

Peru Overview

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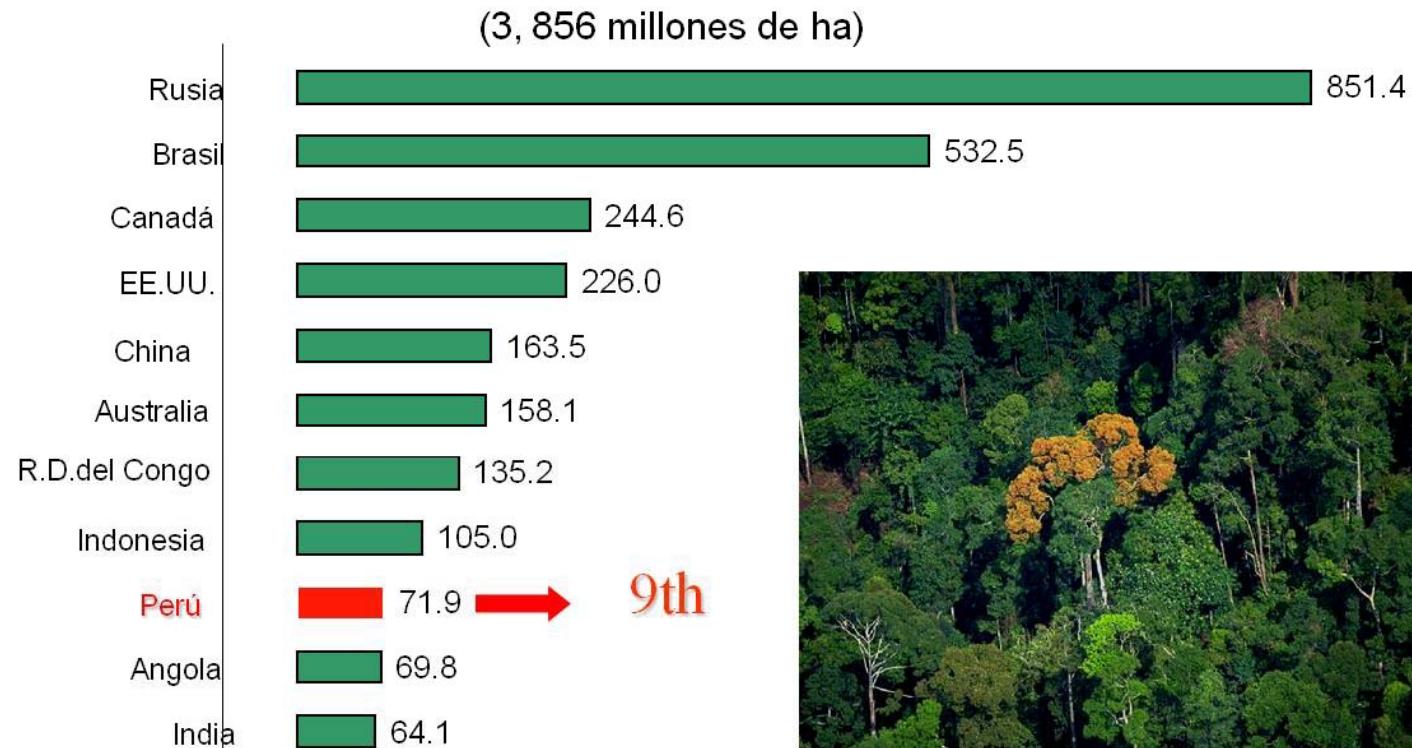
Partnership for the
Tropical Forest
Margins



Outline

- Drivers of deforestation in each country?
- Brief overview of NAMAs
- National strategy or action plans for REDD – policies & measures, capacity building
- National forest reference emission levels
- National forest monitoring system
- Land tenure issues
- Forest governance issues
- Gender considerations
- Measures to address safeguards in Appendix 1 (indigenous peoples, etc.)
- Existing sources of funding for this?

WORLD SURFACE IN NATURAL FOREST (2000)



Fuente: FAO, 2001

Peru occupies the ninth place in the world

In 2011, an estimated forest area is 67 million ha
(Source MINAM, 2011).



PERÚ

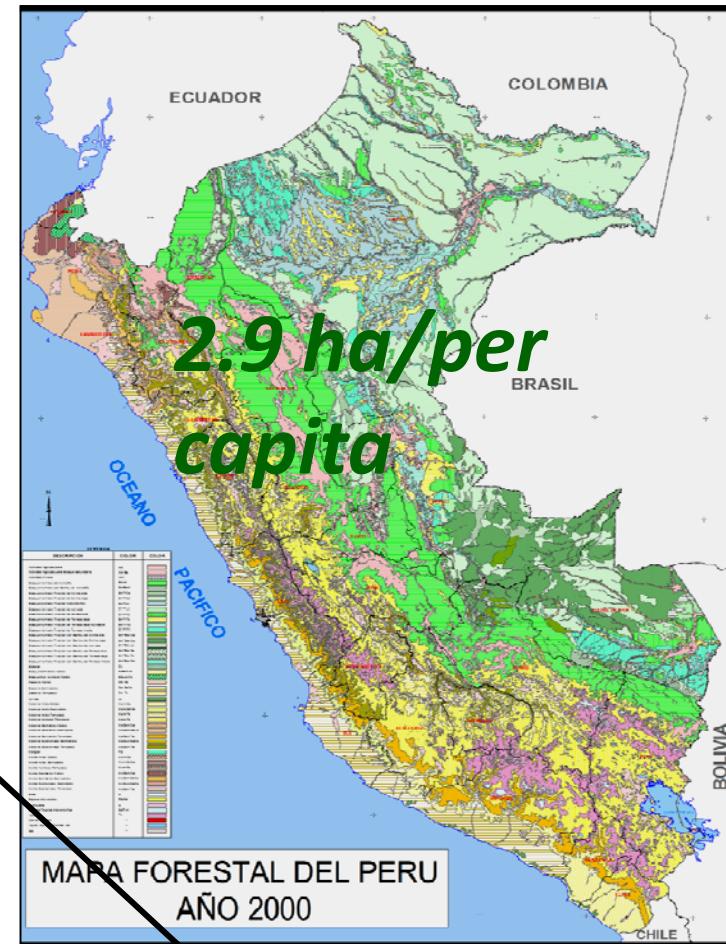
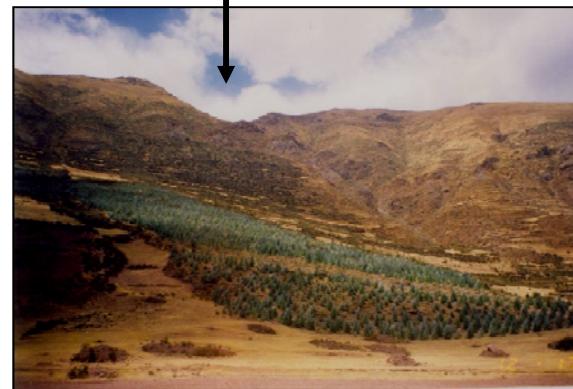
Ministerio
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4.- The Forest Resources and Climate Change in Peru.

**67 million hectares
of natural forests**

Natural forest	72 million ha
Coast	2,8 million ha
Highlands	1,8 million ha
Tropical forest	67,2 million ha
Areas for plantation	10 million ha
Total population	25 million
Total surface	1.29 million km ²



MAIN COUNTRIES WITH HIGH BIOLOGICAL DIVERSITY IN THE World

MAMIFEROS	AVES	ANFIBIOS	REPTILES
INDONESIA 515	PERU 1800	BRASIL 516	MEXICO 717
PERU 460	COLOMBIA 1721	COLOMBIA 407	AUSTRALIA 686
MEXICO 449	BRASIL 1622	ECUADOR 358	INDONESIA 600
BRASIL 428	INDONESIA 1519	PERU 332	BRASIL 467
ZAIRE 409	ECUADOR 1447	MEXICO 282	INDIA 453
CHINA 394	VENEZUELA 1275	INDONESIA 270	COLOMBIA 383
COLOMBIA 359	BOLIVIA 1250	CHINA 261	PERU 365
INDIA 350	INDIA 1200	ZAIRE 216	ECUADOR 297



PERÚ

Megadiverse
country

- 1º place in birds.
- 2º place in mammals.
- 2º place lugar in fishes.
- 4º place in anfibians.
- 7º place in reptiles.
- Peru has 25000 especies de plantas (30% are endémic species)



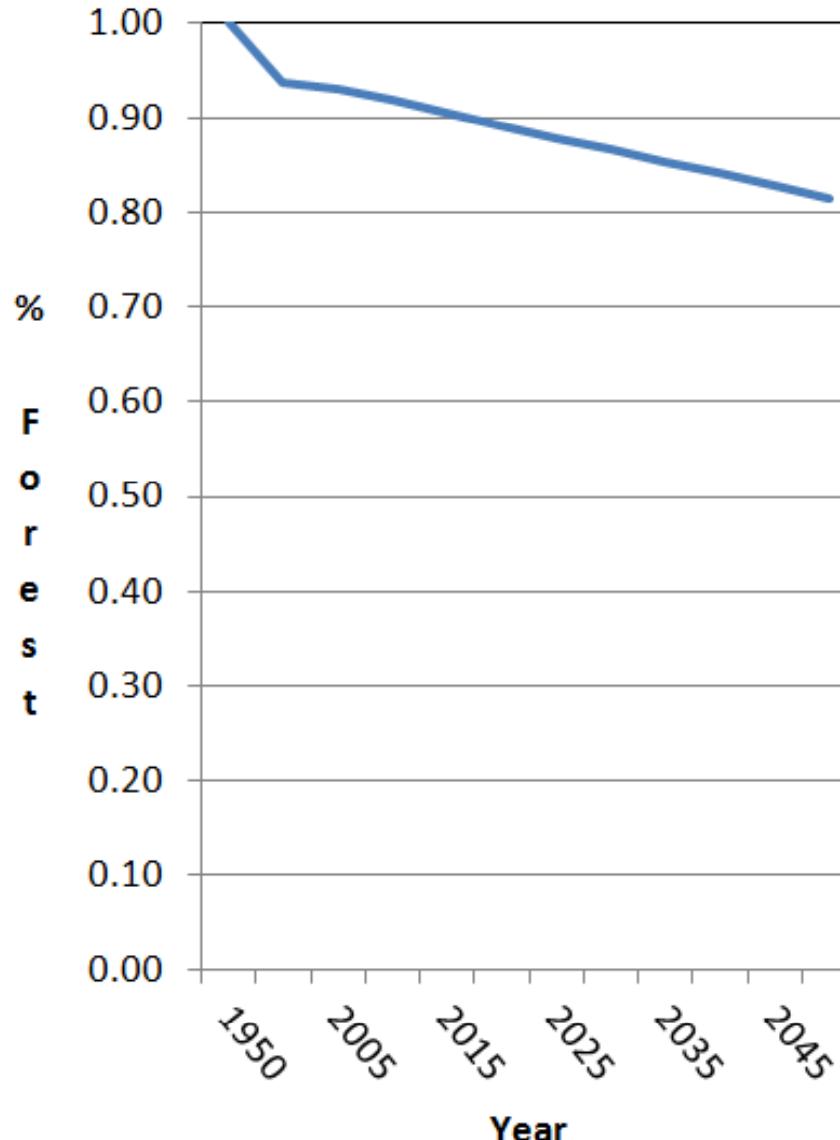
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Peru: Forest Transition Curve

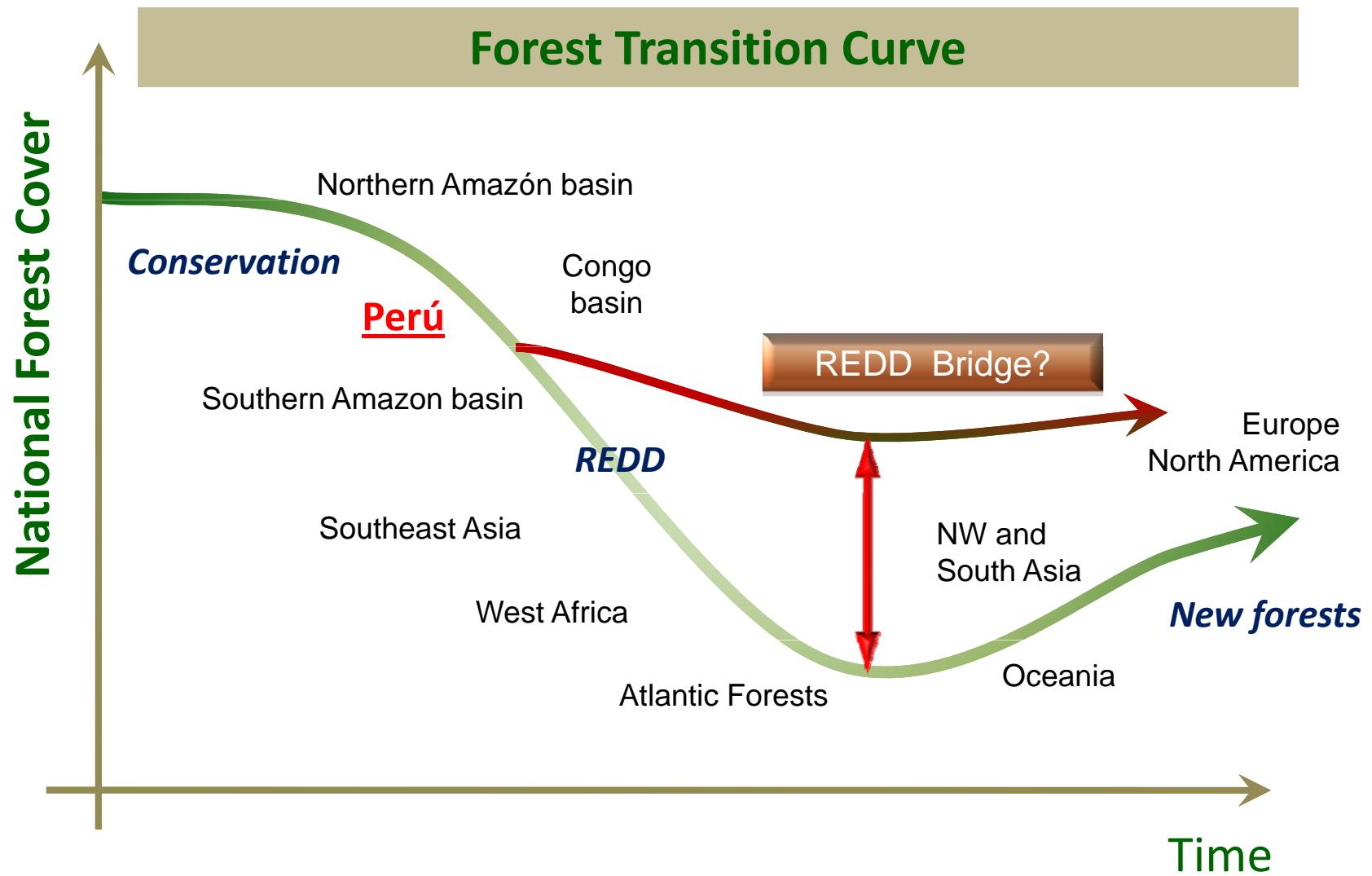
- For 5 Amazon Departments in Peru
- In 2001 94% forested
- We need to think about this in terms of carbon emissions



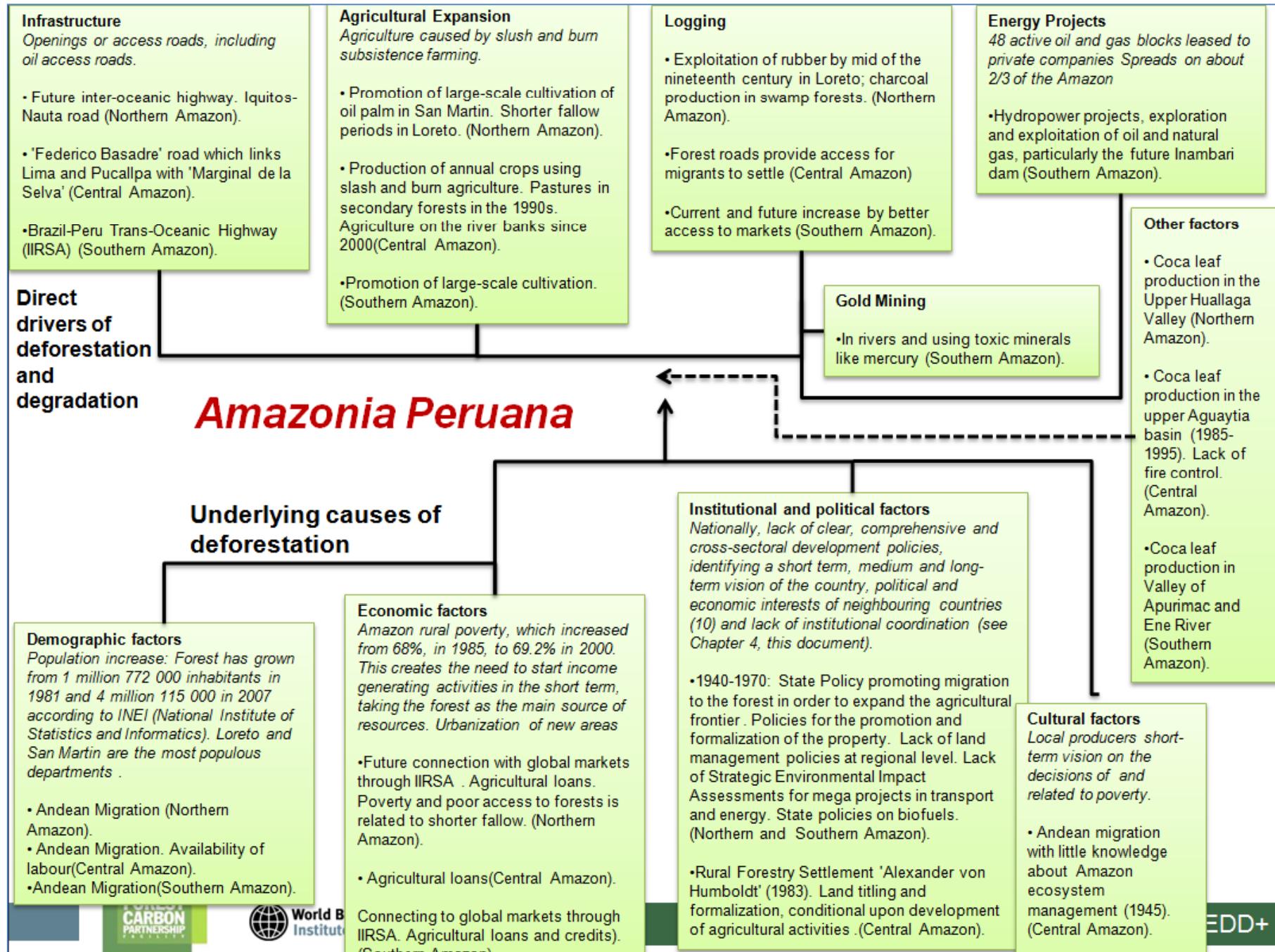
<http://www.iamazonica.org.br/IAViewer> - Deforestation Module

Source: Modeling conservation in the Amazon basin.

© G&B Moore Foundation / LBA SIMAmazonia Project,
led by Soares-Filho B. S. et al. 2006.



Fuente: Zarin, 2009



National Forest Conservation Program (PNCB)

- Conditional cash transfer: climate change mitigation
- S/ 10 ha yr⁻¹ (US\$ 3.59 ha yr⁻¹)
- Aims to conserve 54 m ha out of 77 m ha total in Peruvian Amazon; 10 m ha in indigenous reserves
- Starting with indigenous communities prioritized by forest area & accessibility; 333K indigenous pop.
- Prioritized by primary forest area, deforestation rate & poverty prevalence
- Agreements are 5 years
- Payments to single community account by wire transfer
- Payment are to be used according to agreed investment plan

Some back of the envelope calculations: if the system covered all indigenous communities in Peru

10,000,000	ha in indigenous reserves
US\$ 3.59	\$ per ha per year payment
US \$35,900,000	Annual payment to fund total area
333,000	Indigenous population
US\$ 108	Payment per capita

PNCB Issues

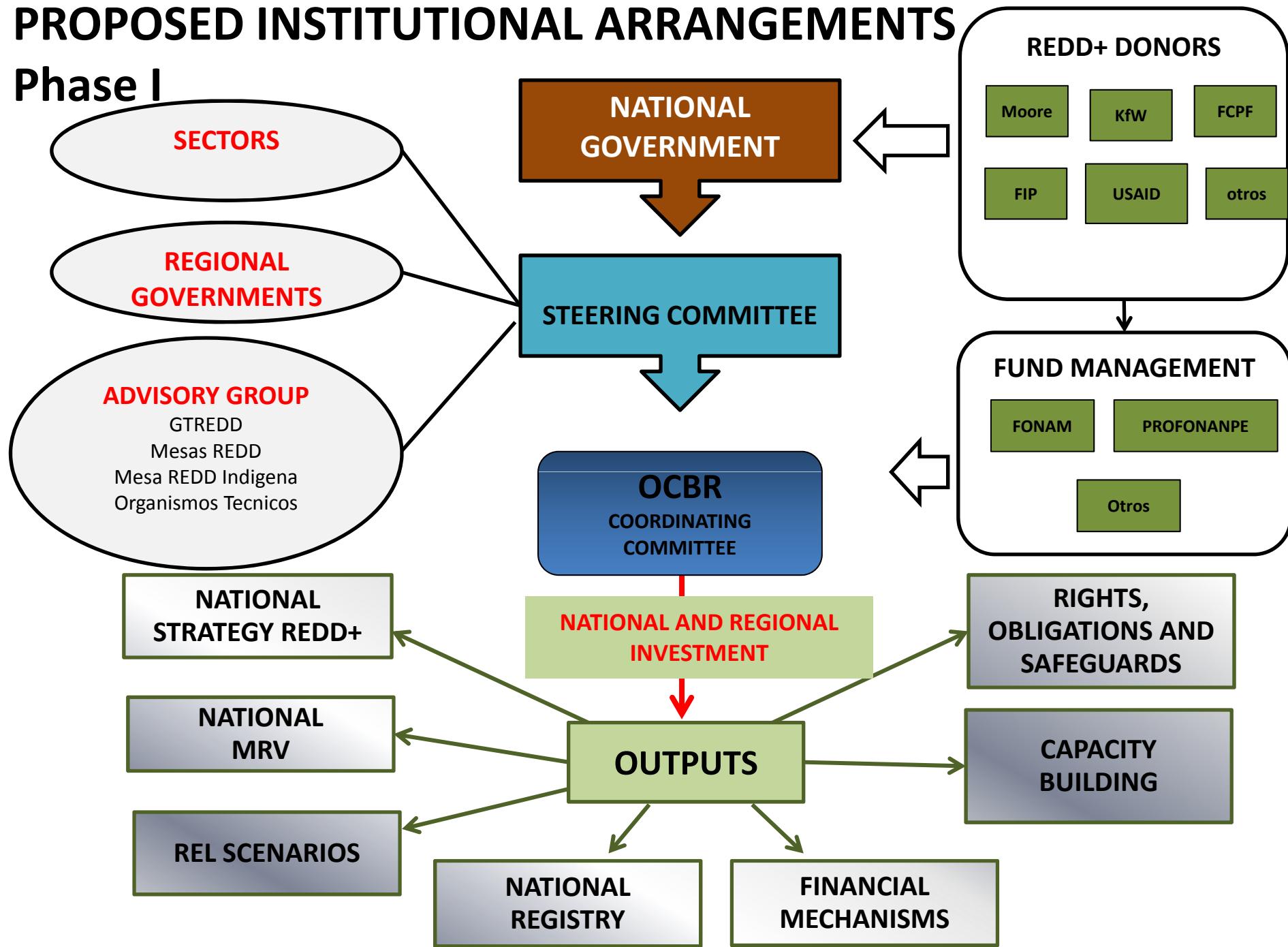
- Program disregards opportunity costs and carbon stocks.....only focuses on deforestation and degradation
- Indigenous group management committee
 - Established in community meetings
 - Technical capacity
 - representative
- MRV – how reliable is it?
- The economics of conditional cash transfer (how does it compare to ASB-style opportunity cost analysis?)
- Impact on poverty alleviation?
- Impact on carbon emissions?

Policies and laws

- Forest and Wildlife Law enacted in 2000
- Forestry and Wildlife Law – draft
- Environmental Services Promotion and Compensation Law – draft
- Prior, Free and Informed Consultation Law – approved by legislature, but not executive
- USA-Peru Free Trade Agreement

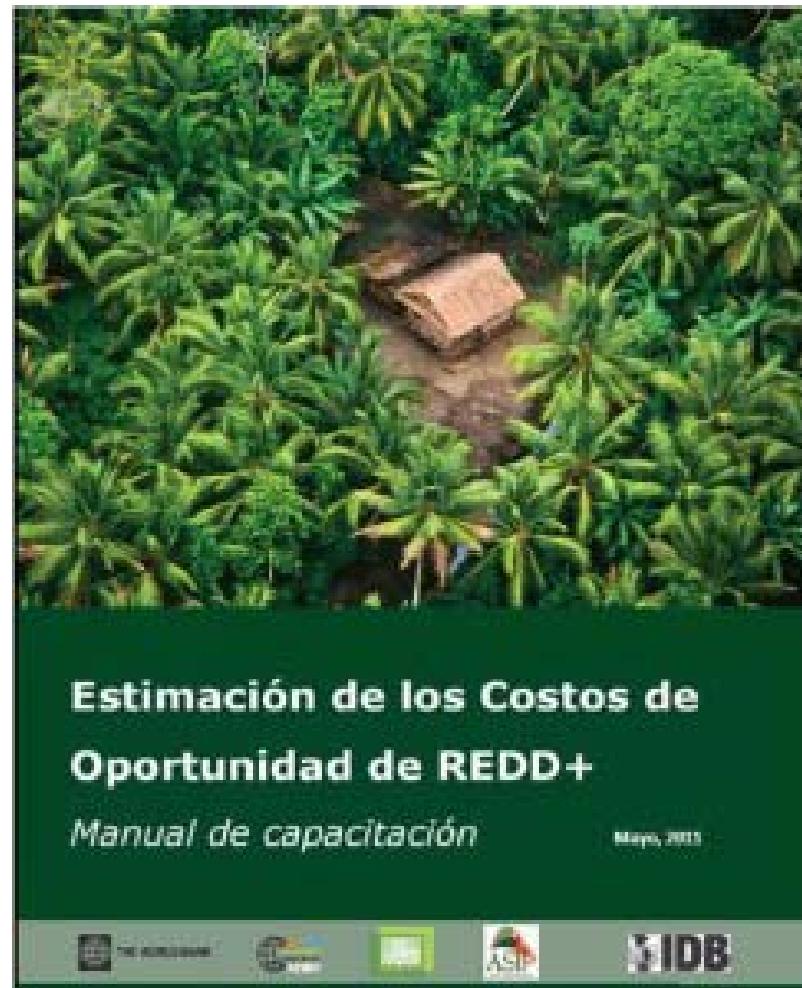
PROPOSED INSTITUTIONAL ARRANGEMENTS

Phase I



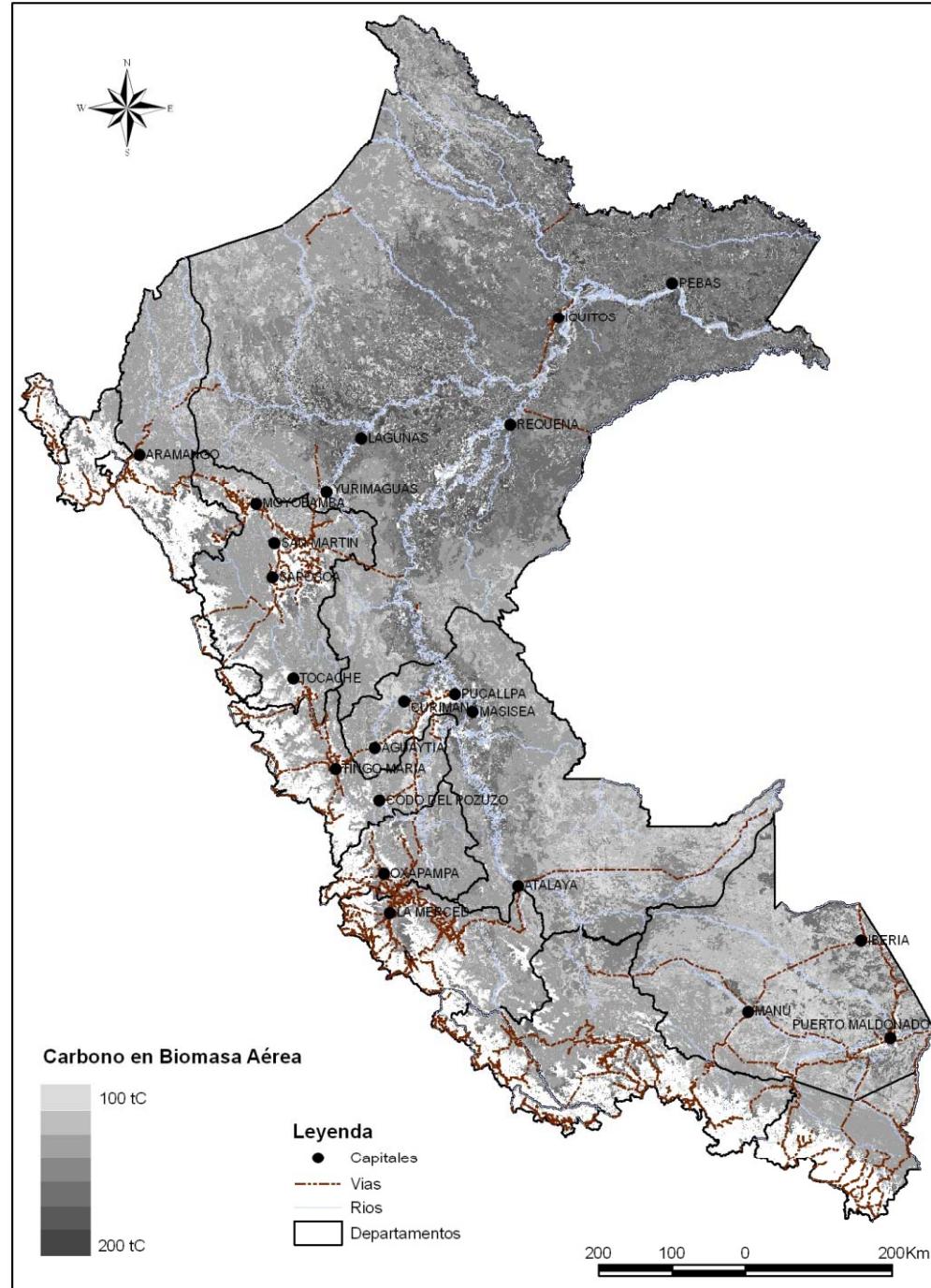
ASB Capacity building in Peru

- 2-day meeting of policy makers
- 55 professionals from Amazon region trained in opportunity cost methodology
- Follow-up activities planned with GIZ



Carbon in biomass

Saatchi et al., 2007



Deforestation to the year 2000

Armas, A.; Börner, J.; Tito, M.; Díaz, L.; Tapia-Coral, S.C.; Wunder, S.; Reymond, L.; Nascimento, N. 2009. Pagos por Servicios Ambientales para la conservación de bosques en la Amazonía peruana: Un análisis de viabilidad. SERNANP, Lima-Perú. 92 p.

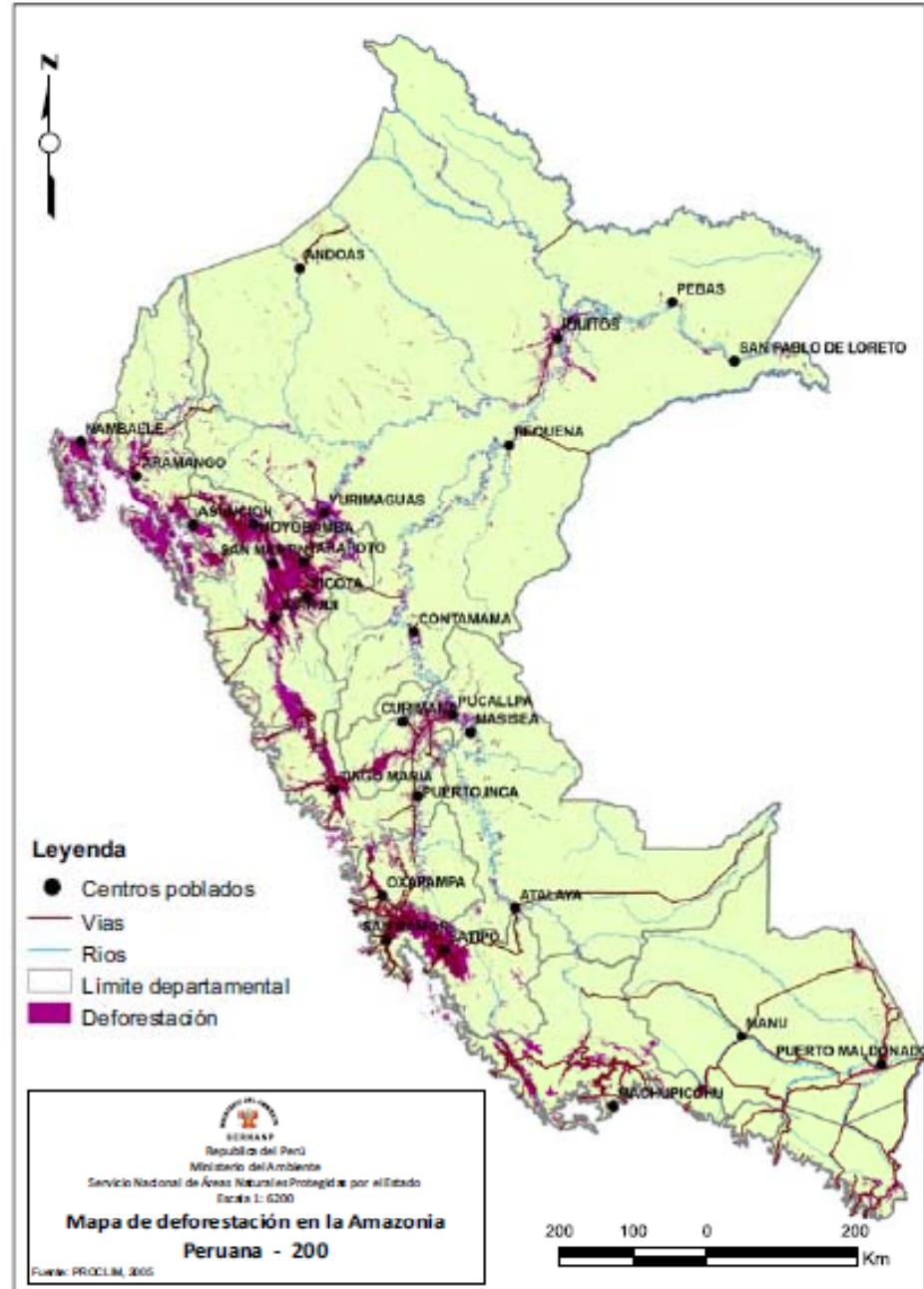
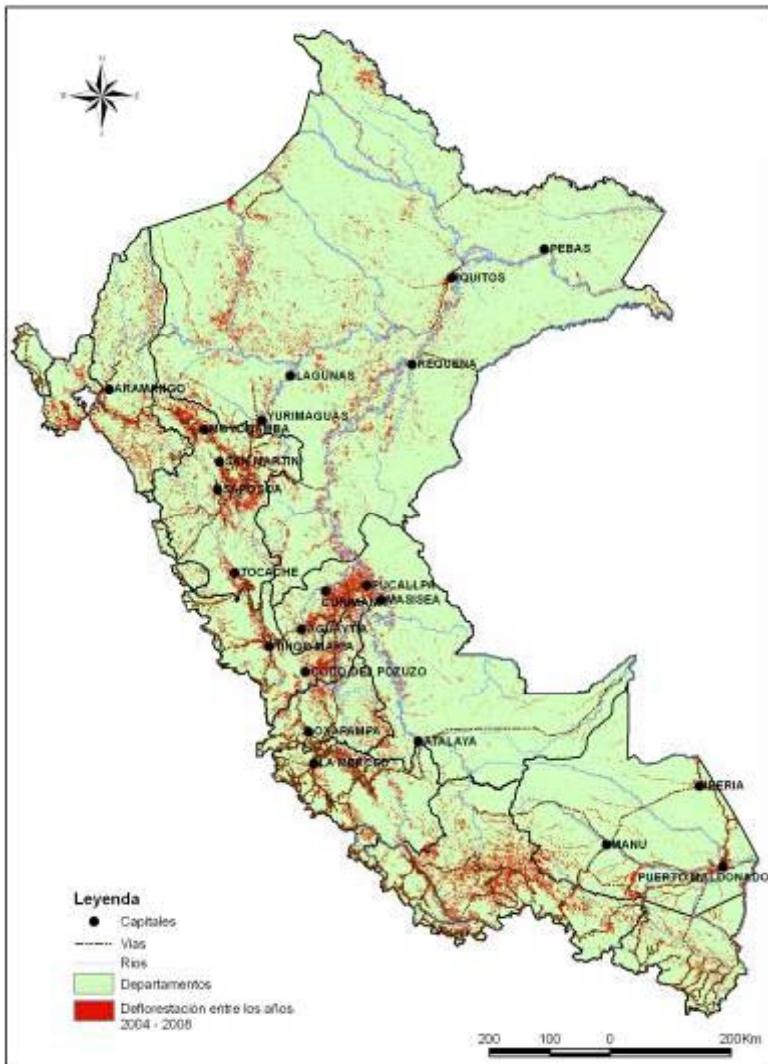


Fig. 7. Deforestación según PROCLIM (1990-2000).

Deforestación histórica - MODIS

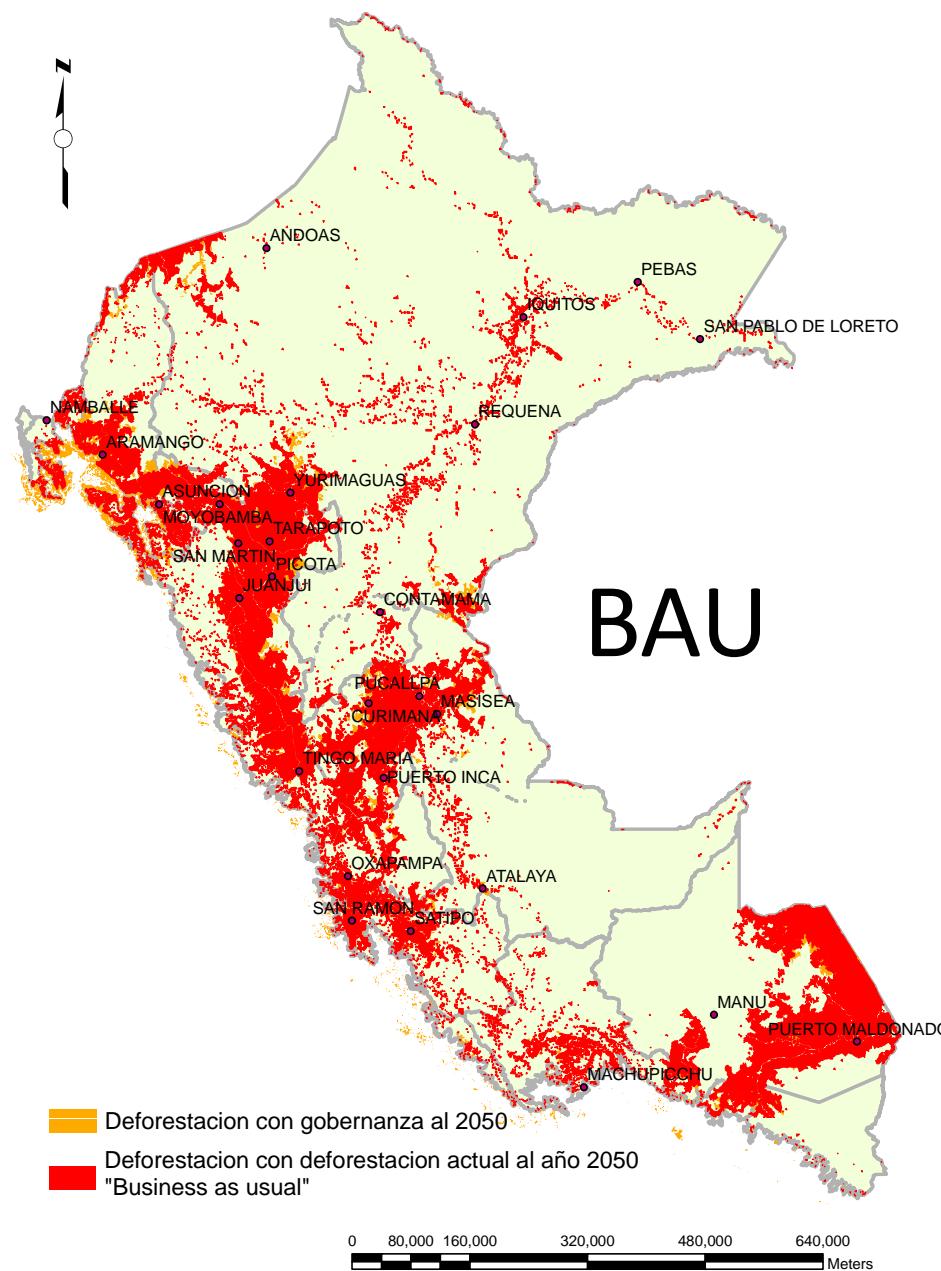


Tasa anual de deforestación
entre 2004 – 2008
144 221 has

Oliveira et al. 2007
2000-5, 63 400-128 100 h

Armas, A.; Börner, J.; Tito, M.; Díaz, L.; Tapia-Coral, S.C.; Wunder, S.; Reymond, L.; Nascimento, N. 2009. Pagos por Servicios Ambientales para la conservación de bosques en la Amazonía peruana: Un análisis de viabilidad. SERNANP, Lima-Perú. 92 p.

Simulated deforestation in 2050 Source: Soarez Filho, 2005



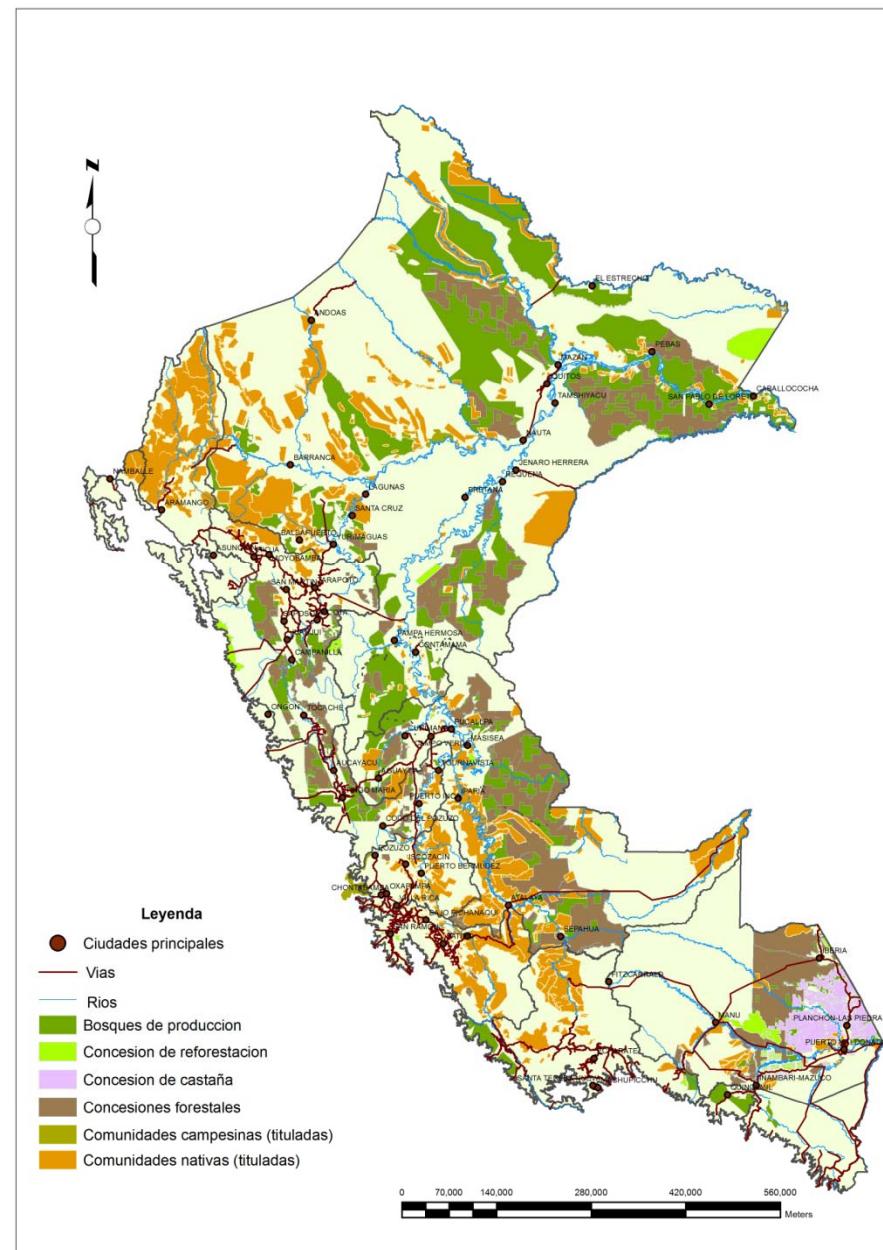
National forest monitoring system

- Proposal for tri-national MRV – Peru, Colombia, Mexico
- MRV – ClasLite, mapping well advanced, but still not degradation estimate
- National Forest Inventory – US\$ 6 million 2011-2013; carbon stock, biodiversity, environmental services....FAO project
- Despite work on Lidar, it is unclear whether they can bring this technology to Peru countrywide

Tenure Regimes

Categoría de tenencia	Área (ha)	Contribución (%)
Comunidades nativas	9,927,676	13
Comunidades campesinas	148,965	0
Concesiones forestales	7,470,325	10
Concesiones de conservación y reforestación	786,068	1
Áreas Naturales Protegidas	26,832,827	36
Bosques de producción	11,466,147	15
Sin clasificación	17,361,892	23
Área total	73,993,900	100

Armas et al., 2009



Arreglos institucionales en el Perú

- Es un proceso liderado por el Gobierno Peruano.
- Comité Directivo conformado por:
 - MINAM
 - MEF
 - MINAG
 - Gobiernos Regionales
 - BID, BM, IFC (observadores)
 - Otros actores



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AIDESEP and COICA condemn reject “carbon cowboy” [CE] and demand his expulsion f

By Chris...e

The total area being granted to multinational companies covers more than 70 percent of the Peruvian Amazon, according to a study by scientists at Duke University.

ANALYSIS-Peru Amazon conflict exposes rift over economic policy

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Tue Jun 9, 2009 11:36am EDT

- * Amazon thought to have substantial oil, mineral reserves
- * Indian population for long neglected by government
- * Both sides blame the other for recent violence

By Marco Aquino

BAGUA GRANDE, Peru, June 9 (Reuters) - Potentially lucrative oil and gas reserves lie in Peru's vast Amazon region, but its Indian inhabitants are furious at being left out of plans to profit from the



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“carbon cowboy” David Nilsson denounces dangerous chief in Peru

August 5th, 2011

Funding considerations

- National Forest Inventory – US\$ 6 million 2011-2013; carbon stock, biodiversity, environmental services
- 100 million US\$ for REDD ; 46m donation; 65m loan

GESTION DE FONDOS

Item	TOTAL (US\$)	Contrapartida FONAM (US\$)
Ejecución de Proyectos	2'196,376.62	471,000.00
Administración de Fondos	31'277,801.00	905,000.00
Fideicomisos	8'153,647.50	0
Apoyo en el acceso al financiamiento del portafolio de proyectos de carbono identificados por FONAM	1,500'000,000.00	0
Gestoría en la elaboración de propuestas de cooperación técnica y financiera	258'000,000.00	0
TOTAL (US\$)	1,799'627,825.12	1,376,000.00

FINANCIAMIENTO REDD

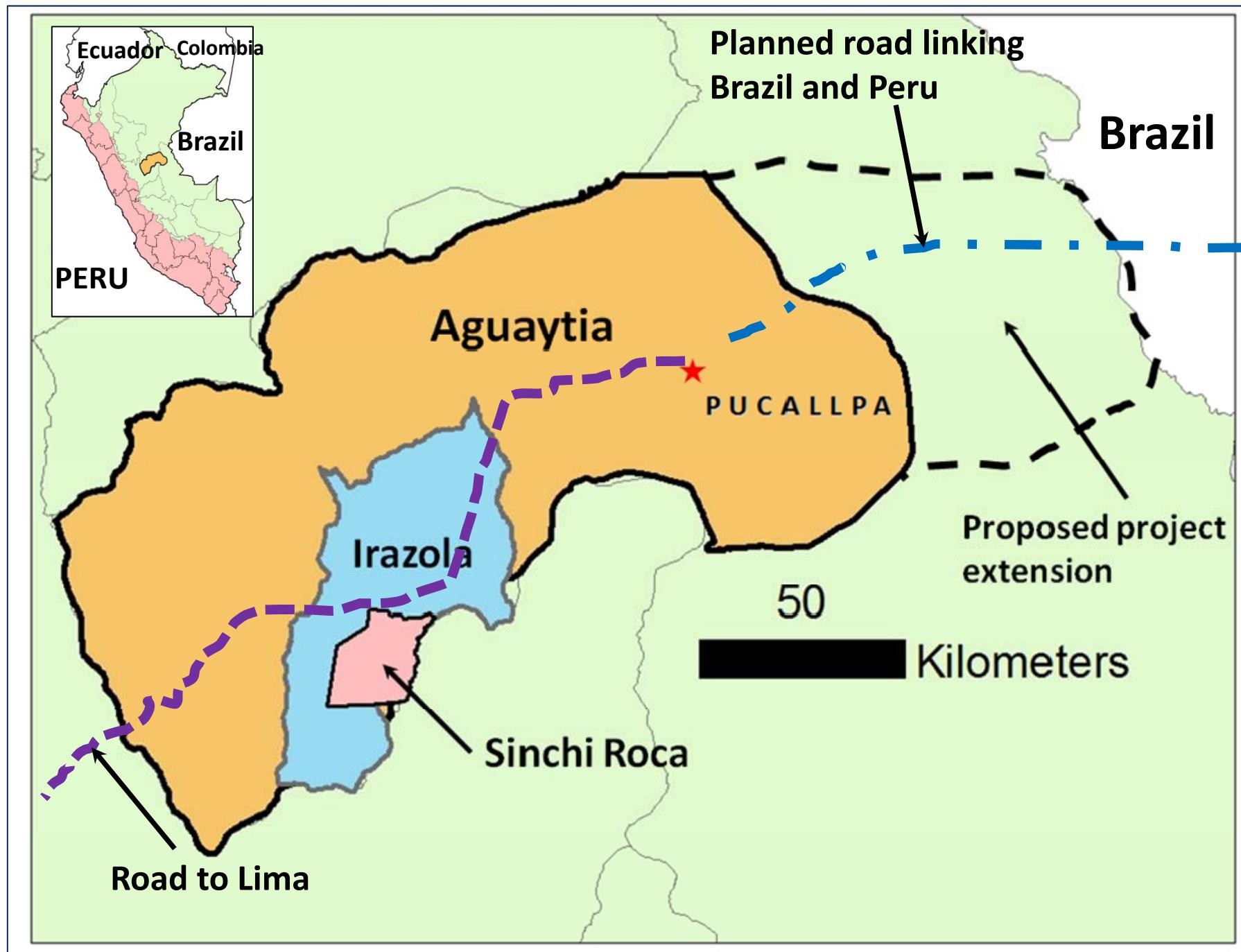
FINANCIAMIENTO EN EJECUCION: US\$ 111 MM

Nombre del Proyecto	Entidad Donante	Donación (US\$)	Préstamo US\$
Proyecto en temática REDD	Agencia de los EE.U.U. para el Desarrollo Internacional (USAID)	6,000,000.00	
Apoyo a la Implementación de REDD+ en el Perú	KfW Bankengruppe	8,100,000.00	
Fortalecimiento de Capacidades Técnicas para la Implementación de REDD en el Perú	Fundación Gordon & Betty Moore	2,000,000.00	
Readiness Preparation Proposal (R-PP)	Banco Mundial FPCF	3,600,000.00	
Fortalecimiento de Capacidades Regionales en Gestión del Cambio Climático	Banco Interamericano de Desarrollo (Fondo SECCI BID)	400,000.00	
Medidas de Adaptación en Cuencas de Ríos Santa, Mayo, Piura y Mantaro	Banco Interamericano de Desarrollo (Fondo SECCI BID)	1,000,000.00	
FIP	Banco Interamericano de Desarrollo BID	25,000,000.00	25,000,000.00
PNCB	MINAM - JICA	40,000,000.00	
TOT AL		46,100,000.00	65,000,000.00

En proceso US\$ 100 MM

Aguaytia Pre-Feasibility Study: Lessons Learned

- Opportunity cost analysis shows plenty of opportunity
- T&I costs, not known. More research needed
- Need better incorporation of Brasil-Peru road
- Scenarios need to incorporate permanent crops and recuperation of degraded lands
- Improve carbon data; reconcile below ground and above ground data from ICRAF, Gottingen and INIA teams
- ICRAF and CIAT working on improving land use data
- Much more work on obstacles such as land tenure, governance issues at multiple levels and perceptions



Peru workplan

- Convene a 2-day workshop on implementation and transaction costs of REDD+
- Develop, compare and contrast statistical and remote sensing methods for land use change in opportunity cost analysis.
- Reconcile estimates of forest degradation: remote sensing and forest inventories
- Fully incorporate illegal logging into analysis
- Unravel the data on land tenure: census data combined with protected areas, concessions maps
- Opportunity cost and land use modeling with local stakeholders
- Start up – initial – costs of changing land use (agroforestry, silvoagropastoral systems)

INIA WORK PLAN 2011 - NATIONAL REPORT						
WP		Description	Output	Advance %	Responsible/Person	Commentaries
1	1.1	Review of illegal activity in Ucayali	Project report in Spanish and English	70	Eloy/Glenn	
	1.2	Policy brief	Publication summarising WP1 work	30	Eloy /Walter/Glenn	
2	2.1	Inventory data assessments and carbon in biomass (methodologies, July Alegre)	Project report	90	Eloy/Ricse	
	2.2	Measure above-ground biomass according to agreed protocol at same sites used for soil C sampling in WP3	Successful collection of above-ground C data. Contribution to project report and subsequent publications.	100	Eloy/Evelin/Walter	
2	2.3	Policy brief	Publication summarising WP2 work	30	Eloy/Johannes	
	2.4	Thesis, Quantification of carbon in above ground biomass in three different land use: forest, oil palm plantation and pasture.	Completed theses and scientific papers completed (in English)	20	Eloy /Johannes/Evelin	
3	2.5	Data on carbon plant stock – review of literature on previous studies	Elaboration of a document annotated bibliography in English and Spanish	50	Eloy/Walter	
	3.1	Data on soil carbon – review of literature on previous studies	Elaboration of a document annotated bibliography in English and Spanish	50	Eloy/Evelin/Walter	
3	3.1	Assist Edzo Veldkamp's team with the logistics of soil C sampling	Elaboration of the thesis and publication	100	Eloy/katrin/Walter/Walter	
	3.3	Thesis; Quantification of soil carbon and biomass of roots in three different land use: forest, oil palm plantation and pasture.	Completed theses and scientific papers completed (in English)	20	Eloy/Katrin/karen	
4	3.4	Policy brief	Publication summarising WP3 work	30	Eloy /Ricse/Katrin	
	4.1	Circulate forest governance study reports	Project report	0	Glenn/Douglas/Eloy	
4	4.2	Provide logistic facilities for the interviews to make by F Von Blucher and to provide workspace in the IA offices	Successful completion of field study.	100	Eloy/Mirian/Ymber	
	4.3	Article: PERCEPTIONS FROM THE POPULATION ABOUT FOREST AND ILLEGAL LOGGING IN THE AGUAYTIA BASIN		100	Eloy/Andres	
4	4.4	Policy Brief	Publication summarising WP4 work	30	Eloy/Hugo/Ricse/Walter	
	5.1	Map the boundaries of the villages included in the RAVA database	Limit of the georeferenced towns	30	Eloy/Roberto/Julio	
5	5.2	Collect and collate secondary socio-economic data for Aguaytia district as required by modelling for George Dyer	Required data provided in spreadsheet files	0	?	
	5.3	INIA to provide support for the implementation of a modelling workshop scheduled for the second half of 2011.	Workshop report.	0	Eloy/Mirian/Walter	

INIA WORK PLAN 2011 - NATIONAL COUNTRY FINANCIAL REPORT						
WP	Description	Soles	Euros	Advance	Responsible/Person	
1	1.1 Review of illegal activity in Ucayali	4,500.00	1,250.00	875.00	Eloy	
	1.2 Policy brief	2,500.00	694.44	208.33	Eloy	
2	Inventory data assessments and carbon in biomass (methodologies, July Alegre)	1,800.00	500.00	450.00	Eloy/Ricse	
	Measure above-ground biomass according to agreed protocol at same sites used for soil C sampling in WP3	43,000.00	11,944.44	11,944.44	Eloy/Evelin/Walter	
	2.3 Policy brief	2,500.00	694.44	208.33	Eloy/Johannes	
	Thesis, Quantification of carbon in above ground biomass in three different land use: forest, oil palm plantation and pasture.	6,000.00	1,666.67	333.33	Eloy /Johannes/Evelin	
	Data on carbon plant stock – review of literature on previous studies	12,000.00	3,333.33	1,666.67		
3	3.1 Data on soil carbon – review of literature on previous studies	12,000.00	3,333.33	1,666.67	Eloy/Evelin/Walter	
	Assist Edzo Veldkamp's team with the logistics of soil C sampling	48,000.00	13,333.33	13,333.33	Eloy/katrin/Walter/Walter	
	Thesis; Quantification of soil carbon and biomass of roots in three different land use: forest, oil palm plantation and pasture.	6,000.00	1,666.67	333.33	Eloy/Katrin/karen	
	3.4 Policy brief	3,000.00	833.33	250.00	Eloy	
4	4.1 Circulate forest governance study reports	5,000.00	1,388.89	0.00	Glenn/Douglas	
	4.2 Provide logistic facilities for the interviews to make by F Von Blucher and to provide workspace in the IA offices	1,600.00	444.44	444.44	Eloy/Mirian/Ymber	
	4.3 Article: PERCEPTIONS FROM THE POPULATION ABOUT FOREST AND ILLEGAL LOGGING IN THE AGUAYTIA BASIN	1,200.00	333.33	333.33	Eloy	
	4.4 Policy Brief about this WP	3,000.00	833.33	250.00	Eloy/	
5	Map the boundaries of the villages included in the RAVA database	28,000.00	7,777.78	2,333.33	Eloy/Roberto/Julio	
	5.2 Collect and collate secondary socio-economic data for Aguaytia district as required by modelling for George Dyer	20,000.00	5,555.56	0.00	?	
	5.3 INIA to provide support for the implementation of a modelling workshop scheduled for the second half of 2011.	86,000.00	23,888.89	0.00	Eloy/Mirian/Walter	
	Total Receives	286,100.00	79,472.22			
	Total Spent	124,670.00	34,630.56	34,630.56		
	Remainder				44,841.67	

