

EXECUTIVE SUMMARIES OF R-PPs

1. CAMBODIA

R-PP Executive Summary

Cambodia has one of the highest levels of forest cover in Southeast Asia, with approximately 10.7 million hectares of forest in 2006 or 59% of Cambodia's land area. Based on the FAO 2005 Forest Resources Assessment, Cambodia has the 30th largest area of tropical forest in the world, but is the 13th most forested country by percentage of land area. Cambodia also has a relatively high rate of land-use change with Forestry Administration statistics showing that 379,485 hectares of forest were lost between 2002 and 2005/6, a deforestation rate of 0.8% per year. As a consequence Cambodia has been classified as a high forest cover, high deforestation' country for the purposes of REDD.

Deforestation in Cambodia is caused by the rapid pace of development in the country, including large-scale agro-industrial development, and a lack of effective implementation of existing laws and policies for forest land and forest resource management. The principle forest management strategies of the Royal Government of Cambodia (RGC) are the new National Forest Programme (2010) for the Permanent Forest Estate regulated by the Forestry Administration, Protected Areas managed by the Ministry of Environment, and the flooded forests and mangroves that form part of the fisheries domain regulated by the Fisheries Administration. REDD+ could form a significant new source of finance for effective implementation of these forest management strategies, in a way that explicitly recognizes local livelihood and biodiversity conservation co-benefits. This would help Cambodia to achieve its national target of maintaining 60% forest cover, which is one of the main objectives of the RGC's Rectangular Strategy, which is the over-arching socioeconomic development policy agenda for the Fourth Legislature of the National Assembly (2008-2013) and is a key indicator for the Cambodia Millennium Development Goal 7.

The RGC rapidly started to implement pilot REDD+ projects following the Bali Conference of the Parties in 2007, with the approval of a first REDD+ pilot in the Oddar Meanchey community forests in May 2008, and the Seima Protected Forest REDD+ pilot in 2009. These pilot projects are amongst the most advanced in the Greater Mekong region. In developing these pilots the RGC has made maximizing transparent and equitable local benefit-sharing to communities an explicit policy priority under Council of Ministers Decision #699 that approved the first pilot.

Cambodia submitted its R-PIN to the World Bank Forest Carbon Partnership Facility (FCPF) in late 2008 and was accepted into the FCPF in early 2009. In August, Cambodia was invited to join the UN REDD Programme, and was granted observer status on the UN REDD Policy Board in October 2009. Following Cambodia's entrance to UN REDD, the UNDP Cambodia and FAO Cambodia Country Offices committed to support the Royal Government with a REDD Readiness planning process, which led to the development of the Cambodia REDD+ Roadmap ("the Cambodia Readiness Plan Proposal on REDD+").

The Cambodia REDD+ Roadmap was designed based on version 4 of the R-PP template. It was developed by the interim REDD+ Taskforce and stakeholder groups during the period January-September 2010. Following a two-month national consultation process on the Roadmap drafts, the third version was approved by stakeholders in late September 2010. Following international review by the World Resources Institute and the UN REDD Policy Board, and based on the results of further national consultations, the Roadmap was updated in January 2010 (version 4.0). The Cambodia REDD+ Roadmap and the supporting Cambodia REDD+ Background document is available on request. The Roadmap structure is based on the R-PP template and covers the six main components of REDD+ Readiness:

Section 1. Management of National REDD+ Readiness (Component 1a of the R-PP)

Section 2. Consultation, stakeholder engagement and awareness-raising plan (Component 1b and 1c of the R-PP).

Section 3. Development and selection of REDD strategies, including the Assessment of Land-use, Forest Policy and Governance⁵ (Components 2a and 2b of the R-PP)

Section 4. Implementation framework (including benefit-sharing and safeguards) (Components 2c and 2d of the R-PP)

Section 5. Development of the Reference Scenario against which performance will be measured (Reference Levels or Reference Emissions Levels, RLs/REs) (Component 3 of the R-PP)

Section 6. Development of the Monitoring System for national Monitoring, Reporting and Verification (MRV) (Component 4 of the R-PP).

The Roadmap planning process was an important achievement for the Royal Government, as it has set a new standard for inter-ministerial cooperation and effective consultation and engagement with local stakeholders. This achievement was due to strong national leadership by the Forestry Administration of the Ministry of Agriculture, Forestry and Fisheries, and the General Department of Administration for Nature Conservation and Protection of the Ministry of Environment.

The Roadmap was used as the basis of a funding request to the UN REDD Global Programme for \$3.0 million, which was approved by the UN REDD Policy Board on November 5, 2010. In addition, UNDP, FAO, JICA and the Government of Japan have committed funding for Roadmap activities. Finally, the Roadmap and the material in the Background document have been used to prepare this R-PP funding request. The R-PP components and finance are:

Component 1: Organise and Consult.

Outcome 1: Effective National Management of the REDD+ Readiness process and stakeholder engagement in accordance with the consultation principles established in the R-PP.

Component 1a: National Readiness Management Arrangements. Funded by the FCPF request (\$325,000), UN REDD (\$650,000), Government of Japan (\$300,000 for equipment and offices), Cambodian Government agencies (\$180,000) and JICA (\$40,000). Total: \$1,495,000.

Component 1c: Consultation and Participation Process. Funded by the FCPF request (\$300,000) and UN REDD (\$300,000). Total: \$600,000

Component 2: Prepare the REDD+ Strategy

Outcome 2: Development of the National REDD+ Strategy and Implementation Framework

Component 2a: Assessment of Land-Use, Forest Policy and Governance in Cambodia. Funded by UN REDD (\$20,000) and FAO (\$10,000) to update the previous report by FAO. Total: \$30,000.

Component 2b: REDD+ Strategy Options. Funded by the FCPF request (\$550,000), UN REDD (\$200,000), UNDP (\$400,000 from the Sustainable Forest Management (SFM) GEF project co-financing) and the Government agencies (\$90,000). Total: \$1,240,000.

Component 2c: REDD+ Implementation Framework. Funded by the FCPF request (\$1,300,000), UN REDD (\$375,000), UNDP (\$550,000), JICA (\$300,000) and the Government agencies (\$50,000). The UNDP funds have been committed for REDD+ pilot projects, and \$1,000,000 of the FCPF funds are allocated for capacity-building in two provinces. Total: \$2,575,000.

Component 2d: Social and Environmental Impacts. Funded by the FCPF request (\$175,000). This section was based on the Version 4 of the R-PP template, and may need to be updated prior to the initiation of R-PP funded activities.

Component 3: Develop a Reference Level.

Outcome 3. Design of Cambodia's Reference Level for REDD+. Funded by the FCPF request (\$150,000), UN REDD (\$300,000) and FAO (\$100,000). Total: \$550,000.

Component 4: Design a Monitoring System.

Outcome 4) Monitoring system designed for REDD+ with capacity for implementation. Funded by the FCPF request (\$800,000), UN REDD (\$960,000), FAO (\$290,000), JICA (\$100,000), the Cambodian Government agencies (\$90,000) and the Government of Japan (\$2,000,000 for equipment and the national forest inventory). Total: \$4,240,000.

Component 5: Schedule and Budget.

Component 6: Design a Program Monitoring and Evaluation Framework.

The full Cambodia Readiness Plan Proposal on REDD+ (the Roadmap), the Background document, the Background analyses and minutes of all the multi-stakeholder consultations are available.

2. INDONESIA

Executive Summary

Recognizing the unique role of forest in climate stabilization and as live support system, and considering problem in deforestation and forest degradation, Indonesia has put five priority policies since 2000 as mentioned in earlier section, to improve the management of forest resources and halt further forest decline.

According to the UNFCCC Decision 11/CP.7, definition of deforestation is the direct, human-induced conversion of forested land to non-forested land. Effectively this definition means a reduction in crown cover from above the threshold for forest definition to below this threshold. Whereas degradation is defined as a direct, human-

induced, long-term loss (persisting for X years or more) or at least Y% of forest carbon stocks [and forest values] since time T and not qualifying as deforestation. Degradation would represent a measurable, sustained, human-induced decrease in carbon stocks, with measured tree cover remaining above the minimum required to be considered forest. Furthermore, it should be enlighten between gross and net deforestation. Gross emissions assume removal of trees and most of the biomass and that all carbon is emitted. It does not include any reductions for the carbon sequestered in the vegetation of the replacing land use. However, net emissions assume removal of trees and most of the biomass and that all stored carbon is emitted, but allows for counting the carbon stocks on the area deforested as they are replaced. Where an area of natural forest is removed for the purposes of creating a plantation it may seem attractive to consider applying the concept of net deforestation because it is assumed that the level of emissions will be lower because of subsequent carbon sequestration as the plantation grows. Though gross emissions are higher than net emissions and result in a higher REL, MoF concern on reducing gross emissions in order to comply with IPCC Guidelines.

In the case of Indonesia, deforestation can be categorized as planned and unplanned deforestation. Forest area under the category of ‘convertible forest’ and forested non-forest land (*Id. Areal Penggunaan Lain/AOL*) are allowed to be converted to other land uses, and so, deforestation in these area is under the category of ‘planned deforestation’. Planned deforestation as well as planned forest losses mostly as a result of the rapidly growing of forest plantation and pulp and paper industry. Since the availability of timber from natural forests is declining, pulp and plywood producers and furniture manufactures are increasingly turning to fast growing tree species, grown in plantations, as a source of raw material. The strategic policy to reduce planned deforestation is by allocating the degraded and uncommercially unproductive land for intensive plantation silviculture. Oil palm plantation also contribute to the planned forest loss in Indonesia. Implementation of spatial planning effectively, including law enforcement on that, is one of the effort to reduce forest conversion into oil palm plantation. Furthermore, to avoid unplanned forest losses, MoF has opposed further conversion of convertible production forest for plantation crops, over and above the agreed areas under the *Padu Serasi*. There have been some efforts to reconstruct *Padu Serasi* agreement at a scale that is consistent with local government spatial planning, thereby it would be a harmony between the functional land use zoning that is required under local government spatial planning and the functional land planning and management of forest areas within the forest land.

Unplanned forest losses can result from forest fires, forest encroachment, unsustainable levels of logging from legally permitted forest concessions, and illegal logging at small and large scales. As Indonesia’s population continues to grow through the current long term plan projections towards 275 million, there is also going to be continuing pressure for land reform and reallocation of forest estate to support the growing numbers of people. The forest dependent people give high pressure into forest land since there is limited source of their livelihood. They have very low income thereby they depend much on forest products as their main source of livelihood. Schemes to improve livelihoods of forest-dependent people while reducing pressures on the forest have failed in the past in part because they operate too close to the forest edge and serve more as magnets that attract and keep people close to or inside the forest rather than pulling them away towards less forest-dependent livelihood options. This can be overcome by addressing the problem on a larger scale. Poverty alleviation funds that draw people away from, rather than into, forests—such as through agricultural intensification in areas of good productivity and adequate infrastructure far from the forest frontier—have proven effective. Instruments that may be applied include disbursement through projects, or block payments to local governments implementing the programs such as REDD.

In addition to unplanned forest losses, the largest length of the boundaries of the production forests and the protected areas are more difficult to control and are therefore open to unplanned encroachment from communities of local people or other commercial forest users, and subject to small and large scale illegal logging. The factors that combine to allow for illegal logging and encroachment particularly in protected forest are a lack of enforcement, insufficient incentives for communities and governments for maintaining protected areas, and low capacity of institutions charged with managing the protected areas. It also occurred in production forest. The encroachment are conducted by neighbouring communities who may or may not be aware of the boundaries. Over the last three years the Ministry of Forestry has issued regulations that create four new avenues for improved access and rights over forest resources in order to overcome the root cause of unplanned forest losses. These regulations embraces Collaborative Management in Protected Areas (MoF decree No 19/2004), Community Forests (Government Regulation 6/2007), Community Forest Plantations (Government Regulation 6/2007), and Customary Forests (Government Regulation 6/2007).

The five priority policies have been translated into long, medium and short term planning. National long-term planning (RPJN) and the national 5 year plan are the guidance for the forestry sector planning. The following time scale planning have been in place, namely, Forestry Long Term Development Plan, Road Map for the Revitalization of Forest Industry, Five Year Forestry Plan. Annual budget allocation is based on these plans, however, because of the magnitude of the challenges which need to be tackled, the available domestic funds often far from adequate. Market failure for forest products and services (e.g. market of illegal forest products, A/R CDM) has also added the challenges in practicing SFM principles which can eventually contribute positively towards climate change mitigation.

A number of regulations already exists which can contribute to creating enabling conditions for climate mitigation actions, through reducing emissions from deforestation and forest degradation, sustainable forest management, forest conservation, and through enhancement of carbon stocks from forest restoration, afforestation and reforestation, if they are successfully implemented. To provide illustration of the regulation exists, there are new spatial planning legislation in Act 26/2007 which requires local government to progressively revise their spatial plans and government regulation PP 6/2007 and its revision PP 3/2008 which provides a framework for licensing the use of forest land for a range of environmental services as well as timber products. PP 6 and PP 3 also accommodate a greater range of community interest through licenses for Community Plantation Forest (HTR), Community Forest (HKM), and Customary Forest (Hutan Adat). The forestry law, Act 41/1999 introduced a broader range of concepts of forest resources use than had previously existed.

Along with the implementation of the five priority policies, forest lost has decreased significantly. Based on the Ministry of Forestry data, forest lost has decreased from 1.7 million ha per year between 1985 – 1997 and the highest forest lost of 2.8 million ha per year during 1997-2000, to 1.2 million ha per year during 2000-2005.

The necessary condition to enable sustainable forest management, including the formulation and implementation of forest policies and practices is good governance. Recognizing the need for a multi sector approach to improving governance, the GoI has made the fight against corruption in all sectors a top priority, as demonstrated by the work of the Independent Anti Corruption Commission (KPK) and the Special Anti Corruption Court. GoI also has a law against money laundering (UU 25/2003) which

allows the proceeds of illegal logging to be investigated and used in prosecution. The state Ministry for Administrative Reforms announced a goal to apply a nationwide system of good governance at the local government level by 2008. To address the transparency and accountability considered in good forest governance, Directorate General of Forest Planning, MoF has built the new Forest Monitoring and assessment system (FOMAS/FRIS/NCAS) using new remote sensing technologies. Other initiative that aimed to strengthen community access to customary land is designation such as –village forest||, –community forest|| and HTR. These designations promote an interested management presence on land that has become de facto open access where communities have not had the legal authority or means to prevent outsiders entering the forest. Since 2005, GoI has been undertaking a comprehensive program to curb illegal logging under the umbrella of the Forest Law Enforcement National Strategy (FLENS). In addition, Presidential Instruction (INPRES 4/2005) directs 18 government bodies as well as local government officials to cooperate in action to eradicate illegal logging.

There are several action plans that MoF committed to undertake for improving good forest governance in Indonesia as follow : 1) Building Confidence and Readiness by implementing the Ministry of Forestry_s disclosure policy and invite public review of the maps and information prepared by the FOMAS project and advanced to FRIS and NCAS, activating the national case-tracking system within the Ministry of Forestry in coordination with police and prosecutors, launching a high-level, inter-agency *strike force* under Presidential authority to investigate and prosecute top ringleaders and financiers of illegal logging and associated crimes, 2) Strengthening Accountability by requiring disclosure and divestiture by cabinet members of forest-related financial holdings and other business interests to reduce the potential for political interference and conflict-of-interest, eliminating the use of forestry revenues as a source of funding for political parties, making corporate and local government eligibility to participate in REDD conditional on meeting specific standards and indicators of good governance, considering a public declaration of principles and practices that politicians, political parties, and business associations should commit to in support of good forest governance and achievement of REDD objectives, seeking compliance through incentives and enforcement with policies and regulations requiring forest concession holders to implement plans which reduce timber theft and environmental damage from fire and logging practices, 3) Safeguarding REDD Payments and Markets by considering adopting national financial sector regulations requiring enhanced due diligence procedures for Politically Exposed Persons (PEPs) to curtail the financial activities of PEPs involved in forest-related corruption and crime, enhancing cooperation with Indonesia’s major international partners in forest trade and investment to strengthen FLEG reforms, tackling judicial reform and anti-corruption efforts in the justice system through case-tracking and public scrutiny, consumer action, and institutional capacity-building.

As noted earlier there are also underlying issues of institutional infrastructure and human resources capacity, which need to be improved to ensure that positive outcomes can be achieved. Furthermore, government efforts in enhancing commercial plantation in degraded forest land and other programmes to improve forest cover have not been able to balance the rate of forest loses. And so, protecting the remaining forest is urgently needed, facilitated by policy intervention, which enable Indonesia to reduce emissions from forest losses and achieve her development objectives. Hence, REDD Indonesia need to be designed to support these two fold objectives.

3. LAO PDR

Executive Summary

The current arrangements with a REDD+ Task Force and a REDD+ focal person within DOF have been adequate to bring the process to the current position, but major changes are needed to effectively implement the Readiness Implementation phase. High level cross-sector coordination and policy guidance will be provided by the National Environment Committee, the members of which are at Minister or Vice-Minister level. In order to engage all sectors involved in REDD+ and related Climate Change issues, membership of this Committee will be broadened to include other sectors not currently represented, especially the National Land Management Authority.

The REDD+ TF will be strengthened by additional members from other key ministries, including Finance, Planning and Investment, Mines and Energy and from the Department of Forest Inspection in MAF. The TF will be supported by a new REDD+ Office with full-time staff. This Office will have several tasks; including (i) implementation of the Readiness activities funded by the FCPF, (ii) coordinating and monitoring other REDD+ related activities by maintaining a register of all projects, whether funded by donors or by credits from the voluntary market, (iii) monitoring international negotiations and providing material support for Lao PDR delegates attending international meetings (iv) organizing stakeholder coordination and implementing the SPCP, (v) preparing a draft decree for submission to the TF and NEC on REDD+ , that will lay down, among other things, who can promote REDD+ activities; any conditions that will apply to participation by stakeholder groups; and the principles to be adopted for benefit sharing; (vi) prepare detailed proposals for how different forms of REDD+ related funding will be managed and distributed; (vii) Develop a carbon Registry.

The REDD+ Office will be empowered to establish a number of Technical Working Groups, including; REL, MRV, Stakeholder Consultation, Land-use Planning, Carbon Registry, REDD+ Strategy, and others as required. These working groups will provide technical support and advice to the Office as needed and in particular for the preparation of Annual Work Plans to be prepared by the Office, that will be submitted to the Task Force for endorsement to the NEC. The REDD+ Office will also support the establishment of a similar structure at Provincial level, in those Provinces where REDD+ activities are taking place or are planned for the Readiness phase.

Two stakeholder consultation workshops have been held during the preparation of the R-PP and a number of important recommendations were made, in particular that REDD+ should be considered as a mechanism for promoting multiple benefits, Pilot activities should be incorporated into government programmes/ donor projects and should not be “stand-alone”. Awareness raising is essential and later training local communities in monitoring carbon stocks and other indicators necessary for REDD+ + will help to improve awareness and understanding. Capacity building is necessary among all stakeholder groups and should not be restricted to government only while ways need to be found to strengthen cross sector coordination.

The stakeholder participation and consultation plan takes account of the relatively unique circumstances that prevail in Lao PDR, where about 70% of the people live one hour or more travel time from their District town. There are more than 10,000 villages across the country, most quite small and many of which are not accessible by motorized

vehicle. The Lao government uses the term Ethnic groups and the Lao Front for National Construction (LFNC) is the organization charged with implementing the Party and Government's ethnic policy, which recognizes 49 ethnic groups from four ethno-linguistic families, many of which do not have written language. During the Readiness phase consultation at community and village level will only be feasible for villages where field activities are being piloted.

Each of the four major stakeholder groups, that cover government, civil society, the private sector and donor partners has a very large number of sub-groups with specific interests, and these will be brought into the process through the use of focus groups. An example is mining companies that clear forest, but may need a lot of convincing to take account of the impact of their activities on CO2 emissions. The Goal of the SPCP is to achieve collective ownership of the process to develop strategies that reduce emissions through deforestation and degradation (REDD+) and to support conservation, sustainable forest management, and the enhancement of forest carbon stocks (the + in REDD+ plus). The Purpose is to develop a system of consultation to ensure that all stakeholder groups have a better understanding of REDD+, how it relates to Lao PDR, what roles, responsibilities and opportunities they have within Lao PDR's efforts and encourage a sense of ownership of the REDD+ measures to be adopted.

The major issues that are foreseen as requiring substantial consultation are; carbon ownership in relation to land-tenure, benefit sharing arrangements, law enforcement and related governance issues, especially concerned with awarding of licenses and concessions and the establishment of credible baselines and RELs. The SPCP links the awareness raising and consultation processes closely to the pilot activities which will provide opportunities to discuss issues in specific circumstances rather than in very general terms.

Chapter 2a discusses recent trends in land-use and points out that there have been massive inflows of FDI in the past few years that have led to high demand for land for cash crops and plantations. The national and provincial governments do not have the capacity to undertake comprehensive social, economic and environmental appraisals of proposals so that concessions have often been awarded in forest areas, which is in contradiction of the law that bans conversion of forest except in special circumstances of national importance.

There is a wide range of forest resource tenure rights, including state property; communal rights, private assigned to individuals, corporate bodies and non profit organizations; and open access. As a result, several different stakeholders may have rights and interests, and consequently entitlements to REDD+ benefits. The entitlement of ethnic groups and local communities to REDD+ benefits presents a particular problem because they typically do not hold registered title and enforceable rights over the land they manage.

The Forest and the Wildlife and Aquatic Resources Laws have recently been revised and promulgated and provide a good regulatory framework, but many officials at lower levels in Province and District are not familiar with the provisions, so that enforcement is generally weak. Illegal logging is a serious problem despite many provisions in the Law that could be used to control it. The government has created a new Department of Forest Inspection charged with dealing with this problem, but the staff are still under training and it suffers from severe budget limitations. The Forest Department is being supported by several donors to implement sustainable management of production and conservation forests and 6 Production Forest Management Units have achieved full FSC certification standards.

The main drivers of deforestation have been identified as conversion to agricultural land and plantation crops (including timber trees and rubber), by commercial companies and smallholders, and for mining and infrastructure development. There has also been and will continue to be expansion in hydro-power generating capacity, which has resulted in the inundation of substantial areas of forest. The drivers of degradation are primarily illegal logging and shifting cultivation. The latter is considered as degradation so long as it is done on a rotation basis and there is a fallow period with secondary forest, so that forest stock is reduced, but not forest area. The total annual emissions from deforestation and degradation is estimated to be around 51 million tonnes CO₂ annually, split almost equally between deforestation and degradation. (see Chapter 2a Table 2)

The REDD+ strategy will be developed in detail during the Readiness phase, and will include both the instruments that will be used for implementation (institutions, regulations, information and financial) and a wide range of field actions. During the Readiness phase as many as possible of the potential actions will be field tested. In accordance with the recommendations from the stakeholder consultation, these field activities will be either undertaken by large donor funded projects aimed specifically at REDD+ or will be undertaken by providing additional funding to projects that are dealing with closely related issues, that could incorporate REDD+ specific activities within their overall scheme. (An example is a project that is supporting land-use planning, where some additional funding could enable it to assess carbon stocks and incorporate emissions reduction measures into the land-use zoning and planning to avoid the kind of problem referred to above of misallocation of forest for concessions)

The options for REDD+ field activities are discussed for the main drivers of deforestation and for degradation as well as options for regeneration and restoration of degraded forest. The drivers of deforestation and the potential solutions are largely outwith the control of the forest sector and will therefore depend heavily on the support and cooperation of a number of other agencies and departments at national, provincial and district level as well as private sector and local communities, and will primarily focus on land-use planning and the valuation of carbon stocks, with a possible policy measure of charging developers for any carbon stocks that are destroyed. Mining and Hydro-power utilities are bound by Concession Agreements that include environmental safeguards, but these are not enforced at present, and an important option is to establish the degree to which forest loss and emissions can be reduced through the introduction and enforcement of safeguards. The drivers of degradation are more directly under the control of the forest authorities and DOF and DOFI will implement a number of activities aimed at reducing illegal logging and reducing emissions from shifting cultivation through the provision of alternative livelihood systems that also tackle poverty.

The REDD+ Implementation arrangements will develop the instruments needed to support REDD+ activities whenever a new international protocol is agreed. The performance of the institutional arrangements used for the Readiness phase will be evaluated and refined and then rolled out gradually nationally to provinces that have not been involved in pilot activities. A REDD+ Decree will be issued by PM at an early date to provide clarity related to key REDD+ issues, in particular ownership of carbon rights, the obligation to compensate government for carbon stocks that are liquidated, should this be adopted as policy, the benefit sharing system, financial management and distribution mechanism, how REDD+ activities are to be developed and sponsored and which organizations, groups and individuals are eligible to participate in REDD+ activities funded both from national and international sources and the voluntary market. There are a number of options for management of future REDD+ funds, and

these will be evaluated to determine the most suitable long-term arrangements bearing in mind the multiple sources of funds, the need for beneficiaries at all levels down to villages to receive their due in a timely manner. The possibility of establishing a new and special REDD+ fund will be examined in detail at an early stage during implementation through discussions with the Ministry of Finance and other stakeholders. Carbon tenure and benefit sharing are closely related issues and although certain principles have been discussed and generally agreed, the practicality of benefit sharing under different circumstances will need to be thoroughly tested during the pilot activities. The establishment and management of a carbon registry is closely linked to the requirements for MRV. Capacity building is essential and will be undertaken across the full spectrum of stakeholders.

The social and environmental impacts are difficult to enumerate at this stage as no decisions have been taken on what activities will be conducted where, and who will be involved. As the design of specific pilot activities is developed an SEIA will be undertaken and an ESMF developed for each to ensure that any adverse impacts are avoided or adequately mitigated. As a first step a comprehensive stakeholder analysis will be undertaken.

A reference emission level has been developed using a development model to assess the likely changes in emissions from 2011 to 2015. This shows a slow decline in emissions from an estimate of around 51 million tonnes CO₂ in 2010 to around 42 million tonnes in 2015, but it is not a linear decrease as a substantial expansion in the area cleared for hydro-power is expected in the next few years. The model estimates are very dependent on the many assumptions that are made, which have been necessary due to lack of good and complete data. A sensitivity analysis suggests that the estimate of total emissions is most sensitive to the assumed value of the average growing stock at the start of the period (2002), with a 10% change in the assumed value changing the estimated emissions by between 2% for poorly stocked forest and 8% for medium density forest.

The GoL has opted for REDD+ which increases the complexity of the required MRV system since the monitoring system will have to be designed to monitor reduced emissions from deforestation and forest degradation as well as removals from conservation, sustainable management of forests and enhancement of forest carbon stocks in Lao PDR. Of the five carbon pools only above-ground biomass is measured and accounted for in Lao PDR at present. The GoL has already submitted a forest definition to UNFCCC (min. 20% forest cover, min. area 0.5 ha, min tree height 5 m, palm trees and bamboo considered as non-forest). There is an immediate need to provide training on GHG accounting and reporting for Land Use, Land Use Change and Forestry (LULUCF) which will also inform the development of the 2nd Communication. As a matter of priority, a study for developing Lao specific emission and removal factors (Tier 2) for the various emission related activities in regard to LULUCF and AFOLU will be conducted. The forest definition has implications for National GHG monitoring and the MRV system because areas under rotational shifting cultivation change their status from forest to non-forest, making forest cover assessments challenging and a study will be conducted to assess the implications of the forest definition, and recommend the most appropriate definition for Lao PDR national circumstances.

The JICA-supported Program for Forest Information Management (FIMP) will address the problem of inconsistency between forest cover assessments at various times by preparing a nation-wide forest base-map 2010 using ALOS, SPOT-5 and Rapideye imagery and carrying out a nation-wide field survey in 2010 collecting basic information on species, diameter, height and density and will use SPOT4 imagery to prepare a nation-wide forest cover map for 2005. A National Forest Inventory was carried out

between 1991 and 1999 and it is proposed that a new inventory will be conducted as soon as possible. PSPs established during the NFI will where possible be re-measured. Changes in forest biomass and carbon are key issues for REDD+ monitoring and reporting. According to IPCC guidance, carbon stock change assessment shall be done using activity data and emission factors. In Lao PDR, the information base is much better for production forests than for other forest categories. Previous experience in Lao PDR suggests that a combination of ground-based inventories and analyses of remotely sensed data (satellite images, aerial photographs) using multi-phase or multi-stage sampling approaches has to be used to monitor carbon emissions and removals. While already a large amount of relevant data and information for REDD+ has been collected in Lao PDR, a major shortcoming is the proper storage, retrieval and reporting of the very information. Instead of preparing a separate reporting system for forest carbon and REDD+, it is will be incorporated it into the proposed integrated Forest Information System.

The nested approach also requires more diversified verification arrangement. For the voluntary market, various carbon standards are under development for REDD+ projects, but most of them require verification by an independent certifier. In the CDM compliance market which may be regarded as a model for future REDD+ compliance market, Designated Operational Entities (DOE) are required.

Broad agreement has been reached at an international conference on a draft framework of three core governance parameters for REDD+ and key considerations (i.e. „what to monitor“). The framework is comprehensive and can be adapted for Lao PDR taking into account particular national circumstances and governance situations which are described in more detail in component 2a of the R-PP. Among others, it will monitor policy implementation, law enforcement, compliance with environmental laws (e.g. hydropower, mining), illegal logging, land use and carbon rights, equity of benefit-sharing arrangements, corruption, institutional performance, conflict resolution mechanisms. The REDD+ office shall develop country-specific indicators for the governance parameters and principles based on broad consultations with major stakeholders, to be used for measurement, reporting and verification. Right after the start of the R-PP implementation, a baseline survey of pertinent governance factors will be conducted (or commissioned) by the REDD+ office.

4. NEPAL

Executive Summary

Nepal's landscape and forest endowment reflects its topographic, physiographic and cultural diversity and results in a complex mosaic of agriculture and forests. The area of the country is 14.78 million ha, of which forest covers about 5.8 million ha i.e. 39.6% of this. With population growth and forest product and land demands, deforestation and degradation of the forest could be aggravated in the years to come, affecting the livelihoods of a large number of forest-dependent people and Nepal's environmental sustainability. The Government of Nepal is committed to REDD through reversing deforestation and forest degradation, conservation of existing forest and enhancing forest carbon stocks, while addressing livelihoods concerns at the same time.

Nepal's Government has established a three-tiered institutional mechanism for implementation REDD, consisting of the REDD Multi-sectoral, Multi-stakeholder Coordinating and Monitoring Committee as the apex body; the REDD Working Group at

the operational level (RWG); and the REDD-Forestry and Climate Change Cell as the coordinating entity. All three bodies have been working together to prepare the REDD National Strategy and implementation plan. In addition, a Stakeholder Forum has been established to engage wide range of stakeholders in the entire REDD process. Since the state is under a restructuring process, these institutional arrangements will be adjusted in line with the new constitution.

The consultation process for the development of RPP began with a national-level awareness workshop on May 5, 2009. All together 3,180 individuals were consulted through workshops and meetings. 57 workshops were held at national (17), regional/district (13) and community level (27) with participation from a range of stakeholders such as indigenous peoples and local communities, forest dependent people, Dalits, women, civil society organizations, government departments, political parties, the media, universities, international organizations, constitutional assembly members, projects, international development partners, and the private sector. Separate workshops were held targeting to indigenous peoples (4), women (3) and Dalits (1). A variety of outreach materials were developed and used to develop understanding on REDD. As a result of the consultations, this RPP has been developed. This document includes a comprehensive consultation and participation plan to be and investment in wood efficient and alternative energy technologies. In addition, the development of synergy between the forestry and other sectors, including infrastructure, agriculture, and energy is also critical as a cross-cutting strategy. Over the next few years, Nepal will prepare its REDD Strategy. This will be closely aligned with the preparation of anew National Forest Sector Strategy that has already been identified as a priority action for the next interim plan period (up to 2012/3). The REDD strategy will also be aligned with Nepal's strategy for climate change adaptation, especially considering the forest sector's proven contribution to poverty reduction. During the preparation process, the proposed strategic options will be screened and prioritized based on key analytical assessments and consultations with multi-sectoral stakeholders from community to national level.

Nepal has demonstrated that community involvement in forest management can significantly contribute to reducing deforestation and forest degradation especially in the Mid-Hills and that this significantly contributes to forest conservation and enhancement of carbon stocks.

Management rights in most of the community management models are transferred to communities whereas land tenure rests with the government. A key principle is that carbon rights should be tied to land and forest tenure rights. In the next few years carbon ownership for all types of forest need to be resolved as a priority during RPP implementation. Similarly, clear and legally defined benefit sharing mechanisms that can deliver benefits to grassroots level communities, will be an important factor for REDD success. To clarify institutional arrangements, further studies and consultations with stakeholders from local level to national levels will be carried out. A hybrid approach to REDD implementation at both national and sub-national levels is proposed although details of these arrangements still need to be finalized through pilots and further consultation and studies. In addition, Nepal is proposing to use a trust fund model for financial transaction from which payments are made on the basis of a public carbon registry maintained by the REDD cell. Although there are a couple of pilot projects that are already being implemented in Nepal, their findings will not be sufficient to develop the implementing framework. Therefore the process of finalizing the institutional arrangements includes conducting and synthesizing studies, policy development, and designing and piloting the institutional framework.

The REDD strategic options aim to contribute to reducing GHG emissions, conservation of existing forests and enhancing forest carbon stocks. Strategic Environmental and Social Assessment (SESA) is essential both for avoiding negative impacts and ensuring positive or additional REDD benefits, especially in terms of securing livelihoods improvements and the rights of indigenous peoples and local forest-dependent communities including women and Dalits; promoting the conservation of biodiversity; and maintaining cultural heritage, gender equity, capacity development and good governance.

The analysis of the existing forest datasets has concluded that the Land Resource Mapping Project is the most comprehensive forest assessment available for Nepal. A new Forest Resource Assessment (FRA) project has recently started funded by the Government of Finland. This will run for five years (2010-2014) and will conduct forest resource assessment for the whole country and is planning to generate national-level baseline data. The LRMP data hold the potential for creating a provisional biomass surface for Nepal that can be used as a first reference for determining changes in forest cover and degradation. To accurately capture the trends between LRMP and the new assessment, it is envisioned that some interpolation will be required. A separate study will identify the best dataset to be used and it is expected that some reclassification of historic remote sensing data will be required for this.

Nepal is planning to develop a country-wide spatial regression model that is imbedded in a implemented during the readiness phase between 2010 and 2013. The main components of the plan include capacity building, awareness, and consultation.

The preliminary analysis indicated that the drivers of deforestation and forest degradation are diverse, complex and different in the various physiographic regions. Nine direct drivers and several indirect drivers have been identified. Many underlying causes are a result of a combination of internal and external factors to the forestry sector. Underlying causes include socio-economic factors such as population increase and its distribution, poverty, land scarcity and the status of Nepal's level of economic growth and commercial development. Governance and cultural factors are both cross-cutting and are also related to a number of the direct drivers. Information and data for the analysis were not always readily available and need to be further explored or generated. Such further information and analysis is crucial for the identification of REDD strategic options. Supplemental analysis will therefore be conducted to better define the causes of deforestation and forest degradation and to cover various physiographic regions in more detail.

The consultation process resulted in preliminary identification of strategic options for REDD. Major options include improvement in policies/regulations; enhanced forest sector governance; improved management practices and technical skills; investment in forestry and non forestry employment generation; demand based land-use planning; transfer of forest management and tenure rights to communities; sensitization of various actors in the sector; CGE (Computable General Equilibrium) model. The spatial regression model will enable linking GIS based information from the LRMP and FRA projects to economic variables and parameters and use this to make projections of carbon stock changes under different scenarios.

An integrated monitoring and reporting system to integrate national, regional/district and management unit level will be developed to account for the contributions of all levels and to allow for fair sharing of the benefits based on actual performance. Nepal is proposing to adopt tier II for MRV. The data collection will be based on a combined method using remote sensing data and periodic ground inventory measurement

throughout all major forest types and physiographic regions of Nepal coordinated with the methodology to be used in the upcoming FRA. The design and implementation of MRV will involve government and nongovernment organizations including indigenous peoples and local communities, and other institutions with each having clearly defined roles and responsibilities.

As part of the proposed monitoring, data management and reporting system, a National Forest Information Management System (NAFIMS) will be established which includes a Central Forest Geo-Database. The Department of Forest Research and Survey will oversee the collection, storage, sharing and management of nationwide forest related spatial data.

Monitoring and evaluation of the implementation of R-PP will be coordinated through REDD Forestry and Climate Change Cell. The timeframe for implementing activities in most of the components are included under the same components. A skeleton for M&E has been developed and is planned to be finalized by the end of June 2010.

The total estimate for RPP implementation is US\$ 7.654 million which is expected be covered by the Nepal Government and various donors as in the following table.

5. PAPUA NEW GUINEA

Executive Summary

The Forest Carbon Partnership Facility (FCPF) which became operational in 2008 and, was globally focused on reducing emissions from deforestation and forest degradation, forest carbon stock conservation and sustainable management of forests including enhancement of carbon stock. Papua New Guinea is also a member of the FCPF Programme seeking to bridge readiness gaps under both the FCPF and the UNREDD Programme through assistance under each Programme. For this alone, it reflects PNG's long standing commitment in addressing global climate change. In particular by proposing measures to realise the carbon abatement opportunity offered by preserving and sustainably managing tropical forests, i.e. by introducing the concept of REDD-plus into international negotiations in 2005 alongside Costa Rica.

Domestically, PNG is also committed to mitigating greenhouse gas emissions. The country's Vision 2050 envisages low-carbon economic development, aiming to increase per capita GDP by a factor of three by 2030, while maintaining an aspiration goal of net carbon neutrality by 2050. This Vision is strategic driven by the Development Sector Plan 2010-2030. A ten-year operational plan, which will see sectors focusing on practical initiatives to drive forward the implementation of their activities directly or indirectly related to REDD-plus. The government has also further made this become operational throughout levels of government through the MTDP 2011-2015, whereby budget allocations are provided on an annual basis to sufficiently co-support activities. The implementation of this R-PP will be co-supported by the GovPNG in alignment with the national government priorities as well.

Papua New Guinea is also a recipient of the UNREDD Program which approved its National Program of US\$ 6.4 million in 2011. However, most of these funding have been and will continually be utilized to build and expand PNG's capacity in developing a National MRV system. Although a substantial portion of this funding was also dedicated for consultation and strategy development, the demand for more attention and continuous work by Papua New Guineans still remains a challenge and along with this is their cost.

Coupled with this dilemma is also the challenge within government's own capacity to deliver, especially when new emerging issues are added on to its national budget menu on an annual basis. The government has also acknowledged the role of the UN delivery partners in co-sharing the implementation burden by seeking ways where it can see itself being a partner in this process. As such this R-PP proposal has an objective to secure funding that will be managed independently from government control by UNDP as its delivery partner.

The government has confidence in UNDP's role in the future implementation of this R-PP given its reputable role in the overall climate change policy development and implementation in PNG over the years.

The future R-PP Programme for PNG will continue to support the current UNREDD Programme beyond 2013, by addressing key gaps while slowly addressing other issues that needs to be resolved continuously and consistently throughout the implementation of REDD-plus.

PNG has several enabling environments that will support a balance implementation of this R-PP by both the government and UNDP. These includes the following but not limited to:

- The newly established Office of Climate Change and Development (OCCD) provide the institutional structure to coordinate action against climate change in PNG. It supports the whole-of government
- National Climate Change Committee in steering climate change policy and reports to the Minister for Climate Change and Forestry.
- A Climate-Compatible Development Strategy (CCDS) sets out the strategic direction for PNG's action against climate change domestically, with a strong focus on REDD-plus. The main elements of the draft CCDS and the process for multi-stakeholder consultation have been endorsed by the National Executive Council (NEC). The CCDS is envisaged to be finalised and released in its final form later this year.
- In the spirit of promoting a fair and equitable environment for socio-economic development, all stakeholders in PNG both public and private are allowed to carry out their normal organizational roles while addressing both adaptation and mitigation in parallel. Their role is recognised under the auspices of the Climate Compatible Development Policy.
- The Climate Compatible Development Policy
- National Climate Change Bill (Draft)
- The Role and Governance structure of the REDD+ and MRV TWG Institutions who provide overall support to the Programme with in itself. This also exclusively includes the role of CBOs, CSOs, NGOs, and the Private Sector who will be working closely with government to see through the implementation of this R-PP; and in this case most will be drivers of the implementation of the RPP activities.
- Complemented by what has already been implemented under the National UNREDD Programme, PNG is keen on continuing this work through this R-PP.

6. THAILAND

Executive Summary

Thailand's landscape and forest resources reflect its topographic, agro-ecological zones and cultural diversity which results in a complex mosaic of agriculture and forests. Similar to other developing countries in the region, the forest areas in Thailand have been under serious threat. The forest area has declined from 53.3 % in 1961 to 25.3 % in 1998. The assessment of forest cover during the early period used the interpretation of Landsat-MSS at the scale of 1:250,000. In 2000, the imageries at the scale of 1:50,000 were introduced. Due to the change of scale and method of calculation, a new benchmark of forest area of 33.1% was then established. With population growth and increased demand for forest products and land, deforestation and degradation of the forest could be aggravated in the years to come, affecting the livelihoods of a large number of forest-dependent people and Thailand's environmental sustainability. Reducing deforestation and forest degradation while addressing livelihoods concerns at the same time is challenge for Thailand.

The need for a multi-sectoral approach to REDD+ is recognized by Thailand's Government. The government has put in place an institutional

arrangement/management structures that reflects the relevant sectors engaged in land use as well as other stakeholders with an interest and stake in REDD+. The REDD+ institutional/implementation framework is to provide the scheme for the design and implementation of the appropriate institutional, financial, legal and governance arrangements to successfully implement REDD+ in Thailand in accordance with international guidance for future REDD+ efforts. This institutional arrangement consists of a two-tiered institutional mechanism for implementing REDD+. At the national level, a National REDD+ task force was established to facilitate, coordinate and spearhead the REDD+ activities and it will be supported by a REDD+ Office to be established early in the readiness phase. At sub-national level, REDD+ Offices will also be established throughout the regions to coordinate and facilitate REDD+ pilot activities at sub-national level and establish capacity building and stakeholder consultation for local communities. Local NGOs, and local forest-dependent communities that are playing an important role in forest conservation and provision of extension services would be part of REDD+ implementation at local levels.

The principles behind this two tiered approach is for REDD+ to ensure credibility and to provide for transparent, efficient and effective decision making, implementation and monitoring of REDD+ efforts. Since implementation of REDD+ is a multi-sector and multi-stakeholder endeavor and comprises actions at the national and sub-national levels, Thailand will use the three main instruments for REDD+ implementation: institutions, financial measures and regulatory framework. This will enable Thailand to operationalize and implement its provisional REDD+ strategy options to minimize the conversion of forest land into other uses, hence reducing emissions, and equally to introduce actions that will enhance the sequestration capacity according to the national REDD+ strategies.

Key issues unique to REDD+ implementation that must be resolved during the readiness phase include institutional arrangements to plan, implement and monitor REDD+ activities; financing mechanisms for REDD+ activities and transactions; benefit sharing arrangements; carbon ownership to be addressed to three key beneficiaries for their efforts in the context of implementing REDD+ strategies; carbon registry to serve as national carbon tracking system; capacity building to improve technical background knowledge and skills and the regulatory framework to ensure clarity concerning key issues unique to REDD+ implementation. In addition, a Stakeholder Forum will be established to engage wide range of stakeholders, especially forest-dependent local communities in the entire REDD+ process. During readiness, the institutional/implementation arrangements will be adjusted for the effective and inclusive delivery of readiness.

The consultation process for the formulation of the R-PP began with early national and regional information sharing and dialogue with relevant stakeholders based on the mapping exercise conducted. A total of 1,252 individuals from 263 stakeholder groups were consulted through workshops and meetings. Two multi-stakeholders workshops were held at national level and six multi-stakeholder workshops were held at regional level targeting: relevant government sectors engaged in land use, military personnel, Foreign Affairs, media, universities, international organizations, and the private sector. In addition another four regional dialogues were held exclusively targeting forest-dependent local communities including local communities living and depending on the forest and its resources, women and youth groups and, civil society organizations. As a result of the early information sharing and dialogue and initial level assessments conducted, this R-PP was then formulated. This document includes a comprehensive consultation and participation plan to be implemented during the readiness phase between 2014 and 2017.

The preliminary analysis indicated that the drivers of deforestation and forest degradation are complex but are not so different in the various agro-ecological regions. Analysis revealed that deforestation is mainly caused by conversion of natural forest to agriculture and other uses (encroachment - being unauthorized or illegal land occupation), infrastructure development, and mining. The deforestation rate due to these factors is approximately 100,000 hectares per year during 2000-2006. Forest degradation, where the land remains as forest but the density and quality of the forest is decreased, is caused mainly by illegal logging and harvesting of non-timber forest product for commercial purpose, and uncontrolled forest fires. Some of the underlying factors of deforestation and forest degradation include: unclear forest area and other land use boundaries; increasing population and poverty resulting in use of forest area for livelihood. It is recognized that information and data for the analysis were not always readily available. Such further information and analysis is crucial for the identification of REDD+ strategic options. Supplemental analysis will therefore be conducted during the Readiness phase to better define and quantify the causes of deforestation and forest degradation and to cover various ecological zones/regions in more detail.

A number of potential strategic options to address the direct causes of deforestation and forest degradations were identified through analysis of existing policies, legal framework and plans, as well as stakeholder consultations. The proposed strategic options include clear forest area boundaries and zoning, updating and harmonizing forest and forest-related policies, improving efficiency of forest law enforcement, building awareness of forest conservation, development of alternative livelihoods, developing forest certification and chain of custody standards, enforcing environmental and social impact assessments of any infrastructure projects, and improving fire detection and control capability. These potential REDD+ Strategies Options will be evaluated further through the REDD+ Readiness phase. Several studies will be undertaken, including: risk analysis (summarize major types of risks, and their significance for the major REDD+ strategy activities); and feasibility assessment (socioeconomic, political and institutional) of the options. A forest governance assessment framework will be undertaken in the Readiness Phase.

REDD+ activities have the potential to deliver significant social and environmental co-benefits, however, many participants during the early information sharing and dialogues have also highlighted the potential risks, particularly for forest-dependent communities. Strategic environmental and social issues which must be considered at the REDD+ readiness stage includes biodiversity and ecosystem services; micro-climate; water services and quality; soil condition; food security, placement of people and fauna, cultural and social problems resulting from migration and immigration, land ownership, land tenure, land accessibility, energy supply and gender equity and other benefits to improve education and health of the people while pursuing growth with low emissions from land use change.

SESA will be carried out during the Readiness phase which will include stakeholder analysis, description of the initial social and environmental situation of the forestry sector in Thailand, analysis of the possible impacts of different REDD+ strategy option scenarios, analysis of impacts of different REDD+ alternatives, and development of an Environmental and Social Management Plan (ESMP). Tasks to be conducted during the Readiness phase will include 1) scope of assessments and baseline analysis; 2) measures for impact mitigation and efficiency improvement. The results from SESA analysis will be used to suggest measures for negative impact mitigation and efficiency improvement for positive impacts in REDD+ strategy options; the suggestions will include the revision

of REDD+ strategic options; the revision of rules and regulations together with institutional management; terms/conditions of REDD+ project implementation and stakeholder participation, 3) monitoring framework: SEIA will suggest the monitoring system, reporting pattern and indicators for monitoring of social and environmental impacts from REDD+ strategy implementation and 4) reporting: the results and conclusions from SESA will be summarized in the draft report. The draft report disseminated publically to relevant stakeholders. Besides, a safeguard information system should be designed. This system will be initiated to test, as appropriate subject to available financial support.

The Development of Environmental and Social Management Framework: the ESMF is an output of the SESA process. It aims to ensure that REDD+ policy/REDD+ scheme „do no harm“ and, instead, should do good“ to all environmental and social aspects. The integration of the social and environmental considerations will be handled using the ESMF tool. This tool will be used to guide the process of incorporating the safeguards for identified negative impacts. The tool provides the guidance to identify salient environmental and social issues early on, prepare, as needed, remedies and plans to address these issues, and monitor implementation.

The need for a reference emission baseline: A reference emission level provides national stakeholders with a measure of the current level of emissions from forests and land-use change and gives a measure of the magnitude of the task to reduce emissions. It also gives potential future funding sources for REDD+ activities a measure of the relative importance of different strategic options and provides the baseline against which future reductions in emissions are measured and credited. Forest carbon stocks in Thailand were estimated in 1989, 1994 and 2006. The results indicated that annual loss of carbon from natural forests during the period 1994-2006 averaged 33 million tones, which is partly offset by net sequestration in plantations of approximately 17 million tones. Based on an average carbon density in natural forests the loss of carbon from deforestation of approximately 180,000 hectares annually accounts for about 16 million tones, suggesting that forest degradation accounts for approximately 17 million tones. All these figures need to be verified by more detailed analysis, which will require good coordination between the many departments holding the relevant data. This analysis will be undertaken during the first two years of the Readiness phase to develop a credible national baseline.

In Thailand, each sector has established systems for monitoring relevant sector indicators, and the aim is to build a national REDD+ monitoring system that will integrate forestry sector information with that of other relevant sectors. For forestry related data the existing national forest information systems will be harmonized and integrated into an NFMS, and for the other sector data, discussions will be arranged with all the relevant agencies to share data and submit needed information to a REDD+ Co-benefit monitoring system that will be the second component of the National REDD+ monitoring system. National forest land use change monitoring is conducted by several agencies. However, these agencies use different forest area estimation techniques, classification systems, and imagery. For example, the Department of National Parks, Wildlife and Plant Conservation (DNP) uses Landsat-5 imagery with automated and visual interpretation, while the Royal Thai Survey Department (RTSD) uses aerial photographs taken with digital mapping camera (DMC).

National carbon stock change monitoring data do not currently exist, although there exist tree volume data from THAIFORM that could be converted to carbon using existing allometric equations or other conversion factors. Other existing volume data have several limitations: inconsistent data across the country; several data custodians; lack of

data on some forest resources; lack of tools to accurately estimate carbon in standing trees; and lack of mechanisms for information dissemination sharing, networking. There is also no comprehensive national forest information system in place. The various government departments under Ministry of Natural Resources and Environment (MONRE) have their own databases and systems. An International Tropical Timber Organization (ITTO) supported pre-project is currently under preparation with the Royal Forest Department (RFD), to strengthen the existing national forest information systems.

Most of the forest resources assessment work is currently conducted by the DNP, which has the largest pool of forest inventory experts and personnel. Within the DNP, there currently exist inventory and monitoring systems infrastructure, which could be built upon, strengthened and integrated, to implement a national forest information system (re-measure and analyze the permanent sample plots), for the purposes of REDD+ monitoring. This implementation will be coordinated by the REDD+ TF. Capacity building, in the form of training, is needed in the DNP and collaborating agencies. Furthermore, during the Readiness phase, regional cooperation in REDD+ monitoring would take place, since some of the pertinent REDD+ drivers (*e.g.* illegal logging) are of trans-boundary nature and to also help address the issue of leakage and the current displacement of emissions among countries through illegal logging. Studies will be implemented to: i) examine the potential scope of multi-country monitoring, harmonization requirements and possible implementation arrangements; ii) devise mechanisms to link the NFMS with community-level and project-type monitoring systems; iii) prescribe the necessary guidelines (systems, design, methodologies and parameters) for implementing carbon monitoring at the community-level; and iv) identify capacity building needs for community-level monitoring support.

Verification standards for REDD+ are lacking in Thailand. Thus, during the Readiness phase, it is proposed to develop national standards and guidelines for independent and transparent verification. These standards would outline who the verification bodies are, what the verification process should be, how verification results will be reported, and how to make adjustments in reports of reducing emissions from deforestation and degradation. Capacity building measures, specifically training, for government staff, private sector and NGOs on the verification requirements will be undertaken.

A process is proposed for the development of the component to the national REDD+ MRV system for monitoring benefits from REDD+ interventions other than reductions in net greenhouse gas emissions, that includes biodiversity, soil and water conservation and social and environmental impacts and the effectiveness of the planned safeguards and governance. A large number of agencies are currently monitoring most of the indicators that are required to assess co-benefits from REDD+ interventions other than changes in carbon stocks and emissions of CO₂. These include indicators for changes in household and community livelihoods, biodiversity, soil and water land-use rights and ownership and governance. This will build on the wide-ranging monitoring systems already in place in various agencies and will be tested in the pilot sites, which will enable gaps in monitoring capacity to be identified. It is expected that the REDD+ readiness program would require a large number of activities to be implemented by many different stakeholders during 2014-2017. The progress of implementation of these activities will need to be closely monitored to ensure all are completed in time using Milestones and Indicators established in the monitoring framework, to enable the program manager check progress. The outcomes of many of the activities are based on assumptions that need to be reviewed, and also carry risks that may impede or prevent implementation and these will need to be mitigated. Many activities are interlinked and

need to be coordinated. Periodic and progress reports form an important part of monitoring and need to be delivered on time in accordance with the framework. During the Readiness phase, the REDD+ Office will develop a detailed work-plan and revise the milestones and indicators accordingly during the first six months. A Gant chart will be developed to lay out the schedule and linkages between all the activities to aid monitoring. The REDD+ Office will ensure that all reports and documents required for monitoring are prepared and delivered in accordance with the work-plan.

7. VANUATU

Executive Summary

Vanuatu is a Melanesian archipelagic nation of about 83 islands in the South Pacific Ocean, with a small population estimated at 230,000. Ni-Vanuatu, or indigenous people from Vanuatu, makes up the majority of the population. Rural and traditional economies characterized by very low monetary incomes and subsistence land use are dominant in the country; around three-fourths of Ni-Vanuatu live in rural areas. Produce such as root crops and seasonal fruits as well as fishing and cattle raising form the base of many livelihoods. Given its low per-capita income, Vanuatu belongs to the group of Least Developed Countries. However, Vanuatu has repeatedly expressed its desire to develop economically, through investments in infrastructure, an internationally competitive tourism industry, and agriculture and forestry, including agro-industrial production and processing. The success of REDD+ in Vanuatu is contingent on its ability to comprehensively integrate sustainable land use activities that reduce pressure on forests into the development and implementation of these development policies.

Land is deeply important to the Ni-Vanuatu. Customary law has been a significant influence on Vanuatu's legal system and the vast majority of land in Vanuatu is owned by Ni-Vanuatu communities or individuals. The 1980 Constitution vests all land to Ni-Vanuatu in perpetuity. In order to develop land, i.e. implement any commercial activity, a conditioned lease has to be registered, including the demarcation of the land, registration of ownership, and specific conditions as to which activity can be implemented under the lease agreement. Vanuatu land law requires customary owners to be consulted and have to consent to all matters relating to the use of the land and its resources. However, the land tenure system is vulnerable to illegal practices that lead to land grabbing and to conflicts over the ownership as soon as financial gains are expected. Thus, participation and support of community representatives will be a cornerstone of REDD+ strategy building during R-PP implementation.

REDD+ Scheme is the fully functional design and implementation of REDD+ in Vanuatu. The term *Scheme* is used in order to distinguish REDD+ from time-bound programs or projects. REDD+ Scheme is the overarching term which encompasses REDD+ projects and programs.

For the purposes of REDD+, the forest definition is broad to include mangroves, palms and agroforestry systems that meet the minimum area, height and canopy cover requirements. Although commercial logging led to significant forest degradation in the 80s and 90s, land use trends most affecting the forests have shifted to small-scale subsistence activities. In the future, infrastructure, tourism and agro-industry development may prove to be the most important drivers, also land speculations might contribute to land use change. Due to high social and ecological diversity between the islands, the REDD+ Scheme must incorporate a variety of approaches, both in

addressing different drivers as well as how it reaches out to stakeholders through the different communication structures prevalent at the village level.

Taking all of this into account, Vanuatu is planning to implement an innovative approach, its national REDD+ Scheme, in which the government will use the carbon money to invest into sustainable land use activities in different sectors and thereby lower the rate of deforestation and forest degradation, hence the GHG emissions. The main benefit for the Ni-Vanuatu will be the enhancement of sustainable economic activities and the increase of income with the national investment program covering the up-front investments. Vanuatu will pursue demonstration activities using financing instruments currently available to support such activities.

In parallel to the investment program, the Government of Vanuatu is in the process of developing a well-articulated and widely accepted land use policy, emphasizing balance and trade-offs among different land-use options, and enabling close collaboration and coordination among the different Government authorities responsible for land, agriculture, livestock, forestry, climate change adaptation, Provincial governments, customary chiefs and communities. Integrating REDD+ objectives into land use planning at the Provincial level is seen as the most promising approach to ensuring REDD+ activities come from bottom-up demand, as opposed to being imposed from the top-down.

The reader will notice that the budget for the implementation of most chapters is not yet secured. Ongoing activities by other donors that can be used as REDD+ contributions and in-kind contributions of the government of Vanuatu are not quantifiable. The potential contributions are listed in the budget of chapter 5, without amount, and described in the relevant text passages.

Summary of R-PP:

1. National Management Arrangements:

- a. The Vanuatu Meteorology and Geo-Hazards Department under the Ministry of Civil Aviation, Meteorology and Postal Services is the REDD+ Focal Point and the Department of Forests is the implementing agency.
- b. A multi-stakeholder Technical Committee (TC) has been created, which will report to the Program Management Unit at the NAB.
- c. Ad-hoc Working Groups under the TC will be created for specific issues as required.

2. Communication, consultation and participation

- a. Stakeholder mapping identified REDD+ relevant stakeholders at the national level and the relationships between them.
- b. Early dialogues in the Provinces resulted in a communication strategy for widespread awareness-raising which will be up-scaled following R-PP acceptance.
- c. The majority of land is owned by Ni-Vanuatu or citizens of Vanuatu, making stakeholder engagement the core of REDD+ in Vanuatu. The regional NGO Live & Learn has launched an early REDD+ dialogue in three Provinces during which it has developed the REDD+ Consultation and Participation Plan.

3. REDD+ strategy options and implementation framework

- a. Existing analysis on drivers of deforestation and forest degradation has influenced the R-PP. More detailed assessments will be carried out during R-PP implementation.

- b. Vanuatu is considering a national REDD+ Scheme which enhances investments for sustainable land use activities, with the national Government creating the institutional framework for REDD+ and implementation taking place at the Provincial level. Due to differences in island size, deforestation and degradation dynamics, it is proposed that the subnational design follow island topography. The technical modalities will be further defined during R-PP implementation, which will include field testing on the island of Espiritu Santo (Santo).
 - c. A Jurisdictional REDD+ program in Vanuatu would mean baselines, crediting, safeguards management and an internal allocation program would be developed at the national level, with the Provincial governments administering the main REDD+ activities
 - d. A Strategic Social and Environmental Assessment will allow for a better understanding of the costs/benefit trade-offs between the strategic options as well as allow for a broader range of stakeholder to influence strategic REDD+ decisions.
4. Measurement, reporting and verification of forest carbon and non-carbon benefits
- a. Vanuatu is aiming at an activity-based subnational approach to be aggregated to a national reference level. Each jurisdiction or defined subnational domain would require its own activity-specific reference (emission) level.
 - b. A forest governance assessment and streamline a Safeguards Information System within the PMU are priorities for monitoring multiple benefits.
5. Budget and timeline of work plan and activities, including milestones.
6. Monitoring of R-PP implementation and continuous improvement of program approach by incorporating stakeholder feedback.

8. VIETNAM

Executive Summary

The Readiness Preparation Proposal (R-PP) outlines the process by which the Government of Vietnam will develop its national strategy for participating in an evolving international mechanism for reducing emissions from deforestation and forest degradation, sustainable forest management, forest conservation, and enhancement of C-stocks (REDD+).

According to the UNFCCC conference in Bali, Vietnam is one of the most severely affected by negative impact of climate change in the world, with potential extensive economic damage and loss of life. Its extended coastline with land just above sea level houses most of the country's population and harbours most its economic activities, good for some 90% of the GNP. For this reason the country has much to gain when joining the international struggle against the effects of global warming.

Vietnam is one of the nine countries identified for country programming under the QuickStart Initiative of the UN-REDD Programme, and was one of the first countries to receive approval of the R-PIN under the current FCPF initiative. It therefore is much committed to achieve substantial results in the field of climate change and mitigation.

The forests of Vietnam are under serious threat. Increasing deforestation and rapid degeneration of forests in the country have led to loss of habitat and made entire

landscapes susceptible to changing climate conditions. Much forest cover was removed between 1943 and 1993 declining the national coverage from at least 43% to 20%. Since then considerable efforts have been made to increase overall forest cover. According to official statistics Vietnam's actual forest area has increased to 13.26 million ha in 2009 (above 39% of the land area). With the *Five Million Hectares Reforestation Program* it aims to reach 40% by 2010. Much of the increase has been realized through plantations, re-designation and inclusion of previously omitted limestone forests, and natural regeneration - predominately of bamboo forest area. However, albeit some net increase in forests is observed, Vietnam has clear pockets of serious deforestation and extensive degradation occurs. Furthermore, it is generally acknowledged that the quality of natural forests are considered poor or regenerating and continues to be more fragmented and degraded. Lowland forests supporting their full natural biodiversity have been almost entirely lost, while Vietnam's mangrove forests have been significantly degraded.

The factors driving deforestation in Vietnam have changed throughout the course of history. Much of this was a result of war and agricultural expansion by people migrating into forested areas. Currently it is the fast economic growth within the country and the drive to export commodities to be the underlying drivers of deforestation and forest degradation. Changing natural forests into alternative land use, such as coffee or rubber, has rapidly changed the landscape. Such opportunities are a serious threat to standing natural forest. It is of much importance that the benefits of REDD+ outweigh the opportunity costs from current land uses.

Government Decree No. 99/2010/ND-CP dated 24th September 2010 on Policy on Payment for Forest Environmental Services (PFES), in which carbon sequestration and conservation are considered as forest services, paid an important legal foundation for the REDD+ implementation in Vietnam. Fully implementing a mechanism on REDD+ is a challenging task and requires cross-sectoral planning and coordination, as well as a revision of policies, programs, laws and institutions. Vietnam has, through its parallel UN-REDD activities, already established a well-defined institutional structure to initiate the REDD+ process. In January 2011, the Vietnam REDD+ Steering Committee is established under authorization of the Prime Minister and chaired by Minister of Ministry of Agriculture and Rural Development (MARD). The Vietnam REDD+ Office is founded to coordinate all the REDD+-related activities in Vietnam. All participating parties are organized through two established groups: the National REDD Network and the Technical Working Group, each with its clearly defined roles and responsibilities.

Under the auspices of the Secretariat of the National REDD Network and the REDD Working Groups, the National REDD+ Programme is now under preparation. As part of the development of the R-PP, and particularly to promote *ownership* during the entire process and ensure the success of REDD+ implementation, there has been a wide consultation process with key stakeholders. Such consultation is part of the Strategic Environmental and Social Assessment (SESA), which provides a platform for discussions with and involvement of stakeholders and partners as well as a mechanism for taking their opinions into account during the National REDD+ Programme preparation and implementation. This process has resulted in the preliminary identification of 'strategic options' for addressing deforestation and forest degradation and provide the basic elements of a National Strategy. The strategic options identified are a direct response to the key drivers of deforestation and underlying causes mentioned above. Embedded in the concept National REDD+ Programme is linking the REDD+ activities to the Socio-economic Development Plan (SEDP) operating at different administrative levels consistent with the REDD+ implementation processes.

Effectively measuring the development of the forests, thus the potential reduction of emission levels and increase of carbon stock exchange, is key to REDD+. Determining the actual impact of REDD+ requires the best available information on trends in carbon sequestration. This generally is supplied by using Reference Scenarios and forest reference levels (RL). Though it is understood that all technical considerations await the final decision by the Conference of Parties to the UNFCCC, Vietnam is arriving at some convergence on technical methodologies appropriate for the development of RELs/RLs. Incorporating consultations with stakeholders (e.g. through the National REDD Network and numerous Sub-Technical Working Groups), basically RELs and RLs will be developed for all carbon related activities within the scope of the REDD+ mechanism. Currently much work on developing these reference levels is implemented under support of JICA and Finland.

To arrive at the difference between the calculated stocks in the reference scenario and those data collected through actual and verified measurements, data on both deforestation and forest degeneration needs to be available. Historical RELs will be developed based on historical deforestation trends dating back to at least 1990 and is based on the full available record of satellite imagery for Vietnam at medium spatial resolution and field measurement data of previous cycles of the National Forest Inventory Program (NFI). Generation of historical RELs for forest degradation involves greater complexity. For the latter, the option is considered to forego accounting for historical emissions from forest degradation as the level of detail and coverage of available data is difficult to match with current data sets and information. Instead, sub-national RELs/RLs will be developed based on stratification of the national territory into more homogeneous eco-regions.

Local people can play a role in monitoring emissions, but are especially valuable in identifying, reporting, and enforcing the interventions and tasks required for REDD+. Participatory monitoring will strengthen their understanding and commitment while providing a degree of comfort to investors that REDD+ is sustainable. Key stakeholders on the ground will be asked to register land changes that result in effectively reducing emission levels and increasing removals. Information from such land changes will be integrated with historical data on land cover change to assess the success of REDD+ and to administer the claims Vietnam can make in the international carbon stock market. Associated benefits of such grass-root level approach is the ultimate requirement to have land tenure ship secured, and increase of overall ownership and support for the REDD+ process.

A financial mechanism shall be developed to reach the local beneficiaries participating in REDD+, and ensure the fund has a sound governance structure which includes how funds are monitored. Such an appropriate off-budget mechanism should meet international requirements regarding transparency, equity and performance linkage and suitable with national circumstances and culture. This implies the need to –fire-wall|| REDD+ revenues to prevent co-mingling with other sources of funding. The mechanism also needs to be able to accommodate the disbursement of REDD+ revenues to sub-national and local levels, as well as to follow strict monitoring and performance requirements. Having already several mechanisms of funding in place, Vietnam has to choose the most viable one in REDD+ terms, currently subject of the study *Design of a REDD-compliant Benefit Distribution System (BDS) for Vietnam*.

The proposed measurement, reporting and verification (MRV) system will closely follow the guidelines defined by the UNFCCC, as well as adopting functions specially pertaining to forest and forest land management, and socio-economic development of provinces, districts and communes. It will be implemented to quantify the actual success in

emission reduction and increase of removals, as well as monitoring of REDD+ interventions and actions, revenue disbursement, and financial transactions (auditing).

The methods of forest Participatory Carbon Monitoring for households, communes and Community Forestry Management groups is being tested by the UN-REDD Vietnam Programme. Data will be collected using the PCM methods will be supplemented by satellite based monitoring and field measured data of the National Forest Inventory Program. All relevant stakeholders will have access to specific functionality relevant to the specific tasks, role or interest of the stakeholder. It is proposed they will gain access to data and information through a web-based interface.

Reporting will be managed through a national data infrastructure for the MRV system. The main communications options will be the internet and the mobile phone network, both readily available and relatively easy to implement in Vietnam, except in the most remote areas.

An independent (international) auditor will review and assess all the data and information, including provincial and district Socio-economic Development Plans relevant to REDD+. The MRV system will thus work as the principal repository for all data pertinent to the report on emission reductions and removals.

The REDD+ readiness preparation phase is achieved through various activities leading to the anticipated outcome and ultimately to REDD+ readiness implementation. As in Vietnam already much is in motion concerning REDD+ or activities closely related to this, certain activities are already deployed and no budget is required for the same under FCPF. For instance, the UN-REDD Vietnam Programme together with JICA and Finland are much involved in developing adequate RELs for Vietnam. Hence, no funding is required here. On the other hand, few initiatives have been undertaken in developing an effective MRV system and FCPF financial assistance would be much welcomed. The activities leading to REDD+ implementation have been calculated individually, and the sum total of the actions amounts to \$15,578k, of which \$3,619k is requested from the FCPF. A breakdown of costs is given in Component 5.

Given distinct trends of forest changes, forest and land tenure systems and strong government commitment, the support from FCPF and other development partners could give interesting lessons for the REDD+ implementation in the other countries.