Leveraging Finance for Green Growth/LEDS in AFOLU

Experiences from Vietnam

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Outline:

• Background: GHG Emissions in Agriculture, Forestry, and Other Land Use (AFOLU)

• Case-Study: Vietnam REDD+ Programme

• Mobilizing Finance for Green Growth and AFOLU: Challenges and Opportunities
INVESTMENT NEEDS FOR CLIMATE CHANGE

• Over the past decade, climate related disasters (particularly storms and floods) have caused an annual average cost in damages of 2-6 percent of GDP.

• Viet Nam’s rate of emissions growth currently outstrips that of its GDP growth and committed to reduce the emissions.
Three pillars of VGGS

Low Carbon Development

Greening Lifestyle and Sustainable Consumption

Greening Production

By 2020:

- GHG emission intensity reduced by 8-10% from the level of 2010 (10-20% in energy sector)
- Up to 20% With international supports

How those indicators reflected at provincial level?

Promoting Greening Industrial and Agricultural Productions:

- Which sectors to be prioritized?
- Related programmes/projects?
## Background: GHG Emissions in AFOLU

<table>
<thead>
<tr>
<th>Year</th>
<th>Economy-Wide GHG Emissions (MtCO$_2$e)</th>
<th>GDP (US$ billion)</th>
<th>AFOLU GHG Emissions (%)</th>
<th>GDP (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>150.9</td>
<td>31.2</td>
<td>53</td>
<td>&gt;20</td>
</tr>
<tr>
<td>2010</td>
<td>246.8</td>
<td>115.9</td>
<td>28**</td>
<td>~10</td>
</tr>
<tr>
<td>2020</td>
<td>474.1*</td>
<td>268^</td>
<td>12.2**</td>
<td></td>
</tr>
<tr>
<td>2030</td>
<td>787.4*</td>
<td></td>
<td>8.1**</td>
<td></td>
</tr>
</tbody>
</table>

*: forecast upon BAU, source: INDC 2015  
**: source: NC3, INDC 2015  
^: [http://www.tradingeconomics.com/vietnam/forecast](http://www.tradingeconomics.com/vietnam/forecast)
Viet Nam’s GHG Emission Reduction Targets and Finance Gaps for AFOLU

<table>
<thead>
<tr>
<th>Sector</th>
<th>Modality</th>
<th>Reduction target by 2030 (%)</th>
<th>Budget (US$ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agriculture</strong></td>
<td>voluntary</td>
<td>-11.6</td>
<td>3,693.0</td>
</tr>
<tr>
<td></td>
<td>with inter’l support</td>
<td>-45</td>
<td>13,385.8</td>
</tr>
<tr>
<td><strong>LULUCF</strong></td>
<td>voluntary</td>
<td>+83.4*</td>
<td>218.32</td>
</tr>
<tr>
<td></td>
<td>with inter’l support</td>
<td>+94.4*</td>
<td>755.47</td>
</tr>
</tbody>
</table>

source: Viet Nam INDC 2015
*: increase GHG sequestration
Mobilizing Finance for Green Growth and AFOLU: Challenges and Opportunities

- Less than half of priority actions in the GGAP are funded (~43%).
- ~$30 billion needed by 2020, of which 70% targeted from non-public sources.
- Only 26% of total ODA programmes and projects currently support green growth priorities of GoV.
- Majority of Vietnam’s national climate change response is funded through public resources (64%).
- Significant scope to move to scale on mitigation and adaptation programmes, by creating incentives to leverage private sector and accelerate public-private partnerships.
Situation of climate finance
Mobilizing Finance for Green Growth and AFOLU: Challenges and Opportunities

- New **2015 Law on Public Investment**: catalyze and crowd-in investment through PPPs for green growth.

- The Government of Vietnam issued Decree No. 15/2015/ND-CP regulating the investment in the form of public-private partnership (PPP) effective from April 10, 2015.

- **Project contract types**: PPP is an investment form implemented on the basis of contract between the authorized state agency and the investor, project enterprise to implement, manage, and operate infrastructure project or provide public services.
  
  - BOT, BTO and BT contracts
  - BOO (Build – Own – Operate)
  - BTL (Build – Transfer – Lease)
  - BLT (Build – Lease – Transfer)
  - O&M (Operate – Manage)
Mobilizing Finance for Green Growth and AFOLU: Challenges and Opportunities

- **PPPs in AFOLU:** Applicable investments sectors include agricultural and rural infrastructure facilities and development services for connecting production with processing and sale of agricultural products.

- Reducing energy density of AFOLU by, for example:
  - promoting solar PV for agricultural processing, irrigation and fisheries
  - transiting from road freight transport to in-land waterways
  - repurposing agricultural waste such as crop residue
  - promoting peri-urban and urban agriculture to reduce food transit
  - management of enteric fermentation;
  - more effective manure management;
  - shifting rice cultivation practices to reduce emissions;
  - investing in carbon sequestration capacity of agricultural soils;

- Payment for Ecosystem Services (PES):
  - partner with households, communities and private sector (pilots underway in provinces)
Mobilizing Finance for Green Growth and AFOLU: Challenges and Opportunities

In March 2015, the State Bank of Vietnam released Directive No. 3.

Objective: expand green credit programs and policies in order to raise green credit proportion in credit portfolio.

- commercial banks, finance companies, financial leasing companies, cooperative banks, and foreign bank branches are to:
  
  i. review, adjust and upgrade credit regulations in accordance with green growth objectives;
  
  ii. focus on credit granting to projects and production and business activities which are environmentally and socially friendly; and
  
  iii. contribute to the implementation of green growth targets by the business community.
AFOLU Case-Study: Vietnam Programme on Reducing Emissions from Deforestation & Forest Degradation (REDD+)

• Objectives: To enhance Vietnam’s ability to benefit from future results-based payments for REDD+, undertake transformational changes in the forestry sector, and reduce GHG emissions.

• Duration: 2013 – 2018

• Expected Outcomes:
  • Operational capacity in six pilot provinces is strengthened;
  • MRV information system operational;
  • Financial incentives fully functional;
  • Regional cooperation in Lower Mekong Sub-region expanded;
  • Benefit Distribution System operational.
Provinces (13) with provincial REDD+ projects
(more REDD+ projects working at sub-provincial level)

6 UN-REDD provinces

- Lao Cai • UN-REDD
  • JICA

- Dien Bien • JICA

- Dak Nong
  • FCPF

- Thai Nguyen • CERDA

- Bac Kan • ICRAF
  • UN-REDD

- Ha Tinh • UN-REDD
  • VFD

- Thanh Hoa • VFD

- Quang Binh • GIZ
  • FCPF

- Quang Tri • FCPF

- Dak Nong

- Lam Dong • UN-REDD
  • LEAF
  • MB-REDD

- Binh Thuan • UN-REDD

- Ca Mau • UN-REDD
  • MB-REDD

- Nghe An • VFD
Vietnam National REDD+ Fund (NRF):

- US$30 million (~50% demonstration activities)
- Meets UNFCC standards for result-based payments
- Transition period, with funding from international development partners, but voluntary grants from domestic entities (private sector) and government contributions
- NRF can access to Carbon Fund, Green Climate Fund
- High fiduciary standards of internal control, budget planning and execution, treasury and cash management, accounting, internal and external auditing and reporting.

NRF Windows in Vietnam:

<table>
<thead>
<tr>
<th>Types of activities</th>
<th>WINDOW 1: Strategic government mandate</th>
<th>WINDOW 2: Competitive results-based window</th>
<th>WINDOW 3: Small grants window</th>
<th>OTHER (government research, benefit sharing, operational costs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operation and management of the national REDD+ Program</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Support to Policies &amp; Measures</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development of Prov’l REDD Action Plans (PRAPs)</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implementation of PRAPs</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Implementation of benefit sharing plan for emission reductions</td>
<td></td>
<td></td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>
Green Growth Action Plan (GGAP): MPI’s Role

• Sector-based green growth action plans under development by various ministries.

• ~16 provinces are early adopters, preparing Provincial Green Growth Action Plans (mandatory for all provinces by 2017/18).

• Support accreditation of National Implementing Entities (NIEs) to directly access climate finance, e.g., Green Climate Fund, GEF, Adaptation Fund.

• Support national entities to meet accreditation criteria, assess capacity needs, and strengthen environmental and social safeguards to facilitate access to climate finance (with support from Belgium, UNDP, GIZ, KOICA).

• Developing “Investment Guideline for Green Growth” to strengthen appraisal and prioritization of public investments (with support from UNDP and Global Green Growth Institute)
CLIMATE FINANCE NEEDS TO BE LINKED TO POLICY

**Proposed Green Growth Strategy Roadmap**

- **GGS**
  - Establish national REDD Program
  - Develop MRV
  - Develop financial infrastructure and market-based mechanism (new mechanism)
  - Climate finance master plan
  - Public awareness campaigns
  - Develop human resources and technology for GG

- **CDM**
  - Develop financial infrastructure and market-based mechanism (new mechanism)
  - Climate finance master plan
  - Public awareness campaigns

- **PHASES**
  - Learning 2012
  - Mainstreaming 2015-2020
  - Green Growth 2025
  - Towards a Green Economy 2030
  - Green Vietnam 2050

- **GGS Tasks:**
  1. Low carbon growth
  2. Greening of production
  3. Green lifestyles
  4. Restored natural capital

**Green Vietnam:** High Green GDP and low GHG/unit GDP

Gradually sharpen targets through cap and trade, increased and targeted environmental taxes.
THANK YOU

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How to leverage finance for Panama REDD+ National Strategy

Rosalena Lindo
Head of Climate Change Unit
Ministry of Environment
16-10-2015
CONTENT

1. National Priorities
2. REDD+ National Strategy and finance challenge
National Priorities

Government Strategic Priorities 2014-2019

New Environmental Law
Climate Change Title

Capacity building, Technology transfer, and innovative financing

REDD+ National Strategy
- Reduce deforestation
- Reduce degradation
- Conservation
- Sustainable Forest Management
- Enhancement carbon stocks

Alliance for the Million

ETS – domestic and international

1. Livelihoods wellbeing
2. Strengthen democracy
3. Sustainable economic growth
4. Citizens Safety
5. Foreign affairs policy geared towards sust. dev.
6. Value and protect the environment
Panama Forest circumstances

Land cover- 2012

Data

Total country area
7,491,653 ha

Primary Forest lands:
2.73 million ha (36.5%)

Deforested area:
2 million ha (27%)

Commercial forest plantation:
0.35 million ha (4.7%)

Protected areas:
2.3 million ha (31%)

Indigenous reserves:
1.4 million ha (19%)

Other type of forest:
0.14 million ha (3.3%)
Why does the World need finance for REDD+?
Mapping Finance for Forest - REDD+

2009-2017

Worldwide 5.57 Billion USD

GEF: 0.136 Billion USD
World Bank: 0.144 Billion USD
EU: 0.019 Billion USD
Climate Investment Fund: 0.445 Billion USD

Source: REDD Database, African Development Bank Group, Ghana Web, PNUD Mexico, WWF Global, The REDD desk, UNDP Vietnam,
Mapping Finance for Forest - REDD+
Panama 30 Million USD

- River Basin Restoration: 2.17 Million USD
- Protected Areas: 22.37 Million USD
- REDD+ Readiness activities: 2.06 Million USD
- ONU REDD Support: 4.37 Million USD

Reduction of emissions from deforestation and forest degradation in 33.4% (from 2000 to 2012)
LANDSCAPE CONSERVATION (Forest – No Forest)
Integrated watershed management

Land with Forest
Carbon stocks, decrease of deforestation and degradation
- Protected Areas
- Public Land
- Indigenous Territories
- Private reserves

Land without Forest
Carbon capture – Alliance for the million has
- Private Land
- Public Land
- Indigenous Territories

Community Projects
- Sustainable forest management
- Crops forests
- Syst. agroforestry
- Syst. silvopastoral
- Organic Agriculture
- Land restauration and Conservation

CO₂ Benefits
Communities
Public
Private
% ($)

MRV SYSTEM
Projects
- Commercial forest plantations
- Forest plantations for conservation
- Syst. agroforestry
- Syst. silvopastoral
- Reforestation of riverbanks and Protected Areas
### Expected Results

1. Strengthening Institutional Forestry Administration
2. MRV System
3. Community reforestation: Reforestation in degraded land from State and indigenous reserve
4. Reforestation of hydrological recharge zones
5. Sustainable forest management in indigenous reserves
6. Interoperational ETS

### Funding Breakdown

<table>
<thead>
<tr>
<th>Activity</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>River Basin Restoration</td>
<td>20.19 Mill USD</td>
</tr>
<tr>
<td>Protected Areas</td>
<td>2.937 Mill USD</td>
</tr>
<tr>
<td>REDD+ Readiness activities</td>
<td>0.75 Mill USD</td>
</tr>
<tr>
<td>FCPF Support</td>
<td>4.0 Mill USD</td>
</tr>
<tr>
<td>ONU REDD Support</td>
<td>0.926 Mill USD</td>
</tr>
</tbody>
</table>

**Panama 59.8 Million USD**
Reforestation of 1,000,000 ha in the next 20 years

CO2 Capture potential of the Alliance for the million Hectares in 20 years approx. 300,120,500 TCO2e.

Estimated investment required: 5 billion - 7 billion USD
- International emissions trading: It is expected that from Paris agreements, the international carbon market receives a signal that encourages investment in carbon credits (offsets) from REDD + activities.

- Corporate Social Responsibility (CSR) offer REDD + credits for CSR programs both locally and internationally.

- Projects significant impacts (Category II and III): the possibility of seeking compensation for loss of carbon content within a bond of environmental compliance for projects that incur losses of biomass is analyzed.
International Level
- COP 21 results (30 Nov. – 11 Dec.)
- Definition of mechanism to mitigate the risk exposition associated to REDD+ activities and ETS

National Level
- Establishment of an Institutional Framework that guarantee REDD+ activities transparency in its implementation and the disbursement of the expected benefits.
- Create the enabling conditions to incentive private sector.
- Have the appropriate human resources to implement REDD+ Strategies and to provide the required associated services.
Thanks

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16-10-2015
China, el valor agregado se su mercado de emisiones alcanzó US$72 millones en el 2014. La provincia de Hubei logró USD 22 millones.

Union Europea
Cobertura: 2000 Mt CO2e
En el 2011, 7.9 MM de permisos de emision fueron transados, por la suma de US$147.9 billones.

Tokyo, operativo
Cobertura 2015: 10.8 Mt CO2e
Korea ETS, operativo
Cobertura 2015: 573 Mt CO2e

California, operativo
Cobertura 2015: 394.5 Mt CO2e

Québec, operativo
Cobertura 2015: 65.3 Mt CO2e
Se estima que pueda generar CAD 3.3 billiones de recaudo entre 2013-2020.

Ucrania
Planea lanzar ETS en 2017

en el 2015 un mercado valorado en 
€70MM

de acuerdo a Point Carbon, Thomson Reuters

Fuente: ICAP Status Report 2015