

Promotion of Developing Countries

Frankfurt, Dezember 2007

Emission Reductions from Forests A Sector Approach based on Experience from German Financial Cooperation

Introduction

In 2005, the 11th Conference of the Parties to the U.N. Framework Convention on Climate Change (UNFCCC) mandated a two-year discussion process on *Reducing Emissions from Deforestation in Developing Countries*. Two workshops held in Rome 2006 and in Cairns 2007 brought together policymakers and experts of all interested country Parties. The approaches presented there on reducing forest emissions in developing countries were not restricted to deforestation only, but also included proposals on forest management, afforestation and reforestation. This is explained by the fact that deforestation is the result of land-use decisions across the whole sector. On these workshops, gaps in knowledge were identified, and the need for capacity development stressed. Forest inventories of developing countries and forest governance need to be improved in most cases. The optimistic message was conveyed by the experts that **methodological problems can be solved, once there is a policy framework that allows for learning by doing.**

Reducing Emissions from Deforestation and Degradation (REDD) is actually being discussed under the UNFCCC, and not the Kyoto Protocol (KP), with the US being the only Party with a dissenting view on the issue. Acknowledging that the instrument to be created will most likely be operating outside and independently from the KP, and its scope may be wider than deforestation only, we nevertheless chose to denominate it “REDD Mechanism” in this paper.

For development cooperation, environmental integrity and equity are synergetic goals. Poverty is a major underlying cause for deforestation and degradation processes.

The present paper distinguishes four design elements of the to-be mechanism:

- (i) Scope – Which activities to include?
- (ii) Implementation level – How to integrate sub-national programs and activities?
- (iii) Compensation – Will it be based on a voluntary fund or on integration into existing carbon markets?

- (iv) Readiness – What is needed for countries to participate, and how can readiness be achieved?

An initiative by the World Bank is actually putting together a prototype for a future REDD Mechanism, by the name of *Forest Carbon Partnership Facility (FCPF)*. It shall explore issues and options of REDD under different country conditions.

German development cooperation, on the other hand, has long been active in forest management and protection in tropical countries. We will sketch some lessons learned from these activities.

Finally, some conclusions and recommendations will be given for the Bali negotiation process.

There are a number of basic **criteria derived from the goal of environmental integrity**, to be observed when designing a new mechanism for REDD:

- a) Reward real, additional and measurable emission reductions;
- b) Provide long-term incentives for responsible land use;
- c) Be flexible enough to adapt to national circumstances and respect national sovereignty;
- d) Not weaken incentives for reductions in other sectors;
- e) Be simple and invite for broad participation of developing countries
- f) Reward early action.

The **equity goal** can be operationalized by the following criteria:

- a) Any activities must be aimed at improving rural livelihoods;
- b) Participation of countries unattractive for private-sector engagement shall be encouraged by public finance;
- c) When determining the emission target level, the human and financial capacities of the respective country shall be considered;
- d) Distributional aspects need to be taken into account in all stages of international decision-making.

1 Scope

Approaches proposed so far on which human activities to include bear the handwriting of each proponent country. In Brazil, deforestation is being well-monitored and has been reduced over the last three years. Therefore, the country proposes concentrating on deforestation reduction only. The Coalition for Rainforest Nations, including the Congo Basin and countries, where degradation is the main concern, proposes to account for the carbon effects of forest management practices too. This would include the conversion of natural forests to palm oil or rubber plantations. Finally, India and China, countries where most natural forests have already been cut down, promote afforestation / reforestation and forest management to be accounted for. **The choice of the scope becomes a distributional conflict.** None of the models proposed so far is sufficiently universal as to cater the needs of all developing countries. **Broad participation is crucial** for avoiding deforestation moving elsewhere ('leakage').

Besides equity, there are also methodological reasons for the inclusion of all forest-related activities: There are generic **forest definition thresholds** (area size, tree height in maturity, crown cover density) first adopted by Annex I countries for distinguishing between the different compartments of their reporting duties under the Kyoto Protocol. In principle however, these are **non-exclusive for accounting**. Limiting carbon accounting to some specific forest land uses would attach an extremely high weight to appropriate definitions, because they would determine the distribution of funds. Forest definitions have been a key methodological problem in the implementation of the afforestation & reforestation CDM.

Hence there are **technical and at the same time distributional arguments for opening up the scope of the REDD Mechanism** to the same menu of options Annex I Parties have for reporting in the land use sector. In the Kyoto Protocol, Art. 3.3 obliges Parties to report emissions and uptake from afforestation, reforestation and deforestation (ARD). Art. 3.4 optionally allows them to account for carbon uptake in forest management (FM) activities. These articles could serve as a blueprint for the scope element of the REDD Mechanism. Adapted to the situation of non-Annex I country Parties, the result could be a **voluntary emission reduction commitment for the whole forest sector**. As in many cases capacity will lack for monitoring the FM carbon balance, the emission reductions from REDD would initially be discounted, in order to account for potential leakage effects towards increased forest degradation.

2 Implementation level

Agreement under the UNFCCC is found among the governments of its country Parties. Nevertheless, it is in the spirit of the Climate Convention to put incentives for sub-national entities to be entrusted with tasks that serve its ultimate objective. This has been the case

with Activities Implemented Jointly (1995) and with the three market mechanisms under the Kyoto Protocol (1997). Any such activity however requires the authorization by the respective government.

In order to take most advantage of the reduction potential of REDD, early action is indispensable. **There is no contradiction between a voluntary country target in the forest sector and the delegation of certain tasks to sub-national entities.** Some experience on project-based REDD has already been gathered over the past years. **Today's challenge is to design programs and projects in a way that they have an interface to a voluntary REDD target of the host country level.**

This may be done under tax easements, a subsidy scheme, or via bundled payments for environmental services, of which the climate service is one. Whether a project-based approach can be helpful to fulfill such a commitment will ultimately depend on the specific national circumstances. Rather than contributing to a fund or a country-wide program, the private sector has a preference for concrete, on-the-ground activities. In many cases, Parties still lack the preconditions for private engagement. **Private-sector activities will be encouraged by clarifying land tenure and improving law enforcement.**

An REDD Mechanism should **not preclude whether the participating country may invite foreign project participants.** The stronger the linkage to the international carbon market, the stronger the incentive for international investors to participate in such activities. This latter aspect leads us directly to the issue of compensation.

3 Compensation

Rewarding developing countries for slowing deforestation intuitively conflicts with the polluter-pays principle of environmental policy. However, land use in these countries is closely linked to industrialized countries' demand for agricultural and silvicultural products. Agricultural subsidies of Annex I countries tend to distort land use patterns far away from the beneficiaries. Without appropriate safeguards, the switch to biofuels is expected to put additional pressure on tropical forests. Resulting from the principle of common, but differentiated responsibility, **industrialized countries need to take their share in REDD.**¹

On the other hand, slowing down deforestation will in many cases be profitable for the target countries. Deforestation is often linked to unacceptable social costs on the macro level. Bad governance and high discount rates are important barriers against rational resource use. Compensations for REDD can help remove these barriers and mobilizing development potentials. Once this has been achieved, the baseline for land use emissions needs to be reassessed. An REDD Mechanism may channel North-South transfers for a

¹ One caveat is needed at this point: In case equal per-capita-emission allowances were allocated, like demanded by the German chancellor, no additional incentive mechanism may be needed. Given the appropriate country capacities, all deforestation emissions at marginal costs below the international carbon price will be stopped. In this case, only the "readiness" element would be needed.

timeframe of one generation only. After this period, most of today's developing countries will be in the position to accept full liability for the external costs of their land use emissions. **REDD shall not become an infinite subsidy mechanism.**

Most proposals foresee linking emission reductions to the compliance market between the parties listed under Annex I of the UNFCCC. So far, Brazil has been opposing this option and proposes a voluntary fund to be replenished with contributions from Annex II countries (OECD countries in 1992). It is estimated that some 10 billion US\$ per annum will be needed to make up for the opportunity costs and administrative needs of reducing 50 percent of worldwide emissions from deforestation. Experience with the Special Climate Fund under the UNFCCC has shown that **voluntary contributions are unlikely to provide sufficient resources over the long term**, if not linked to immediate benefit for the donors. The volatility of ODA budgets justifies doubts on the reliability of exclusive international public funding.

Most Parties agree that developing countries need upfront resources before they are able to even consider any voluntary REDD commitment. Any REDD Mechanism will therefore have to provide grants for capacity building (see next chapter). The question whether REDD credits will be allowed to offset industrial emissions from Annex I countries is not only a moral one. The ability of the market to absorb reductions in the order of 10 gigatons until 2020 mainly depends on future commitments. The conundrum is as follows: Only substantive emission cuts by industrialized countries will drive demand as high as to absorb the potential supply from REDD. A foreseeable long-term scarcity of emission permits will also drive energy and industry investment decisions in a way to de-carbonize the economy. On the contrary, if industrialized country targets are too lenient, prices will erode, few REDD credits will be produced, and permanence of the forests conserved may not be granted, because the associated GHG levels will on the long run turn forests from a net sink to a net source, thus increasing future adaptation costs.

Under an ideal climate regime on-track to keeping the temperature increase from pre-industrial levels below 2° C, full integration of REDD credits in the market for GHG reductions is the first-best option. For situations where the necessary demand level cannot be reached, there is a whole array of options for capping demand, supply or prices until reaching the desired incentive level. In doing so, attention needs to be paid to the distributional effect of each option. **Clearly, the highest market liquidity will be granted in case full carbon market integration is achieved.**

4 Readiness

Readiness comprises everything needed for developing countries to participate in a REDD Mechanism, like:

- The political will, including public awareness.

- Stable institutions for achieving the emission reduction goal over longer periods.
- The capacity to assess forest inventories and – more complex – the related carbon stock changes.
- Forest governance, law making and enforcement.
- Removal of perverse incentives for deforestation and land degradation over all sectors.
- The technical capability to determine a future land-use emission scenario and a target level.

The **determination of a target level for REDD** is envisaged as a two-stage process.

First, country experts choose a baseline approach that is most appropriate and conservative departing from available forest inventories. The IPCC proposes a tiered approach for country inventories, with discounts according to the respective level of uncertainty. A baseline is the most likely emission scenario for the forest sector, and it may be sustained by historic data and models that use different land use drivers as variables. There is considerable experience on baseline determination and review under the Clean Development Mechanism (CDM) of the Kyoto Protocol. **An expert review for the country baseline could be undertaken by the same panel that actually reviews Annex I inventories.**

In the second stage, the country determines the share of reductions it is willing to achieve internally. Obviously, emerging economies will be expected to bring a higher contribution than poorer developing countries. The efforts the country commits itself to will not be accounted for as REDD credits. Any reductions beyond this level can be transferred.

A two-stage process assures that a minimum of “hot air” (over-allocation of emission permits) is created, and it allows for a differentiated treatment of target countries.

Financing readiness will initially create the basis for an assessment of forest resource emission and uptakes. This can only be achieved with grant-based finance, because it brings no immediate benefit. Once a voluntary target emission level is declared however, countries have the chance for ex-post emission reduction credits. Investment needed in the implementation phase should be attributed as a loan. Liability for the **permanence** of forest-based emission reductions can be solved in a variety of ways. The economically less attractive means is temporary crediting, because it holds the buyer liable for any future reversal. Politically, temporary crediting conflicts with the objective of broadening developing country participation in the climate regime. In order to make up for future losses, countries could opt for a **credit buffer, international carbon insurance**, or spread the risk via **bilateral or multilateral compliance partnerships**. These partnerships could mitigate different types of risk:

1. The risk that emissions do not go below the target level, and upfront investment is sunk;
2. The risk that emissions increase again in the future, after the sale of emission permits;
 - a. Due to economic or political reasons
 - b. Due to climatic change itself

Risk (1) would apply if activities and measures were pre-financed by loans, and no certificates could be sold later. Risk (2a) applies in principle, when opportunity costs for foregone land use costs become higher than the credit value. Case (2b) could be founded in case abnormalities like El Niño occur more frequently than expected, or if a change in climate slowly decreases carbon content in existing ecosystems, so that emission factors per ecosystem need to be corrected downwards in later commitment periods.

A special form of these partnerships would be the one with Annex I countries that in exchange for upfront finance and shared liability gain preferential access to the REDD credits. They could direct bilateral financial and technical cooperation in a way to ensure compliance.

Most methodological problems of an REDD Mechanism can be summarized under the 'readiness' category. In methodological questions, **there is a high potential for a transfer of know-how, vertically (N-S) and horizontally (S-S), given the number of centers of excellence on tropical forestry located in developing countries.**

5 The Forest Carbon Partnership Facility

With the aim of "testing the waters": for REDD, the World Bank is actually putting up a so-called *Forest Carbon Partnership Facility (FCPF)* with an expected initial lifetime of approximately five years. The FCPF will comprise two mechanisms: i) a readiness mechanism supported by a Readiness Fund; and ii) a carbon mechanism supported by a Carbon Fund. The main objectives of the FCPF are:

- 1) to assist eligible REDD Countries in their efforts to reduce emissions from deforestation/degradation by providing them with financial and technical assistance in building their capacity to benefit from a future system of positive incentives from REDD;
- 2) to pilot a performance-based payment system for emission reductions generated from REDD activities;
- 3) to build public and private partnerships among participants to the FCPF and the relevant international organizations, NGOs and private sector entities.

There will be about five countries eligible for these compensation payments. While in principle, these payments will be ex-post (performance-based), there is **openness for some upfront payments**.

The final design of the FCPF will depend on the decisions to be taken at Bali. **Germany** is a major shareholder in the upcoming World Bank facility. German development cooperation however does not stop here.

6 German Development Cooperation and REDD

Germany looks back on extensive cooperation in the protection of natural resources. Sectoral programs include the Pilot Program to Conserve the Brazilian Rain Forest (PPG7) and the Amazonian Protected Areas Program (ARPA) where technical and financial cooperation have been combined. Germany also contributes to the Central African Forest Commission (COMIFAC), an initiative of ten countries of the Congo Basin to jointly improve their forest administration and management. In Asia, German bilateral assistance has successfully supported forest development programs especially in China and Vietnam. All these activities have brought undeniable environmental benefit, which however has hardly been quantified.

Many countries have been cooperating with Germany in forest development activities, all of which aim at improving forest quality and coverage. Some countries have achieved considerable progress over the last 10-20 years, others are still not there due to many institutional, legal, economic and other factors, including know-how. Any REDD mechanism will contribute to improving forest development, but only in few countries it will be sufficient. Continued or even enhanced development cooperation in the forestry sector and conservation is required to successfully “turn the tide” in many countries.

From all these experiences, we know, building up readiness is a process of at least three years. The German KfW Development Bank sees the **necessity of a learning-by-doing phase**, including an **early start of project-based activities**. A **“Nested Approach” to REDD**, as proposed by several Parties, **will help identifying the most cost-efficient means** under different national circumstances. At this point, KfW Development Bank sees a **complementary role for bilateral cooperation**, which would leverage additional investment in REDD. Financial cooperation could provide the upfront finance needed to implement national or sub-national programs aiming at generating environmental services from forests. **Compliance partnerships under an REDD Mechanism, can be a strong form of bilateral commitment.** This type of commitment is most needed, where private equity is not available, due to the country risk profile. Bilateral financial cooperation has the potential to spread these risks worldwide.

7 Conclusions and recommendations

The two-year process leading to Bali has unveiled a number of technical and methodological questions surrounding REDD. The good news is that these can be solved, given the right political framework.

The framework decision needed will define an **REDD Mechanism that is flexible, simple and transparent enough to invite for broad participation**. It needs to impose the **criteria of environmental integrity**, but it shall not be policy-prescriptive for national governments on how to implement policies and measures aimed at reaching the goal of reducing forestry sector emissions. As land planning is an integrated process, **the choice of activities eligible for accounting shall be unrestricted**.

The level of implementation of a national REDD commitment is up to the government of the target countries to decide. **In most cases, it will be beneficial to involve sub-national entities, which may also leverage additional finance. Sub-national program and project-based activities constitute a dynamic factor, which also drives readiness on the state and administration levels.** There is a need for development cooperation to counterbalance the disadvantage towards the private sector of countries with an unfavorable investment climate,

There are conflicting views on a compensation mechanism. **From an economic perspective and given the estimated finance needs, it is most promising to harness the carbon market for an REDD Mechanism.** It will ultimately depend on future Annex I emission limitations how much market integration can be allowed without eroding the carbon market.

Incentives shall be reliable and long-term, be instrumental in overcoming barriers and liberating development potentials. As they can impulse structural reforms in the land use sector, they will eventually become obsolete on the long run (15 – 50 years).

In order to gain experience and to take advantage of today's low-cost opportunities for REDD in developing countries, **conditions for an early start shall be provided**. This can be achieved by **allowing REDD during the first commitment period to be banked towards future commitment periods**. There are good precedents for this: When CDM project activities starting from the year 2000 were allowed for offsetting Annex I targets during the first commitment period, the future price level was equally unforeseeable. Nevertheless, the promise of market integration provided enough incentive for an early start.

Contact:

Alfred Schweitzer

KfW Entwicklungsbank

E-mail: Alfred.Schweitzer@kfw.de

Promotion of Developing Countries

Frankfurt, Dezember 2007

Emission Reductions from Forests A Sector Approach based on Experience from German Financial Cooperation

Introduction

In 2005, the 11th Conference of the Parties to the U.N. Framework Convention on Climate Change (UNFCCC) mandated a two-year discussion process on *Reducing Emissions from Deforestation in Developing Countries*. Two workshops held in Rome 2006 and in Cairns 2007 brought together policymakers and experts of all interested country Parties. The approaches presented there on reducing forest emissions in developing countries were not restricted to deforestation only, but also included proposals on forest management, afforestation and reforestation. This is explained by the fact that deforestation is the result of land-use decisions across the whole sector. On these workshops, gaps in knowledge were identified, and the need for capacity development stressed. Forest inventories of developing countries and forest governance need to be improved in most cases. The optimistic message was conveyed by the experts that **methodological problems can be solved, once there is a policy framework that allows for learning by doing.**

Reducing Emissions from Deforestation and Degradation (REDD) is actually being discussed under the UNFCCC, and not the Kyoto Protocol (KP), with the US being the only Party with a dissenting view on the issue. Acknowledging that the instrument to be created will most likely be operating outside and independently from the KP, and its scope may be wider than deforestation only, we nevertheless chose to denominate it “REDD Mechanism” in this paper.

For development cooperation, environmental integrity and equity are synergetic goals. Poverty is a major underlying cause for deforestation and degradation processes.

The present paper distinguishes four design elements of the to-be mechanism:

- (i) Scope – Which activities to include?
- (ii) Implementation level – How to integrate sub-national programs and activities?
- (iii) Compensation – Will it be based on a voluntary fund or on integration into existing carbon markets?

(iv) Readiness – What is needed for countries to participate, and how can readiness be achieved?

An initiative by the World Bank is actually putting together a prototype for a future REDD Mechanism, by the name of *Forest Carbon Partnership Facility (FCPF)*. It shall explore issues and options of REDD under different country conditions.

German development cooperation, on the other hand, has long been active in forest management and protection in tropical countries. We will sketch some lessons learned from these activities.

Finally, some conclusions and recommendations will be given for the Bali negotiation process.

There are a number of basic **criteria derived from the goal of environmental integrity**, to be observed when designing a new mechanism for REDD:

- a) Reward real, additional and measurable emission reductions;
- b) Provide long-term incentives for responsible land use;
- c) Be flexible enough to adapt to national circumstances and respect national sovereignty;
- d) Not weaken incentives for reductions in other sectors;
- e) Be simple and invite for broad participation of developing countries
- f) Reward early action.

The **equity goal** can be operationalized by the following criteria:

- a) Any activities must be aimed at improving rural livelihoods;
- b) Participation of countries unattractive for private-sector engagement shall be encouraged by public finance;
- c) When determining the emission target level, the human and financial capacities of the respective country shall be considered;
- d) Distributional aspects need to be taken into account in all stages of international decision-making.

1 Scope

Approaches proposed so far on which human activities to include bear the handwriting of each proponent country. In Brazil, deforestation is being well-monitored and has been reduced over the last three years. Therefore, the country proposes concentrating on deforestation reduction only. The Coalition for Rainforest Nations, including the Congo Basin and countries, where degradation is the main concern, proposes to account for the carbon effects of forest management practices too. This would include the conversion of natural forests to palm oil or rubber plantations. Finally, India and China, countries where most natural forests have already been cut down, promote afforestation / reforestation and forest management to be accounted for. **The choice of the scope becomes a distributional conflict.** None of the models proposed so far is sufficiently universal as to cater the needs of all developing countries. **Broad participation is crucial** for avoiding deforestation moving elsewhere ('leakage').

Besides equity, there are also methodological reasons for the inclusion of all forest-related activities: There are generic **forest definition thresholds** (area size, tree height in maturity, crown cover density) first adopted by Annex I countries for distinguishing between the different compartments of their reporting duties under the Kyoto Protocol. In principle however, these are **non-exclusive for accounting**. Limiting carbon accounting to some specific forest land uses would attach an extremely high weight to appropriate definitions, because they would determine the distribution of funds. Forest definitions have been a key methodological problem in the implementation of the afforestation & reforestation CDM.

Hence there are **technical and at the same time distributional arguments for opening up the scope of the REDD Mechanism** to the same menu of options Annex I Parties have for reporting in the land use sector. In the Kyoto Protocol, Art. 3.3 obliges Parties to report emissions and uptake from afforestation, reforestation and deforestation (ARD). Art. 3.4 optionally allows them to account for carbon uptake in forest management (FM) activities. These articles could serve as a blueprint for the scope element of the REDD Mechanism. Adapted to the situation of non-Annex I country Parties, the result could be a **voluntary emission reduction commitment for the whole forest sector**. As in many cases capacity will lack for monitoring the FM carbon balance, the emission reductions from REDD would initially be discounted, in order to account for potential leakage effects towards increased forest degradation.

2 Implementation level

Agreement under the UNFCCC is found among the governments of its country Parties. Nevertheless, it is in the spirit of the Climate Convention to put incentives for sub-national entities to be entrusted with tasks that serve its ultimate objective. This has been the case

with Activities Implemented Jointly (1995) and with the three market mechanisms under the Kyoto Protocol (1997). Any such activity however requires the authorization by the respective government.

In order to take most advantage of the reduction potential of REDD, early action is indispensable. **There is no contradiction between a voluntary country target in the forest sector and the delegation of certain tasks to sub-national entities.** Some experience on project-based REDD has already been gathered over the past years. **Today's challenge is to design programs and projects in a way that they have an interface to a voluntary REDD target of the host country level.**

This may be done under tax easements, a subsidy scheme, or via bundled payments for environmental services, of which the climate service is one. Whether a project-based approach can be helpful to fulfill such a commitment will ultimately depend on the specific national circumstances. Rather than contributing to a fund or a country-wide program, the private sector has a preference for concrete, on-the-ground activities. In many cases, Parties still lack the preconditions for private engagement. **Private-sector activities will be encouraged by clarifying land tenure and improving law enforcement.**

An REDD Mechanism should **not preclude whether the participating country may invite foreign project participants.** The stronger the linkage to the international carbon market, the stronger the incentive for international investors to participate in such activities. This latter aspect leads us directly to the issue of compensation.

3 Compensation

Rewarding developing countries for slowing deforestation intuitively conflicts with the polluter-pays principle of environmental policy. However, land use in these countries is closely linked to industrialized countries' demand for agricultural and silvicultural products. Agricultural subsidies of Annex I countries tend to distort land use patterns far away from the beneficiaries. Without appropriate safeguards, the switch to biofuels is expected to put additional pressure on tropical forests. Resulting from the principle of common, but differentiated responsibility, **industrialized countries need to take their share in REDD.**¹

On the other hand, slowing down deforestation will in many cases be profitable for the target countries. Deforestation is often linked to unacceptable social costs on the macro level. Bad governance and high discount rates are important barriers against rational resource use. Compensations for REDD can help remove these barriers and mobilizing development potentials. Once this has been achieved, the baseline for land use emissions needs to be reassessed. An REDD Mechanism may channel North-South transfers for a

¹ One caveat is needed at this point: In case equal per-capita-emission allowances were allocated, like demanded by the German chancellor, no additional incentive mechanism may be needed. Given the appropriate country capacities, all deforestation emissions at marginal costs below the international carbon price will be stopped. In this case, only the "readiness" element would be needed.

timeframe of one generation only. After this period, most of today's developing countries will be in the position to accept full liability for the external costs of their land use emissions. **REDD shall not become an infinite subsidy mechanism.**

Most proposals foresee linking emission reductions to the compliance market between the parties listed under Annex I of the UNFCCC. So far, Brazil has been opposing this option and proposes a voluntary fund to be replenished with contributions from Annex II countries (OECD countries in 1992). It is estimated that some 10 billion US\$ per annum will be needed to make up for the opportunity costs and administrative needs of reducing 50 percent of worldwide emissions from deforestation. Experience with the Special Climate Fund under the UNFCCC has shown that **voluntary contributions are unlikely to provide sufficient resources over the long term**, if not linked to immediate benefit for the donors. The volatility of ODA budgets justifies doubts on the reliability of exclusive international public funding.

Most Parties agree that developing countries need upfront resources before they are able to even consider any voluntary REDD commitment. Any REDD Mechanism will therefore have to provide grants for capacity building (see next chapter). The question whether REDD credits will be allowed to offset industrial emissions from Annex I countries is not only a moral one. The ability of the market to absorb reductions in the order of 10 gigatons until 2020 mainly depends on future commitments. The conundrum is as follows: Only substantive emission cuts by industrialized countries will drive demand as high as to absorb the potential supply from REDD. A foreseeable long-term scarcity of emission permits will also drive energy and industry investment decisions in a way to de-carbonize the economy. On the contrary, if industrialized country targets are too lenient, prices will erode, few REDD credits will be produced, and permanence of the forests conserved may not be granted, because the associated GHG levels will on the long run turn forests from a net sink to a net source, thus increasing future adaptation costs.

Under an ideal climate regime on-track to keeping the temperature increase from pre-industrial levels below 2° C, full integration of REDD credits in the market for GHG reductions is the first-best option. For situations where the necessary demand level cannot be reached, there is a whole array of options for capping demand, supply or prices until reaching the desired incentive level. In doing so, attention needs to be paid to the distributional effect of each option. **Clearly, the highest market liquidity will be granted in case full carbon market integration is achieved.**

4 Readiness

Readiness comprises everything needed for developing countries to participate in a REDD Mechanism, like:

- The political will, including public awareness.

- Stable institutions for achieving the emission reduction goal over longer periods.
- The capacity to assess forest inventories and – more complex – the related carbon stock changes.
- Forest governance, law making and enforcement.
- Removal of perverse incentives for deforestation and land degradation over all sectors.
- The technical capability to determine a future land-use emission scenario and a target level.

The **determination of a target level for REDD** is envisaged as a two-stage process.

First, country experts choose a baseline approach that is most appropriate and conservative departing from available forest inventories. The IPCC proposes a tiered approach for country inventories, with discounts according to the respective level of uncertainty. A baseline is the most likely emission scenario for the forest sector, and it may be sustained by historic data and models that use different land use drivers as variables. There is considerable experience on baseline determination and review under the Clean Development Mechanism (CDM) of the Kyoto Protocol. **An expert review for the country baseline could be undertaken by the same panel that actually reviews Annex I inventories.**

In the second stage, the country determines the share of reductions it is willing to achieve internally. Obviously, emerging economies will be expected to bring a higher contribution than poorer developing countries. The efforts the country commits itself to will not be accounted for as REDD credits. Any reductions beyond this level can be transferred.

A two-stage process assures that a minimum of “hot air” (over-allocation of emission permits) is created, and it allows for a differentiated treatment of target countries.

Financing readiness will initially create the basis for an assessment of forest resource emission and uptakes. This can only be achieved with grant-based finance, because it brings no immediate benefit. Once a voluntary target emission level is declared however, countries have the chance for ex-post emission reduction credits. Investment needed in the implementation phase should be attributed as a loan. Liability for the **permanence** of forest-based emission reductions can be solved in a variety of ways. The economically less attractive means is temporary crediting, because it holds the buyer liable for any future reversal. Politically, temporary crediting conflicts with the objective of broadening developing country participation in the climate regime. In order to make up for future losses, countries could opt for a **credit buffer, international carbon insurance**, or spread the risk via **bilateral or multilateral compliance partnerships**. These partnerships could mitigate different types of risk:

1. The risk that emissions do not go below the target level, and upfront investment is sunk;
2. The risk that emissions increase again in the future, after the sale of emission permits;
 - a. Due to economic or political reasons
 - b. Due to climatic change itself

Risk (1) would apply if activities and measures were pre-financed by loans, and no certificates could be sold later. Risk (2a) applies in principle, when opportunity costs for foregone land use costs become higher than the credit value. Case (2b) could be founded in case abnormalities like El Niño occur more frequently than expected, or if a change in climate slowly decreases carbon content in existing ecosystems, so that emission factors per ecosystem need to be corrected downwards in later commitment periods.

A special form of these partnerships would be the one with Annex I countries that in exchange for upfront finance and shared liability gain preferential access to the REDD credits. They could direct bilateral financial and technical cooperation in a way to ensure compliance.

Most methodological problems of an REDD Mechanism can be summarized under the 'readiness' category. In methodological questions, **there is a high potential for a transfer of know-how, vertically (N-S) and horizontally (S-S), given the number of centers of excellence on tropical forestry located in developing countries.**

5 The Forest Carbon Partnership Facility

With the aim of "testing the waters": for REDD, the World Bank is actually putting up a so-called *Forest Carbon Partnership Facility (FCPF)* with an expected initial lifetime of approximately five years. The FCPF will comprise two mechanisms: i) a readiness mechanism supported by a Readiness Fund; and ii) a carbon mechanism supported by a Carbon Fund. The main objectives of the FCPF are:

- 1) to assist eligible REDD Countries in their efforts to reduce emissions from deforestation/degradation by providing them with financial and technical assistance in building their capacity to benefit from a future system of positive incentives from REDD;
- 2) to pilot a performance-based payment system for emission reductions generated from REDD activities;
- 3) to build public and private partnerships among participants to the FCPF and the relevant international organizations, NGOs and private sector entities.

There will be about five countries eligible for these compensation payments. While in principle, these payments will be ex-post (performance-based), there is **openness for some upfront payments**.

The final design of the FCPF will depend on the decisions to be taken at Bali. **Germany** is a major shareholder in the upcoming World Bank facility. German development cooperation however does not stop here.

6 German Development Cooperation and REDD

Germany looks back on extensive cooperation in the protection of natural resources. Sectoral programs include the Pilot Program to Conserve the Brazilian Rain Forest (PPG7) and the Amazonian Protected Areas Program (ARPA) where technical and financial cooperation have been combined. Germany also contributes to the Central African Forest Commission (COMIFAC), an initiative of ten countries of the Congo Basin to jointly improve their forest administration and management. In Asia, German bilateral assistance has successfully supported forest development programs especially in China and Vietnam. All these activities have brought undeniable environmental benefit, which however has hardly been quantified.

Many countries have been cooperating with Germany in forest development activities, all of which aim at improving forest quality and coverage. Some countries have achieved considerable progress over the last 10-20 years, others are still not there due to many institutional, legal, economic and other factors, including know-how. Any REDD mechanism will contribute to improving forest development, but only in few countries it will be sufficient. Continued or even enhanced development cooperation in the forestry sector and conservation is required to successfully “turn the tide” in many countries.

From all these experiences, we know, building up readiness is a process of at least three years. The German KfW Development Bank sees the **necessity of a learning-by-doing phase**, including an **early start of project-based activities**. A **“Nested Approach” to REDD**, as proposed by several Parties, **will help identifying the most cost-efficient means** under different national circumstances. At this point, KfW Development Bank sees a **complementary role for bilateral cooperation**, which would leverage additional investment in REDD. Financial cooperation could provide the upfront finance needed to implement national or sub-national programs aiming at generating environmental services from forests. **Compliance partnerships under an REDD Mechanism, can be a strong form of bilateral commitment.** This type of commitment is most needed, where private equity is not available, due to the country risk profile. Bilateral financial cooperation has the potential to spread these risks worldwide.

7 Conclusions and recommendations

The two-year process leading to Bali has unveiled a number of technical and methodological questions surrounding REDD. The good news is that these can be solved, given the right political framework.

The framework decision needed will define an **REDD Mechanism that is flexible, simple and transparent enough to invite for broad participation**. It needs to impose the **criteria of environmental integrity**, but it shall not be policy-prescriptive for national governments on how to implement policies and measures aimed at reaching the goal of reducing forestry sector emissions. As land planning is an integrated process, **the choice of activities eligible for accounting shall be unrestricted**.

The level of implementation of a national REDD commitment is up to the government of the target countries to decide. **In most cases, it will be beneficial to involve sub-national entities, which may also leverage additional finance. Sub-national program and project-based activities constitute a dynamic factor, which also drives readiness on the state and administration levels.** There is a need for development cooperation to counterbalance the disadvantage towards the private sector of countries with an unfavorable investment climate,

There are conflicting views on a compensation mechanism. **From an economic perspective and given the estimated finance needs, it is most promising to harness the carbon market for an REDD Mechanism.** It will ultimately depend on future Annex I emission limitations how much market integration can be allowed without eroding the carbon market.

Incentives shall be reliable and long-term, be instrumental in overcoming barriers and liberating development potentials. As they can impulse structural reforms in the land use sector, they will eventually become obsolete on the long run (15 – 50 years).

In order to gain experience and to take advantage of today's low-cost opportunities for REDD in developing countries, **conditions for an early start shall be provided**. This can be achieved by **allowing REDD during the first commitment period to be banked towards future commitment periods**. There are good precedents for this: When CDM project activities starting from the year 2000 were allowed for offsetting Annex I targets during the first commitment period, the future price level was equally unforeseeable. Nevertheless, the promise of market integration provided enough incentive for an early start.

Contact:

Alfred Schweitzer

KfW Entwicklungsbank

E-mail: Alfred.Schweitzer@kfw.de

Promotion of Developing Countries

Frankfurt, Dezember 2007

Emission Reductions from Forests A Sector Approach based on Experience from German Financial Cooperation

Introduction

In 2005, the 11th Conference of the Parties to the U.N. Framework Convention on Climate Change (UNFCCC) mandated a two-year discussion process on *Reducing Emissions from Deforestation in Developing Countries*. Two workshops held in Rome 2006 and in Cairns 2007 brought together policymakers and experts of all interested country Parties. The approaches presented there on reducing forest emissions in developing countries were not restricted to deforestation only, but also included proposals on forest management, afforestation and reforestation. This is explained by the fact that deforestation is the result of land-use decisions across the whole sector. On these workshops, gaps in knowledge were identified, and the need for capacity development stressed. Forest inventories of developing countries and forest governance need to be improved in most cases. The optimistic message was conveyed by the experts that **methodological problems can be solved, once there is a policy framework that allows for learning by doing.**

Reducing Emissions from Deforestation and Degradation (REDD) is actually being discussed under the UNFCCC, and not the Kyoto Protocol (KP), with the US being the only Party with a dissenting view on the issue. Acknowledging that the instrument to be created will most likely be operating outside and independently from the KP, and its scope may be wider than deforestation only, we nevertheless chose to denominate it “REDD Mechanism” in this paper.

For development cooperation, environmental integrity and equity are synergetic goals. Poverty is a major underlying cause for deforestation and degradation processes.

The present paper distinguishes four design elements of the to-be mechanism:

- (i) Scope – Which activities to include?
- (ii) Implementation level – How to integrate sub-national programs and activities?
- (iii) Compensation – Will it be based on a voluntary fund or on integration into existing carbon markets?

(iv) Readiness – What is needed for countries to participate, and how can readiness be achieved?

An initiative by the World Bank is actually putting together a prototype for a future REDD Mechanism, by the name of *Forest Carbon Partnership Facility (FCPF)*. It shall explore issues and options of REDD under different country conditions.

German development cooperation, on the other hand, has long been active in forest management and protection in tropical countries. We will sketch some lessons learned from these activities.

Finally, some conclusions and recommendations will be given for the Bali negotiation process.

There are a number of basic **criteria derived from the goal of environmental integrity**, to be observed when designing a new mechanism for REDD:

- a) Reward real, additional and measurable emission reductions;
- b) Provide long-term incentives for responsible land use;
- c) Be flexible enough to adapt to national circumstances and respect national sovereignty;
- d) Not weaken incentives for reductions in other sectors;
- e) Be simple and invite for broad participation of developing countries
- f) Reward early action.

The **equity goal** can be operationalized by the following criteria:

- a) Any activities must be aimed at improving rural livelihoods;
- b) Participation of countries unattractive for private-sector engagement shall be encouraged by public finance;
- c) When determining the emission target level, the human and financial capacities of the respective country shall be considered;
- d) Distributional aspects need to be taken into account in all stages of international decision-making.

1 Scope

Approaches proposed so far on which human activities to include bear the handwriting of each proponent country. In Brazil, deforestation is being well-monitored and has been reduced over the last three years. Therefore, the country proposes concentrating on deforestation reduction only. The Coalition for Rainforest Nations, including the Congo Basin and countries, where degradation is the main concern, proposes to account for the carbon effects of forest management practices too. This would include the conversion of natural forests to palm oil or rubber plantations. Finally, India and China, countries where most natural forests have already been cut down, promote afforestation / reforestation and forest management to be accounted for. **The choice of the scope becomes a distributional conflict.** None of the models proposed so far is sufficiently universal as to cater the needs of all developing countries. **Broad participation is crucial** for avoiding deforestation moving elsewhere ('leakage').

Besides equity, there are also methodological reasons for the inclusion of all forest-related activities: There are generic **forest definition thresholds** (area size, tree height in maturity, crown cover density) first adopted by Annex I countries for distinguishing between the different compartments of their reporting duties under the Kyoto Protocol. In principle however, these are **non-exclusive for accounting**. Limiting carbon accounting to some specific forest land uses would attach an extremely high weight to appropriate definitions, because they would determine the distribution of funds. Forest definitions have been a key methodological problem in the implementation of the afforestation & reforestation CDM.

Hence there are **technical and at the same time distributional arguments for opening up the scope of the REDD Mechanism** to the same menu of options Annex I Parties have for reporting in the land use sector. In the Kyoto Protocol, Art. 3.3 obliges Parties to report emissions and uptake from afforestation, reforestation and deforestation (ARD). Art. 3.4 optionally allows them to account for carbon uptake in forest management (FM) activities. These articles could serve as a blueprint for the scope element of the REDD Mechanism. Adapted to the situation of non-Annex I country Parties, the result could be a **voluntary emission reduction commitment for the whole forest sector**. As in many cases capacity will lack for monitoring the FM carbon balance, the emission reductions from REDD would initially be discounted, in order to account for potential leakage effects towards increased forest degradation.

2 Implementation level

Agreement under the UNFCCC is found among the governments of its country Parties. Nevertheless, it is in the spirit of the Climate Convention to put incentives for sub-national entities to be entrusted with tasks that serve its ultimate objective. This has been the case

with Activities Implemented Jointly (1995) and with the three market mechanisms under the Kyoto Protocol (1997). Any such activity however requires the authorization by the respective government.

In order to take most advantage of the reduction potential of REDD, early action is indispensable. **There is no contradiction between a voluntary country target in the forest sector and the delegation of certain tasks to sub-national entities.** Some experience on project-based REDD has already been gathered over the past years. **Today's challenge is to design programs and projects in a way that they have an interface to a voluntary REDD target of the host country level.**

This may be done under tax easements, a subsidy scheme, or via bundled payments for environmental services, of which the climate service is one. Whether a project-based approach can be helpful to fulfill such a commitment will ultimately depend on the specific national circumstances. Rather than contributing to a fund or a country-wide program, the private sector has a preference for concrete, on-the-ground activities. In many cases, Parties still lack the preconditions for private engagement. **Private-sector activities will be encouraged by clarifying land tenure and improving law enforcement.**

An REDD Mechanism should **not preclude whether the participating country may invite foreign project participants.** The stronger the linkage to the international carbon market, the stronger the incentive for international investors to participate in such activities. This latter aspect leads us directly to the issue of compensation.

3 Compensation

Rewarding developing countries for slowing deforestation intuitively conflicts with the polluter-pays principle of environmental policy. However, land use in these countries is closely linked to industrialized countries' demand for agricultural and silvicultural products. Agricultural subsidies of Annex I countries tend to distort land use patterns far away from the beneficiaries. Without appropriate safeguards, the switch to biofuels is expected to put additional pressure on tropical forests. Resulting from the principle of common, but differentiated responsibility, **industrialized countries need to take their share in REDD.**¹

On the other hand, slowing down deforestation will in many cases be profitable for the target countries. Deforestation is often linked to unacceptable social costs on the macro level. Bad governance and high discount rates are important barriers against rational resource use. Compensations for REDD can help remove these barriers and mobilizing development potentials. Once this has been achieved, the baseline for land use emissions needs to be reassessed. An REDD Mechanism may channel North-South transfers for a

¹ One caveat is needed at this point: In case equal per-capita-emission allowances were allocated, like demanded by the German chancellor, no additional incentive mechanism may be needed. Given the appropriate country capacities, all deforestation emissions at marginal costs below the international carbon price will be stopped. In this case, only the "readiness" element would be needed.

timeframe of one generation only. After this period, most of today's developing countries will be in the position to accept full liability for the external costs of their land use emissions. **REDD shall not become an infinite subsidy mechanism.**

Most proposals foresee linking emission reductions to the compliance market between the parties listed under Annex I of the UNFCCC. So far, Brazil has been opposing this option and proposes a voluntary fund to be replenished with contributions from Annex II countries (OECD countries in 1992). It is estimated that some 10 billion US\$ per annum will be needed to make up for the opportunity costs and administrative needs of reducing 50 percent of worldwide emissions from deforestation. Experience with the Special Climate Fund under the UNFCCC has shown that **voluntary contributions are unlikely to provide sufficient resources over the long term**, if not linked to immediate benefit for the donors. The volatility of ODA budgets justifies doubts on the reliability of exclusive international public funding.

Most Parties agree that developing countries need upfront resources before they are able to even consider any voluntary REDD commitment. Any REDD Mechanism will therefore have to provide grants for capacity building (see next chapter). The question whether REDD credits will be allowed to offset industrial emissions from Annex I countries is not only a moral one. The ability of the market to absorb reductions in the order of 10 gigatons until 2020 mainly depends on future commitments. The conundrum is as follows: Only substantive emission cuts by industrialized countries will drive demand as high as to absorb the potential supply from REDD. A foreseeable long-term scarcity of emission permits will also drive energy and industry investment decisions in a way to de-carbonize the economy. On the contrary, if industrialized country targets are too lenient, prices will erode, few REDD credits will be produced, and permanence of the forests conserved may not be granted, because the associated GHG levels will on the long run turn forests from a net sink to a net source, thus increasing future adaptation costs.

Under an ideal climate regime on-track to keeping the temperature increase from pre-industrial levels below 2° C, full integration of REDD credits in the market for GHG reductions is the first-best option. For situations where the necessary demand level cannot be reached, there is a whole array of options for capping demand, supply or prices until reaching the desired incentive level. In doing so, attention needs to be paid to the distributional effect of each option. **Clearly, the highest market liquidity will be granted in case full carbon market integration is achieved.**

4 Readiness

Readiness comprises everything needed for developing countries to participate in a REDD Mechanism, like:

- The political will, including public awareness.

- Stable institutions for achieving the emission reduction goal over longer periods.
- The capacity to assess forest inventories and – more complex – the related carbon stock changes.
- Forest governance, law making and enforcement.
- Removal of perverse incentives for deforestation and land degradation over all sectors.
- The technical capability to determine a future land-use emission scenario and a target level.

The **determination of a target level for REDD** is envisaged as a two-stage process.

First, country experts choose a baseline approach that is most appropriate and conservative departing from available forest inventories. The IPCC proposes a tiered approach for country inventories, with discounts according to the respective level of uncertainty. A baseline is the most likely emission scenario for the forest sector, and it may be sustained by historic data and models that use different land use drivers as variables. There is considerable experience on baseline determination and review under the Clean Development Mechanism (CDM) of the Kyoto Protocol. **An expert review for the country baseline could be undertaken by the same panel that actually reviews Annex I inventories.**

In the second stage, the country determines the share of reductions it is willing to achieve internally. Obviously, emerging economies will be expected to bring a higher contribution than poorer developing countries. The efforts the country commits itself to will not be accounted for as REDD credits. Any reductions beyond this level can be transferred.

A two-stage process assures that a minimum of “hot air” (over-allocation of emission permits) is created, and it allows for a differentiated treatment of target countries.

Financing readiness will initially create the basis for an assessment of forest resource emission and uptakes. This can only be achieved with grant-based finance, because it brings no immediate benefit. Once a voluntary target emission level is declared however, countries have the chance for ex-post emission reduction credits. Investment needed in the implementation phase should be attributed as a loan. Liability for the **permanence** of forest-based emission reductions can be solved in a variety of ways. The economically less attractive means is temporary crediting, because it holds the buyer liable for any future reversal. Politically, temporary crediting conflicts with the objective of broadening developing country participation in the climate regime. In order to make up for future losses, countries could opt for a **credit buffer, international carbon insurance**, or spread the risk via **bilateral or multilateral compliance partnerships**. These partnerships could mitigate different types of risk:

1. The risk that emissions do not go below the target level, and upfront investment is sunk;
2. The risk that emissions increase again in the future, after the sale of emission permits;
 - a. Due to economic or political reasons
 - b. Due to climatic change itself

Risk (1) would apply if activities and measures were pre-financed by loans, and no certificates could be sold later. Risk (2a) applies in principle, when opportunity costs for foregone land use costs become higher than the credit value. Case (2b) could be founded in case abnormalities like El Niño occur more frequently than expected, or if a change in climate slowly decreases carbon content in existing ecosystems, so that emission factors per ecosystem need to be corrected downwards in later commitment periods.

A special form of these partnerships would be the one with Annex I countries that in exchange for upfront finance and shared liability gain preferential access to the REDD credits. They could direct bilateral financial and technical cooperation in a way to ensure compliance.

Most methodological problems of an REDD Mechanism can be summarized under the 'readiness' category. In methodological questions, **there is a high potential for a transfer of know-how, vertically (N-S) and horizontally (S-S), given the number of centers of excellence on tropical forestry located in developing countries.**

5 The Forest Carbon Partnership Facility

With the aim of "testing the waters": for REDD, the World Bank is actually putting up a so-called *Forest Carbon Partnership Facility (FCPF)* with an expected initial lifetime of approximately five years. The FCPF will comprise two mechanisms: i) a readiness mechanism supported by a Readiness Fund; and ii) a carbon mechanism supported by a Carbon Fund. The main objectives of the FCPF are:

- 1) to assist eligible REDD Countries in their efforts to reduce emissions from deforestation/degradation by providing them with financial and technical assistance in building their capacity to benefit from a future system of positive incentives from REDD;
- 2) to pilot a performance-based payment system for emission reductions generated from REDD activities;
- 3) to build public and private partnerships among participants to the FCPF and the relevant international organizations, NGOs and private sector entities.

There will be about five countries eligible for these compensation payments. While in principle, these payments will be ex-post (performance-based), there is **openness for some upfront payments**.

The final design of the FCPF will depend on the decisions to be taken at Bali. **Germany** is a major shareholder in the upcoming World Bank facility. German development cooperation however does not stop here.

6 German Development Cooperation and REDD

Germany looks back on extensive cooperation in the protection of natural resources. Sectoral programs include the Pilot Program to Conserve the Brazilian Rain Forest (PPG7) and the Amazonian Protected Areas Program (ARPA) where technical and financial cooperation have been combined. Germany also contributes to the Central African Forest Commission (COMIFAC), an initiative of ten countries of the Congo Basin to jointly improve their forest administration and management. In Asia, German bilateral assistance has successfully supported forest development programs especially in China and Vietnam. All these activities have brought undeniable environmental benefit, which however has hardly been quantified.

Many countries have been cooperating with Germany in forest development activities, all of which aim at improving forest quality and coverage. Some countries have achieved considerable progress over the last 10-20 years, others are still not there due to many institutional, legal, economic and other factors, including know-how. Any REDD mechanism will contribute to improving forest development, but only in few countries it will be sufficient. Continued or even enhanced development cooperation in the forestry sector and conservation is required to successfully “turn the tide” in many countries.

From all these experiences, we know, building up readiness is a process of at least three years. The German KfW Development Bank sees the **necessity of a learning-by-doing phase**, including an **early start of project-based activities**. A **“Nested Approach” to REDD**, as proposed by several Parties, **will help identifying the most cost-efficient means** under different national circumstances. At this point, KfW Development Bank sees a **complementary role for bilateral cooperation**, which would leverage additional investment in REDD. Financial cooperation could provide the upfront finance needed to implement national or sub-national programs aiming at generating environmental services from forests. **Compliance partnerships under an REDD Mechanism, can be a strong form of bilateral commitment.** This type of commitment is most needed, where private equity is not available, due to the country risk profile. Bilateral financial cooperation has the potential to spread these risks worldwide.

7 Conclusions and recommendations

The two-year process leading to Bali has unveiled a number of technical and methodological questions surrounding REDD. The good news is that these can be solved, given the right political framework.

The framework decision needed will define an **REDD Mechanism that is flexible, simple and transparent enough to invite for broad participation**. It needs to impose the **criteria of environmental integrity**, but it shall not be policy-prescriptive for national governments on how to implement policies and measures aimed at reaching the goal of reducing forestry sector emissions. As land planning is an integrated process, **the choice of activities eligible for accounting shall be unrestricted**.

The level of implementation of a national REDD commitment is up to the government of the target countries to decide. **In most cases, it will be beneficial to involve sub-national entities, which may also leverage additional finance. Sub-national program and project-based activities constitute a dynamic factor, which also drives readiness on the state and administration levels.** There is a need for development cooperation to counterbalance the disadvantage towards the private sector of countries with an unfavorable investment climate,

There are conflicting views on a compensation mechanism. **From an economic perspective and given the estimated finance needs, it is most promising to harness the carbon market for an REDD Mechanism.** It will ultimately depend on future Annex I emission limitations how much market integration can be allowed without eroding the carbon market.

Incentives shall be reliable and long-term, be instrumental in overcoming barriers and liberating development potentials. As they can impulse structural reforms in the land use sector, they will eventually become obsolete on the long run (15 – 50 years).

In order to gain experience and to take advantage of today's low-cost opportunities for REDD in developing countries, **conditions for an early start shall be provided**. This can be achieved by **allowing REDD during the first commitment period to be banked towards future commitment periods**. There are good precedents for this: When CDM project activities starting from the year 2000 were allowed for offsetting Annex I targets during the first commitment period, the future price level was equally unforeseeable. Nevertheless, the promise of market integration provided enough incentive for an early start.

Contact:

Alfred Schweitzer

KfW Entwicklungsbank

E-mail: Alfred.Schweitzer@kfw.de

