Regional Capacity Building Training Seminars on the Development and Implementation of Climate Mitigation Actions

Courtyard Marriott, Paramaribo
Suriname
23 – 24 June 2016

Sharing success stories and main barriers during preparation and implementation of mitigation actions such as CDM projects & programs, NAMAs etc. in the country?
Mitigation Actions in the Forest Sector

Sustainable forest Management

Forest Conservation

Enhancement of forest carbon stocks?

(Renewable) energy?
FORESTRY, including REDD+
- Reduce emission from deforestation
- Reduce emission from forest degradation
- The role of Sustainable Forest Management
- The role of Forest Conservation
- Enhancement of Forest Carbon stocks

Within the REDD+ project (REDD-Readiness phase 2014-2018) the SBB is responsible for
- Pillar II: REDD+ Bussenis model and Strategy
  - Drivers of deforestation and forest degradation
- Pillar III: REDD+ implementing framework and tools
  - National Forest Monitoring System (NFMS)
  - Forest reference emission level (FREL)

Main goal SBB: PROMOTE SUSTAINABLE FOREST MANAGEMENT
Milestones 2016

1. National Forest Monitoring System (NFMS) roadmap
2. Activity Data - 3rd party review deforestation maps
3. Emission Factors - best possible carbon stock estimation
5. Drivers of deforestation (DDFDB+) study
6. Forest Reference (Emissions) Level (FREL/FRL)
7. National Forest Inventory (NFI) proposal
8. NFMS Database & Geoportal

SBB is responsible for part pillar II and pillar III
Milestone 1: NFMS Roadmap

- 1: Develop methodology
- 2: Develop internal baseline NFMS roadmap
- 3: National and international experts input
- 4: Finalize Draft roadmap
- 5: Validation Roadmap with relevant stakeholders
- 6: Adjust Roadmap with new information, views and studies

Some of the topics covered:
- Cross-cutting: definition of classes, data management
- Technical components: LMS, NFI, GHG inventory and reporting, ...
- Capacity building and engagement
Milestone 2: Activity Data

Land use map + 3rd party review
Existing maps
Milestone 3: Emission Factors

### Activities

<table>
<thead>
<tr>
<th>Activities</th>
<th>Timeline and deadlines</th>
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<tbody>
<tr>
<td>Preliminary work plan</td>
<td>April 22&lt;sup&gt;nd&lt;/sup&gt;</td>
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<tr>
<td>Exploratory trip by CATIE in Suriname</td>
<td>April 25&lt;sup&gt;th&lt;/sup&gt; - 29&lt;sup&gt;th&lt;/sup&gt;</td>
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<tr>
<td>Description of REDD+ context</td>
<td>June 15&lt;sup&gt;th&lt;/sup&gt;</td>
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<tr>
<td>Data base synthesis</td>
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<td>An assessment of options to choose the most suitable emissions factor</td>
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<td>National experts from Suriname trained at CATIE in Costa Rica</td>
<td>Between 18 to 25 June</td>
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<td>First draft report including statistical estimates and recommendations on the future NFI design based on the available information</td>
<td>August 22&lt;sup&gt;nd&lt;/sup&gt;</td>
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<td>Presentation and training workshop by CATIE at the SBB Office in Suriname</td>
<td>August 29&lt;sup&gt;th&lt;/sup&gt; - September 2&lt;sup&gt;nd&lt;/sup&gt;</td>
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<tr>
<td>Final report &quot;State-of-the-art study: Best estimates for emission factors and carbon stocks for Suriname.&quot;</td>
<td>September 15&lt;sup&gt;th&lt;/sup&gt;</td>
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</table>
Milestone 4: Deforestation map 2014-2015

Map of 2014-2015 Will be added In Q4
Milestone 5: Drivers of deforestation study

Problem statement:
Deforestation and forest degradation result in greenhouse gas emissions and climate change

Multi-perspective analysis of drivers of deforestation, forest degradation and barriers to REDD+ Activities

Four sub-studies are planned:

1. State of the forest in Suriname
2. Deforestation drivers per land-use sector
3. Spatial modelling of deforestation
4. Community views on forest and deforestation
Milestone 6: Forest Reference Level

FREL/FRL = Baseline for possible future results-based payments

First steps:
Definition of forest
Other strategic national decisions
Milestone 7: NFI proposal

Third party review of NFI pilot report?
Milestone 8: NFMS Database and Geoportal
Sustainable Forest Management and production control (data management) Map of timber licenses.

Information available for the public and updated regularly:
file:///C:/Users/SBB-Administrator/Desktop/Bosbouwlegger_A0_20160113.pdf
Data management (License information)
Overview of logging activities

Log Tracking system
Technical spatial analysis of drivers

Logging: all recorded timber production is geographically linked with the compartment where it was extracted from.

Deforestation maps (ACTO regional project)

Deforestation maps (ACTO regional project)

Deforested area (ha)

*to be validated

2000-2009 ca. 23,000

2009-2013 ca. 30,000

2013-2014 ca. 18,000*

Total forest area ca. 15.3 million ha
> 90% of land area
Impact of goldmining in the forest cover (REDD+ for the Guiana shield project)

Deforestation caused by mining
percentage total land area
percentage total deforestation

53668.9 Ha
0.33%
73%
Potential Impact on waterways Gold mining

- REDD + for the Guiana shield
- ACTO: Monitoring forest cover change of the Amazon region
ENERGY : Key indicators  Wood energy Suriname

- Per capita wood consumption: 0.25 m³
- Per capita industrial wood consumption: 0.31 m³
- Per capita total round wood consumption: 0.56 m³
- Number of persons depending on energy wood for cooking: 76,000
- Average energy consumption per year Per households in A cluster districts: 13 m³
- Average energy consumption per year Per households in B cluster districts: 3 m³
- Highest energy wood consumption districts: Sipaliwini en Wanica
- Source of energy wood from forest: 56%
- Source of energy wood from outside the forest: 19%
- Source of energy wood from industrial waste: 25%
- Direct energy wood: 69%
- Indirect energy wood: 26%
- Recovered energy wood: 5%
- Households who use energy wood for cooking every day:
  - Of all households in Suriname: 0.3%
  - Of households that use energy wood for cooking: 2%
- Important cooking facilities: Tripod and Chula
- Potential of cooking facilities per year: 1,180,000 m³
- Carbon dioxide emission per year by using energy wood: 213,000 ton CO₂
- Annual savings of gas by the use of energy wood (febr 2015): SRD 200 miljoen
- Turnover per year by production and use of energy wood: SRD 13 miljoen

Source : SBB Forest economic Service, 2015

Wood production per year 2013

<table>
<thead>
<tr>
<th>Activity</th>
<th>Roundwood volume m³</th>
<th>Wood waste volume m³</th>
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<tbody>
<tr>
<td>Roundlogs production</td>
<td>400.000</td>
<td></td>
</tr>
<tr>
<td>Waste from logging 50%</td>
<td></td>
<td>400.000</td>
</tr>
<tr>
<td>Roundwood input saw mill</td>
<td>300.000</td>
<td></td>
</tr>
<tr>
<td>Waste from saw mill</td>
<td></td>
<td>180.000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>580.000</strong></td>
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</table>

Total round wood production 2003-2015

<table>
<thead>
<tr>
<th>Year</th>
<th>Industrial round logs</th>
<th>Energy wood</th>
<th>Totaal Roundlogs</th>
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<tbody>
<tr>
<td>2003</td>
<td>155,000</td>
<td>116,500</td>
<td>271,500</td>
</tr>
<tr>
<td>2004</td>
<td>159,000</td>
<td>113,100</td>
<td>272,100</td>
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<tr>
<td>2005</td>
<td>181,000</td>
<td>109,800</td>
<td>290,800</td>
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<tr>
<td>2006</td>
<td>193,000</td>
<td>107,200</td>
<td>300,200</td>
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<tr>
<td>2007</td>
<td>166,000</td>
<td>104,600</td>
<td>270,600</td>
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<tr>
<td>2008</td>
<td>197,000</td>
<td>102,000</td>
<td>299,000</td>
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<tr>
<td>2009</td>
<td>207,000</td>
<td>99,500</td>
<td>306,500</td>
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<tr>
<td>2010</td>
<td>246,000</td>
<td>97,100</td>
<td>343,100</td>
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<tr>
<td>2011</td>
<td>366,000</td>
<td>94,700</td>
<td>460,700</td>
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<tr>
<td>2012</td>
<td>436,000</td>
<td>92,400</td>
<td>528,400</td>
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<tr>
<td>2013</td>
<td>394,000</td>
<td>90,200</td>
<td>484,200</td>
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<tr>
<td>2014</td>
<td>520,000</td>
<td></td>
<td>520,000</td>
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<tr>
<td>2015</td>
<td>560,000</td>
<td></td>
<td>560,000</td>
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Source: SBB Forest economic Service, 2015
Some succes stories.

- Capacity building: GIS, RS, Forest Inventory, Carbon Assessment, Project Management, New Technologies, Data, Researchs, Maps e.g Forest Cover Monitoring Unit, Forest Cover Monitoring Plan

- Setting up Resource Group. National, regional and international Platform(s) of cooperation (Guyana shield, ACTO)

- Increased Data gathering, Data Sharing

- South-South, North-South (regional cooperation) cooperation

- Increased Awareness about Climate changes, Mitigation and Adaptation actions
Challenges, (main) barriers

- Need to consolidate or enhance commitment on all level
- Increase capacity on all level: personnel, technology, institutional, legal
  
  Fundraising, project formulation and implementation, project management, in country based international entity.
- Confusion between Funding entities and project management, high requirement and conditions to access funds if available. Green Climate Fund.
- Access to Funds - Forestry
- More Pro active and increase capacity of the DNA
- Enhance Awareness about Climate changes, Mitigation and adaptation actions
- CDM not applicable for the forest sector (even though 95% land area is still forest)
- Potential of forest still acknowledged
- Land tenure, Land use map
- ENERGY: Energy from wood waste was more expensive than Energy from fossil fuel, integration to the national grid.
THANK YOU