission

#### How can we best help each other?

- If your project might fit the land degradation methodology, then look carefully at the China Methodology
- The Mexico draft methodology, simply takes the China document and reproduces it with alterations and additions highlighted
- We will try to have the Mexico methodology completed within a few weeks based on the China revision
  - It will add soil organic carbon and dead wood
  - Leaves only litter to be added

#### How can we best help each other?

- If your project does not fit the land degradation methodology, then still look carefully at the China Methodology
- Treat it as a guide to the depth and detail of treatment
- Treat it as a toolbox
  - If a component says what you need, then re-use it.
    Don't try to say it better
  - If it doesn't, think carefully why not and restate it as simply as possible

### **Broad Questions**

- What is a good methodology?
- How many Methodologies do we need? (~5??)

– What are they? Can they be identified now?

 Should we (BioCF projects) be thinking of a toolbox of methods for various components that are then bought together for a particular methodology for the EB (& eventually the DoEs)?

- Consolidation

### Some Pointers - Additionality

- Recall the logic and necessity of additionality
- Use the EB's Additionality Tool if at all possible
  Problem where project has started early
- Consistency between determination of additionality and determination of baseline
- Use multiple additionality tests??

# **Omitting Pools**

- Must show that omission does not increase carbon credits
  - Scientific principles
    - E.g. In baseline the land is being degraded and soil carbon must be expected to decrease. Your activity is most likely to lead to an increase in soil carbon or at least no accelerated decrease
  - Verify by monitoring
    - Risky commit yourself to intensive monitoring and questioning of the "no change" assumption

### Some pointers - Methodology

- Use standard land eligibility tool
- If there is national legislation or other compliance regulations that require some of the activities in your project, check recent EB guidance
  - Do they pre-date CDM rules?
  - If they post-date then you do not have to consider them

#### Some Pointers

- Small scale: it may be preferable to wait for the "topdown" methodologies from the AR WG (coming soon)
- Consider EB clarifications on national / sectoral policies
  <u>http://cdm.unfccc.int/EB/Meetings/016/eb16repan3.pdf</u>

#### Measurement

- How much detail?
  - "How to use a dbh tape" No
  - "How to derive an allometric equation" Maybe
  - "Use existing allometric equation well accepted for the area"
    - How did they derive their equation?
    - Do we have to describe it?
  - "Use IPCC default value" !!
- Is too much detail a trap for the future?

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AR WG checklist for baseline methodologies for compliance with 19/CP.9)

- Definitions baseline removal by sinks, net removals, leakage, positive and negative
- Eligibility of land
- Determination of baseline (one of the three approaches)
- Non-CO<sub>2</sub> correctly calculated
- Project boundary
- Compliance national policies
- Additionality checked, quantitative and qualitative
- Leakage properly treated/all sources covered
- Conservative approach/assessment of uncertainties
- Monitoring methodology follows the baseline methodology?

#### Reasons for rejection of NMBs to date

- Incomplete or errors in equations etc
- Not following 19 CP9 requirements (eg including non-CO<sub>2</sub> gases in baseline)
- Language (drafting) problems
- Scope and applicability (too broad e.g. all AR/too narrow)
- Data (lack of quality, not possible to monitor)
- Assumptions, parameters and models not adequately substantiated
- Improper baseline definition must follow one of the 3 approaches
- Inadequate additionality treatment
- QA/QC procedures and transparency; conflict of interest in maintaining plots

# Reasons for rejection of NMBs to date (baseline)

- Process for selecting the most plausible baseline scenario is not satisfactory
  - E.g. Baseline was assumed to contain no tree planting, but this was not substantiated
- Baseline is based on activities occurring outside the project area
- No additionality tool was used; additionality was understood as difference between project and baseline. Should be: project would not have occurred in absence of CDM funding.
- Baseline included non-CO<sub>2</sub> gases (but what if increase in project)
- Baseline: control plots monitored during project, but model for determining baseline management not described
- Conflict of interest when project participants manage control plots (for baseline estimation)
- Baseline determination and additionality test not clearly separated

# Reasons for rejection of NMBs to date (miscellaneous)

- Land eligibility (1990 forest rule) not assessed, or improperly assessed
- Carbon pools not estimated separately
- GHG emissions estimation from project not complete (e.g., omitted N<sub>2</sub>O from fertilizers)
- No prediction of baseline and project C stock changes
- Self developed additionality tool not adequate
- Uncertainties not assessed AND no conservative assumptions (at least one of the two is necessary)
- Leakage from displacing agricultural activities not assessed
- Positive leakage: must not be included (not a sole reason for rejection) But what about net leakage?

# What makes a methodology different from another one?

- Pre-project land use
- Generic vs. project specific
- Baseline approach (a, b, c)
- Additionality tool (standard / project specific)
- Proposed procedure for national policies
- Control plots for baseline?
- Way leakage is addressed
- Land eligibility test (standard tool coming up?)

#### Possible classification of methodologies for BioCF projects

- Degraded lands with no attractive baseline use
  - Little vegetation, hardly any trees (not likely to become forest)
  - Lands in slash and burn cycle (could become a forest)
- Projects on grazing lands (special leakage assessment for activity displacement)
- Agro-forestry projects that avoid leakage by activity displacement
- Projects which may appear attractive even w/o CDM funding (e.g., timber plantations; timber market leakage needs to be checked)

#### Questions

• Do we confront the "errors" in the rules (e.g. the mishandling of non-CO<sub>2</sub> gases)

# LULUCF Additionality

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- 0. Early start
  - Based on documents available to 3<sup>rd</sup> parties
- 0. Land eligibility
  - Archives, maps & satellite imagery around 1990 and recently before the start
- O. Direct human induced establishment
- 1. Define alternatives
  - Options
    - 1. Project without A/R CDM activity
    - 2. Economically attractive
    - 3. Including barrier analysis
    - 4. Most likely land use
    - 5. Common land-use
    - 6. Continuation of current
    - 7. Revert to historical

- Compliance with applicable laws
  - Enforced
  - Pre date CDM rules
- If project is the only alternative it is not additional

#### 2 Investment analysis

- Options
  - 1. Simple cost analysis (no other income)
  - 2. Investment comparison analysis
  - 3. Benchmark analysis
- Sensitivity analysis
- 3. Barrier analysis
- 4. Impact of CDM registration