Climate Investment Funds

Meeting of the FIP Sub-Committee
Washington, D.C.
June 24, 2010

FIP EXPERT GROUP: RECOMMENDATIONS FOR ADDITIONAL PILOTS UNDER THE FIP

Proposed Decision by the FIP Sub-Committee

The Sub-Committee welcomes the report of the FIP Expert Group and expresses its appreciation for the high quality, substantive supplemental work that has been carried out by the group. The Sub-Committee notes that the supplemental Expert Group report provides a solid, analytical basis for selecting additional pilot programs to be financed by the FIP.

RECOMMENDATIONS FOR THE SELECTION OF PILOTS UNDER THE FOREST INVESTMENT PROGRAMME (FIP)

Second Report of the Expert Group to the FIP Subcommittee

Executive Summary

At its last meeting, the FIP Sub-Committee (FIP-SC) welcomed the presentation of the Co-Chairs of the FIP Expert Group (FIP-EG) on the work of the group and the group's report (FIP/SC.3/6, *Report of FIP Expert Group: Recommendations for Pilots under the FIP*) and expresses its appreciation for the high quality, substantive work that has been carried out by the group. The Sub-Committee noted that the Expert Group report provides a solid, analytical basis for selecting the pilot programs to be financed by the FIP.

Based on the recommendations proposed by the FIP Expert Group, the Sub-Committee approved the following five country pilots to be financed by the FIP. The Sub-Committee noted that the five pilots met the criteria and other considerations approved by the Sub-Committee:

> (a) Burkina Faso
> (b) Ghana[1]
> (c) Indonesia
> (d) Lao P.D.R.
> (e) Peru

Recognizing that the current level of pledged financing available for the FIP has increased to $558 million, taking into account the indicative assessment of country investment needs provided by the MDBs, and underscoring the importance of ensuring that the scale of investment for each pilot is sufficient to initiate transformational change, the Sub-Committee invited the FIP Expert Group, taking into account the expressions of interest received, having regard to its previous recommendations on alternate pilots[2] and ensuring consistency with existing criteria for the selection of country and regional pilots, to propose a list of six additional pilots, in priority order, to the Sub-Committee for consideration at its next meeting.

The FIP Sub-Committee requested the Expert Group to specifically review the potential of a pilot program in Brazil to achieve the objectives of the FIP, as

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[1] With regard to Ghana the FIP Sub-Committee notes that Ghana is particularly well placed to exchange lessons learned through the FIP process with its neighboring countries, in particular Liberia. Given the ongoing efforts in apost-conflict Liberia to transform the forest sector, collaboration between Ghana and Liberia in the implementation of the FIP is envisaged in a coordinated manner.

[2] The Expert Group was asked to recommend three alternate pilots. The alternates recommended were COMIFAC (a regional pilot covering Cameroon, Central African Republic, Democratic Republic of Congo, the Republic of Congo, Equatorial Guinea and Gabon), Mexico and the Philippines.

well as similar potential of pilot programs in interested countries in Europe and Central Asia and South Asia, when providing its recommendations.

The FIP-EG reconvened in response to the FIP-SC request to recommend six more pilots in the second round. The EG adhered to the FIP Criteria for Selecting Pilots and followed essentially the methodology of the first round. However, the guidance from the FIP-SC, particularly paragraphs 14 and 15 of Summary of the Co-Chairs (March 2010), obliged the EG to introduce some modifications in the approaches and methodology to be followed in the second round of proposing pilots for FIP investment.

The process for proposing six pilots proceeded in three consecutive stages. In the first stage, the 44 Expressions of Interest (with the exclusion of the five that had been approved in the first round) were ranked through a numerical scoring system based on the following four FIP Criteria for selecting pilots:

a) Potential to lead to significantly reduced greenhouse gas emissions from deforestation and forest degradation or lead to further efforts to conserve, sustainably manage or enhance forest carbon stocks whilst protecting biodiversity and supporting rural livelihoods.

b) Potential to contribute to FIP objectives and adherence to FIP principles (mainly the potential to initiate transformational change).

c) Potential of mainstreaming FIP investment in ongoing policy framework and ongoing development activities especially the potential for FIP investments to have a significant impact that would initiate transformational change while working in synergy with ongoing efforts to mitigate climate change and to promote forest sector development.

d) Country preparedness, ability and interest to undertake REDD+ initiatives and to address key direct and underlying drivers of deforestation and forest degradation. Government

efforts to date and its willingness to move to a strategic approach to REDD+ and to integrate the role of forests into national sustainable development strategies, as well as government's ability to effectively absorb additional funds, recognizing on-going forest programs.

Twenty-one potential pilots scored above the average in the first stage. They were subjected to a second round of numerical scoring and ranking based on the four major FIP Objectives:

1) To initiate and facilitate steps towards transformational change in developing countries' forest related land-use policies and practices;

2) To pilot replicable models to generate understanding and learning of the linkages among the implementation of forest-related investments, policies and measures and long-term emission reductions and conservation, sustainable management of forests and the enhancement of forest carbon stocks in developing countries;

3) To facilitate the leveraging of additional financial resources for REDD leading to an effective and sustained reduction of deforestation and forest degradation, thereby enhancing the sustainable management of forests; and

4) To provide valuable experience and feedback in the context of the UNFCCC deliberations on REDD.

Out of the twenty-one EOI ranked in the second stage, six scored the highest (Brazil, DRC, Mexico, Philippines, Mozambique and Russia). However, the Expression of Interest from Russia, which ranked sixth, had to be eliminated at that stage because it is considered not eligible according to the FIP Design Document and Eligibility Criteria (based on the DAC criteria). Hence, Russia could not be proposed among the six pilots for the FIP finance and had to be replaced by Nepal, the pilot that ranked after Russia.

Recognizing the guidance from the FIP-SC, the six top ranking potential pilots were considered for a third stage of prioritizing proposed pilots based mainly on the fifth FIP criterion for selecting pilots: *"e) Country distribution across regions and biomes, ensuring that pilots generate lessons on how to go to scale with respect to: (i) immediate action to curb high rates of deforestation and forest degradation; (ii) conservation of existing forest carbon stocks within primary forests; (iii) enhancement of forest carbon stocks on degraded lands; and (iv) building effective capacities for sustainable management of forests. Recognizing the emphasis on lesson learning through the FIP, the pilots should be representative of the broad spectrum of forest issues, such as various degrees of deforestation and degradation as well as well as potential for carbon- and other GHG-related mitigation approaches".*

The following is the proposed grouping in a priority order:
 1. Brazil
 2. Brazil and DRC
 3. Brazil, DRC and Mexico
 4. Brazil, DRC, Mexico and Philippines
 5. Brazil, DRC, Mexico, Philippines and Mozambique
 6. Brazil, DRC, Mexico, Philippines, Mozambique and Nepal

Finally, similar to the first round, evaluating and proposing the most appropriate group of pilots among many strong EoI was a challenging task for the EG in this second round as well. However, prioritizing the six proposed pilots introduced an additional challenge especially that the sixth ranking pilot (Russia) is not eligible for FIP finance and had to be replaced by the seventh ranking pilot (Nepal).

With these six proposed pilots and the priority order suggested, a reasonable distribution across regions and biome would be achieved. Two pilots are proposed for each of Latin America and Caribbean, Asia and Africa. When the five pilots that have

been selected by the FIP-CS already are combined with the proposed six additional pilots then clustered relative to forest cover (high and low) and deforestation (high and low) it is interesting to note that all of the four clusters are represented, though with unequal numbers within each cluster. Burkina Faso is the only country that represents countries with relatively low forest cover and low deforestation (due to natural conditions and land use activities leading to desertification), while Ghana, Mozambique, the Philippines and Nepal also possess a relatively low forest area but exhibit high deforestation rates. Three pilots (Lao P.D.R., DRC and Peru) represent the high forested area/low deforestation situation; however the drivers of deforestation vary within this cluster. Two countries (Indonesia and Brazil) are classified as highly forested with high deforestation rates while Mexico is on the boarder lines between high forested/low deforestation and high forested/high deforestation.

1. Introduction

The Strategic Climate Fund (SCF) was established to provide finance piloting new development approaches or to expand activities aimed at a specific climate change challenge or sectoral response through targeted programs. The Forest Investment Program (FIP) was established as a targeted program under the SCF to catalyze policies and measures as well as mobilize funds to facilitate the reduction of deforestation and forest degradation and to promote sustainable management of forests, leading to emission reductions and protection of forest carbon stocks.

The FIP is designed to achieve four major objectives:

1) To initiate and facilitate steps towards transformational change in developing countries' forest related land-use policies and practices;

2) To pilot replicable models to generate understanding and learning of the linkages among the implementation of forest-related investments, policies and measures and long-term emission reductions and conservation, sustainable management of forests and the enhancement of forest carbon stocks in developing countries;

3) To facilitate the leveraging of additional financial resources for REDD leading to an effective and sustained reduction of deforestation and forest degradation, thereby enhancing the sustainable management of forests; and

4) To provide valuable experience and feedback in the context of the UNFCCC deliberations on REDD.

A FIP Expert Group (EG) was established by the FIP Sub-Committee (FIP-SC) to advise the Sub-Committee on the selection of country or regional pilots for the FIP. A list of FIP-EG members is given in Appendix 1.

Consistent with the criteria for the selection of country and regional pilots, and following the working modalities approved

by the Sub-Committee, the EG was invited to recommend five country or regional pilots that meet the criteria and other considerations agreed by the FIP-SC. The EG was also asked to propose a list of up to three additional pilots for consideration by the FIP-SC as it sees fit, including in the circumstances where additional funds become available to finance additional pilots or should some of the selected pilots prove not to be feasible.

The CIF Administrative Unit informed eligible countries, through the country offices of the MDBs, of the FIP program and invited interested governments to submit a brief expression of interest (EOI) to be considered as a pilot country. The EOI received by the CIF Administrative Unit by the deadline were made available to the EG for its consideration.

The FIP-EG completed its task and presented a report to the FIP-SC in March 2009 under the title: RECOMMENDATIONS FOR THE SELECTION OF PILOTS UNDER THE FOREST INVESTMENT PROGRAM (FIP)**; Report of the Expert Group to the FIP Subcommittee**[3]**.**

In considering the present report, it is essential to refer to the above- mentioned report for detailed background information.
The FIP-SC met in Manila in March 2010 and considered the FIP-EG report. The FIP-SC Co-Chairs' summary [4]has stated the following under*: ´Recommendations for Pilots under the FIP:*
12. The Sub-Committee welcomes the presentation of the Co-Chairs of the FIP Expert Group on the work of the group and the group's report (FIP/SC.3/6, Report of FIP Expert Group: Recommendations for Pilots under the FIP) and expresses its

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[3]
http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Summary%20of%20Co-Chairs%20FIP%20SC%20March%202010%20FINAL.pdf

[4]
http://www.climateinvestmentfunds.org/cif/sites/climateinvestmentfunds.org/files/Summary%20of%20Co-chairs%20FIP%20SC%20March%202010%20FINAL.pdf
And http://www.climateinvestmentfunds.org/cif/node/5

appreciation for the high quality, substantive work that has been carried out by the group. The Sub-Committee notes that the Expert Group report provides a solid, analytical basis for selecting the pilot programs to be financed by the FIP.

Selection of FIP Pilots
13. Based on the recommendations proposed by the FIP Expert Group, the Sub-Committee approves the following five country pilots to be financed by the FIP. The Sub-Committee notes that the five pilots meet the criteria and other considerations approved by the Sub-Committee:
(a) Burkina Faso, (b) Ghana[5], (c) Indonesia,(d) Lao P.D.R. and (e) Peru.

14. Recognizing that the current level of pledged financing available for the FIP has increased to $558 million, taking into account the indicative assessment of country investment needs provided by the MDBs, and underscoring the importance of ensuring that the scale of investment for each pilot is sufficient to initiate transformational change, the Sub-Committee invites the FIP Expert Group, taking into account the expressions of interest received, having regard to its previous recommendations on alternate pilots[6] and ensuring consistency with existing criteria for the selection of country and regional pilots, to propose a list of six additional pilots, in priority order, to the Sub-Committee for consideration at its next meeting.

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[5] With regard to Ghana the FIP Sub-Committee notes that Ghana is particularly well placed to exchange lessons learned through the FIP process with its neighbouring countries, in particular Liberia. Given the ongoing efforts in a post-conflict Liberia to transform the forest sector, collaboration between Ghana and Liberia in the implementation of the FIP is envisaged in a coordinated manner.

[6] The Expert Group was asked to recommend three alternate pilots. The alternates recommended were COMIFAC (a regional pilot covering Cameroon, Central African Republic, Democratic Republic of Congo, the Republic of Congo, Equatorial Guinea and Gabon), Mexico and the Philippines.

15. The FIP Sub-Committee requests the Expert Group to specifically review the potential of a pilot program in Brazil to achieve the objectives of the FIP, as well as similar potential of pilot programs in interested countries in Europe and Central Asia and South Asia, when providing its recommendations."

In response to the invitation from the FIP-SC, the CIF Secretariat reconvened the FIP-EG in order to review the EOI (Annex 2) and additional material received from potential pilots and other documents made available by the CIF Admin Unit with a view of proposing 6 more pilots, in priority order, as requested by the FIP-EG. The EG performed its task guided by the decisions of the FIP-SC stated above and following the basic methodology of the first assignment, with some modifications as recommended by the FIP-SC and as outlined in Chapter 2.

The FIP-EG began its second task by a preparatory teleconference in April 2010 followed by a series of discussions among the group. A meeting of the co-chairs was held in Washington, DC May 10-14 with the participation of other EG members through teleconferencing. The FIP-EG drafted the present report by the end of May for the consideration of the FIP-SC in its meeting in Washington, June 24, 2010.

2. Methodological Approach and Analytical Procedure

It is important to recall here that the EG was guided essentially by the Criteria for Selecting Expert Group members and its Terms of Reference (FIP/SC/1/4/Rev1) which stipulated *i.a.* that: *"in reporting to the FIP Sub-Committee, the Expert Group outcome document should include information on:*
a) methodology and analysis leading to the group's recommendations regarding proposed country and regional pilots;
b) an assessment of key issues and challenges for the recommended pilots".

The EG adhered as close as possible to the **General methodology** and **Review of background material** respectively described in sections **3.1 and 3.2** of the first report. However, the guidance from the FIP-SC, particularly paragraphs 14 and 15 of Summary of the Co-Chairs stated above, obliged the EG to introduce some modifications in the methodology to be followed in the second round of proposing pilots for FIP investment. In particular, the EG deliberated extensively on the interpretation of: "*to propose a list of six additional pilots, in priority order,*" (paragraph 14, Co-Chairs' Summary).

The review process
The EG began the second round of proposing pilots by reviewing recent literature on the role of forests in climate change mitigation especially those pertaining to the FIP objectives as well as recent developments in processes such as the UN-REDD and Forest Carbon Partnership Facility. The outcome of the "*CIF Partnership Forum 2010; Collaborating for REDD+: The Forest Investment Program and its Partners at the Country Level*" which was held in Manila following the FIP-SC meeting was available to some EG members as well.

The Expressions of Interests (EoI) were re-examined. At that stage, 44 out of the original 49 EoI (48 plus Kenya, Annex 2) were considered with the exclusion of the five pilots that had been selected by the FIP-SC already (Burkina Faso, Ghana, Indonesia, Lao PDR and Peru).

The process of proposing pilots went into three consecutive stages.

Stage I:

After extensive deliberations, the EG decided to consider all of the 44 EoI in the first stage of screening. The following four FIP criteria for selecting Pilots as given in the FIP Design Document constituted the bases for ranking the EoI:

a) Potential to lead to significantly reduced greenhouse gas emissions from deforestation and forest degradation or lead to further efforts to conserve, sustainably manage or enhance forest carbon stocks whilst protecting biodiversity and supporting rural livelihoods.

b) Potential to contribute to FIP objectives and adherence to FIP principles (mainly the potential to initiate transformational change),),

c) Potential of mainstreaming FIP investment in ongoing policy framework and ongoing development activities especially the potential for FIP investments to have a significant impact that would initiate transformational change while working in synergy with ongoing efforts to mitigate climate change and to promote forest sector development.

d) Country preparedness, ability and interest to undertake REDD+ initiatives and to address key direct and underlying drivers of deforestation and forest degradation. Government efforts to date and its willingness to move to a strategic approach to REDD+ and to integrate the role of forests into national sustainable development strategies, as well as

government's ability to effectively absorb additional funds, recognizing on-going forest programs.

A quantitative value was given to each criterion with equal weights to all four criteria.

Stage II:

The potential pilots that scored above average in the first stage were subjected to the second round of ranking based on the flowing FIP Objectives stated in FIP Design Document:

1) To initiate and facilitate steps towards transformational change in developing countries' forest related land-use policies and practices;

2) To pilot replicable models to generate understanding and learning of the linkages among the implementation of forest-related investments, policies and measures and long-term emission reductions and conservation, sustainable management of forests and the enhancement of forest carbon stocks in developing countries;
3) To facilitate the leveraging of additional financial resources for REDD leading to an effective and sustained reduction of deforestation and forest degradation, thereby enhancing the sustainable management of forests; and
4) To provide valuable experience and feedback in the context of the UNFCCC deliberations on REDD.

A special weight was given to the high potential for REDD+ in the second stage of the ranking process. .

Stage III:

After the completion of the second stage, the six top ranking potential pilots were re-examined to ensure that they fulfil the collective FIP Objectives and Criteria for Selecting Pilots. They were then arranged in a priority order based mainly on the fifth

criterion for selecting Pilots : "e) *Country distribution across regions and biomes, ensuring that pilots generate lessons on how to go to scale with respect to: (i) immediate action to curb high rates of deforestation and forest degradation; (ii) conservation of existing forest carbon stocks within primary forests; (iii) enhancement of forest carbon stocks on degraded lands; and (iv) building effective capacities for sustainable management of forests. Recognizing the emphasis on lesson learning through the FIP, the pilots should be representative of the broad spectrum of forest issues, such as various degrees of deforestation and degradation as well as well as potential for carbon- and other GHG-related mitigation approaches"*.

In addition, the first FIP Objective: "To initiate and facilitate steps towards transformational change in developing countries' forest related land-use policies and practices" served in "fine-tuning" the final ranking and grouping of the proposed pilots.

3. Results

3.1 Assessing the REDD+ potentials of the forty-nine countries/regions

The FIP Sub-Committee in its session in Manila, asked the FIP-Expert Group to look into the REDD+ potential of all countries and regions that had submitted EoI (Annex 2) with a view to estimate their total REDD+ potential. This would be an objective indicator of one of the core criteria set by the FIP-SC for selecting pilots. In response to this request, the expert group made an attempt to roughly assess the total forest mitigation potential (REDD+, reducing emissions and enhancement of sinks) of all 49 EoI submitted for country/regional pilots.

In the following assessments, the absolute values were calculated using equations based on expert knowledge and need to be taken with great caution. The data however have their value in the fact that they allow to compare the REDD+ potential of the submitted pilots. Estimates were done for 46 countries/regions but could not be done for the Brazilian Amapa State, Serbia and Kosovo. For the latter two pilots, separate forest area figures are not available .The full tables, presented by region and containing all data is shown in Annex 3.

Figure (1) illustrates examples of the total forest carbon stock in some countries/regions. Figure (1a) shows estimates of the total forest carbon (absolute in tC) while Figure (1b) shows forest carbon stock relative to the total area of the country.
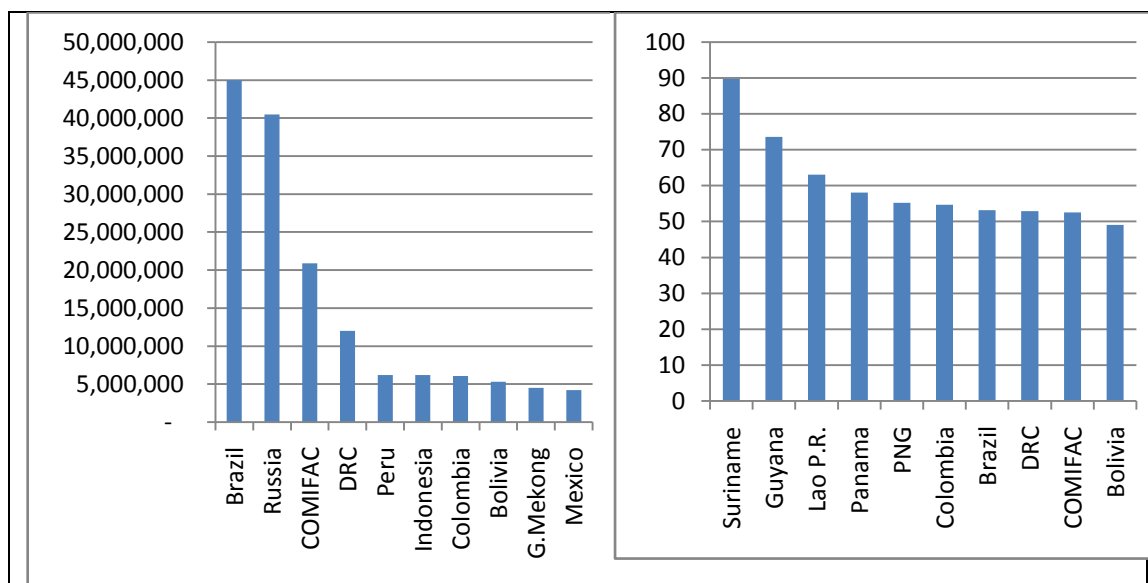
Figure (1a). Forest carbon stock (tC) of the 10 countries with highest absolute stock

Figure (1b). Relative forest carbon stock to the land area.

Since total forest carbon figures closely correlate with the absolute extent of forest area, it is not surprising that the countries/regions with largest forest areas also have the largest forest carbon stock. As only living biomass is counted, Brazil, though with a smaller forest area shows a forest carbon stock higher than the largest forested country in the world, Russia.

The 10 countries with the highest relative forest carbon stock are presented in Figure (1b). Here, in relation to the land area, Suriname and Guyana, score at the top. Surprisingly, Indonesia does not come in the first 10 countries with the weighted highest forest carbon stock. Nonetheless, the absolute forest carbon figures per ha as indicated by FAO (2009) for Indonesia, are probably underestimated.

Figure (2) summarizes the total REDD potential (including REDD in the narrow sense) of the 20 countries/regions with the highest REDD potential.
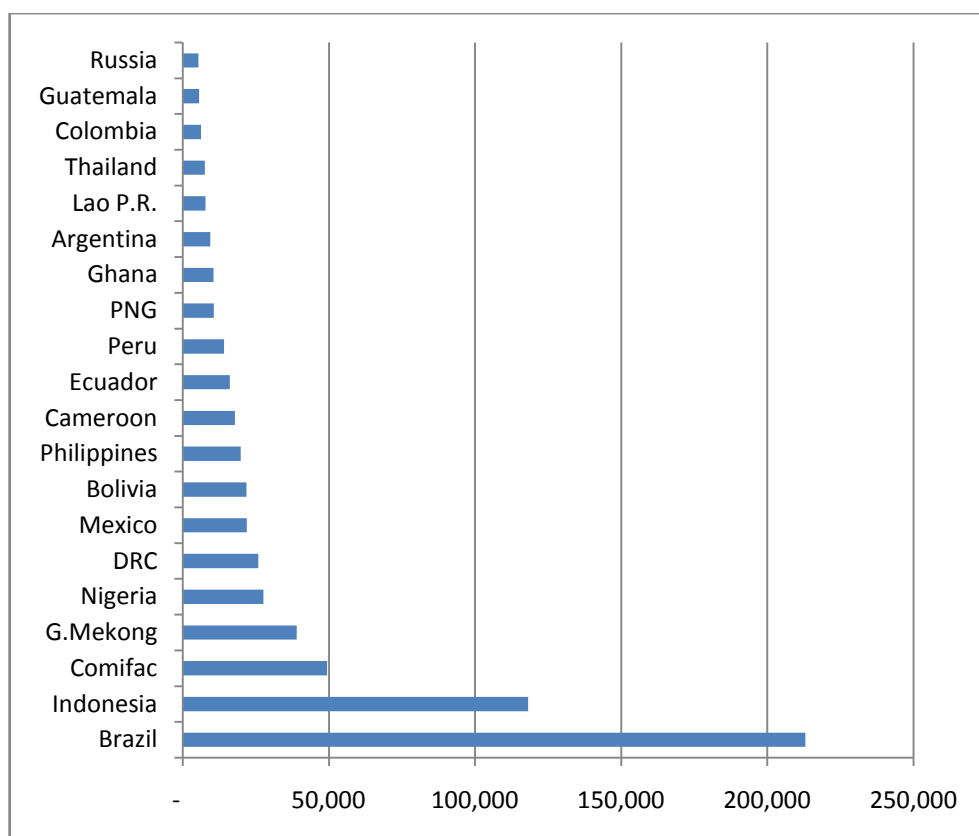
Figure 2: Total potential for reducing emissions from deforestation and forest degradation of the 20 countries/regions with the highest REDD potential. Basis: reduction of deforestation by 50% in the period 2011-2030, (in '000 t of forest C).

The highest REDD potential by far is in Brazil, followed by Indonesia and the 6 countries of the Congo Basin (COMIFAC), Greater Mekong (without Myanmar and Southern China) and Nigeria. Nigeria has *a priori* a higher potential than DRC due to its high current deforestation rates. Twenty countries (not shown in the figure but presented in the table in Annex 3b have a REDD potential of 100,000 tons and less and thus are irrelevant from a REDD perspective. They include all proposed countries from the MENA region and all Eastern European countries, but also some tropical countries.

Figure (3) shows the twenty countries with the highest potential for enhancement of sinks (only referring to the + in REDD+). While all of the countries that have submitted EoI have enhancement of sink potential, 17 countries have a potential of

less than 100,000 tons. They are scattered over all eco-climate zones and include mainly the smaller countries with a surface area of less than 100,000 km2.

By far the highest potential for the enhancement of sinks is in Russia, due to the huge extent of forests and the high potential in improving existing forest management procedures. The second highest potential is in Greater Mekong, followed by Brazil, Indonesia, the COMIFAC countries and Vietnam. Smaller countries, such as Philippines, Mozambique, PNG Cameroon and Ecuador score relatively high, as they have larger areas with degraded forests and thus good potential for restoring lost carbon pools or potential large areas for planting trees.
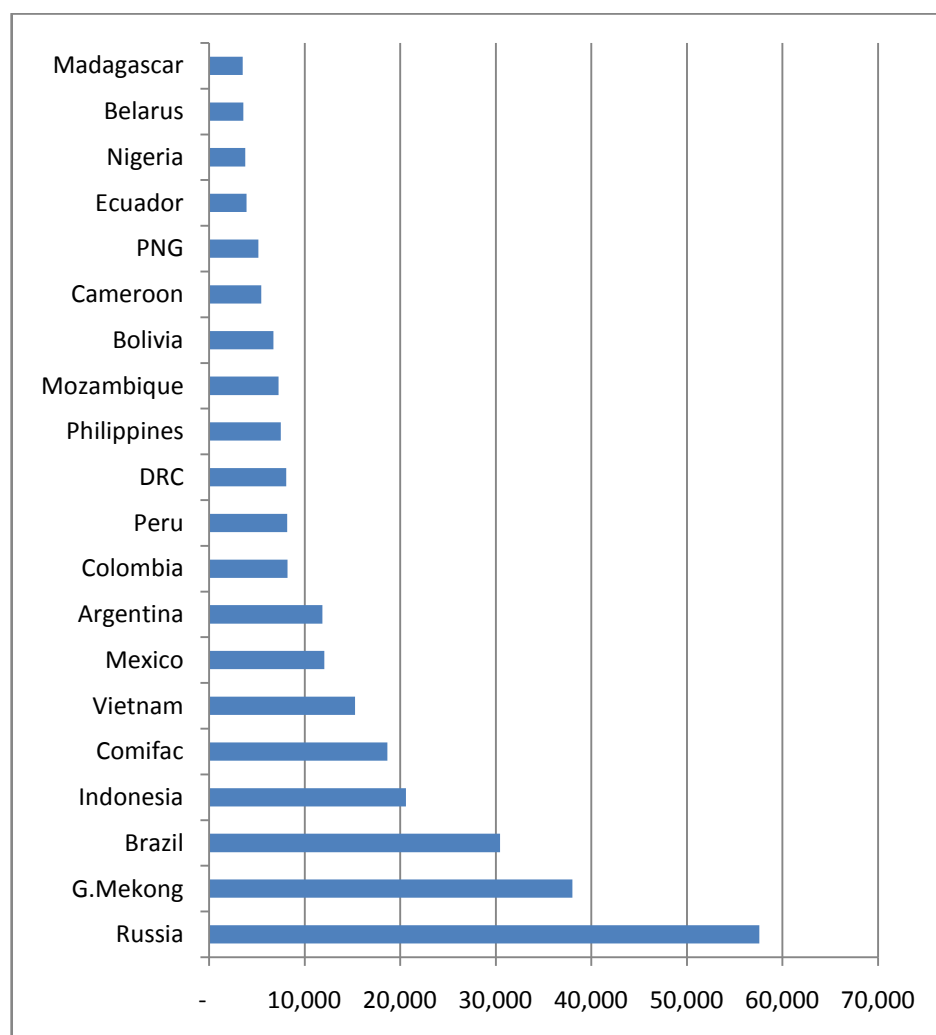
Figure 3: Total potential for enhancement of sinks (the + in REDD+) of the 20 countries/regions with the highest Enhancement of sinks potential. Basis: Estimates for sustainably managing production forests, additional forest restoration and afforestation/reforestation potential, estimated for the period 2011-2030 ('000 tC).

Finally, Figure (4) presents the thirty countries with the highest overall REDD+ potential (REDD+ as defined in the Bali Action Plan).
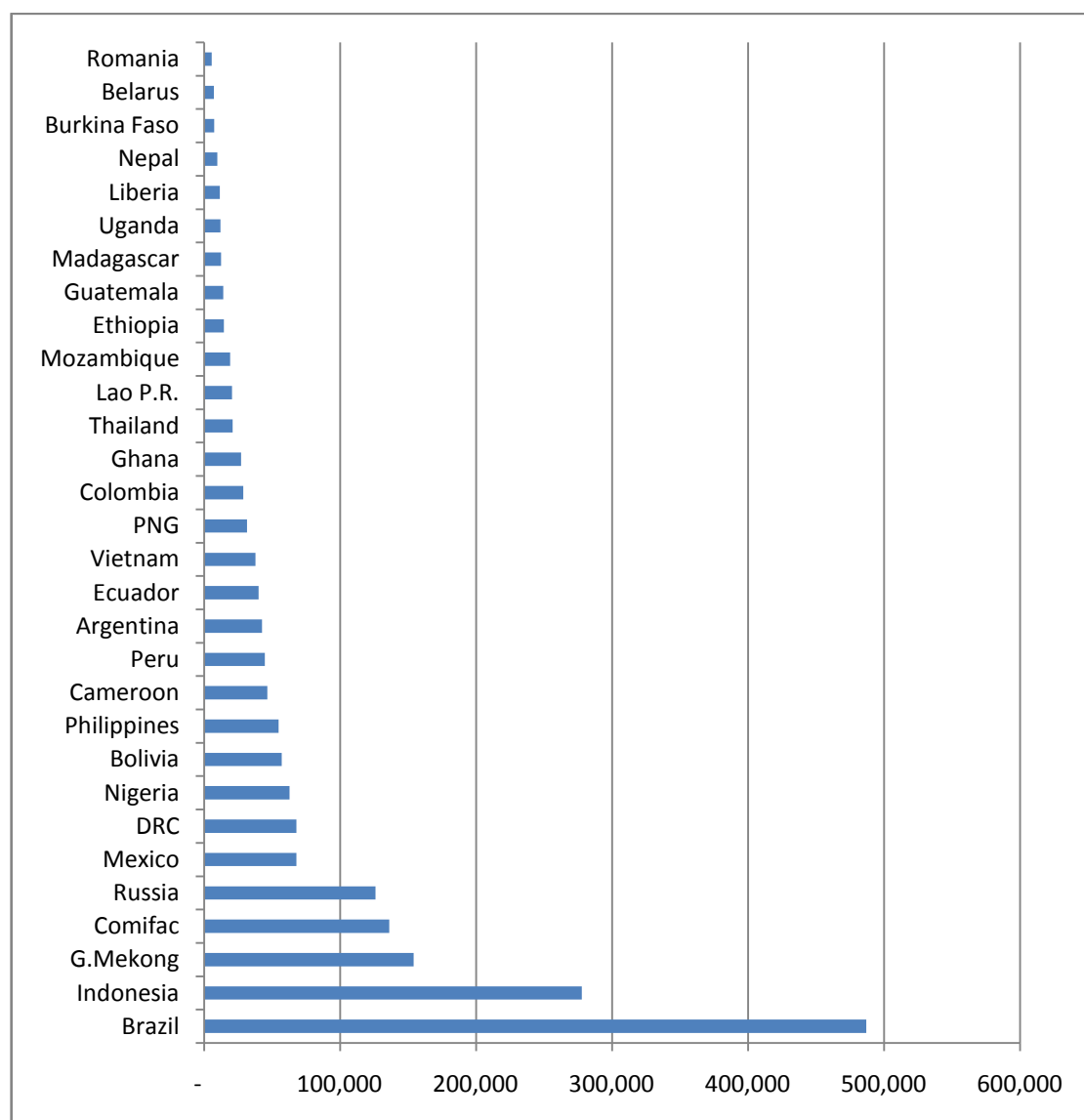
Figure 4: Total potential REDD+ of the 30 countries/regions with the highest REDD+ potential. Estimated for the period of 2011-2030, (in '000 t of forest carbon).

Logically, the biggest countries/regions with large extent of forests in absolute terms have the highest REDD+ potential, including, in a descending order Brazil, Indonesia, Greater

Mekong, the COMIFAC Region, Russia, Mexico, DRC and Nigeria. In the top twenty, 5 countries/regions are from Africa, 7 countries/regions from Tropical America, 7 from Tropical Asia and one is Russia, covering both Europe and Northern Asia region. Together, 10 countries have a total REDD+ potential of 2,500,000 tons, including in a descending order of the estimate: Panama, Algeria, Croatia, Costa Rica, Tunisia, Albania, Macedonia, Bangladesh, Tajikistan, and Jamaica.

The criterion "REDD+ potential+" is thus closely related to the size of a country, its absolute extent of forest cover, its absolute deforestation figures and the extent of land with potential to restore lost forest carbon pools or to create new forest carbon pools. It is therefore important to consider other criteria, such as geographical distribution, biome and the relative importance of forest cover and deforestation in a country to make an informed proposal of countries/regions for the FIP

3.2: Outcome of the ranking process

Stage I:

The scoring in this preliminary stage yielded 11 groups of EoI. The top 21 potential pilots (almost half the total number of EoI examined) could be grouped into the following five categories in a descending order (pilots listed alphabetically within each category):

Category I: Brazil

Category II: DRC, Mexico, Philippines

Category III: Mozambique

Category IV: Argentina, Colombia, Guatemala, Guyana, Russia, Uganda, Vietnam.

Category V: Cameroon, COMIFAC, Costa Rica, Ethiopia, Gr. Mekong Region, Kenya, Liberia, Madagascar, Nepal

Stage II:

When the twenty-one potential pilots were subjected to the second round of scoring, seven of them ranked at the top. They could be grouped in the following five categories (in a descending order):

Category I: Brazil

Category II: DRC, Mexico

Category III: Philippines

Category IV: Mozambique, Russia

Category V: Nepal

Although Russia ranked sixth in the second round it was eliminated as it is not eligible according to the FIP Design Document and Eligibility Criteria (based on the DAC criteria). Hence, Russia could not be proposed among the six pilots for the FIP.

3.2.1. Characteristics of the proposed pilots

Table (1) presents a synoptic overview of the forest situation of the five already selected pilots and the six pilots proposed for consideration by the sub-committee in June 2010, while Figure (5) illustrates their comparative forest situation.

Table 1: Forest data of the 5 selected and 6 additional proposed pilots in alphabetical order (quantitative data based on FAO State of the World Forests 2009)

Country	Land Area '000 ha	Forest Area '000 ha	% Forest area of land area	% Annual Change (2000 05)	Forest cover change/yr '000 ha	Direct activities of deforestation* (based on FCPF R-PINS)
Five countries already selected:						
Burkina Faso Tropical dry	27,400	6,800	29	-0.3	-24	Overgrazing, fuelwood, forest fire
Ghana Tropical humid	22,700	5,500	24	-2.0	-115	Logging, fuelwood, Agricultural expansion
Indonesia Tropical humid	181,000	88,500	49	-2.0	-1,900	Commercial agriculture expansion, logging
Lao P.D.R. Tropical humid	23,000	16,100	70	-0.5	-80	Shifting cultivation, firewood
Perú Tropical humid	128,000	68,700	54	-0.1	-94	Shifting cultivation infrastructure (roads)
Six additional countries proposed:						
Brazil Tropical humid*	846,000	477,000	57	-0.5	-2,800	Small-holder agriculture, ommercial land conversion
Congo D.R. Tropical humid	226,000	133,000	59	-0.4	-320	Shifting cultivation, illegal logging, fuelwood
Mexico Trop. semi-humid	194,000	64,200	34	-0.4	-260	agriculture (conversion/biofuel), fire
Mozambique Subtrop., semi-h.	79,000	19,300	25	-0.3	-50	Shifting cultivation, fire, charcoal, irregular logging
Nepal Subtrop. mount.	14,300	3,600	25	-2.1	-53	Fuelwood gathering , illegal logging in the Terai
The Philippines Tropical humid	30,000	7,100	23	-2.1	-160	Shifting agriculture, cattle ranching, illegal logging

*Brazil has different climate zones, the area concerned for REDD+ is predominantly tropical humid

The proposal for six additional pilots includes three countries (Brazil, DRC and The Philippines) in which the main forest ecosystems are located in the tropical humid climate zone (precipitation > 1500 mm per yr.), two countries with semi-humid climate (Mexico, Mozambique) and one country (Nepal) that has its main forest extent in humid tropics, but also a relatively important forest area in the mountainous sub-

tropical and temperate climatic zones. Brazil, DRC and Mexico are very large countries with very high REDD+ potentials (see Figures 1a, 2, 3 and 4), while Mozambique and Philippines are mid-size countries with good REDD+ potentials and high demonstration values (e.g. Philippines with respect to enhancement of sinks). Nepal is a small country with low REDD+ potential, but furnishes a certain demonstration value at regional level in South-Asia.

3.2.2 Clusters of proposed pilots

Figure (5), which has been constructed for comparison reasons but not to a scale, shows that the 5 already selected and 6 newly proposed pilots could be grouped into four clusters based on forest cover and deforestation rates: low forest cover with low deforestation; high forest cover with low deforestation; low forest cover with high deforestation and high forest cover with high deforestation.
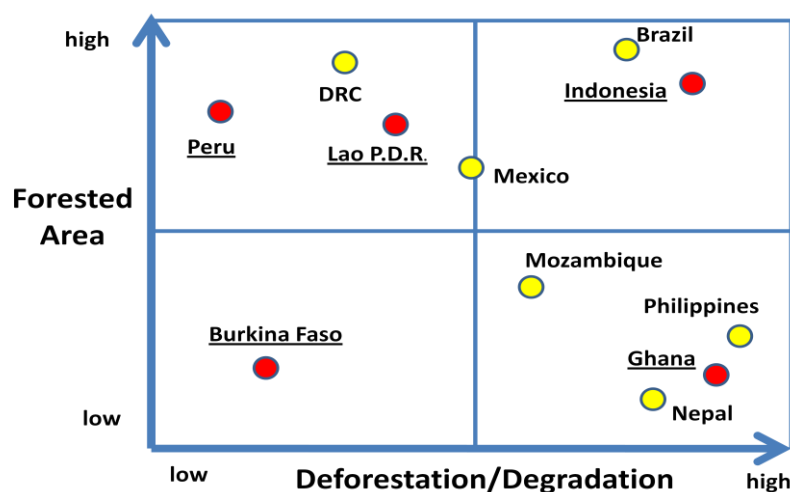
Figure 5: Comparative position of the 5 (red) already selected and the 6 (yellow) proposed pilots with respect to their forest cover and rates of deforestation and degradation. (Relative position weighed among percentage of total land area, deforestation rate and absolute forest and deforestation areas). Only dense forest area as defined by FAO (2009) is considered in order to better reflect the carbon stock situation).

All of the four clusters are represented here, though with unequal numbers within each cluster. Burkina Faso is the only country that represents countries with relatively low forest cover (due to natural conditions and land use activities leading to desertification). Ghana, Mozambique, the Philippines and Nepal also have a relatively low forest area but exhibit high deforestation rates. Three proposed pilots (Lao P.D.R., DRC and Peru) represent the high forested/low deforestation situation; however the drivers of deforestation vary within this sub-group. Two countries (Indonesia and Brazil) are classified as highly forested with high deforestation rates while Mexico is on the boarder lines between high forested/low deforestation and high forested/high deforestation.

3.2.3 Additional rational for proposing the six pilots

Additional characteristics that were analysed by the EG in proposing the six pilots included forest carbon stock and estimated mitigation potential (Table2). Below, the EG provides a brief description of the rational for evaluating the specific context including a constellation of some characteristics considered by the EG.

As said before, an important criterion to illustrate the variation among proposed pilots is the capacity to reduce emissions of GHG's resulting from land-use activities. In particular forest conservation, sustainably managing natural forests and enhancement of forest carbon stocks were considered. Table (2) summarizes an attempt to estimate the REDD+ potential for the period 2011-2030 of the 5 selected and 6 newly proposed pilots7. A rough estimate of the forest mitigation potential is presented according to six different mitigation approaches of

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[7] The figures slightly differ from the first FIP Expert Group report and the equation needed to be adapted to include the larger group of countries.

REDD+[8]. Nevertheless, these estimates should be taken with some caution, as the calculations were made by the EG based on carbon estimates of the living biomass only. The carbon amount counting all 5 carbon pools is much higher (e.g. in Indonesia, the large amount of carbon stocked in peat lands is not accounted for in the estimate).

Table 2. Some forest characteristics and rough estimates of the forest-based mitigation potential (2010-2030) for the proposed pilots (in '000 tons).

Pilot	De-gradation **	SFM Natural Forests ***	Active Forest Restoration ****	Afforestation/ Reforestation	Total Mitigation Potential 2011-30
Burkina Faso	1,200	50	250	1,500	3,600
Ghana	5,400	150	500	2,300	13,550
Indonesia	53,200	2,200	6,700	11,700	139,200
Lao P.D.R.	4,300	400	1,200	800	10,300
Peru	6,100	1,300	4,800	2,000	22,200
Brazil	95,000	4,000	12,100	14,000	243,900
Congo D.R.	11,500	800	2,500	4,800	34,000
Mexico	13,500	500	2,300	9,000	33,700
Mozambique	1,000	190	1,300	5,800	9,600
Nepal	1,800	50	200	3,500	7,850
The Philippines	11,900	250	750	6,500	27,200

Estimates inspired by Blaser&Robledo, 2008; WRI 2009 and IPCC default values (IPCC Good Practice Guidelines). Data based on FAO estimates 2009 and 2010 (under publication) and ITTO 2005 and 2010, the latter still unpublished.
*based on the assumption that deforestation can be reduced by 50% until 2030; **based on the estimate that "degraded" means an average loss of biomass of a given forest type by extractive activities; ***incremental gain through forest conservation (instead of logging/gathering fuelwood) and/or reduced impact logging estimated to be applied in 50% of the total production forest area (as defined by ITTO 2006); ****based on a assessment in each country a certain part of the degraded forests are on disposal for ecological restoration through planned carbon sequestration (natural regeneration; enrichment planting; local-species reforestation and initiation of secondary forest growth). Estimation base for mitigation values are available in excel sheets; available upon request.

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[8] The estimates have to be taken with caution as there is no literature available on quantitative forest mitigation potentials. The figures are to be considered mainly for their comparative value, and not in absolute terms. The basis of calculation are data sets of FAO (2001, 2009), ITTO (2006) and IPCC

Total figures have been slightly altered as the calculation base has been changed taking into account all 49 parties that had submitted a request to FIP. Comparative values remain unchanged.

Of the six proposed pilots, Brazil has by far the greatest GHG mitigation potential and counts for more REDD+ potential than the other 5 pilots combined. DRC, even with its considerable size, has a relatively low REDD+ potential as the largest forest tracks remains under low deforestation threat. The Philippines and Mozambique have a relatively high potential for enhancement of sink; the Philippines in particular in combination with a high REDD potential. The Philippines had converted most of its forest cover and thus has today a relatively high potential for ecological restoration. The absolute figure remains low due to the current relatively low forest area potentially available for restoration. However, because much of the deforested land is classified as degraded, the sink potential from afforestation and reforestation – coupled with high productivity and re-growth rates – has immense carbon capturing potential.

## 3.3 Prioritizing the proposed pilots

(Step III)

The six top ranking pilots could be arranged in the following order with due consideration to the rational given above and particularly to FIP Criterion 5: Country distribution across regions and biomes:

 1. Brazil

 2. Brazil and DRC

 3. Brazil, DRC and Mexico

 4. Brazil, DRC, Mexico and Philippines

 5. Brazil, DRC, Mexico, Philippines and Mozambique

6. Brazil, DRC, Mexico, Philippines, Mozambique and Nepal

The six above proposed pilots include two (Mexico and The Philippines) out of the three additional pilots proposed in the FIP-EG first report. Notwithstanding the SC's request stated in the Co-Chairs Summary Report of SC meeting, (March 2010) : "...*the Sub-Committee invites the FIP Expert Group, ..., having regard to its previous recommendations on alternate pilots and ensuring consistency with existing criteria for the selection of country and regional pilots, to propose a list of six additional pilots, in priority order, ...*", these two pilots went through the same rigorous screening process as the others and are proposed here based on their own merits.

It is worth noting that based on the present proposal, the distribution across regions and biomes would be two pilots for each of Latin America and Caribbean; Africa; and Asia. Figure 6 depicts the distribution of the five pilots approved by the FIP-SC in the first round as well as the six proposed ones in this second round.
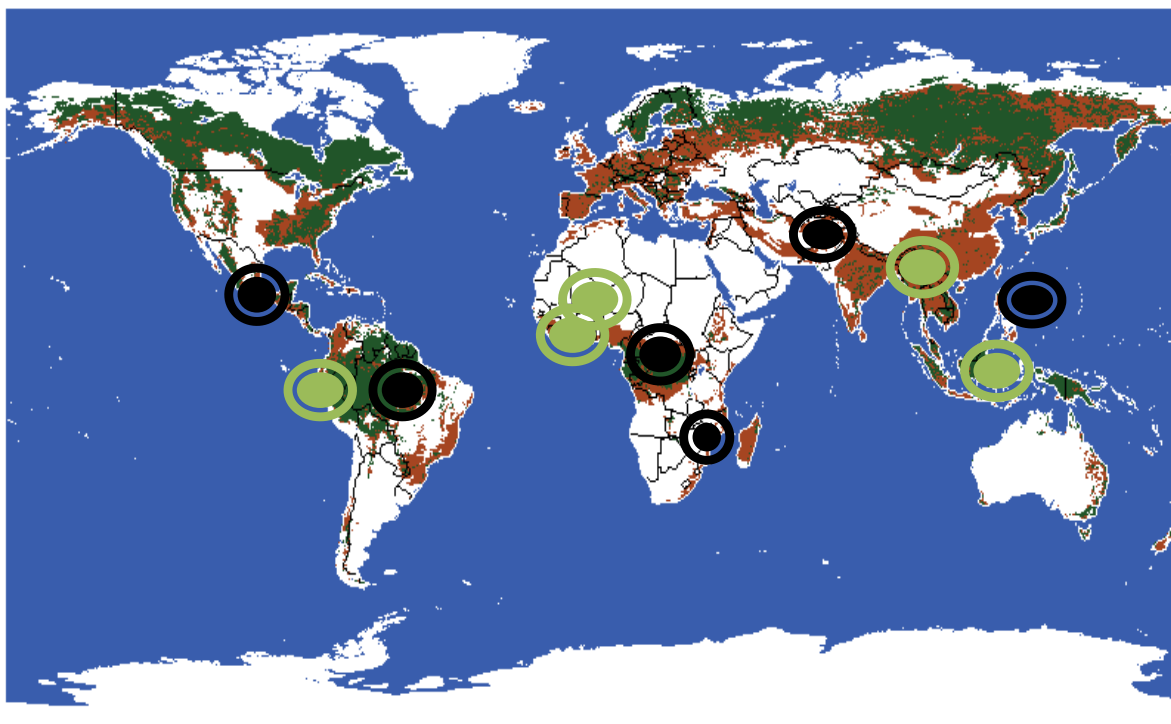
Figure 6: Distribution of five approved (green) and six proposed pilots (black circles)

3.4 Synopses of the proposed pilots

3.4.1 Brazil (with emphasis on the Amazon region)

Land area (km2):	845,900,000	Population:	190 million
		Living in rural areas	<50%
Forest area (km2): % Forest of land area:	477,600,000 57	Main drivers of deforestation:	Small holder agricult. Commercial land conversion, logging
Annual forest loss (ha) Ann. forest loss (%)	3,100,000 -0.6	Carbon in forest biomass Forest carbon per ha	12,000 million tons 90 tons

*Data source: FAO (2009); Assessment of drivers and carbon: authors' estimates; carbon estimates are very rough and have to be interpreted with great caution

(i) REDD+ Potential

Being the host of approx. 1/3 of the remaining tropical forests area, Brazil has the highest emission of GHG from deforestation and forest degradation. The annual emissions for the period 2000-2005 are estimate to 213 MtCO2e, and represent about 20% of the global emissions from deforestation and degradation in total. Changes in the forest carbon stock also accounts for ¾ of all GHG emissions in Brazil.

Not only are the actual emissions levels high in Brazil, but the country has also taken a leading role in international efforts to reduce emissions from forests. In addition to the federal government, several Amazon states have become very active players on the international arena. Both the federal and state governments have taken a large number of policy initiatives to realize the REDD+ potential. The Expert Group believes these efforts within Brazil can be further strengthened through the assistance of FIP.

(ii) Country distribution across regions and biomes

The largest forest area in Brazil is part of the Amazon biome ("Amazon rainforest"), which extends over an area of 6.4 million km2, making it by far the largest tropical forest area of the world. The biome is also considered the largest store of biodiversity, and is estimated to account for about 10 % of both the global terrestrial primary productivity, 10% of the carbon stored in ecosystems, and 15 % of the global freshwater resources.

The Amazon biome is shared among nine countries (Bolivia, Brazil, Colombia, Ecuador, French Guyana, Guyana, Peru, Suriname and Venezuela), with the largest share being located in Brazil (63%) followed by Peru (13%). The Brazilian Amazon covers a forest area of 4.1 million km2, while the Brazilian Legal Amazon is an administrative region covering 5.2 million km2 of 10 states in Brazil.

The principal driver of deforestation in Legal Amazon is cattle ranching, accounting for more than 80% of the deforested areas. Logging, mostly illegal, is sometimes preceding pasture establishment. Various cash crops, including soy bean, has played both a direct and indirect role, the latter being in the form of increasing land scarcity in pushing other farmers to the forest frontier. The area under soy plantations has increased from approx. 10 to 36 million ha over the period 1980-2007.

Deforestation in the Legal Amazon peaked in 2004 at 27 423 km2, and has since steadily declined to 7464 km2 in 2009. In Mato Groso – the state with the highest deforestated area in 2004 - the deforestation has dropped by more than 90%. The main reasons for the decline are twofold: a set of policies adopted to protect forests, including an expansion of protected areas, and a decline in beef and soy prices since 2004. Historically, changes in these prices have been closely linked to changes in deforestation rates. A reversal of international market prices for beef and soy, therefore, poses a high risk of accelerating deforestation.

(iii) Potential to initiate transformational change

Brazil has over the past two decades taken significant steps towards reducing deforestation. Yet, a number of challenges remain. The traditional conflict between "developmental" and "environmental" agencies remains strong. Sectoral programs within the areas of energy, infrastructure and agricultural credits stimulate crop and cattle expansion, and undermine environmental policies. Thus there is a need for better consistency and intersectoral coordination and policy harmonization. Further, there has been a strong drive of forest decentralization, with states and municipalities increasingly involved in forest management. Yet, state and local governments are characterized by limited institutional capacity, and lack of sustained funding remains concern. A third area relates to further tenure reform and clarification of land rights: a large area of the Amazon is characterized by unclear and contested land rights, for example, public land being illegally occupied by individuals (including squatters).

Brazil has generally welcomed and facilitated international funding for REDD+, as exemplified by the establishment of the Amazon Fund in August 2008. While the further policy reforms and steps towards transformational change will largely be driven by domestic political forces, international funding can become a critical in further changing basic economic incentives and capacities, and thereby strengthening these efforts.

(iv) Potential of mainstreaming FIP investment

The government of Brazil has taken a number of initiatives and established new forums for better inter-sectoral coordination of policies that directly or indirectly affects deforestation. These provide an opportunity for further mainstreaming of REDD+ (and FIP) into development policies. The Amazon Fund is located within the National Bank for Economic and Social Development (BNDES), and is a mechanism to channel

international funding to REDD+ projects. While BNDES have received some critique for its funding of projects which have stimulated deforestation, the location of the Amazon Fund within BNDES also hold the potential for better mainstreaming REDD+ operations into the overall strategy of the Bank and the Brazilian government.

(v) Country preparedness for REDD+

The MRV capacity of Brazil is among the best developed in the world. The National Institute of Space Research (INPE) produce coarse land use change information semi-monthly, while more high-resolution data are being produced on an annually basis. The capacity at local levels, including on the ground work and better biomass data, still needs to be strengthened.

The federal and state governments have launched ambitious goals and initiatives to curb deforestation. A goal of an 80% reduction in deforestation by 2020 (compared to the average of the 1996-2005 period) was launched before COP15 in 2009. An active research and civil society has been pushing the REDD+ agenda within the country, and also promises well for future work.

In conclusion, the Expert Group views Brazil to hold a unique REDD+ potential, both based on its current high forest emission and the preparedness for further REDD+ actions.

3.4.2 Democratic Republic of Congo (DRC)

Land area (km2):	2,226,000	Population:	62 million
		Living in rural areas	68%
Forest area (km2): % Forest of land area:	1,330,000 58	Main drivers of deforestation:	Shifting agriculture, illegal logging, fuelwood
Annual forest loss (ha)	319,000 -0.2	Carbon in forest biomass	12,000 million tons 90 tons

Ann. forest loss (%)	Forest carbon per ha

(i)   REDD Potential

The large extent of the Congo Basin forests means that the area has continental and global importance in terms of its function as a "green lung". The Congo Basin, through the inclusion of its largest country, DRC, should be recognised for its strategic continental and global importance. DRC has well advanced in its readiness planning and is the first country in the Congo Basin that has an approved Readiness Preparation Plan in the FCPF. The introduction of FIP funds will thus be based on a provisional REDD-strategy that is now being in a process to be established. It is felt further that economies of scale will be demonstrated visibly in on the example of the DRC and that the introduction of FIP funds will help to build capacity at national level. The potential of the area to demonstrate good results, particularly in managing existing carbon stocks, is relatively high as there is full political commitment of the country. The large extent of the country and the associated governance challenges, however, are negative factors that need to be considered.

While the political will and reasonable institutional capacity for REDD activities exist, there may be a need for additional technical assistance to make optimal use of possible FIP funds. It appears that DRC has clear understanding of the limitations of the technical skills they already have and those which they still require assistance with. This acknowledgement is seen as a positive enabling environment to ensure that adequate and appropriate support is provided to optimize the contribution which the FIP funds could make.

Forest governance does remain challenging in the DRC, but it is believed that positive policy developments are underway. The

investment climate appears to have improved over the past years and some private sector investment is observed in forest industry and mining. Third party forest management and chain of custody certification, through the FSC system, has started for a number of DRC operations. Though the processes are incomplete, they are part of a fairly significant upsurge in FSC certification in the Congo Basin (e.g. Cameroon, Gabon and Congo). There have also been separate independent verifications of legality for some forest products companies conducted by independent auditors in addition to the government supported FLEGT initiative – all of which should result in enhanced enforcement of forest legality requirements in DRC and point toward increased acknowledgement of the need for real accountability in terms of both sustainability and legality issues. In terms of empowerment and involvement of civil society, it is noted that the UN-REDD secretariat have been encouraged by the actions taken by the DRC in utilising its UN REDD readiness funds, in terms of the manner which the DRC has ensured the participation and involvement of indigenous peoples and local communities. A number of NGOs have prioritized DRC for forestry and REDD work (e.g. WWF, WCS, etc.) and have already worked with the government, communities and forest industry on the design of specific REDD projects, e.g. the Bonobo Conservation Initiative in northern DRC - projects that may be worthy of future support or investment. Should DRC receive FIP funding, its participatory process could prove valuable as an example for the region, in addition to what DRC itself can gain from positive dynamics in neighbouring Congo Basin countries.

(ii) Country distribution across regions and biomes:

The total land area of DRC is about 223 million hectares, of which according to the FAO 133 – 155 million hectares are forests. The percentage of forest cover of total land area is therefore estimated at 58%, which makes DRC a very

significantly forested area. The rate of annual deforestation is relatively low, estimated at 0.2% (319,000 ha), though as measured by forest area still significant.

(iii) Potential to initiate transformational change

Some areas of in the vast country may be classified as high forest cover, with high deforestation rates, whilst other areas are more likely to be classified as highly forested but with low deforestation. Potential to initiate transformational change:

FIP pilot funds may have a strategic role to play complimenting other scarce resources that have been flowing to DRC. There is potential to build on planned and on-going investments through the MDBs, and there exists some probability of leveraging funds from the private sector or other sources of investments. It is noted that several private sector initiatives are being undertaken in DRC already. FIP funding, (which may not be a large source of funding in absolute terms considering the huge size of the country and its forest estate), could play a transformational role through harmonisation of the roles and role-players in DRC. The opportunity to institute a REDD+ agenda using FIP pilot funding would greatly assist DRC in developing appropriate methodology and technology needed to address the REDD+ agenda. It is also felt that investments accessed through FIP would allow DRC to position and strengthen its position for implementing a REDD+ strategy.

The Expert Group noted DRC has received approval of its Readiness Preparation Plan (R-PP) in the framework of FCPF in April 2010. We also note that UN-REDD is operating in the DRC already. FCPF and UN-REDD will jointly implement the R-PP with an estimated budget of about 6 million US$. Investment of FIP resources in DRC would complement the work which has already begun through FCPF/UN-REDD at the level of readiness.

(iv)   Country preparedness for REDD

There appears to be a willingness and consensus to move towards a strategic approach to REDD+ and to integrate the role of forests into national sustainable development strategies. This can also have demonstrative effects to the other Congo Basin countries. A question mark does arise, however, about the ability of DRC to absorb additional FIP fund to complement approved funding from FCPF/UN-REDD and existing support through the Congo Basin Partnership Fund.

In DRC, the extraction of natural resources is at the core of the country's development, but also of the country's governance problems. On the one hand, inefficient government institutions are impediments of the country's economic development. The risk embedded to invest in a country with unreliable institutions is high and often drives investors away. On the other side, contributing to improved institutions and governance, as the readiness and the REDD-strategy process imply, would positively affect both, the forest resources and the investors that count on them.

(v)   Potential for mainstreaming FIP investment

The EG is aware that there are various other resources going into the Congo Basin countries, and in particular to DRC, but remain convinced that a FIP investment would be a strategic utilisation of the funds.   A FIP pilot may initiate transformational change in that it may allow for greater harmonisation of the roles of the various players DRC. Yet, there is still a danger that the additional funds may not make a large impact on its own due to the scale of forestry activities in DRC and governance questions. However, the EG feels that a FIP investment could represent a financial/investment action which will unlock the potential for other investments by the government and non-governmental sectors and substantively address the REDD+ agenda in DRC.

3.4. 3 Mexico

Land area (km2):	1,940,000	Population:	106 million
		Living in rural areas	24 %
Forest area (km2):	642,000	Drivers of deforestation:	Shifting cultivation, infrastructural dev., unsustainable logging
% Forest of land area:	34		
Annual forest loss (ha)Ann. forest loss (%)	260,000	Carbon in biomass	45,000,000 m tons
	-0.4	Forest carbon per ha	110 tons

Data source: FAO (2009); Assessment of drivers and carbon estimate: EP/authors' estimates

(i) REDD+ Potential

Mexico has the third largest area of forest in Latin America, after Brazil and Peru. Rural communities own the majority of that forest. The forests are roughly evenly divided between coniferous and tropical broad leaf forests. There are also large areas of shrubs and woodlands. The country suffered rapid deforestation and degradation in the 1970s and 1980s, but the rate of net forest loss has gradually diminished since then. Traditionally, most land cleared of forest ended up as pasture or maize fields. At present the outcomes are more diverse. Unsustainable logging, forest fires, grazing in forests, fuel wood harvesting, and shifting cultivation are the main direct causes of forest degradation. Various factors helped to reduce forest loss in recent years: Greater government support for forestry and conversation; declining agricultural subsidies, low agricultural prices, and massive rural out-migration; poor suitability for agriculture of most remaining forest lands; among others. One cannot necessarily assume these trends will continue.

Mexico is a promising candidate to use international funding to reduce emissions from deforestation and degradation. It has greater capacity to implement community forestry and environmental service programs and to monitor land use

change than many other countries. A significant minority of communities actively manage their forests and it should be possible with appropriate support to greatly increase the area under management and improve the quality of management. Opportunity costs for much of the forest land are relatively low. Since deforestation and degradation rates are already declining, REDD+ efforts can consolidate and re-enforce the trend.

(ii) Country distribution across regions and biomes

Mexico is a diverse country from a forest perspective. Mexico interventions can include a broad range from both deforestation and degradation perspectives, that would result in both curbing deforestation and enhanced carbon stocks through agroforestry, sustainable forest management and tree plantations, and thus can be representative of pilot activities addressing a broad spectrum of forest issues.

From an eco-climatic perspective, Mexico can be divided into three zones with approximately equal areas: tropical, sub-tropical/temperate and semi-arid/arid. It is worth noting that the tropical region includes rainforests, which originally covered 6% of the country, but probably down to half now.

(iii) Potential to initiate transformational change

Mexico has an established land tenure system that puts most forest areas under local communities or ejidos management, though there is some private tenure arrangements in some locations. This land tenure system has resulted in clear linkage between the various benefits and values of forests and local communities and beneficiaries. From a business perspective this tenure and management system, wherein community structures make decisions, has proven challenging from a commercial perspective. Notwithstanding the challenges the ejido system faces, and current national government challenges (negative influence of narcotics trafficking, particularly in the

north), there is a strong community basis upon which to build for REDD+, with strong benefits to civil society, in addition to generally strong governance at the national level, strong leadership on climate issues at the government (led by CONAFOR, the forest agency), a strong and interested NGO sector, and both civil society and commercial interests that are supportive of REDD+. The World Bank and the Inter American Development Bank as well as bilateral supporters and special programs such as FCPF, UN-REDD, GEF all are making, or are supportive, of continuing, complementary investments.

(iv) Potential of mainstreaming FIP investment

Various non-profit and for-profit organizations have already placed some REDD+ investments in Mexico and there is strong interest to continue, with each organization differing in focus from a geographic or implementation type investment. Interactions of Mexico with development banks indicate continuing and strong interest in REDD+ and other forest-related investments. The country continues to rank positively in terms of the investment climate (though again, there are concerns about the negative influence of the narcotics trade, particularly in the north). Based on the observations related to this and the previous criterion, the stage seems set for the various interests to come together in support of a strong REDD+ effort in Mexico, and transformational change matching to FIP objectives.

(v) Country preparedness for REDD+

Mexico is now working through the R-PP process with the FCPF. A review of the most recent (January 2010) draft of the R-PP demonstrates that Mexico has been gradually putting in place the fundamental elements at the national level and there is strong support and leadership on the part of CONAFOR. One of the gaps of the effort so far has been the involvement of the critical agriculture, planning and other development-related

agencies in the R-PP process, something that has already been identified as an issue that will come up in the forthcoming R-PP review. There are also on-the-ground efforts through the work of various NGOs and their collaborators (e.g. Plan Vivo, ProNatura, Reforestamos Mexico, TNC, Conservation International, Rainforest Alliance, etc.) focused on improved forest management, forest conservation, agroforestry, and restoration (riparian zones, etc.) – some initiatives have been in place for years but lacking consistent financial support; others are new.   Mexico has a strong foundation of trained professionals to contribute to these efforts; with some enhanced strategic input of international specialists where necessary.

3.4.4 Mozambique

Land area (km2):	780,000	Population: Living in rural areas	22 million 87%
Forest area (km2): % Forest of land area:	192,660 25	Main drivers of deforestation:	Shifting agriculture, unsustainable logging, charcoal
Annual forest loss (ha) Ann. forest loss (%)	50,000 -0.3	Carbon in biomass Forest carbon per ha	1,213 million tons 35 tons

*Data source: FAO (2009); Assessment of drivers and carbon: authors' estimates; carbon estimates are very rough and have to be interpreted with great caution

(i)   REDD Potential

Mozambique's forests extent over an area of nearly 70 million ha, out of which 50 million ha are open miombo woodlands and about 20 million ha closed forests that are, to a large extent, heavily degraded. Well documented studies by GoM, by a multi stakeholder REDD Strategy Working Group developed with the assistance of a World Bank/PROFOR/IIED financed Growing Forest Partnership and headed by Centro Terra Viva (CTV), a leading conservation NGO in Mozambique, affirm that

Mozambique is strongly committed to supporting strategies for reduction of deforestation and degradation and to restoration of some 2 million ha of degraded lands.

Deforestation in addition to contributing to carbon emissions, poses a major threat to the livelihood of about 50 % of the rural population. About 60% of Mozambique's 22 million people depend on agriculture and about 80 % of the population depend to a high degree on fuel wood, charcoal, forest fruits fodder honey and other products.

An emerging REDD programme is developing strategies for more effective protection and management of State forests that are under threat from agricultural encroachment and illegal logging. In addition to the overriding objectives of containing deforestation and degradation and reduction of carbon emission, the proposed REDD strategy focuses on protection of biodiversity, of critical upland watersheds and of the rights of forest dependent indigenous communities.

Ongoing pilot programmes for sustainable management of the several million ha of Production Forest can provide a valuable starting point for FIP involvement. The GoM is strengthening its institutional capability for sustainable management and conservation of Production Forests, though, until today, with only limited success.

(ii) Country distribution across regions and biomes:

Of all countries in south-eastern Africa region, Mozambique has the greatest potential to contribute to increased carbon sequestration through restoration and afforestation of degraded lands. PROFOR financed studies have developed strategies for local communities to benefit from CDM A/R-type carbon payments.

(iii)   Potential to initiate transformational change:

A GFP/PROFOR supported REDD Strategy Road Map has set out a Consultative Process that between now and September of 2010 will create opportunities for all stakeholder groups to contribute to the design of an effective REDD Strategy.

Major challenges will be how to achieve effective integration and open engagement of the various government ministries, local communities, conservation agencies and both public and private sector financing agencies. A main challenge will be to define how to create financial incentives that will facilitate the involvement of low income households in reforestation and restoring lost carbon pools in forested areas.

A recent mission fielded by the Forest Carbon Partnership Facility (FCPF) commented favourably on the major emphasis being given in Mozambique's emerging REDD Strategies to Community Based Natural Resource Management. The report of that mission identified gaps in knowledge that the FCPF could help to fill and opportunities for joint FIP/private sector engagement.

Specific recommendations for supporting transformation included the potential of REDD related funding and the FIP to contribute to:

- Strategies for engaging local communities in sustainable management and protection of forest resources, including miombo- woodlands;

- Possibilities for well proven agriculture and agro-forestry farming systems to help contain deforestation;

- Strategies for sustainable production of charcoal and its substitution by alternative fuels;

- Strategies and policy reforms for containment of illegal logging;

- Strategies for engaging small holders, local communities and, private sector companies in partnership based tree farming and plantation development; and

- Possibilities to take advantage of newly emerging technologies for measurement and monitoring of carbon emissions and sequestration.

(iv)   Country preparedness for REDD

It should be clear from the above that it is now an appropriate moment for exploring the scaling up of the existing initiatives in the wider framework of the REDD+ approach9. Prospects for rehabilitation of degraded lands, for increased carbon sequestration for generation of income by poor rural communities and for generating sustainable biomass based energy supplies will be greatly improved by an injection of FIP funding.

Engagement of the FIP can also be anticipated to help in attracting responsible private sector investment and most importantly in ensuring that low income communities benefit from carbon credits. A question mark remains at the level of forest governance, as the corruption is widespread and particular private interest in timber and mining resources often hamper the development of sustainable forestry approaches.

(v)   Potential for mainstreaming FIP investment

As already outlined above, the GoM has already gone a long way towards developing a comprehensive and multi-

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[9] REDD+: reducing emissions from deforestation and forest degradation, forest conservation, sustainable management of forests, and enhancement of forest carbon stocks through restoration, afforestation and reforestation.

stakeholder based approach to implementation of a REDD strategy. Its proposals for so doing have been independently reviewed by several World Bank, IFC and other supported missions by the international donor community. There are immediate possibilities for the FIP to engage in translating the activities listed in Section (iii) above into concrete on the ground action.

3.4.5 Nepal

Land area (km2):	143, 000	Population:	28 million
		Living in rural areas	84%
Forest area (km2):	36,360	Drivers of deforestation:	Shifting cultivation, logging, high rate of poverty
% Forest of land area:	25		
Annual forest loss(ha)	53,000	Carbon in biomass	485 million tons
% of forest loss (yr)	-1.4	Forest carbon per ha	133 tons

Data based on FAO (2009) State of the World Forests.

(i) REDD+ potential

Deforestation and forest degradations are two major problems in Nepal and thus REDD+ potential has relatively good prospect in the country. Annual forest loss is high (53,000 ha/year). Deforestation due to commercial exploitation very often occurs in the Terai region where commercial species such as Shorea robust is found. Deforestation increasingly spreads to the hills as well. In the Terai region deforestation is caused by illegal logging, population pressure, conversion of forest to agriculture land and the government resettlement program. All together, the main causes of deforestation include: land clearing for agriculture, firewood collection, and forage for livestock. Poverty and population pressure exacerbates the situation. Nepal has relatively high population growth (2%). Other factors that contribute to deforestation include unemployment, weak governance, political instability, forest fire, shifting cultivation

and natural processes. As a result Nepal looses 1.4% of its forest annually.

In terms of degradation, estimate suggests that over 1 million ha of forest area in Terai has already been degraded. The situation of pastureland is even worse and high mountain pasturelands (about 79 percent) are adversely affected by uncontrolled transhumance grazers. The average carbon stock of living biomass per ha in Nepal is relatively high 133 tons per ha, compared to Lao PDR with 92 tons per ha. From REDD+ point of view, preserving this carbon stock through sustainable forest management, including scheme such as community forestry, is important.

(ii) Country distribution across regions and biomes

Located between China and India, Nepal is a relatively small country (land area 143 000 km2). The country's altitude ranges between 70 in the Southern Terai and 8, 848 meter above sea level at the summit of Mt Everest (the tallest mountain in the world). Generally considered as tropical humid country Nepal is highly varied in terms of elevation and topography. This explains why Nepal has diverse climate characteristics, from sub-tropical in the lowlands to the arctic climate in the high mountains. The annual rainfall varies considerably (between approximately 200 and 4500 mm) between various region and topographic conditions. All of this influences the characteristics of forests and ecosystems. Forests are characterized by tropical savannas along the Indian border, subtropical broadleaf and coniferous forests in the hill regions, temperate broadleaf and coniferous forests along the slopes of Himalaya, and montane shrublands at the highest elevation. The biodiversity in forests is high. Nepal possesses 9 percent of the world's bird species, 5 percent of bryophytes, 4.5 percent of mammals, and 2.7 percent of flowering plants.

A quarter of the land area is classified as forest area (this also includes the shrubland). Nepal usually classifies its forests according to the five development region: Far Western, Mid Western, Western, Central and East Development Regions. In terms of forest area, Eastern Development Region has the highest (26%) and West Development Region has the lowest (12%). Forests and forestry are quite important in Nepal, particularly to support the livelihoods of rural communities (84% of the total population reside in rural area). Productive and commercial forests are mainly located in the Terai region. The most important commercial species is *Shorea robusta*. Community forestry (mainly in the hills) has expanded rapidly and communities are given opportunity to manage their forests through community user groups. Nepal is one of the advanced countries with community forestry. Forests are sources for fuelwoods, fodder, non timber forest products, wood for construction, etc. Major tree species includes: *Pinus roxburghii, Abies spectabilis, Shorea robusta, Quercus* spp*., Terminalia alata, Rhododendron* spp*., Alnus nepalensis, Schima wallichii,* and *Tsuga dumosa.*

(iii) Potential to initiate transformational change

Due to fragile mountain ecosystem, weak geological condition, and diverse nature of climate, Nepal is considered as one of the countries in South Asia which is most susceptible to climate change. It has a high opportunity to initiate transformational change given the presence and influence of civil society and non-governmental organizations in national development and the appropriate capacity of government institutions. As the newest democracy Nepal emerged from a 240 year monarchy system and it has a proven track record in participatory development and involvement of marginalized groups in development. Empowerment of poor and forest dependent people is part of the national development strategy.

Nearly 25% of the forests are now managed by communities under various community forestry schemes. Around 1.2 million ha forest is managed by over 14,000 community forestr user groups (CFUGs) involving 1.6 million families. This is one of the indications of the successful devolution/decentralization process in the country, from which FIP investment will benefit. The role of non-governmental organizations, such as FECOFUN (The Federation of Community Forest Users of Nepal) has been crucial in the success of community forestry in the country. While community forestry is mainly applied in the hills new initiative (since 20000) called collaborative forest management has recently been introduced in the Terai to allow local communities to take part in and benefit from managing forest resources.

(iv) Potential of mainstreaming FIP investment

FIP investment can leverage ongoing climate change projects and programs in Nepal. Since 2000, projects and programs related to climate change have been implemented including those initiated and supported by the MDBs and UN bodies. For example, starting 2008 the GEF/UNDP together with other donors (e.g. DfID, Danish government) provided support for the National Adaptation Program of Action (NAPA) for NAPA and other Climate Change Activities. The Asian Development Bank (ADB) is providing support to Nepal for strengthening capacity for climate change and the environment. The Swiss government provides funding for various adaptation projects. Likewise, supports for mitigation and adaptation are provided by Germany, Norway, the Netherlands and the Australian government. Involvement of organizations such as WWF, ICIMOD, SNV, DfID, Interoperation, etc. in forestry sector development and climate change in Nepal is an asset. Clearly FIP investment can further boost Nepal's effort to curb the adverse impacts of climate change – it can strengthen the synergy among ongoing initiatives.

As environmental restoration and protection has been an important element of forestry development REDD+ potential in the country will be further enhanced. Forest restoration and protection initiatives have been implemented for a long time and in late 1980s, the effort was consolidated through the so-called National Conservation Strategy (NCS). As a follow up of NCS, the Nepal Environmental Policy and Action Plan (NEPAP) was adopted in 1993.

(v) Country preparedness for REDD+

Nepal is part of the World Bank's Forest Carbon Partnership Facility country. It has submitted its Readiness Preparation Proposal (R-PP) in April 2010. According to the R-PP the vision of Nepal's REDD strategy is that by 2013 and beyond, our greenhouse gas emissions resulting from deforestation and forest degradation will be significantly reduced by forest conservation and enhancement, by addressing the livelihoods concerns of poor and socially marginalized forest dependent people, and by establishing effective policy, regulatory and institutional structures for sustainable development of Nepal's forests under the forthcoming new constitutional framework. The R-PP outlines plan for consolation process, stakeholder involvement, REDD strategy development, development of reference scenario, and monitoring system. Besides being a member of FCPF, Nepal has also joined UN-REDD.

In terms of institutional arrangement and readiness, a National Climate Change Committee (NCCC) has been set up, chaired by the Director General of the Department of Hydrology and Meteorology. The Steering Committee of NCCC is headed by the Secretary of the Ministry of Environment, Science and Technology (MOEST), the agency serving as Nepal's focal point for Climate Change Convention. Meanwhile, Ministry of Forests and Soil Conservation (MOFSC) is a responsible agency for REDD+. Finally, Nepals' experience with community certification (with support from organizations e.g. FSC, ANSAB,

FECOFUN) and various activities carried out related to CDM in the past can be incorporated to REDD+ activities.

The only challenge at the moment in term of long term investment, including FIP investment, is the uncertainty of political situations.

3.4.6 The Philippines

Land area (km2):	298,000	Population: Living in rural areas	86 million 37%
Forest area (km2): 71,000 % Forest of land area: 23		Drivers of deforestation:	Shifting cultivation, cattle ranching, illegal logging
Annual forest loss(ha) 160,000 % of forest loss (yr) -2.1		Carbon in biomass Forest carbon per ha	970 million tons 136 tons

*Data source: FAO (2009); Assessment of drivers: authors' estimates

(i) REDD+ potential

The total land area of the Philippines is around 30 million ha, 7 million ha of which (23%) is forested. Generally, forests in the Philippines are regarded as non-frontier medium carbon storage forests. From this perspective alone, the Philippines REDD potential may be considered relatively low. However, the Philippines is a net carbon sink and has above ground carbon stocks estimates to be comparable with its other countries in the region such as Cambodia, Lao PDR and Indonesia. The Philippines is estimated to hold between 750 to 2500 megatons of above ground forest carbon found in primary and secondary dipterocarp forests, peatland, etc. While the intensity of logging has declined due to the decline of forest resources and the ban of lumber export, the Philippines still looses about 160,000 ha of forests annually due to illegal logging, shifting cultivation, forest fire and conversion to other land use types. Because much of the deforested land is classified as degraded,

the sink potential from afforestation and reforestation – coupled with high productivity and re-growth rates – has immense carbon capturing potential.

REDD+ would enhance the opportunity for the Philippines to play active role as it compensates the conservation of existing carbon stocks, carbon stock enhancement and sustainable forest management. It has a huge potential to develop a meaningful enhancement of sink agenda based on forest restoration and reforestation, supported by its community-based forest management that has spread across the archipelago. Since 1960, the Philippines has reforested 1.7 million ha of degraded land (grassland and bushland) though both government and private sector initiatives. Rehabilitation of watersheds has been a priority. Biodiversity conservation and protected areas development have received considerable attention in recent years. It is expected that more protected areas will be established in the near future. With relatively strong forest institutions and decentralization and through a FIP investment, the Philippines has considerable potential to demonstrate mitigation and adaptation strategies through forest management (including restoration of degraded land), forest protection and conservation, agroforestry and sustainable forest management.

(ii) Country distribution across regions and biomes

The Philippines lies in the tropical humid Asia with relatively low forest cover. Although much of the primary forests have been converted, the Philippine retains 0.8 million ha of old growth dipterocarp forest, 1 million ha of mossy forest and relatively significant mangrove areas. Most of remaining forests are already classified as protected forests (e.g. bioreserve, national park, protected forests). Large forest tracts can be found in Palawan, Mindanao and northern Sierra Nadre Mountain in Cagayan and Isabela province. The Philippines is

among the high biodiversity countries in the world. It is home to a large number of endemic species, some are endangered and threatened (situation is most serious in the low land). The remaining old growth dipterocarp forests are the richest in terms of biodiversity.

With its current relatively low forest cover and high deforestation rates as well as the high potential for forest restoration, the Philippines could be a suitable pilot to demonstrate REDD+ activities (restoration, sustainable forest management, biodiversity protection) in countries with comparable environmental, economic and social characteristics.

Due to its geographical position, the Philippines is highly vulnerable to various natural disasters, such as volcanic eruptions, earthquakes, tropical monsoon and extreme weather conditions. The high rate of deforestation and low forest cover also play significant role in damage due to the increased incidences of flooding in recent years, thus a FIP investment may also address this issue through environmental protection.

(iii) Potential to initiate transformational change

FIP can initiate and enhance a number of transformational changes in the Philippines in a number of areas, such as forest governance since illegal logging and high rate of deforestation is often attributed to weak governance in the forest sector. Corruption remains a problem that needs special attention. With the perceived current political will to improve the situation, transformational changes through institutional reform and human capacity building at all government levels will be an area that a pilot FIP could facilitate.

The Philippines is one of the most advanced countries in Asia in terms of engaging local communities and indigenous people in forest management. Community Based Forest Management

(CBFM) has been a strategy for forest management for at least three decades. Under this program people organizations (POs) coordinate community to manage forests for their livelihood benefits. Lessons learned from CBFM will be instrumental for engaging local people in FIP implementation. In addition, in 1997 the Philippines passed the landmark legislation, the Indigenous People Rights Act, which recognizes, protects, and promotes the rights of local communities and indigenous peoples. At a national level, there is a National Commission on Indigenous People (NCIP). The EG believes that with strong civil societies including IPs, the likelihood to achieve real impacts / transformational change that benefit them and their livelihoods is quite high.

(iv) Potential of mainstreaming FIP investment

FIP pilot is expected to strengthen the current efforts of the government together with civil society organisations and bilateral development partners (e.g. Swiss SDC) to develop a viable National REDD Plus Strategy (NRPS). It will also contribute to recent initiative to engage IPs in resource management through land titling program. 44

In the past years, incremental efforts have been conducted to increase forest cover through forest rehabilitation and reforestation schemes, e.g. by the Department of Environment and Natural Resources (DENR), private land owners, CBFM Agreements, etc. In addition, the Philippines government and civil society have been very active in terms of forest conservation. As of July 2007 there were 77 proclaimed terrestrial Protected Areas covering about 1.85 million ha and many areas are still to be identified. A FIP pilot can strengthen and scale up this national initiative.

Within the context of ASEAN, the ASEAN Multi-Sectoral Framework on Climate Change: Agriculture and Forestry towards Food Security (AFCC) is currently being developed to

provide a regional framework on cooperation and coordination of climate change issues in the 10 ASEAN nations. The Philippines is an active member of ASEAN and plays an important role through DENR in AFCC.

(v) Country preparedness for REDD+

Until recently, the Philippines were not very active in terms of FCPF and UN-REDD. However, it has made major steps in taking on REDD-plus opportunities through the development of the Philippine National REDD Plus Strategy (NRPS). DENR formally applied to the UN-REDD program in January 2010. Consolidation of the NRPS multi-stakeholder consultations have been conducted with various interest groups including experts, local government units, civil societies, etc since April 2009.

The Philippines has great promise for REDD-plus implementation considering its potential to deliver co-benefits such as biodiversity conservation, ecological restoration and equitable benefit distribution given its progressive pro-community land tenure and forest management policies.

In terms of scientific preparedness, there has been recently a good study on related aspects such as CDM, carbon sequestration and REDD undertaken by various organizations including ICRAF, Universities and NGOs. The Philippines is quite strong in terms of scientific research – thus very promising in terms of its ability to share lessons effectively within the country and beyond.

4. Conclusions and recommendations

In the first round of proposing pilots to the FIP-SC for finance through FIP (FIP/SC.3/6, Report of FIP Expert Group: Recommendations for Pilots under the FIP), the EG proposed and the SC approved five pilots: Burkina Faso, Ghana, Indonesia, Lao PDR and Peru. The FIP-SC invited the EG to propose a list of six additional pilots, in priority order, to the Sub-Committee for consideration at its next meeting.

Similar to the first round, the EG was guided by the FIP objectives, the criteria for selecting country and regional pilots set by the FIP-SC and by its terms of reference and working modalities. The methodology and rigorous analyses elaborated by the EG for the selection process was also followed in the second round. However, the new guidance from the SC, i.e. "*to propose a list of six additional pilots, in priority order*" prompted the EG to use its collective judgement to develop a slightly modified approach to proposing pilots in this round.

The six top ranking pilots proposed to the FIP-SC are: **Brazil, Democratic Republic of Congo, Mexico, Philippines, Mozambique, and Nepal.** It should be noted that Russia ranked the sixth highest after the second stage of screening, but had to be replaced by Nepal, the seventh ranking, for the third and final stage because it is not eligible according to the FIP Design Document.

In the views of the EG and consistent with its first report, the six presently proposed pilots meet the general objectives as well as the specific objectives of FIP including initiating and facilitating steps towards transformational change in forest related policies and practices; replicability; facilitating the leveraging of additional financial resources for REDD+; and

providing experience in the context of the UNFCCC deliberations on REDD+. Furthermore, some of the currently proposed pilots are among the highest REDD+ potential in the world.

It is notable that based on this proposal and considering the five pilots already approved by the FIP-SC, the distribution across regions and biomes within regions would seem to be an equitable representation of those areas greatest in need and potential for REDD+.

The conclusions and recommendations reached by the EG in the first report are still valid. For example, the EG would reiterate its view that in selecting pilots and their priority combinations in this second round, the FIP-SC may wish to consider: "... collaboration and "twinning" between some proposed countries and some of their neighbours that share similar ecological and socio-economic characteristics under a South-South collaboration scheme merits consideration by the FIP-SC". It is also anticipated that the SC will allocate variable funding levels to the proposed pilots, depending on the twelve criteria for initiating transformational change in each pilot. The absorptive capacity and the opportunities for transformational change in each country are expected to determine the level of financial support as well.

ANNEXES

ANNEX 1 : MEMBERS OF THE FIP-SC EXPERT GROUP

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ANNEX 2 : LIST OF COUNTRIES WHICH EXPRESSED AN INTEREST IN BEING CONSIDERED FOR SELECTION AS A PILOT COUNTRY

1. Albania	17. DR Congo	34. Mozambique
2. Algeria	18. Ecuador	35. Nepal
3. Argentina	19. Ethiopia	36. Nigeria
4. Bangladesh	20. Ghana	37. Panama
5. Belarus	21. Greater Mekong Region	38. Papua New Guinea
6. Bolivia		39. Peru
7. Bosnia & Herzegovina	22. Guatemala	40. Philippines
8. Brazil	23. Guyana	41. Romania
9. Brazil – Amapa State	24. Indonesia	42. Russian Federation
10. Bulgaria	25. Jamaica	43. Suriname
11. Burkina Faso	26. Kenya	44. Serbia
12. Cameroon	27. Kosovo	45. Tajikistan
13. Colombia	28. Lao P.D.R.	46. Thailand
14. COMIFAC/Congo Basin	29. Liberia	47. Tunisia
15. Costa Rica	30. Macedonia	48. Uganda
16. Croatia	31. Madagascar	49. Vietnam
	32. Mexico	
	33. Morocco	

Annex 3 : Total forest mitigation potential (REDD+)of all 49 EoI submitted for country/regional pilots.

Annex 3a: Total estimates (forest carbon living biomass) in '000TC, countries in alphabetic order by region

Pilot	Forest C Stock	Deforestation	Degradation	SFM man. Forest	Restoration	Aff/Reforestation	Total REDD+
Algeria	110'000		500	15	150	300	965
Morocco	240'000		1'000	30	290	550	1'870
Tunesia	40'000	-	200	10	70	150	430
Burkina Faso	300'000	600	1'200	55	230	1'600	3'685
Cameroon	1'900'000	9'900	7'900	350	1'320	3'800	23'270
Comifac	20'900'000	27'400	22'000	2'560	7'680	8'400	68'040
DRC	12'000'000	14'300	11'500	820	2'460	4'800	33'880
Ethiopia	520'000	2'800	2'300	90	430	1'600	7'220
Ghana	500'000	5'100	5'400	150	500	2'400	13'550
Liberia	280'000	2'700	2'200	50	200	600	5'750
Madagascar	1'020'000	1'500	1'200	90	340	3'100	6'230
Mozambique	970'000	1'300	1'000	190	1'270	5'800	9'560
Nigeria	830'000	15'300	12'300	120	370	3'300	31'390
Uganda	240'000	2'800	2'200	80	220	700	6'000
Kenya	230'000	400	600	50	180	1'100	2'330
Bangla Desh	35'000		100	10	30	50	190
Indonesia	6'200'000	65'000	53'200	2'225	6'670	11'700	138'795
Lao P.R.	1'450'000	3'500	4'300	400	1'180	800	10'180
G.Mekong	4'488'000	24'900	14'100	1'100	3'300	33'600	77'000
Nepal	310'000	2'300	1'800	45	180	450	4'775
PNG	2'500'000	5'900	4'700	350	1'320	3'500	15'770
Philippines	720'000	7'900	11'900	250	750	6'500	27'300
Taijkistan	12'000		-	5	10	100	115

Thailand	1'450'000	2'900	4'700	75	230	2'600	**10'505**
Vietnam	1'170'000		3'600	320	960	14'000	**18'880**
Argentina	2'300'000	5'200	4'200	660	1'300	9'900	**21'260**
Bolivia	5'300'000	12'100	9'700	680	2'550	3'500	**28'530**
Brazil	45'000'000	118'000	95'000	4'040	12'120	14'300	**243'460**
Brazil-Amapa				-	-	-	
Colombia	6'070'000	2'400	3'800	225	670	7'300	**14'395**
Costa Rica	190'000			50	200	300	**550**
Ecuador	980'000	8'900	7'200	130	480	3'300	**20'010**
Guatemala	320'000	2'200	3'400	50	180	1'200	**7'030**
Guyana	1'450'000			220	650	900	**1'770**
Jamaica	20'000		-	5	10	50	**65**
Mexico	4'200'000	8'400	13'500	475	2'280	9'300	**33'955**
Panama	430'000	100	100	20	70	800	**1'090**
Peru	6'200'000	8'000	6'100	1'280	4'800	2'100	**22'280**
Suriname	1'400'000			275	830	500	**1'605**
Albania	50'000			45	110	250	**405**
Belarus	550'000			350	840	2'400	**3'590**
Bosnia-Herz.	180'000			120	300	700	**1'120**
Bulgaria	290'000			190	480	700	**1'370**
Croatia	200'000			120	300	400	**820**
Kosovo	-	-		-	-	-	
Mazedonia	60'000			30	90	200	**320**
Romania	580'000			360	900	1'500	**2'760**
Russia	40'500'000	2'400	3'000	11'780	31'200	14'600	**62'980**
Serbia				-	-	-	**-**

Annex 3b: Carbon estimates (forest carbon living biomass) in '000TC, sorted by REDD potential only

Pilot	Total REDD	Deforestation	Degradation
Brazil	213'000	118'000	95'000
Indonesia	118'200	65'000	53'200
COMIFAC	49'400	27'400	22'000
G.Mekong	39'000	24'900	14'100
Nigeria	27'600	15'300	12'300
DRC	25'800	14'300	11'500
Mexico	21'900	8'400	13'500
Philippines	21'900	7'900	14'000
Bolivia	21'800	12'100	9'700
Cameroon	17'800	9'900	7'900
Ecuador	16'100	8'900	7'200
Peru	14'100	8'000	6'100
PNG	10'600	5'900	4'700
Ghana	10'500	5'100	5'400
Argentina	9'400	5'200	4'200
Lao P.R.	7'800	3'500	4'300
Thailand	7'600	2'900	4'700
Colombia	6'200	2'400	3'800
Guatemala	5'600	2'200	3'400
Russia	5'400	2'400	3'000
Ethiopia	5'100	2'800	2'300
Uganda	5'000	2'800	2'200

Liberia	**4'900**	2'700	2'200
Nepal	**4'100**	2'300	1'800
Vietnam	**3'600**		3'600
Madagascar	**2'700**	1'500	1'200
Mozambique	**2'300**	1'300	1'000
Burkina Faso	**1'800**	600	1'200
Kenya	**1'000**	400	600
Morocco	**1'000**	-	1'000
Algeria	**500**		500
Panama	**200**	100	100
Tunesia	**200**	-	200
Bangla Desh	**100**		100
Belarus	**-**	-	
Romania	**-**	-	
Guyana	**-**	-	
Suriname	**-**	-	
Bulgaria	**-**	-	
Bosnia-Herz.	**-**	-	
Croatia	**-**	-	
Costa Rica	**-**	-	
Albania	**-**	-	
Mazedonia			
Taijkistan			
Jamaica			

Annex 3c: Carbon estimates (forest carbon living biomass) in '000TC, sorted by the enhancement of sinks (the +) only

Pilot	SFM man. Forest	Restoration	Aff/Reforestation	Total Enh. of sinks
Russia	11'780	31'200	14'600	57'580
G.Mekong	1'100	3'300	33'600	38'000
Brazil	4'040	12'120	14'300	30'460
Indonesia	2'225	6'670	11'700	20'595
COMIFAC	2'560	7'680	8'400	18'640
Vietnam	320	960	14'000	15'280
Mexico	475	2'280	9'300	12'055
Argentina	660	1'300	9'800	11'760
Colombia	225	670	7'300	8'195
Peru	1'280	4'800	2'100	8'180
DRC	820	2'460	4'800	8'080
Philippines	250	750	6'500	7'500
Mozambique	190	1'270	5'800	7'260
Bolivia	680	2'550	3'500	6'730
Cameroon	350	1'320	3'800	5'470
PNG	350	1'320	3'500	5'170
Ecuador	130	480	3'300	3'910
Nigeria	120	370	3'300	3'790
Belarus	350	840	2'400	3'590
Madagascar	90	340	3'100	3'530
Thailand	75	230	2'600	2'905
Romania	360	900	1'500	2'760
Ghana	150	500	2'400	3'050

Lao P.R.	400	1'180	800	2'380
Ethiopia	90	430	1'600	2'120
Burkina Faso	55	230	1'600	1'885
Guyana	220	650	900	1'770
Suriname	275	830	500	1'605
Guatemala	50	180	1'200	1'430
Bulgaria	190	480	700	1'370
Kenya	50	180	1'100	1'330
Bosnia-Herz.	120	300	700	1'120
Uganda	80	220	700	1'000
Panama	20	70	800	890
Morocco	30	290	550	870
Liberia	50	200	600	850
Croatia	120	300	400	820
Nepal	45	180	450	675
Costa Rica	50	200	300	550
Algeria	15	150	300	465
Albania	45	110	250	405
Mazedonia	30	90	200	320
Tunesia	10	70	150	230
Taijkistan	5	10	100	115
Bangla Desh	10	30	50	90
Jamaica	5	10	50	65

Annex 3d: Carbon estimates (forest carbon living biomass) in '000TC, sorted the total REDD+ potential

Pilot	Forest C Stock	Deforestation	Degradation	SFM man. Forest	Restoration	Aff/Reforestation	Total REDD+
Brazil	45'000'000	118'000	95'000	4'040	12'120	14'300	243'460
Indonesia	6'200'000	65'000	53'200	2'225	6'670	11'700	138'795
G.Mekong	4'488'000	24'900	14'100	1'100	3'300	33'600	77'000
COMIFAC	20'900'000	27'400	22'000	2'560	7'680	8'400	68'040
Russia	40'500'000	2'400	3'000	11'780	31'200	14'600	62'980
Mexico	4'200'000	8'400	13'500	475	2'280	9'300	33'955
DRC	12'000'000	14'300	11'500	820	2'460	4'800	33'880
Nigeria	830'000	15'300	12'300	120	370	3'300	31'390
Philippines	720'000	7'900	14'000	250	750	6'500	29'400
Bolivia	5'300'000	12'100	9'700	680	2'550	3'500	28'530
Cameroon	1'900'000	9'900	7'900	350	1'320	3'800	23'270
Peru	6'200'000	8'000	6'100	1'280	4'800	2'100	22'280
Argentina	2'300'000	5'200	4'200	660	1'300	9'800	21'160
Ecuador	980'000	8'900	7'200	130	480	3'300	20'010
Vietnam	1'170'000	-	3'600	320	960	14'000	18'880
PNG	2'500'000	5'900	4'700	350	1'320	3'500	15'770
Colombia	6'070'000	2'400	3'800	225	670	7'300	14'395
Ghana	500'000	5'100	5'400	150	500	2'400	13'550
Thailand	1'450'000	2'900	4'700	75	230	2'600	10'505
Lao P.R.	1'450'000	3'500	4'300	400	1'180	800	10'180
Mozambique	970'000	1'300	1'000	190	1'270	5'800	9'560
Ethiopia	520'000	2'800	2'300	90	430	1'600	7'220
Guatemala	320'000	2'200	3'400	50	180	1'200	7'030

Madagascar	1'020'000	1'500	1'200	90	340	3'100	6'230
Uganda	240'000	2'800	2'200	80	220	700	6'000
Liberia	280'000	2'700	2'200	50	200	600	5'750
Nepal	310'000	2'300	1'800	45	180	450	4'775
Burkina Faso	300'000	600	1'200	55	230	1'600	3'685
Belarus	550'000	-	-	350	840	2'400	3'590
Romania	580'000	-	-	360	900	1'500	2'760
Kenya	230'000	400	600	50	180	1'100	2'330
Morocco	240'000	-	1'000	30	290	550	1'870
Guyana	1'450'000	-	-	220	650	900	1'770
Suriname	1'400'000	-	-	275	830	500	1'605
Bulgaria	290'000	-	-	190	480	700	1'370
Bosnia-Herz.	180'000	-	-	120	300	700	1'120
Panama	430'000	100	100	20	70	800	1'090
Algeria	110'000	-	500	15	150	300	965
Croatia	200'000	-	-	120	300	400	820
Costa Rica	190'000	-	-	50	200	300	550
Tunesia	40'000	-	200	10	70	150	430
Albania	50'000	-	-	45	110	250	405
Mazedonia	60'000	-	-	30	90	200	320
Bangla Desh	35'000	-	100	10	30	50	190
Taijkistan	12'000	-	-	5	10	100	115
Jamaica	20'000	-	-	5	10	50	65
Brazil-Amapa				-	-	-	-
Kosovo	-	-		-	-	-	-
Serbia				-	-	-	-