

# REDUCING EMISSIONS FROM DEFORESTATION AND FOREST DEGRADATION



## 101: Introduction to REDD and Readiness

### Climate Change – the Basics

In 1992, the countries of the world agreed that temperatures and weather patterns were changing at an unusually fast rate. Under the United Nations, they decided to meet every year to discuss why this was happening and what, if anything, should be done about it.

By 1997, most scientists had concluded that temperatures around the world were rising much faster than usual and that the main reason for this was increasing levels of **Greenhouse Gases** in the atmosphere. These gases trap heat from the sun and stop it from escaping back into space, acting like a greenhouse. They occur naturally but are also produced when oil, coal and wood are burned for energy. Therefore, as the world's population grows, and the more energy we need, the more greenhouse gases we send into the atmosphere. Carbon dioxide (**CO<sub>2</sub>**) is the most important greenhouse gas.



## Why REDD?

### Bringing Forests into the Response to Climate Change

When we think of climate change, we usually think of melting polar ice caps and rising sea levels. But the impacts of climate change are far-reaching, and will also affect forests, and the livelihoods of people who depend on them.

Forests are unique, because they both contribute to causing climate change and are victims of its impacts. Likewise, they also have the potential to be a double-solution to climate change – by **mitigating** its causes, and help society **adapt** to its impacts.

- Preventing deforestation and forest degradation can mitigate nearly 20% of global CO<sub>2</sub> emissions;
- Standing forests can help us adapt by providing valuable ecosystem services.

Climate change can damage forest health in many ways. Decreased rainfall and rising temperatures can cause drought – increasing the amount of forest fires, and reducing forest resources.

A damaged forest will not be able to provide the natural ecosystem services that sustain livelihoods and aid in adaptation to climate change. Forests control soil erosion, provide clean water, and create corridors for wildlife and plants to move to more favorable climates. Losing these services will impact the lives and livelihoods of people who depend on forest resources.

Forests can also contribute to climate change if they are not managed sustainably. When timber is harvested, a tree becomes a source of greenhouse gases as all its stored carbon is released as CO<sub>2</sub>, and the tree ceases to be a carbon sink – it can no longer absorb CO<sub>2</sub> from the atmosphere.

## What is REDD?

### Providing Rewards and New Perspectives

There is growing recognition in the international community that if forests are to be incorporated into a global climate change solution, developing countries must be rewarded for reducing **deforestation** (when forests are cleared for other land uses) and forest **degradation** (when forest resources are damaged). After all, forested land can be valuable – for timber, and for its potential to be converted into commercial plantations or to agriculture to feed a growing population. Financial rewards are necessary to ensure forested land is most valuable as a forest.

Reducing Emissions from Deforestation and Forest Degradation (REDD) is a mechanism being designed to provide these rewards. Under this system, countries will measure and monitor the emissions of CO<sub>2</sub> resulting from deforestation and degradation within their borders. After a certain time period, they will calculate the amount of emissions that were reduced and receive tradable forest carbon credits based on the reduction. These credits can then be sold on the global carbon market.

**Summary:** *REDD provides financial rewards for avoided deforestation and forest degradation. In doing so, it also provides incentive to manage forests sustainably and equitably for people who live in and around forested areas.*



## Where is REDD Now?

### REDD's Current Status

More specifically, what will REDD look like? The REDD mechanism is still in the process of being designed, but right now a few things are known:

- REDD will reward avoided deforestation and degradation
- REDD will enhance forest quality
- Participation in REDD will be voluntary

In December 2009, the nations of the world will meet again to reach agreement on a global strategy for tackling climate change after 2012 (when the first phase of the current agreement, known as the Kyoto Protocol, is due to expire). One of the key decisions will be whether or not to include REDD in this strategy. Even if the meeting gives the go-ahead to proceed with REDD demonstration projects and preparation activities, the final shape of REDD will not be known until at least 2011.

Meanwhile, the international debate is focusing on the aspects of REDD which are unknown:

- How will REDD be implemented? Will it be through national programs or on a project-by-project basis?
- Who will pay for REDD and how will they pay?
- Who owns the carbon? Who will receive payment for carbon credits generated through REDD?
- How do you measure deforestation and degradation?
- What is the definition of "degradation"?
- How can we make REDD work for the benefit of people who live in and around forests?

### Getting Ready for REDD

The success of REDD is dependent on a country's capacity to implement it. Many questions about forest tenure and inventory design need to be answered before REDD projects can start. For example, if it is unclear who owns the forest, who will receive the revenues generated through REDD? REDD is not yet part of the global climate change agreement, so, over the next few years, there is time for countries to build their capacity to implement REDD.

#### Steps to Readiness

##### *1) Reference scenario and inventory*

Countries must measure their existing forest resources through accurate national inventories, and then estimate the amount of carbon contained in these forests. They must also make predictions of how this national forest carbon stock will change in the future, based on the best-available evidence, including, for example, historical trends of deforestation and future demand for forest resources and agricultural land. This prediction, or **reference scenario**, will be used to assess a country's success in achieving REDD targets.

This is a difficult job. It is impossible to know for certain what will happen to forests in the future, so predictions cannot be treated as fact. Each country's reference scenario will have to be carefully verified by independent experts. Some countries will inevitably have a more unpredictable future than others, and this level of risk will affect the potential of the country to generate revenue from REDD.

### 2) National monitoring system

Changes in forest carbon stocks must be monitored over time, so countries will be able to make official claims of emissions reduction. A national accounting system for forest carbon stocks must be developed, which will combine the records from all projects within the country that are working with REDD.

### 3) National REDD strategy

A National REDD working group must be formed, involving the public and private sector and civil society, which will consult with all forest sector stakeholders in order to develop a REDD strategy that is truly national.

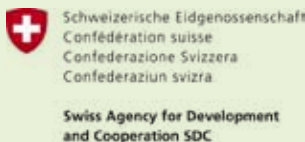
#### Roles of a National REDD Working Group

- Assess training needs
- Monitor and evaluate progress of REDD readiness plan
- Identify expertise, funding and other resources
- Develop policy recommendations
- Collect Information
- Manage and coordinate stakeholder consultations

Implementation of REDD will cover a wide range of activities including capacity building, data collection and management, forest management, forest protection and monitoring of results. As well as defining and describing these activities, a REDD strategy must include:

- Assessments of social and environmental impacts of potential REDD activities
- Realistic needs assessments of human and financial resources
- Necessary conditions for REDD implementation, including:
  - Legal and institutional arrangements – clarify the responsibilities of specific government agencies. Make sure REDD is in line with national laws and policies
  - Design of equitable payment mechanism – ensure that all actors involved receive a fair and appropriate proportion of revenues
  - Ownership of carbon rights
  - Record keeping system – to keep track of all REDD activities in the country, including those run by NGOs and the private sector

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Forestry Training Center  
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(RECOFTC)**

PO Box 1111  
Kasetsart University  
Bangkok 10903, Thailand  
Tel: +66 (0)2 940 5700  
Fax: +66 (0)2 561 4880  
Email: [info@recoftc.org](mailto:info@recoftc.org)  
Website: [www.recoftc.org](http://www.recoftc.org)

### Equity Under REDD

REDD must engage and equitably distribute benefits to many stakeholders, including local forest managers, local government and forestry officials, local NGOs and civil society groups concerned with forest management, and above all the forest-dependent households. These stakeholders have the right to receive REDD benefits in return for their contributions to implementing REDD.

Civil society, NGOs, and communities will be essential for implementing REDD at the local level by practicing sustainable forest management. Community forestry will also contribute to realizing key REDD outcomes: improved livelihoods, healthy forest carbon stocks and generation of lessons learned about sustainable forest management. Local stakeholders are also ideal data collectors – with little training, they can accurately and frequently collect necessary information about deforestation and forest degradation through on the ground monitoring. In return, REDD stands to benefit local stakeholders through:

- Clarifying land tenure and access rights
- Sustaining forest-resources and the livelihoods of those who depend on them
- Awarding them global recognition as responsible forest managers