Potential of Integrating Community Based Forest Monitoring (CBFM) into NFMS

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How can the community be involved in monitoring & reporting?

- Monitoring & Reporting (COP15)
  - full and effective engagement of indigenous peoples and local communities
  - potential contribution of their knowledge

- Forest monitoring has long been conducted by experts
IGES: Community Carbon Accounting

• Ground based forest measurement is one way that local groups can participate in monitoring & reporting
• To develop and test approaches to engage local communities in monitoring of their forest carbon stocks by action learning

Laos (Sangthong District)
Partner: National University of Laos

Cambodia (Mondol Kiri)
Partners: RECOFTC, WCS, Forestry Administration

Vietnam (Cao Phong District)
Partner: Vietnam Forestry University

PNG (Madang)
Partner: FPCD

Indonesia (Central Java)
Partners DKN, ARuPA

Partners:
- RECOFTC
- WCS
- Forestry Administration
- National University of Laos

Partners:
- DKN
- ARuPA
Our approach

- In each step of monitoring (ground based measurement), the role of expert and community are identified

<table>
<thead>
<tr>
<th>Step</th>
<th>Expert</th>
<th>Community</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation: (mapping and sample plot allocation)</td>
<td><strong>Main Role</strong></td>
<td>Providing information</td>
</tr>
<tr>
<td>Forest measurement and recording</td>
<td>Providing support</td>
<td><strong>Main Role</strong></td>
</tr>
<tr>
<td>Data processing</td>
<td><strong>Main Role</strong></td>
<td>Difficult??</td>
</tr>
</tbody>
</table>
Our experience

• Community can adequately take and record forest measurement
  • Following the methods of IPCC GPG guidance
    • AGB (DBH, height), Deadwood
    • Using the same tools and equipment to expert’s
  • Local knowledge on tree spp identification

• Community can do more than is often assumed
  • Sample plot setting
  • Using GPS to find sample plot location
  • Data entry using PC
• Well prepared training programs for the community is essential

• Training of community trainers is critical

• Capacity building of the trainer for the necessary skills is important
  • Mapping, forest measuring, data processing
  • Facilitation skill to teach and motivate the community
  • Developing training program for the community and preparing flip charts
Community measurement is reliable

<table>
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</tr>
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<tbody>
<tr>
<td>Cambodia Deciduous forest</td>
<td>72.2 ± 23 tC/ha</td>
<td>73.8 ± 8.6 tC/ha</td>
</tr>
</tbody>
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(Vathana 2010)

(Danielsen et al. 2011)
Cost effectiveness

- Even considering the training cost, the community measurement is lower than the expert’s

\[
\text{Cost (USD ha}^{-1}\text{year}^{-1})
\]

- $3.0-5.4 /ha
- $10.3-11.1 /ha

(Danielsen et al. 2011)
Benefit of Community Based Forest Monitoring at the Project Level

• MRV perspective: Reliable and cost effective data collection

• To create co-benefit of CBFM, the information on the forest of the community should be fed back to them to enhance their REDD+ activity
Potential of CBFM in NFMS

CBFM would
- improve accuracy of monitoring
- provide independent data for verification
- provide additional information for safeguards
- contribute to benefit sharing
Conclusion and Recommendation

- Community Based Forest Monitoring has potential to expand the role of National Forest Monitoring System
  - *not only for forest (carbon) monitoring*
  - *Contributing successful implementation of REDD+ activity*
  - *Enabling to collect additional information (safeguard, benefit sharing)*
- To integrating CBFM into NFMS,
  - *Linkage between NFMS and monitoring system of REDD+ activities at sub-national & project level*
    - *Information flow system*
    - *Common standard for measurement*
Thank you for your attention