

INITIAL IDEA FOR REDD+ EMISSION REDUCTION PROGRAM IN VIETNAM

Presented at the 5th FCPF Carbon Fund

Paris, France

16-17 October 2012

Overview

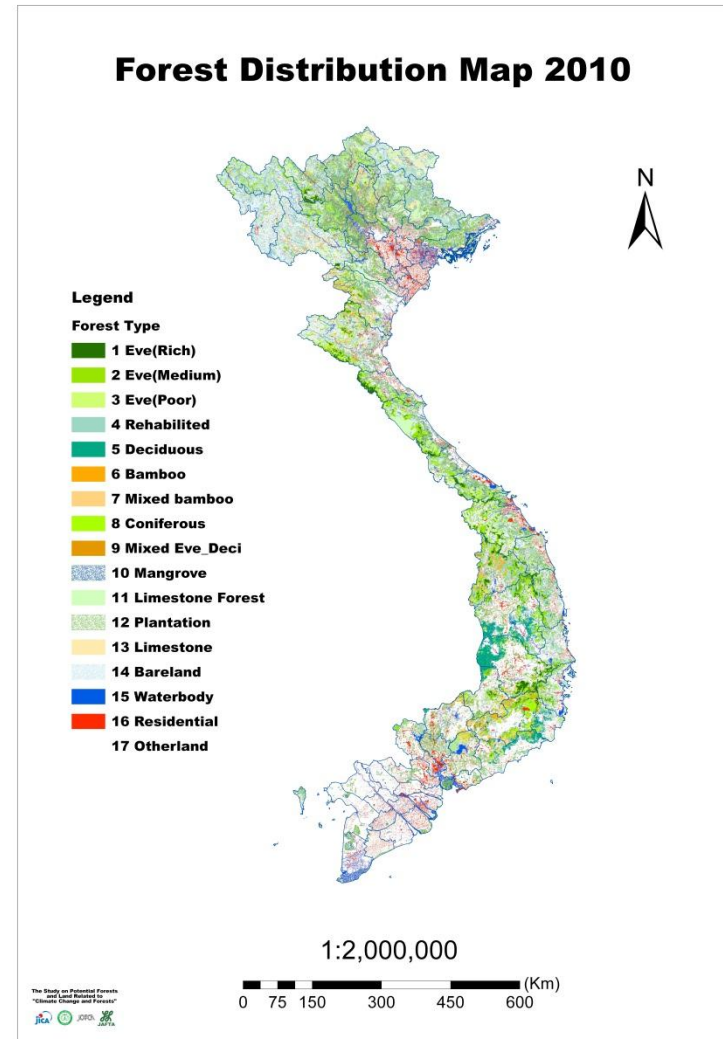


1. National forests data in 2011 and forest changes from 1943-2011
2. Update information on progress of REDD+ readiness and ER ambition
3. Initial proposal on development of the ER Program for Vietnam

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1. Vietnam forest data in 2011 and forest changes during from 1943-2011

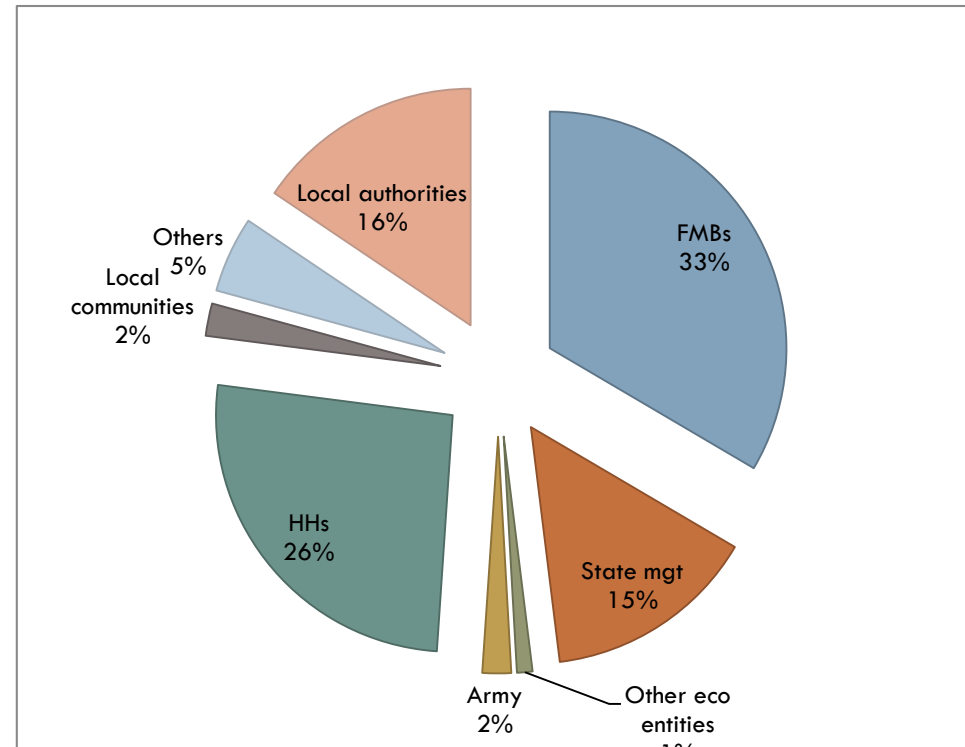
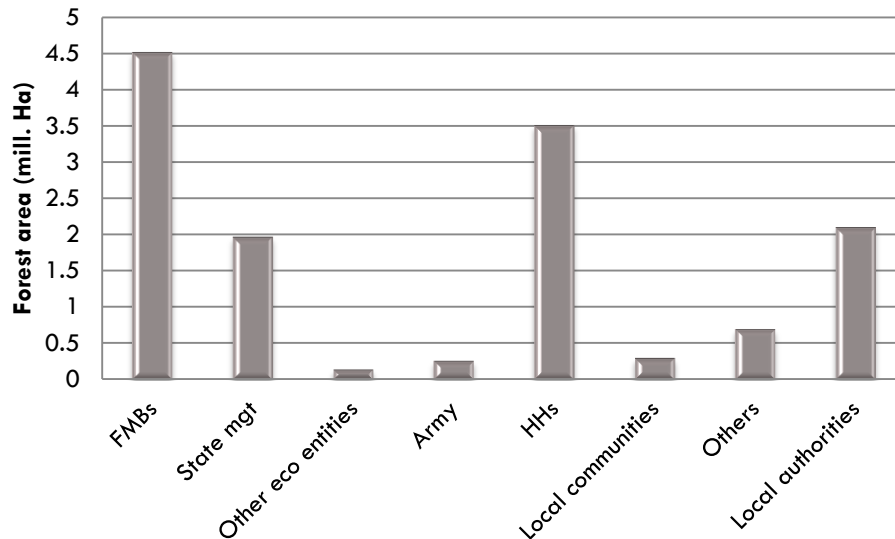
Forests in Vietnam

- **Total land mass:** 33 million Ha, of which $\frac{3}{4}$ are hills& mountains
- **Population in 2010:** 87 mill, of which 70% lived in rural areas and livelihoods rely on agricultural cultivation
- **Designated forestland:** 16.24 million ha (49% total country land mass)

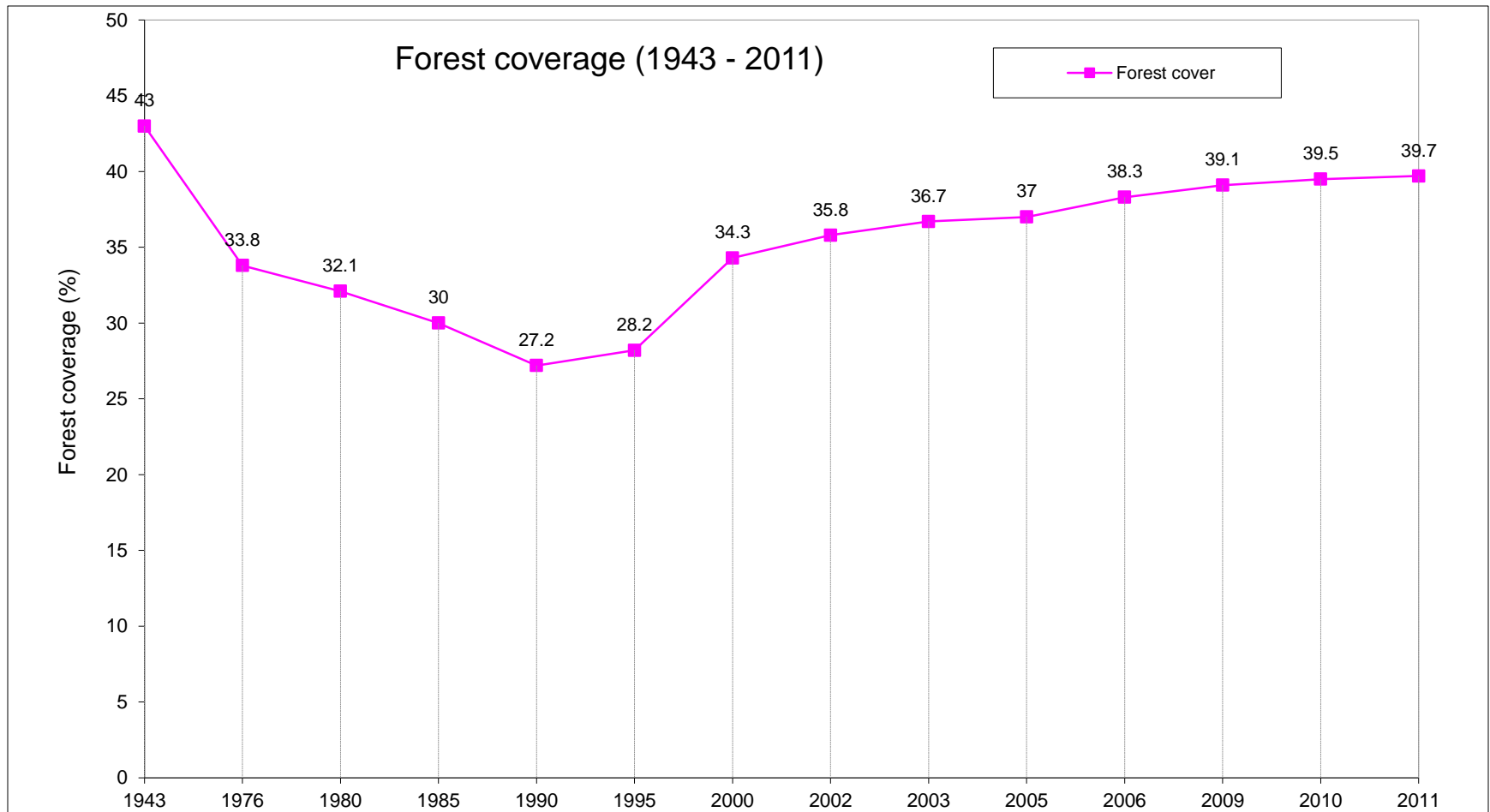


Forest management by stakeholders

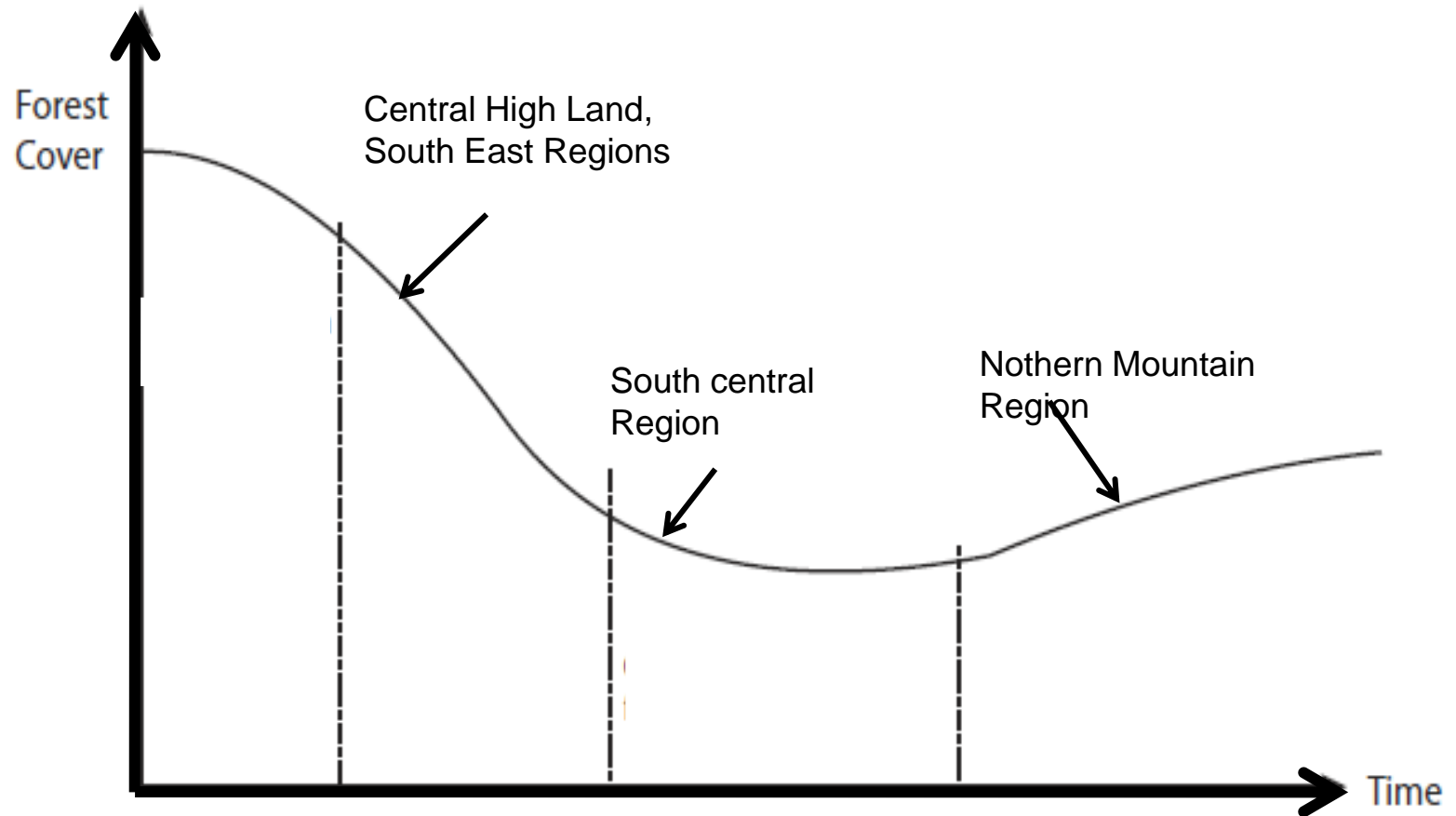
- **Total forest areas in 2011:** 13.5 mill Ha, of which 10.3 mill ha of natural forests and 3.6 mill ha of forest plantations



National forest cover changes during the period from 1943-2011



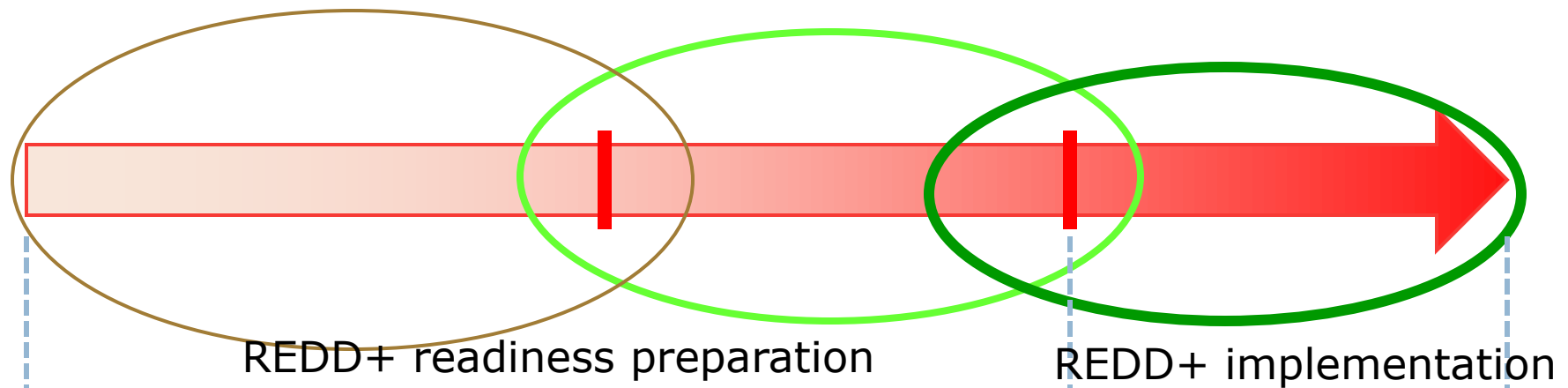
Dynamics of forest cover change in Vietnam



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2. Update information on progress of REDD+ readiness and ER ambition

Roadmap of REDD+ implementation in Vietnam

REDD+ will be implemented in phases accordance to the Cancun Agreement and national circumstances



Development of National Strategies on Climate Change, SD and Green Growth, NRAP and other related policies/measures, and capacity-building

Implementation of national policies, further capacity-building;
results-based demonstration activities

Results-based actions) –
fully MRVed

Key national climate change & REDD+ policies

- **National Target Program on Climate Change - NSCC** (Decision 158/QD-TTg of Prime Minister, December 2008);
- **National Climate Change Strategy** (Decision 2139/QD-TTg of Prime Minister dated 05th Dec 2011);
- **National Strategy on Green Growth - NSGG** (Decision 1393/QD-TTg of Prime Minister, September 2012);
- **National Program on reducing emissions in Agriculture and rural development sector** to 2020 (Decision 3119, Dec 2011);
- National Strategy on Biodiversity Conservation;
- **National Action Plan on Forest Protection and Development** for the period from 2011-2020 (Decision 57/QD-TTg, Jan 2012);

ER targets of National CC Strategies

1. To ensure low-carbon and green development, food & energy security, sustainable development
 - 2012-2020: all sectors: 8-10% compared to 2010; energy sector: 10-20%;
 - 2021-2030: reduce GHG emissions from 20-30% compared to BAU;
2. **In agricultural sector:** to promote green agricultural development. **Every decade: reduce 20% GHG emissions**, growth rate 20% and reduction of poverty rate by 20%; forestry activities will contribute to reduce about 19 million tons CO₂e from 2012-2020.
3. Reducing emission reduction and increase in GHG sequestration will become compulsory requirements for all economic sectors;

National REDD+ Action Program

- **NRAP** is approved by Prime Minister dated 27th June 2012 (Decision 799/QD-TTg);
- **GOAL:** The NRAP is aimed to reduce net GHG emissions, to contribute to sustainable forest management, biodiversity conservation, and successful implementation of the NSCC, poverty alleviation and SD;
- **OBJECTIVES:**
 - ***For period from 2012-2015:*** key elements for national operational REDD+ readiness in place, contribution to protecting existing forests, improvement in forest quality and expansion of forest areas; demonstration activities in at least 8 provinces;
 - ***For period from 2016-2020:*** become REDD+ ready to implement at Nation-wide level; contribute to achievement of 20% GHG emission reduction, increase forest coverage to 45%, biodiversity conservation and improvement in livelihoods of local communities;

Approaches

- **Comply with UNFCCC principles and guidance**, and FCPF requirements;
- **Consistent with national policies**: NRAP is parts of and support for achievement of objectives of the NSCC, NSGG and National Forest Development Strategy; the NRAP implementation will be supported by other policies/program;
- **Landscape-based approach**: not only activities within the forestry sector, agricultural and other sector will be taken into account to deliver comprehensive, effective packages for substantial and permanent ER;
- **Step-wise**: to reduce uncertainties and allow scaling up; two sub-periods: 2012-2015, 2016-2020 and onwards;

Enabling policies for the NRAP implementation

1. Clear mandate and institutional arrangement at national level: MARD = ALL-IN-ONE;
2. National Action Plan on forest protection and development for the period from 2011-2020:
 - Objectives: to protect, improve quality and use sustainably existing forests, expand forest coverage from 39.5% (2010) to 45% (2020)
 - Total investment of about US\$25 billion, of which
 - **state budget:** US\$7 bill. (eqv to 29%). In 2012, state budget invests \$60 million, 2013: US\$ 70-100 million;
 - Remaining 71% (\$18 billion) from private investment, PES, REDD+, ODA.

Enabling policies for the NRAP implementation

3. Policies on strengthening forest management and protection (decision 07/QD-TTg in Feb. 2012):
 - decentralization, clear mandates of local authorities;
 - provision of additional budget for forest protection and payment for participation in forest protection activities;
 - co-management of forests and benefit-sharing with local communities;
 - strengthening the forest rangers: increase total number of forest rangers to 15.000 people by 2015;
4. Policy on incentivizing/promoting expansion of commercial forests: decision 66/2011/QD-TTg Feb. 2011;
5. Policy on investment in special-use forests (nature reserves): decision 24/2012/QD-TTg in June 2012;

Enabling policies for the NRAP implementation

6. National Policy on Payment for Forest Environmental Services (PFES) provides attractive incentives for forest protection to local communities. In 2012, revenue from (paid by domestic buyers):
 - Central fund is US\$35 mill. (from interprovincial services);
 - Provincial funds (from within provincial services): are varied, typical example: Lai Chau = US\$9 million;

7. National Target Program on Rural Development, Poverty Reduction, and the National Program on fast and sustainable poverty alleviation in 62 poorest districts.

Key REDD+ Readiness Projects

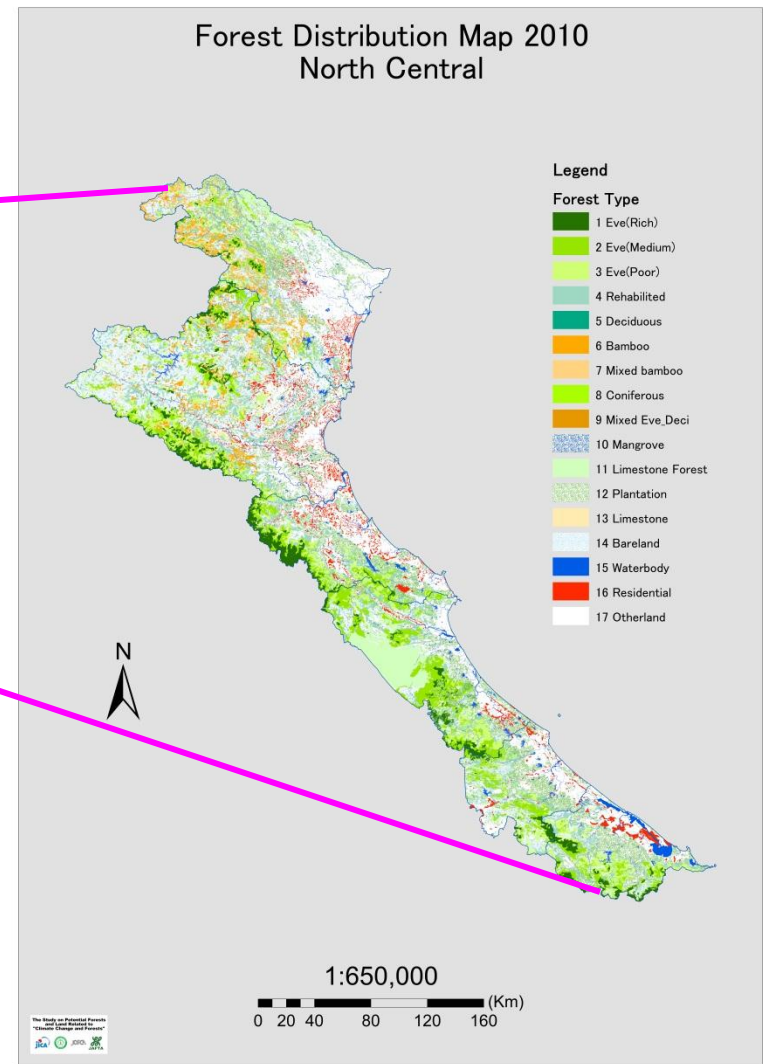
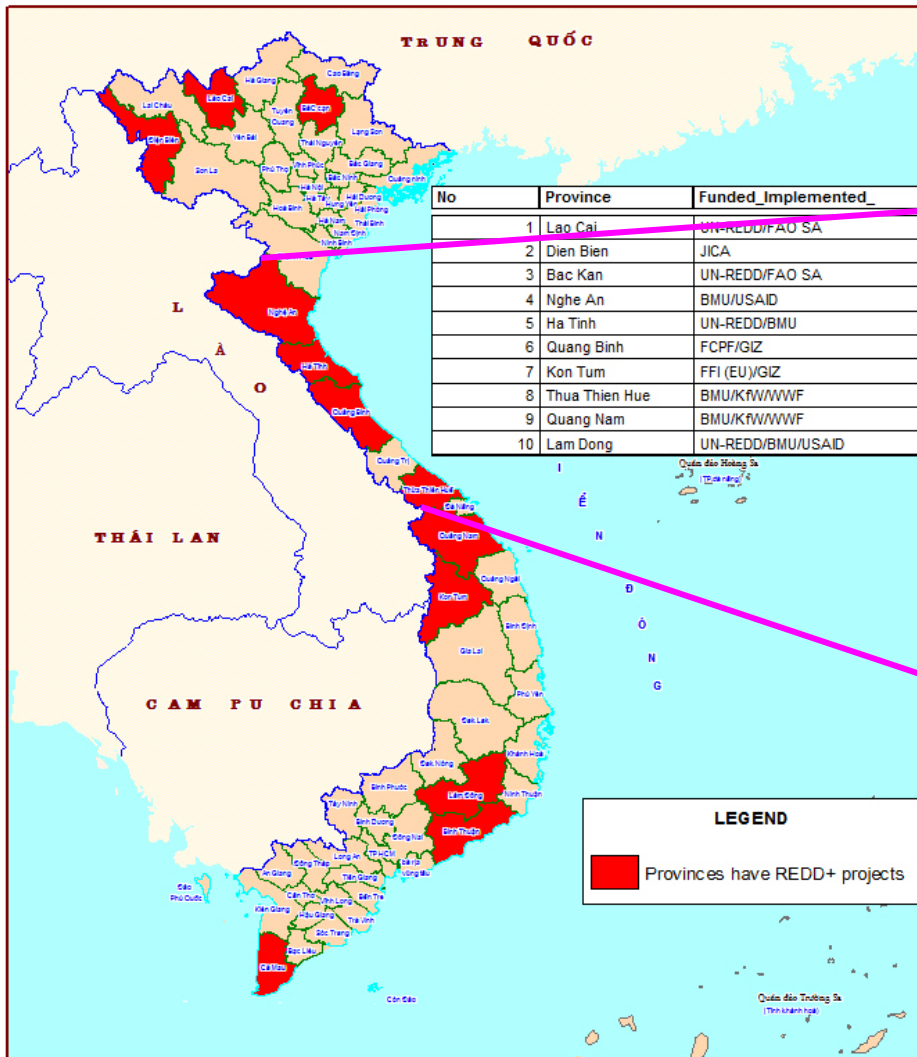
- FCPF REDD Readiness (R-PP): US\$ 3.8 million;
- “Exploring mechanisms to promote high biodiversity conservation through REDD+” funded by BMU, Germany: Euro 1.3 million;
- “Advancing understanding on C stock enhancement” funded by BMU, Germany: Euro1.0 million;
- EU/FAO “Climate Smart Agriculture”: Euro 1 million;
- JICA-funded “Dien Bien REDD+ Pilot Project”: US\$ 2 mill.
- USAID “Low emissions from Asian Forests – LEAF” + “SilvaCarbon Prog.”
- USAID “Vietnam Forests and Delta Program: US\$ 25 mill. from 2012-2017”;
- UN-REDD Vietnam Program Phase 2: two parts (TA & provision of positive incentives) funded by Norway, and will start late 2012;

These projects provide support for capacity building either at national or sub-national levels and demonstrating result-based emission reduction that create sound foundation and experience for ER Prog implementation.



3. Initial proposal on development of ER Program

Scale and location of the ER Program



Reasons for site selection

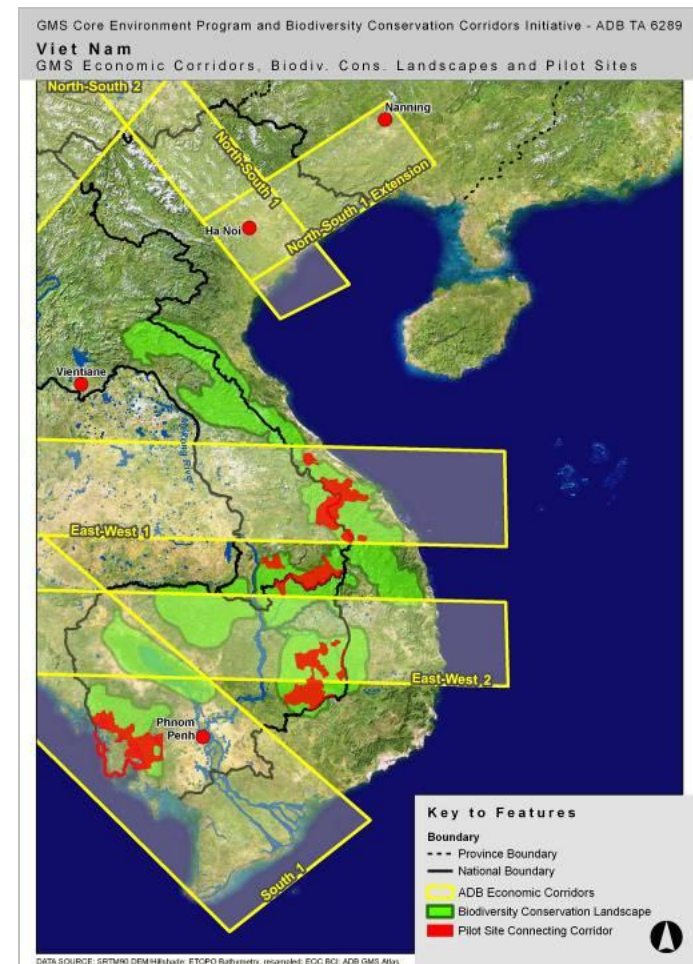
1. Cover large area, high potential of emission reduction; Commitment of local authorities and capacities of relevant stakeholders;
2. Two of 3 provinces from FCPF RP;
3. Opportunities of integration with different government programs – get additional investment;
4. Good cooperation with on-going forest protection, development and livelihood improvement projects:
 - **WB 3:** supports for smallholder plantations in 3 provinces from 2012-2015, US\$ 30 million;
 - **GIZ:** Demonstration of SFM (FSC) & co-management of forests
 - **KfW:** supports for improvement of livelihoods of local communities in buffer zone of NP
 - **UN-REDD Phase II & USAID:** technical building & demonstration REDD+ activities; payment for result of ER

Information on the proposed ER site

Province	Total area (ha)	Total forest area (ha)	Natural forests (ha)	Plantations (ha)	Forest cover (%)	Population (1.000 pers)
Thanh Hoa	1,113,194	546,095	384,146	161,949	49%	3406.8
Nghe An	1,649,181	875,312	734,515	140,797	53%	2917.4
Ha Tinh	599,718	308,082	212,884	95,198	51%	1228
Quang Binh	806,527	540,118	456,537	83,581	67%	849.3
Quang Tri	473,982	223,350	138,807	84,543	47%	600.5
T.Thien Hue	503,321	285,347	202,647	82,701	57%	1090.9
Total	5,145,923	2,778,304	2,129,536	648,769	54%	10,092.90

Strengthening regional cooperation

- Cooperation with the US\$ 34 million Greater Mekong Subregion Biodiversity Conservation Corridors (BBC) Project (2012-2016);
- Minimizing risk of reversal and displacement, including regional displacement;



Proposed key REDD+ Activities

- **Avoided deforestation and forest degradation.**
Interventions:
 - Prevention of conversion of forests into agriculturally cultivated land
 - Protection against illegal logging and promotion of SFM
 - Forest fire prevention
 - Modern wood processing industry, sustainable use of timber and NTFPs, firewood
- **Enhancement of forest carbon stocks:**
 - Assisted natural regeneration of forests
 - Restoration of heavily degraded forest land with agroforestry
 - Plantations but promotion of planting big timber (long rotation) and native species

Proposed key REDD+ Activities

- Each province will develop its REDD+ Action Plan, in which activities, measures, geographical areas, costs and collaboration with other progs/projects will be identified to be suitable with local-specific circumstances in consultative manner;
- Provincial REDD+ Action Plans are crucial inputs for development a plan for the ER Prog.

Institutional arrangement

- How the ER program will be implemented in line with NRAP and other national policies?

National policy-making level

National REDD+ Steering Committee

- NC on CC;
- MARD & line Ministries

VNFOREST

Supervision, & Coordination

Vietnam REDD+ Office

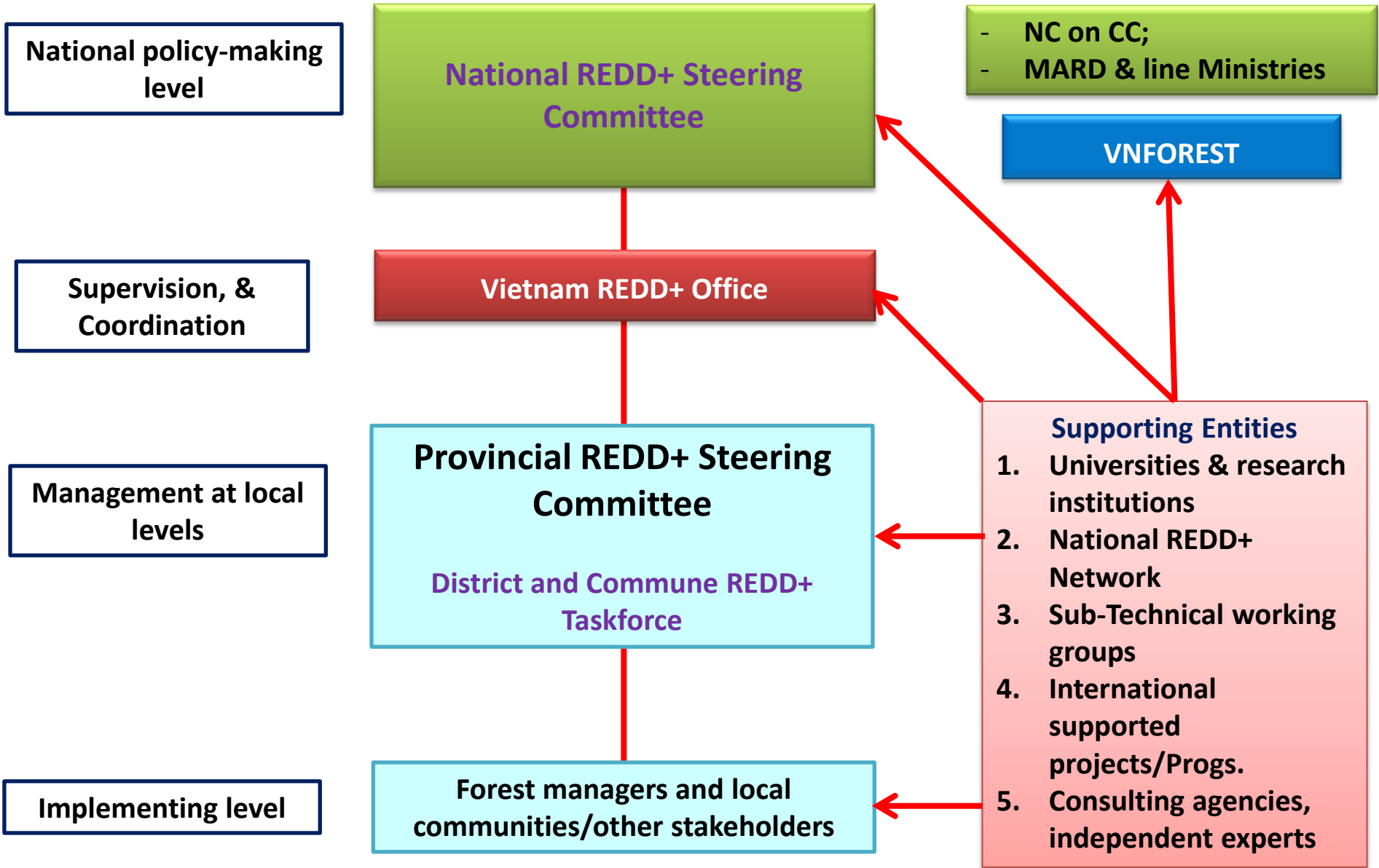
Management at local levels

Provincial REDD+ Steering Committee
District and Commune REDD+ Taskforce

- Supporting Entities
1. Universities & research institutions
 2. National REDD+ Network
 3. Sub-Technical working groups
 4. International supported projects/Progs.
 5. Consulting agencies, independent experts

Implementing level

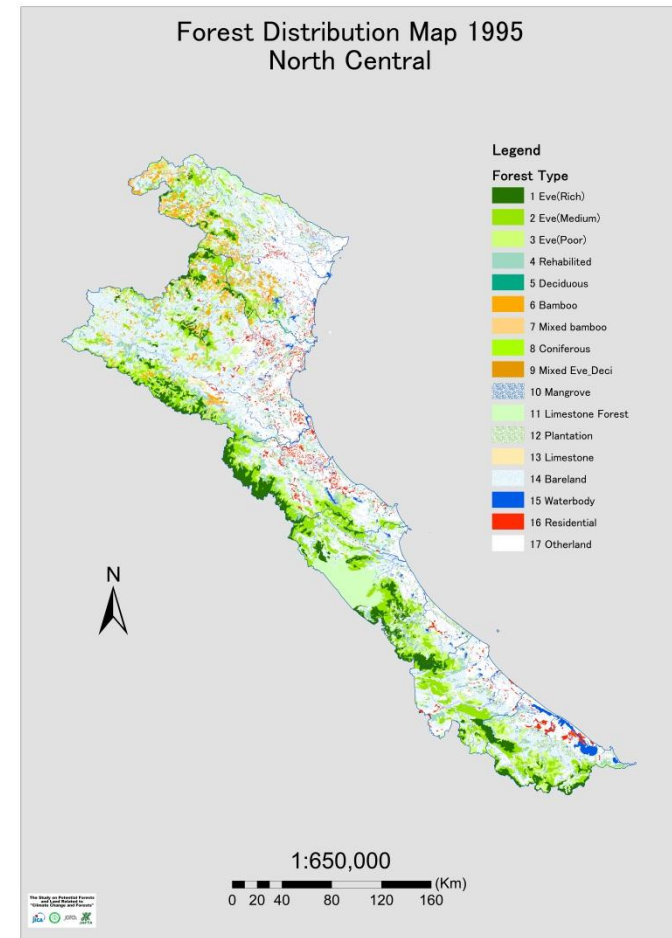
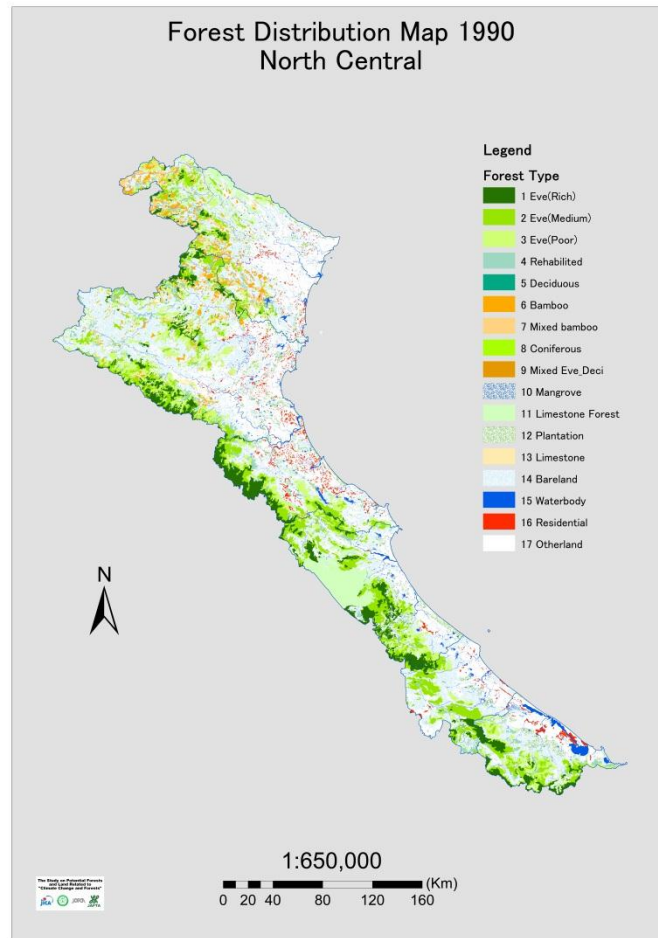
Forest managers and local communities/other stakeholders



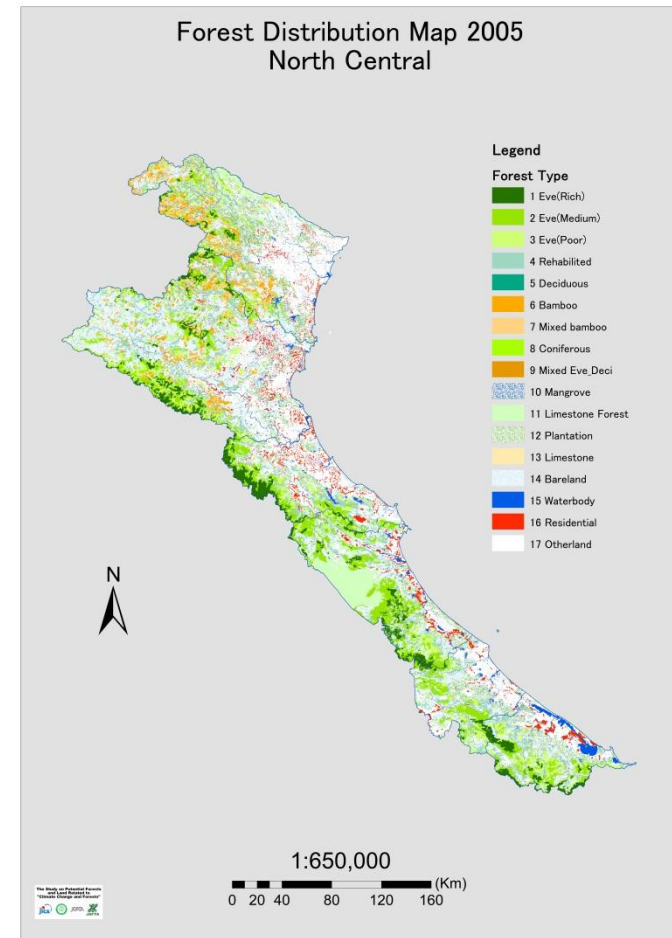
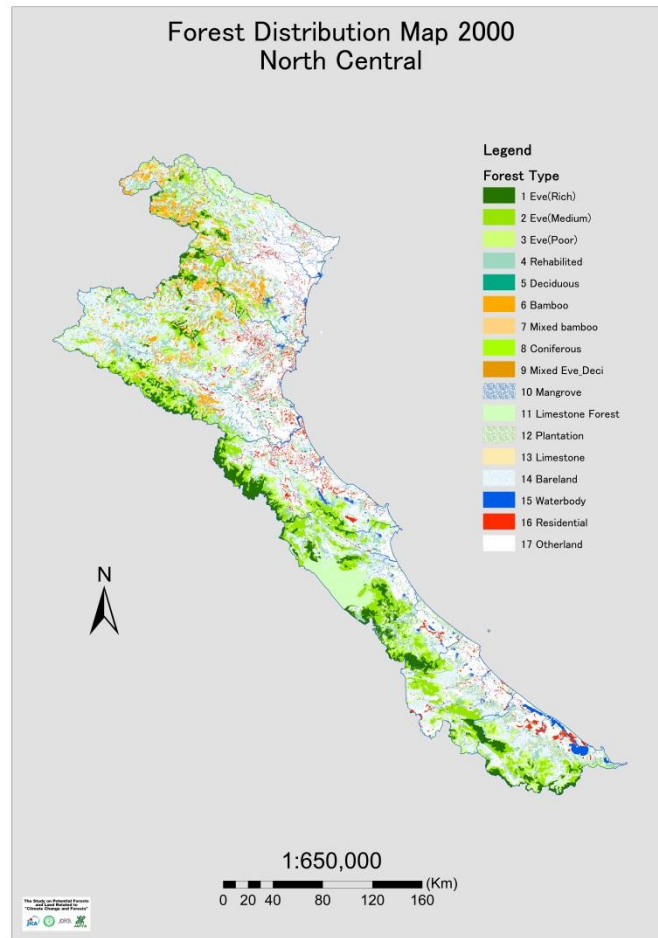
Development of interim REL/FRL

- Historical NFI data for 5 time points: 1990, 1995, 2000, 2005 and 2010 was improved by using RS imagery and data screening with support from JICA and Finland;
- Interim sub-national REL/FRL are developed based on the improved NFI data (both forest maps and field measured data from a system of sample plots. Area of forest changes and GHG emission are fluctuated and it is not easy to project the future trend;
- The interim REL/FRL will be refined by using improved data and methodology;

Historical forest maps

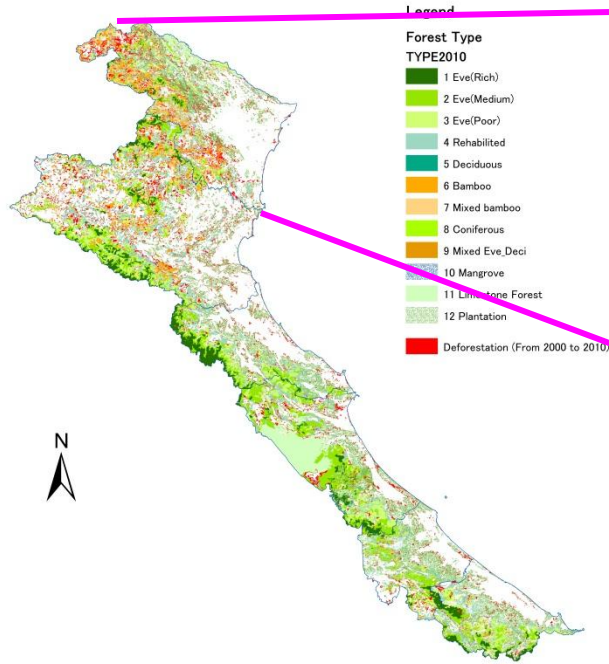


Historical forest maps



Deforested map from 2000-2010

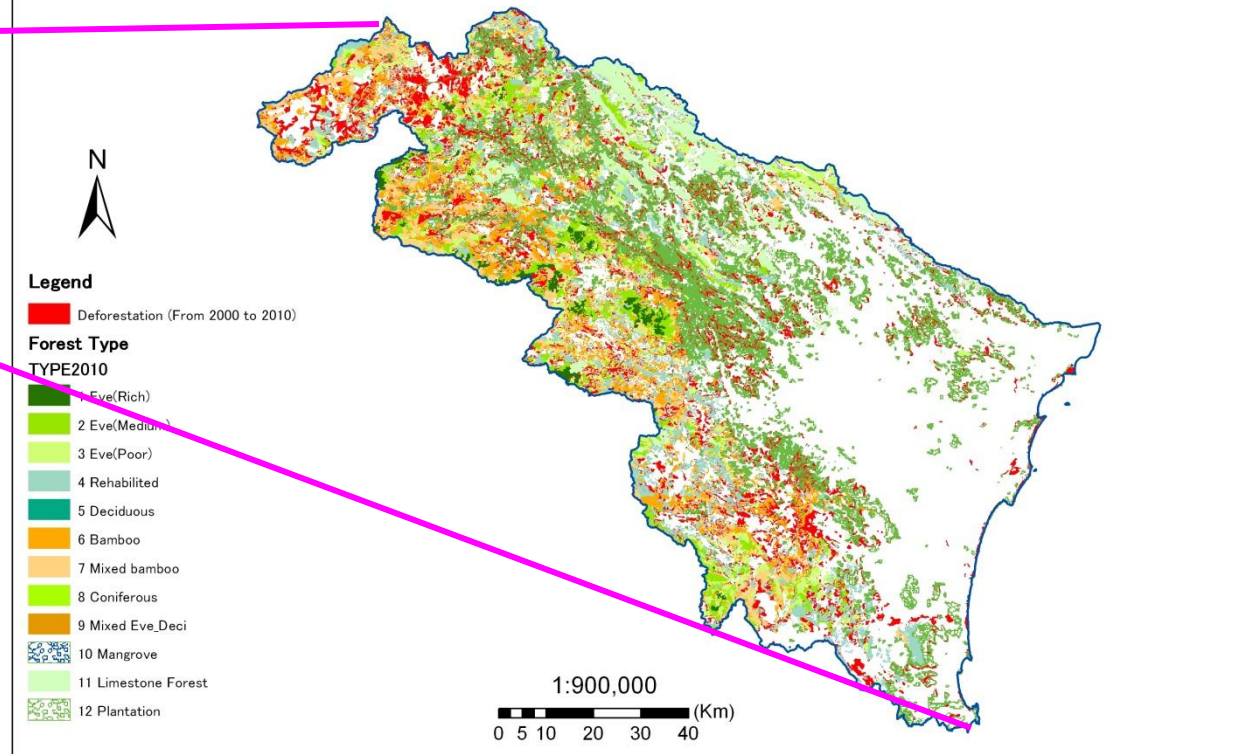
Forest Type Change Map 2010
North Central (Deforestation)



1:650,000

0 20 40 80 120 160 (Km)

Forest Type Change Map 2010
(26 Thang Hoa)



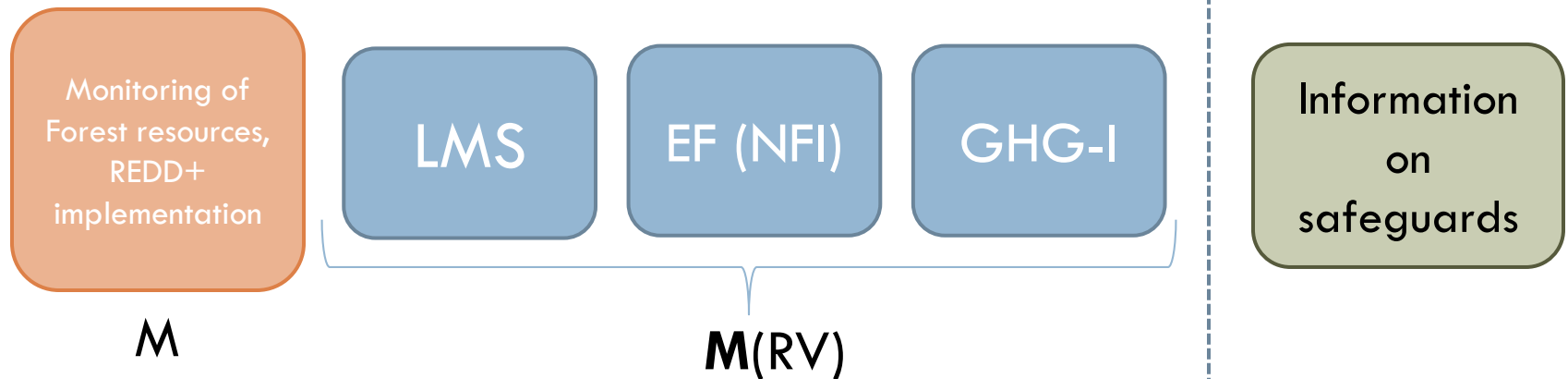
1:900,000

0 5 10 20 30 40 (Km)

MRV Framework document

National REDD+ Information System

National Forest Monitoring System



Forest monitoring

- **How forest monitoring in the ER Prog will be implemented?**
(show example from Mapinfo software)
 - Data collection: methods & role of each stakeholder
 - Data management: forest profiles
 - Data update
- **Principles**
 - Consistent with National Forest Monitoring Program t.o ensure the permanence and applicability as well as scaling up of the ER Prog
 - Participatory monitoring; PFC is legalized by Law on FPD (Article 32)
- **Parameters for monitoring**
 - Various ... (e.g., area of protected/planted forests, quality of forests, rate of deforestation, ect.)
 - Should be simple and practical, close linkages with result-based indicators
- **Development of FORMIS (Registry**

Activity Data

Land Monitoring

X

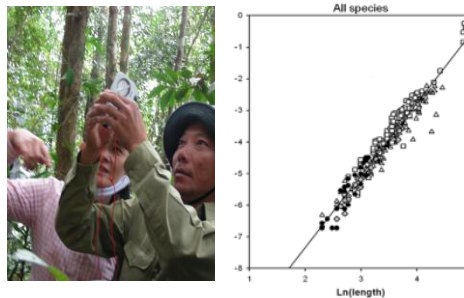
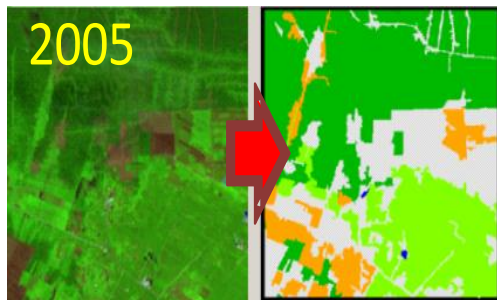
Emission Factor

Carbon inventory
Allometric equations

=

REDD+ GHG
Inventory

GHG Emissions and
Removals



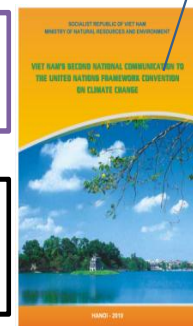
National
Communications

REDD+
Inventory

UNFCCC

QA/QC

Emissions
Inventory



Generation of Activity Data (AD)

- **Policy:** Implementation of NFI is mandated by Law on Forest Protection and Development in every 5 years, and funded by Government budget
- **Method:** Use IPCC guidance and guidelines, as adopted or encouraged by the Conference of the Parties; Longstanding experience in using a combination of remote sensing and ground-based inventory & monitoring; **Tier 2++**
- **Improving current NFI Program:** is currently improved with the support from FAO-Finland forestry partnership Prog, UN-REDD VN. GoV funded for piloting in two REDD+ provinces (US\$ 2.5 mill.); nation-wide implementation: 2013-2015

Estimation of Emission Factor (EF)

- ❑ National Carbon Inventory (NCI) and NFI
- ❑ Development of Destructive measurement for Allometric Equations for key natural forest types and major species for plantations);

Forest eco-regions	NE		NCC		SCC	CH	SE	MRD	Total # of plots	Total sample trees
Forest types / province	Lao Cai	Bac Kan	Ha Tinh	Nghe An	Quang Nam	Lam Dong	Binh Thuan	Ca Mau		
Evergreen broad leaved forest	2	2	3	1	2	2	2	0	14	700
Deciduous forest	0	0	0	0	0	1	1	0	2	100
Bamboo forest	1	1	0	2	0	1	1	0	6	600
<i>Luong - Dendrocalamus barbatus</i>	0	0	0	1	0	0	0	0	1	100
<i>Nua - Schizostachyum sp</i>	0	1	0	1	0	0	0	0	2	200
<i>Vau - Indosasa sp.</i>	1	0	0	0	0	0	0	0	1	100
<i>Lo o - Bambusa balcoa</i>	0	0	0	0	0	1	1	0	2	200
Total # of plots	3	3	3	3	0	4	4	0	22	
Responsible organization	NW sub-FIPI		VFU		TNU	RCFEE	CFIC	n.a.		

How forest area changes are detected and calculated?

Forest Type in the year 2000

Forest Type in the year 1990

Year 1990	Year 2000														Limestone area (no forest)	Category of Non Forest					Grand Total
	Evergreen broadleaf forest, rich forest	Evergreen broadleaf forest, medium forest	Evergreen broadleaf forest, poor forest	Evergreen broadleaf forest, rehabilitation forest	Deciduous forest	Bamboo forest	Mixed timber forest	Coniferous forest	Mixed broadleaf forest	Mangrove forest	Limestone forest	Plantation	Bare land, shrub and fragmented trees	Waterbody		Residential area	Other land				
Evergreen broadleaf forest, rich forest	23,871	8,241	6,470	1,874	100	897	1,640	0	222	0	0	23	0	2,108	5	17	2,563	48,033			
Evergreen broadleaf forest, medium forest	8,415	23,156	1,803	2,673	158	1,135	3,193	0	0	0	0	139	0	4,272	19	1,183	31,171	77,316			
Evergreen broadleaf forest, poor forest	1,184	22,034	53,630	11,500	1,054	1,003	7,417	0	0	0	0	1,460	0	11,774	223	652	28,436	140,375			
Evergreen broadleaf forest, rehabilitation forest	348	2,734	13,117	3,893	69	886	9,182	0	229	0	0	2,551	0	5,539	20	255	17,143	55,971			
Deciduous forest	74	324	718	959	47,140	0	0	0	0	0	0	5	0	5,316	45	701	14,461	69,744			
Bamboo forest	6	253	477	2,812	1	4,722	9,865	0	0	0	0	563	0	3,413	5	11	1,495	23,623			
Mixed timber forest	357	7,373	8,990	7,321	7	3,558	30,794	0	1,939	0	0	1,330	0	5,094	43	11	4,905	71,722			
Coniferous forest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Mixed broadleaf and coniferous forest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Mangrove forest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Limestone forest	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Plantation	0	0	47	12	0	0	0	0	0	0	0	450	0	79	1	21	355	965			
Limestone area (no forest)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Bare land, shrub and fragmented trees	204	1,089	12,322	4,987	3,175	2,263	3,242	0	131	0	0	2,579	0	12,940	144	803	41,610	85,490			
Waterbody	1	4	9	8	0	0	0	0	0	0	0	3	0	21	2,321	75	248	2,718			
Residential area	0	0	8	0	0	0	0	0	0	0	0	72	0	113	9	122	466	791			
Other land	10	626	1,778	3,561	233	940	1,182	0	25	0	0	1,478	0	9,866	484	7,798	47,116	75,098			
Grand Total	34,470	65,833	99,371	39,600	51,943	15,411	66,527	0	2,554	0	0	10,655	0	60,535	3,320	11,651	189,974	651,844			

Category of Forest

Category of Non Forest

Forest degradation

Deforestation

Forest enhancement/
regrowth

Reforestation

Category of Forest

Category of Non Forest

Awareness raising and stakeholders consultation

- Awareness raising for policy-makers, academia, local authorities and people through workshops, meetings, website, video clips in cooperation with RECOFTC, Vietnam CC Forum and other partners;
- Consultation (*participation in REDD+, selection of activities & sites, BDS, etc.*) through various means: National REDD+ Network, REDD+ sub-technical group, Workshops, study tours, e-forums;

How the safeguards are addressed?

- UNFCCC agreed elements, steps and conditions should be respected; consistent with the requirements of the FCPF;
- Consistent with national sovereignty, legislation, circumstances and capacities, and relevant international obligations and agreements;
- BMU Project is now supporting for reviewing current policies and instruments in comparison with COP requirements, then defining the roadmap of development. The UN-REDD will support for piloting at local levels;
- FCPF RPP will provide support for implementation of SESA and ESMF

Addressing regional leakages

1. At national level

- A new MoU is signed in July

2. At provincial level

- All provinces in the region have signed MoUs on socio-economic development/forest protection with neighboring provinces of Lao PDR;
- Establishment of joint taskforce, organization of information and experience sharing event;

Decrease in carbon stock due to deforestation (1990 – 2010)

Province	D (Unit : 1,000CO ₂ t)			
	'90 -'95	'95 -'00	'00 -'05	'05 -'10
Thanh Hoa	-16,682	-16,706	-12,766	-26,529
Nghe An	-21,375	-23,590	-18,628	-28,514
Ha Tinh	-6,298	-12,847	-9,696	-6,987
Quang Binh	-8,524	-14,682	-20,358	-10,833
Quang Tri	-3,600	-8,062	-8,357	-5,614
Thua Thien Hue	-1,706	-5,921	-6,916	-4,812
Total	-58,186	-81,807	-76,721	-83,290

Increase in carbon stock by A/R (1990 – 2010)

Province	A/R (Unit : 1,000CO ₂ t)			
	'90 -'95	'95 -'00	'00 -'05	'05 -'10
Thanh Hoa	11,737	12,508	25,327	11,988
Nghe An	23,253	22,652	22,539	18,754
Ha Tinh	4,876	4,689	7,167	7,689
Quang Binh	10,066	8,498	11,438	17,839
Quang Tri	5,871	4,548	6,656	8,522
Thua Thien Hue	1,334	4,101	7,230	7,838
Total	57,137	56,998	80,357	72,629

Net Carbon Stock Change

Region	Net Carbon Stock Change (Unit : 1,000CO ₂ t)			
	'90 -'95	'95 -'00	'00 -'05	'05 -'10
1. Northwest	12,032	-11,909	13,611	39,912
2. Northeast	-5,343	-9,404	35,319	107,305
3. Red River Delta	844	-695	2,222	2,508
4. North Central	-1,049	-24,810	3,636	-10,661
5. South Central	-16,100	-34,316	38,989	-21,300
6. Central Highlands	-37,695	-73,182	-212	25,288
7. Southeast	-19,731	-34,886	8,195	4,156
8. Mekong Delta	5,605	-4,102	8,286	-5,008
Total (National)	-61,437	-193,303	110,045	142,199

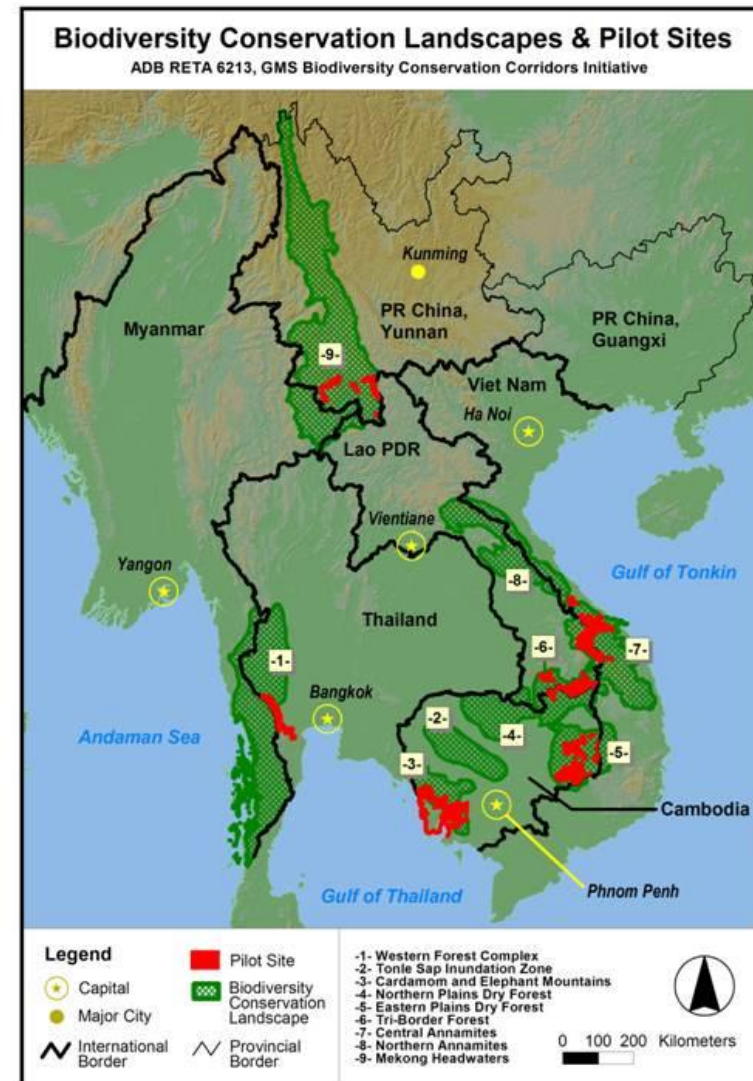
Potential benefits from the ER Prog

Emission reduction:

- Preliminary estimates are based on the JICA Study;
- It is easy to see overall trend of **NET C-stock change at national level** but it is difficult to predict the direction for some eco-regions (sub-national level);
- GHG emission reduction: reliable estimation for each scenarios will be generated after checking and validating the historical forest data, and computing methodology;

Great potential to generate co-benefits

- Contribution to improvement of livelihoods of ethnic minority groups (Total pop. 10 million);
- Biodiversity conservation in the Annamites: 5 national parks and 5 nature reserve areas; and Biodiversity Conservation Corridors in the Mekong region;
- Prevention from flash floods and storms in the most storm-prone area in Vietnam
- Strengthening regional cooperation to minimize leakages



Designing BDS

1. National REDD+ Fund is a trust fund & designed for managing and distributing revenue from REDD+ **regardless from FCPF ER, UN-REDD or other Progs/Projects** to ensure that the payment will be based on ER performance;
2. The Fund has branch offices at provincial level;
3. **Detailed BDS is still in designing process** and will be piloted by UN-REDD Vietnam Phase 2. It is proposed that the R-coefficient will be used to take into account local circumstances & culture; **The UN-REDD Vietnam Phase 2 will provide support for establishment and piloting the REDD+ fund based on performance.** Lessons learned will be very useful for the implementation of the ER Prog.;

Early investment in the ER Program

1. Use of mixed investment in ER:

- State budget is quite limited to total costs (15-30%)
- private sector: mostly focus on plantations
- ODA: capacity building, demonstration models
- REDD+ revenue: UN-REDD Phase II and FCPF ER Prog.

2. Timeline: tentatively 2013-2020, interference btw the REDD+ readiness and provision of positive incentives phases;

Scalable option for ER Program

- **Option 1:** only in the Northern Central Coastal Region;
- **Option 2:** Vietnam adopt national approach, a series of national policies on forest protection and development. However, the GoV budget is limited, PES does not consist of ER and only covers parts of country. Therefore, Vietnam would like to expand the ER prog into larger site: some additional provinces or agri-ecological regions.



Thank you very much for kind attention!