

# **LINKING REDD+ AND THE NATIONAL GREEN GROWTH STRATEGY**

*Presentation of VNForest with Input from the  
MPI/UNDP SD and CP Project*

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# BACKGROUND

- Viet Nam engaged in REDD through UN- REDD Viet Nam Programme phase I (started 2009).
- The Phase II, UN-REDD Programme with 30 million USD for Technical Assistance will be implemented from 2013-2015, covering 6 provinces.
- The FCPF Project with 3,8 million USD for “Support for the REDD+ Readiness Preparation in Vietnam”
- VGGS enacted on 25 September, 2012 by Prime Minister’s Decision **1393/QĐ-TTg**
  - VGGS action plan (launched this week)
  - Provincial Green Growth Plans piloting in 3 provinces
- VGGS is an key element of a wider climate change response which includes:
  - VCCS plus National Climate Change Action Plan
  - Community based DRR



# VGGS-OVERALL FRAMEWORK

**Overall Objective:** *Green growth, as a means to achieve a low carbon economy and to enrich natural capital, will become the principal direction in sustainable economic development; reduction of greenhouse gas emissions and increased capability to absorb greenhouse gas are gradually becoming essential indicators in social-economic development.*

## **Specific objectives:**

1. Restructure the economy and perfect the economic institutions by greening existing sectors and encouraging the development of economic sectors to use energy and natural resources efficiently with higher added values;
2. Conduct research and enhance application of appropriate advanced technologies to more efficiently use natural resources, reduce greenhouse gas emissions intensity and to contribute to an effective response to climate change;
3. Improved living standards of the people, creating an environment friendly lifestyle through employment generation from green industry, agriculture and services; investment in natural capital; and development of green infrastructure

# VGGS TARGETS

The VGGS sets the following targets for GDP growth and GHG emission reductions:

- By the year 2020:
  - GDP per capital is doubled compared to 2010
  - Reduce energy consumption per unit of GDP by 1.5 to 2% per year
  - Reduce intensity of greenhouse gas emissions per unit of GDP by 8-10% or double the target with international support
- By the year 2030:
  - Reduce total GHG emissions by at least 1% per year without and 2% with international support.
  - Environmental degradation is addressed and natural capital stocks have been improved while the access and use of clean and green technology is significantly enhanced.
- In 2050, Viet Nam has mainstreamed Green Economic Development



# KEY VGGS ELEMENTS RELEVANT FOR REDD+

- Strong focus on “restoring Forest”
  - Increasing forest cover further (47%) by 2020
  - Focus on rehabilitating degraded lands
  - Mainstreaming natural capital accounting into planning (supported by WB WAVES and UNDP)
- Building upon existing “Payment for Environmental Service Policies”
- Promoting of Market based based instruments (post 2020):
  - Possible link to off sett mechanism
  - Carbon tax, include forest related emissions?

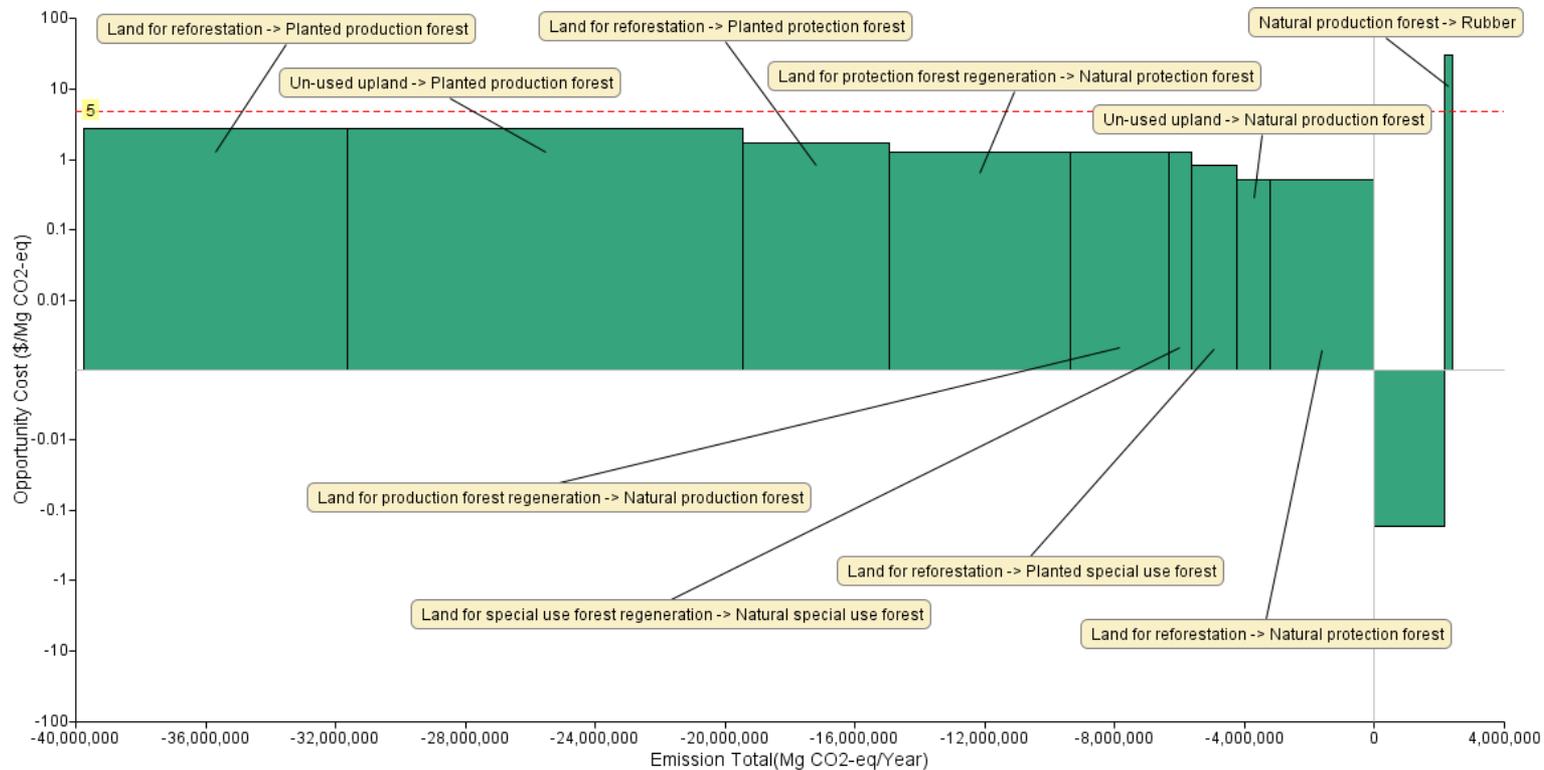


# GREEN GROWTH AND REDD+

- Within the context of Viet Nam → forest/land use sector is a net sink
  - Increase in forest cover
  - Rehabilitation of degraded forest
  - Rubber on degraded lands
  - In the central highlands still significant natural forest losses
- REDD plus is critical to restore “forest based” natural capital:
  - Restore logged over natural forest by forest users
  - Rehabilitate “protection forest areas” for watershed management
- Future land use planning will allow for significant additional sequestration (35 m t CO<sub>2</sub>e annually) to 2020.
- Significant gains possible through improved forest management practices



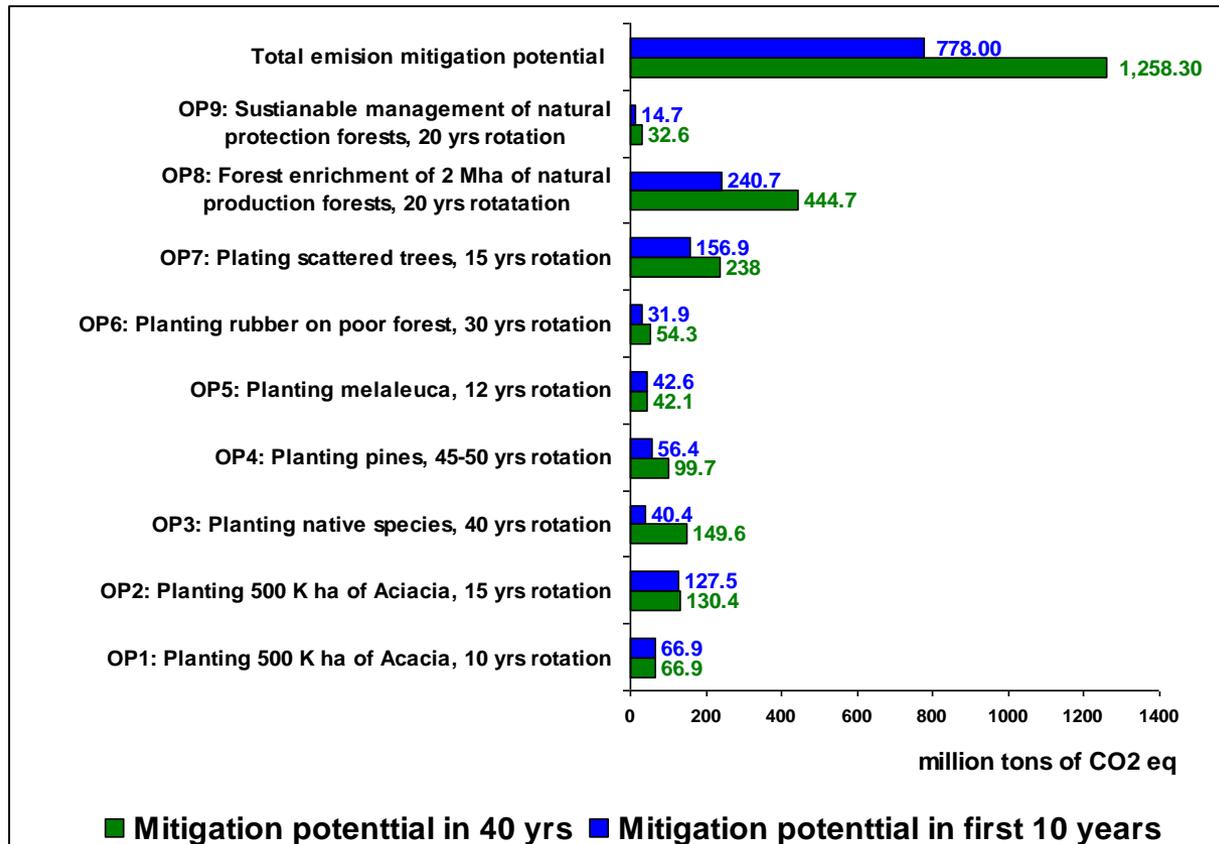
# MARGINAL ABATEMENT COST ANALYSIS FOR THE LAND USE SECTOR



Source UNDP/MPI, 2013. Low Carbon Development Options For Vietnam-Policy Brief



# CARBON SEQUESTRATION FOR DIFFERENT SILVI-CULTURAL OPTIONS



Source UNDP/MPI, 2013. Low Carbon Development Options For Vietnam- Policy Brief



# NATURAL CAPITAL ACCOUNTING IN VIETNAM

- Vietnam will start using Green GDP as an overall Social Economic Development Indicator.
  - Will guide green growth development.
- Green GDP in Viet Nam will adjust Vietnam's official GDP to account for depletion (and degradation) of natural resources and costs associated with pollution and climate change.
- Work is starting in the forestry sector on developing natural wealth accounting (WB/WWF WAVES)
  - Enables to account for true value of forests
  - Will provide guidance for land use planning



# THE ROLE OF REDD+ IN THE GREEN GROWTH AGENDA

- It is important to distinguish between REDD+ as an instrument within the national green growth context and REDD+ as an international financing mechanism because:
    - REDD+ can play a role in future domestic market based mechanism (post 2020)
    - REDD+ can deliver relatively cheap emission reduction options enabling the country to meet its voluntary emission reduction target
  - Significant potential for REDD+ in Viet Nam if improved Carbon Stock management of existing forest lands is included because:
    - Improved carbon stock management of forest plantation and production forests (enrichment planting, use of indigenous species for softwood production etc) deliver significant carbon sequestration potential
    - Wet land areas have to be included as there is substantial potential (peat/mangrove) and can deliver significant added value in terms of coastal defense, salinity and improved coastal hydrology → high natural capital value
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# CHALLENGES

- Furniture industry → rapid growth and depending on supply from abroad
- Pulp and paper Industry demand is leading to short cutting cycles.
- Quality of forests
  - Most low quality (Acacia) plantation for pulp wood (in the North)
  - Rubber
- Wetlands/peat → relatively minor in area (around 250,000 ha) but under threat (peat mining, draining) leading to around 4 m t CO<sub>2</sub>e emissions



# The value of the world's ecosystem services and natural capital

Robert Costanza<sup>\*,†</sup>, Ralph d'Arge<sup>‡</sup>, Rudolf de Groot<sup>§</sup>, Stephen Farber<sup>||</sup>, Monica Grasso<sup>†</sup>, Bruce Hannon<sup>¶</sup>, Karin Limburg<sup>‡\*</sup>, Shahid Naem<sup>\*\*</sup>, Robert V. O'Neill<sup>††</sup>, Jose Paruelo<sup>‡‡</sup>, Robert G. Raskin<sup>§§</sup>, Paul Sutton<sup>|||</sup> & Marjan van den Belt<sup>¶¶</sup>

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**The services of ecological systems and the natural capital stocks that produce them are critical to the functioning of the Earth's life-support system. They contribute to human welfare, both directly and indirectly, and therefore represent part of the total economic value of the planet. We have estimated the current economic value of 17 ecosystem services for 16 biomes, based on published studies and a few original calculations. For the entire biosphere, the value (most of which is outside the market) is estimated to be in the range of US\$16–54 trillion (10<sup>12</sup>) per year, with an average of US\$33 trillion per year. Because of the nature of the uncertainties, this must be considered a minimum estimate. Global gross national product total is around US\$18 trillion per year.**

Because ecosystem services are not fully 'captured' in commercial markets or adequately quantified in terms comparable with economic services and manufactured capital, they are often given too little weight in policy decisions. This neglect may ultimately compromise the sustainability of humans in the biosphere. The economies of the Earth would grind to a halt without the services of ecological life-support systems, so in one sense their total value to the economy is infinite. However, it can be instructive to estimate the 'incremental' or 'marginal' value of ecosystem services (the estimated rate of change of value compared with changes in ecosystem services from their current levels). There have been many studies in the past few decades aimed at estimating the value of a wide variety of ecosystem services. We have gathered together this large (but scattered) amount of information and present it here in a form useful for ecologists, economists, policy makers and the general public. From this synthesis, we have estimated values for ecosystem services per unit area by biome, and then multiplied by the total area of each biome and summed over all services and biomes.

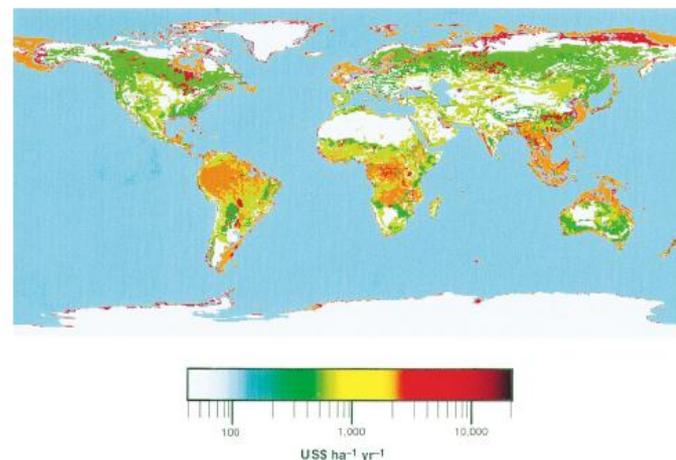
Although we acknowledge that there are many conceptual and empirical problems inherent in producing such an estimate, we think this exercise is essential in order to: (1) make the range of potential values of the services of ecosystems more apparent; (2) establish at least a first approximation of the relative magnitude of global ecosystem services; (3) set up a framework for their further analysis; (4) point out those areas most in need of additional research; and (5) stimulate additional research and debate. Most of the problems and uncertainties we encountered indicate that our

estimate represents a minimum value, which would probably increase: (1) with additional effort in studying and valuing a broader range of ecosystem services; (2) with the incorporation of more realistic representations of ecosystem dynamics and interdependence; and (3) as ecosystem services become more stressed and 'scarce' in the future.

### Ecosystem functions and ecosystem services

Ecosystem functions refer variously to the habitat, biological or system properties or processes of ecosystems. Ecosystem goods (such as food) and services (such as waste assimilation) represent the benefits human populations derive, directly or indirectly, from ecosystem functions. For simplicity, we will refer to ecosystem goods and services together as ecosystem services. A large number of functions and services can be identified<sup>1–4</sup>. Reference 5 provides a recent, detailed compendium on describing, measuring and valuing ecosystem services. For the purposes of this analysis we grouped ecosystem services into 17 major categories. These groups are listed in Table 1. We included only renewable ecosystem services, excluding non-renewable fuels and minerals and the atmosphere. Note that ecosystem services and functions do not necessarily show a one-to-one correspondence. In some cases a single ecosystem service is the product of two or more ecosystem functions whereas in other cases a single ecosystem function contributes to two or more ecosystem services. It is also important to emphasize the interdependent nature of many ecosystem functions. For example, some of the net primary production in an ecosystem ends up as food, the consumption of which generates respiratory products necessary for primary production. Even though these functions and services are interdependent, in many cases they can be added because they represent 'joint products' of the ecosystem, which support human

Figure 2 Global map of the value of ecosystem services. See Supplementary Information and Table 2 for details.



Wetlands	\$14,785 ha <sup>-1</sup> yr <sup>-1</sup>
Lakes/ivers	\$ 8,498
Tropical forests	\$ 2,007
Coral reefs	\$ 675
Open ocean	\$ 252
Grasslands	\$ 232



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# CONCLUSIONS

- REDD + as part of the green growth strategy in Vietnam
- To maximize impact, REDD+ will be viewed as an options to achieve set domestic GHG emissions policy goals
- Natural capital accounting will be mainstreamed in planning (as of 2014, Vietnam will start using green GDP as a key development indicator)

