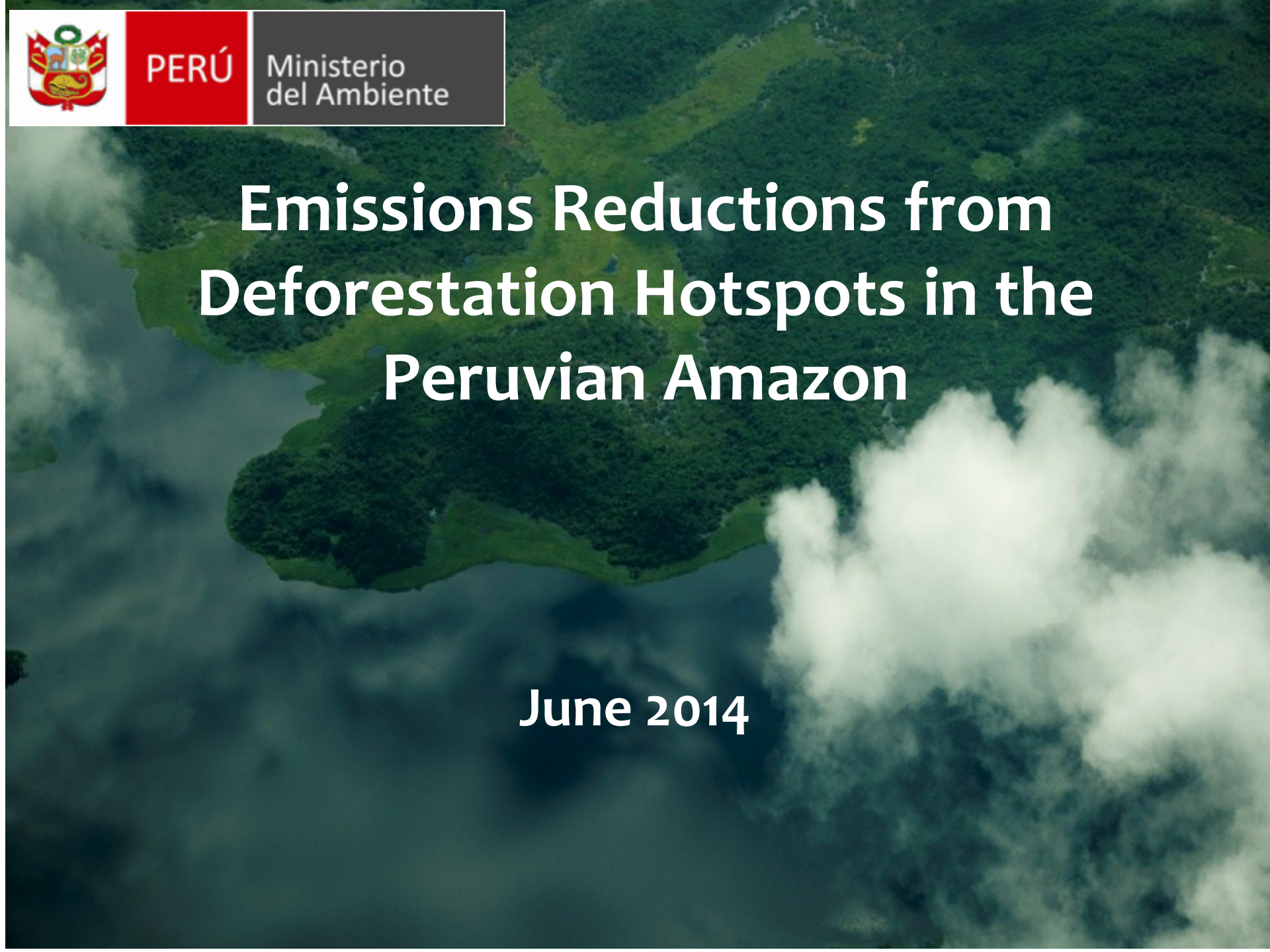


Emissions Reductions from Deforestation Hotspots in the Peruvian Amazon

June 2014

Program Summary

- ***Accounting Area:*** 4.2 million ha (3.2% of national) from 3 areas (Atalaya; Tarapoto-Yurimaguas; Pto. Maldonado-Iñapari and Amarakaeri Indigenous Reserve).
- ***Forest Area:*** 3.4 million ha
- ***Population:*** 250,000
- ***Key drivers***: Shifting agriculture, agroindustries, logging.
- ***Principal Interventions:*** Improved land titling, monitoring and control of land use, SFM, agroforestry, market linkages, capacity building.

Emissions Reductions Summary

- ***Project Period:*** 2016-2020
- ***Reference Period:*** 2000 – 2009/2010
- ***Reference Level:*** 38.7 MtCO2e = 6.1 MtCO2e/yr.
- ***HFLD Adjustment:*** 1.64 MtCO2e/yr.
- ***ER/RL:*** 50%
- ***Emissions Reductions:*** 15.2 (19.4 with adjustment) MtCO2e
- ***ER offered:*** 10 MtCO2e

Unique Characteristics

- Synergy and complementarity with FIP.
- Highly participatory process.
- Indigenous inclusion in decision making and management.
- Differentiated payments for ERs.
- Potential linkage to national fund for climate change mitigation and PES.
- Contributes to national competitiveness in LED economies/markets

Significant Non-Carbon Benefits

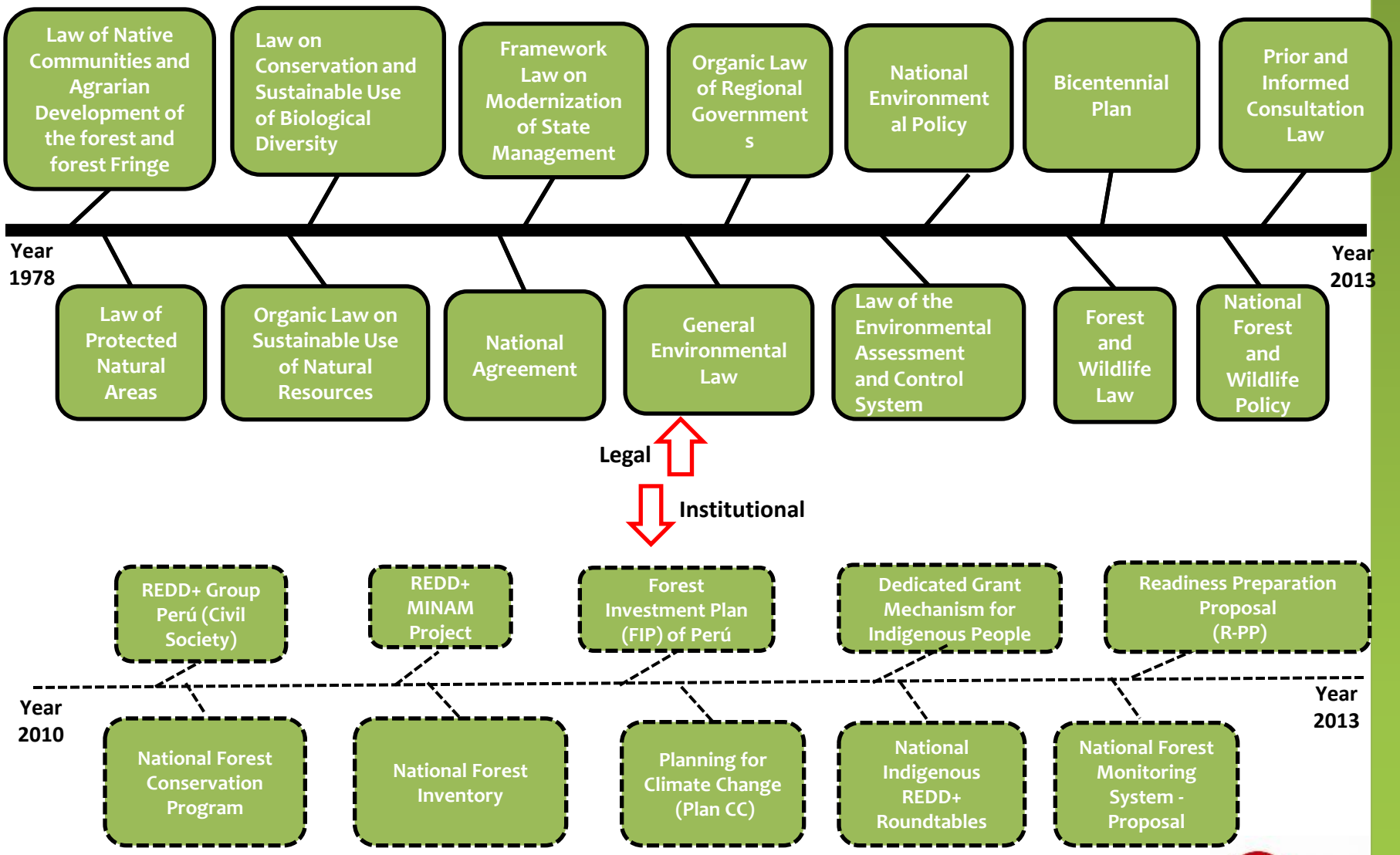
Benefit	T-Y	ATA	MDD
Poverty reduction, esp. Indigenous peoples	M	H	H
Reduced loss of biodiversity & ES	M	M	H
Enabling conditions for forest landscape mgmt. & governance	H	H	H
Improved land titling and rights	H	H	H
Improved competitiveness of forest lands	H	L	M
Improved market access	H	L	H
Greater empowerment and capacities of stakeholders	M	H	H

Political Commitment

- Part of extensive process of reform of national forest service, REDD+, and descentralization.
- Endorsed by Ministry of the Environment and National Forest Conservation and Climate Change Mitigation Program.
- Close cooperation with Min. of Agriculture, Economy and Finance, Culture, regional governments, indigenous organizations, REDD+ roundtables.

PERÚ PROGRESO PARA TODOS

Policy commitment: Marco Legal



PERÚ PROGRESO PARA TODOS

REDD+ Roadmap

National Forest Conservation and Climate Change Program
PNCBMCC

Key stakeholders: Regional goverments, Indigenous organizations, NGO's, etc

R-PP

National Forest and Climate Change Strategy (ENBCC)

Readiness	Design	Implementation
Towards National Forest and Climate Change Strategy	Document design	2014 – 2015: ENBCC implemented

FCPF

- R-PP "Completeness Check": Feb 2014
- Grant Agreement signed: End of April 2014 (IDB-MINAM)

FIP

- Approval: October 30 - 2013
- Projects design: 2014 - 2015

REDD+ MINAM PROJECT (MOORE Y KFW)

- Advances in: Preparation of Reference Scenario, Carbon Map, MRV, Safeguards, Benefits Sharing.

UN-REDD+

- Supporting the design of the National Fund.
- Coordination with Indigenous Peoples Organizations

OTHER PROJECTS: JICA, GIZ...

PERÚ PROGRESO PARA TODOS

Progress On Readiness

PROCESS	NOW	FUTURE (2016)
Reference Level	Changes in forest cover at national level 2000-2011	2012 for Amazon
Degradation	No	Yes (in progress)
Emission factors	Data from 1200 plots	Complete map of "C" densities (in progress)
MRV	Design of national forest monitoring system	Complete reference levels, include local actors in monitoring and verification
	List of REDD+ projects; Registry being designed w/ CIAT	Registry of carbon, safeguards, non-carbon benefits
Safeguards	Diagnosis and road map	Design SESA and ESMF
Non-Carbon benefits	Identified	Framework of baselines, indicators, methods, and registry
Benefit sharing	Differentiated prices, monetary and non-monetary benefits, jurisdictional framework under discussion	Consensus on framework and mechanisms

Forests of Peru

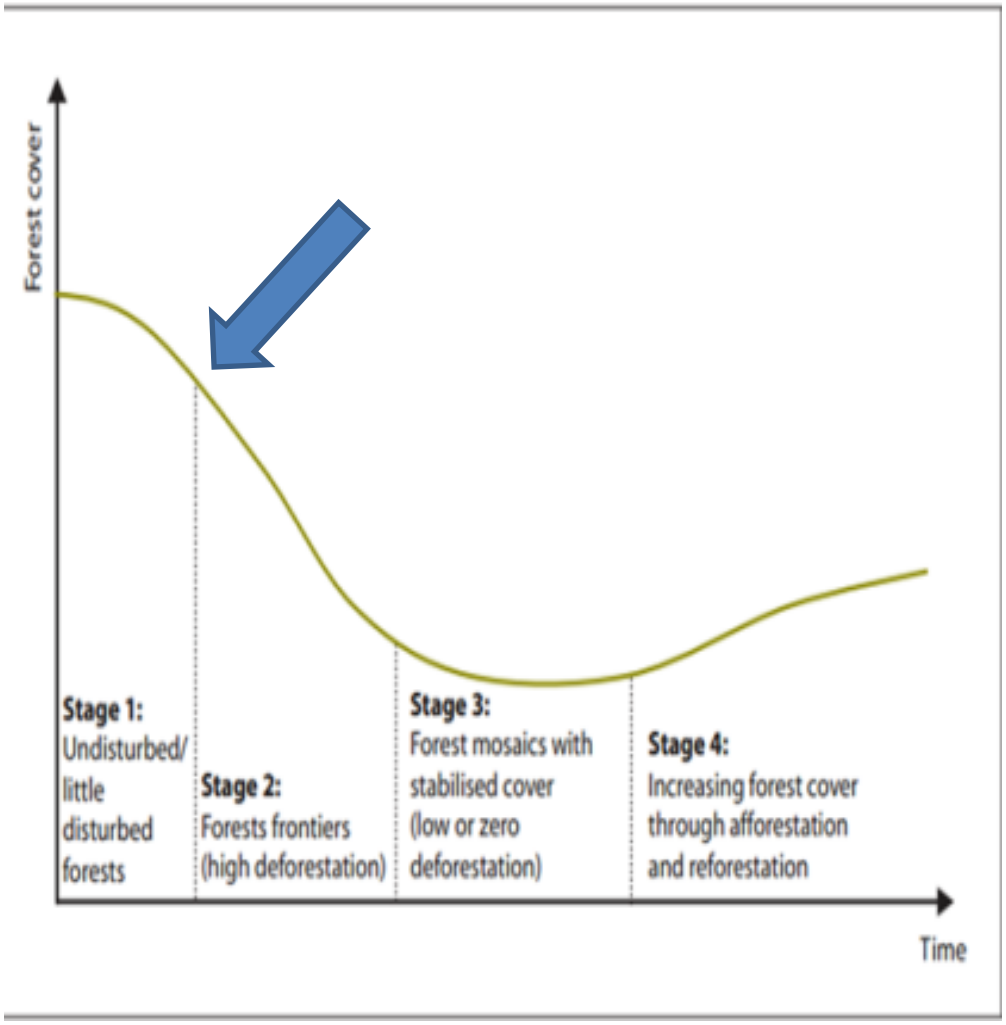
FORESTRY POTENTIAL

68.7 millions ha of forests
(> 54% of the country)
(Forest and protected land > 80%)

- **Coast** **4.6%**
- **Mountains** **1.3 %**
- **Jungle** **94.1%**

- ✓ 9th place in forest area worldwide
- ✓ 4th place in tropical forests
- ✓ 2nd place in the Amazon
- ✓ Megabiodiverse

Peru and Its Forests

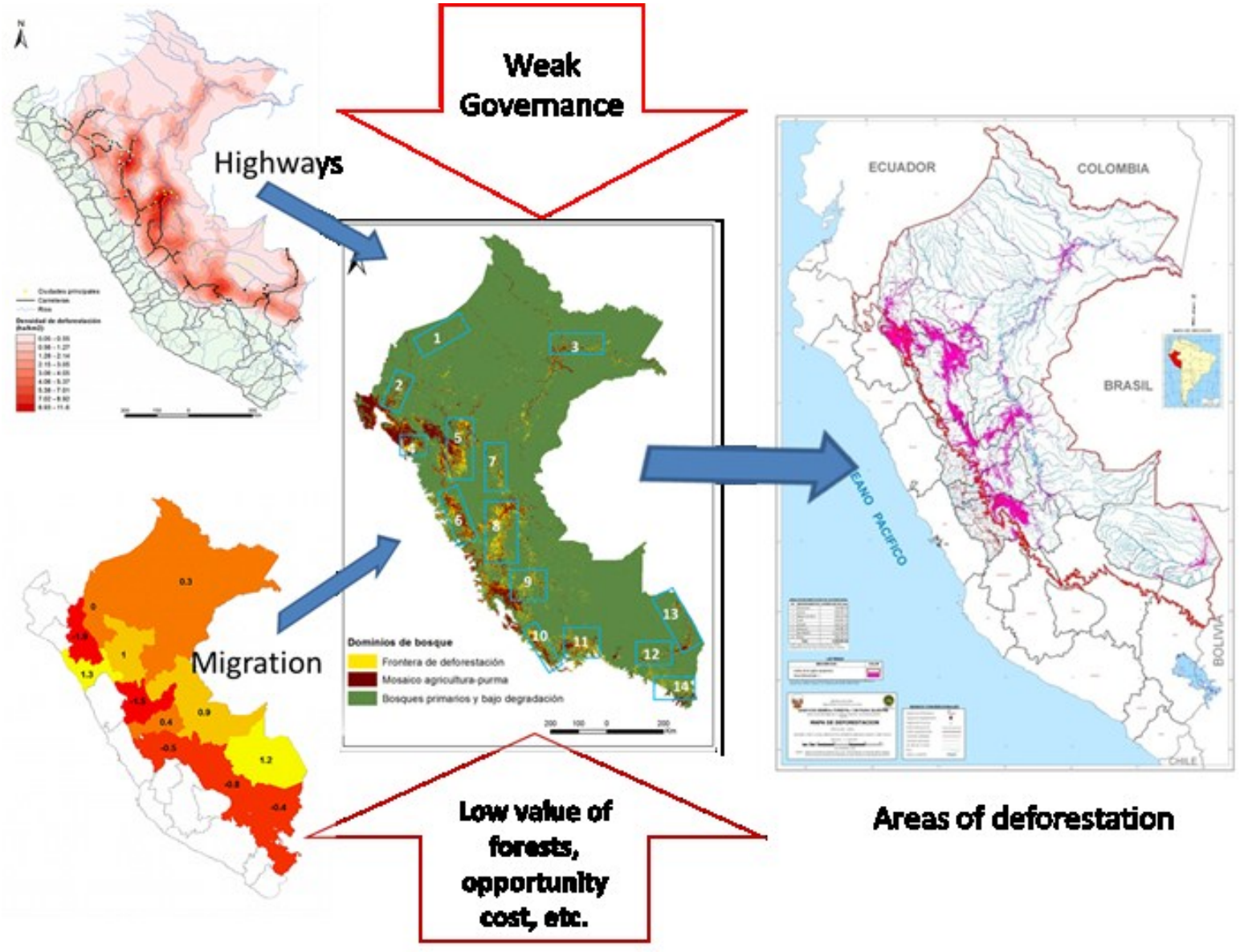


Forests´ potential is unexploited:

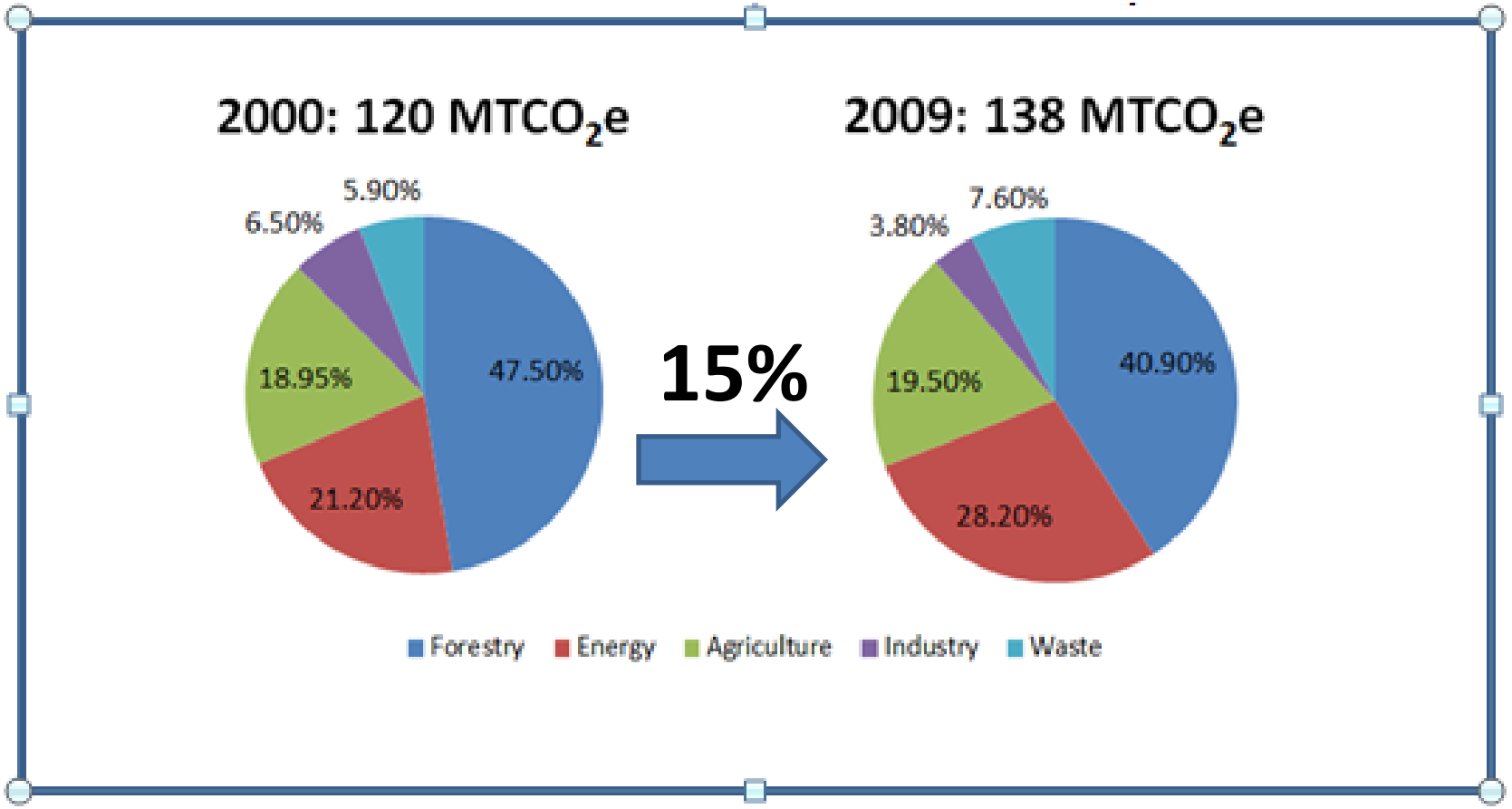
- **Contribute little to the formal economy**
- **Little management**
- **Scarce political attention**
- **Reduced budgets**
- **Source of conflict**
- **Viewed as obstacle to development**

PERÚ PROGRESO PARA TODOS

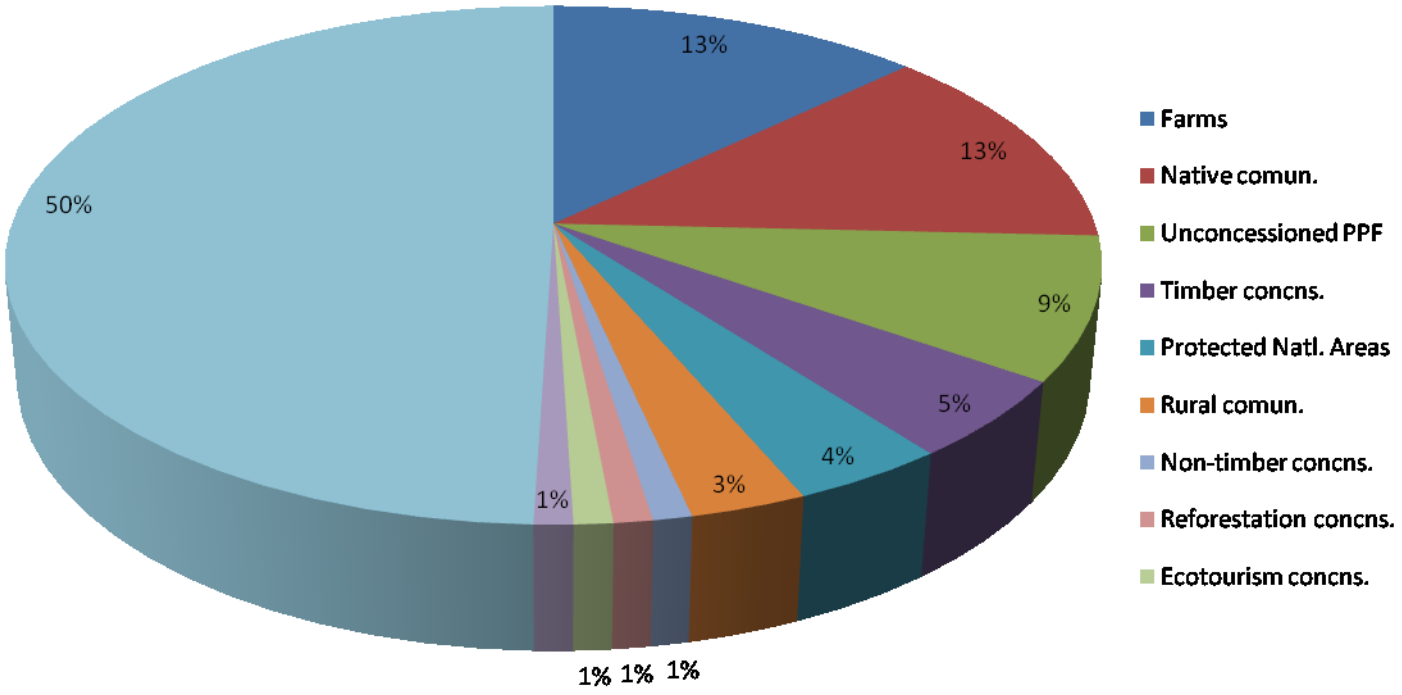
Deforestation Is Increasing



LULUCF Is Main Source Of Emissions

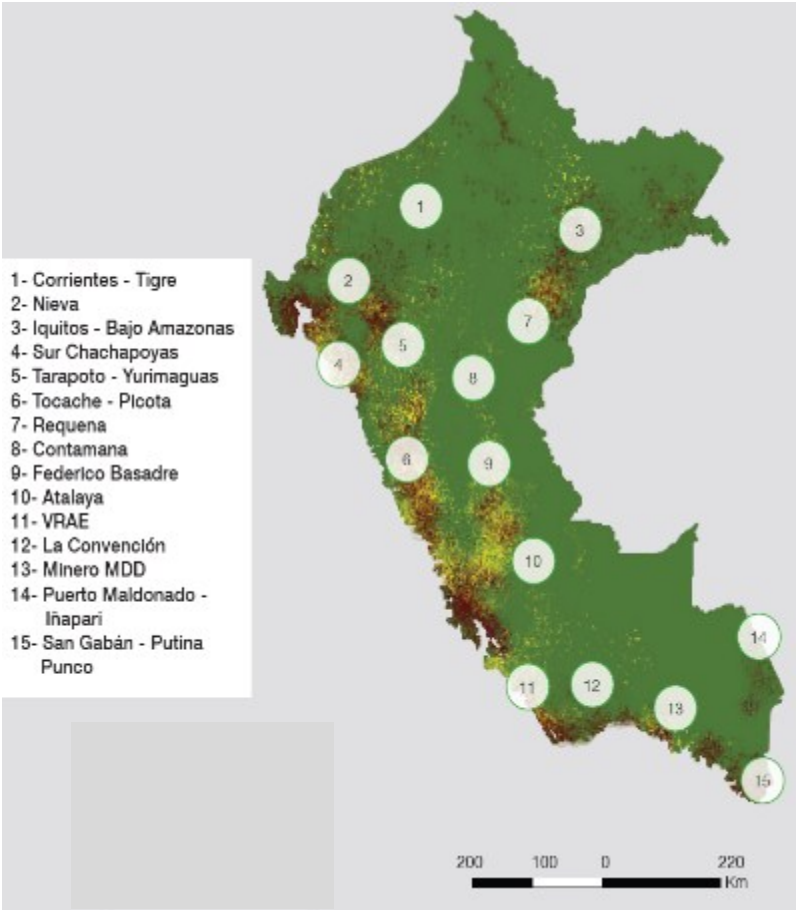


High Deforestation On Native Lands, Legal Farms, and Forests with Unassigned Rights

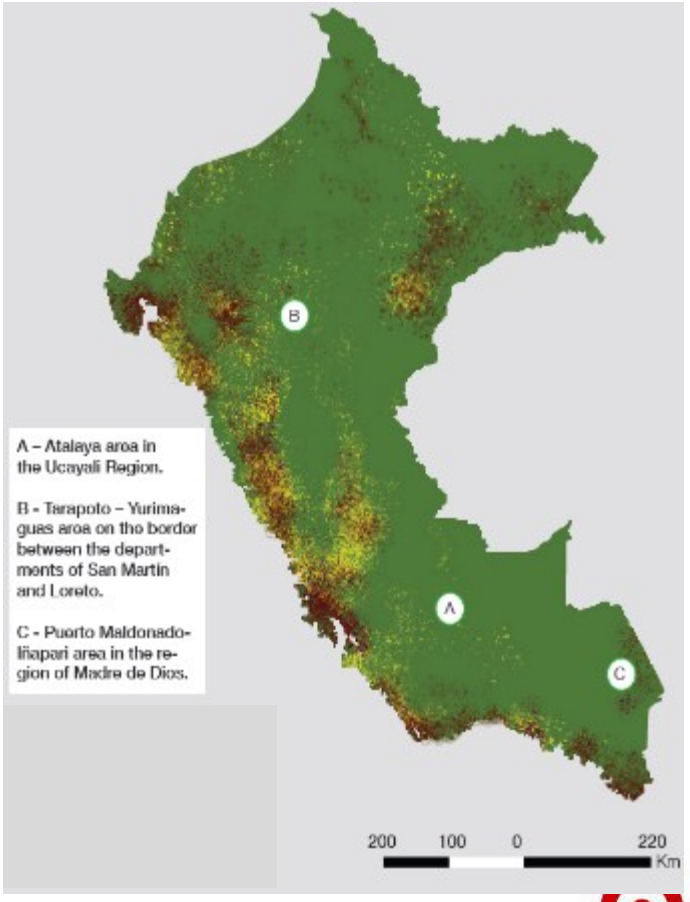


DEFORESTATION HOTSPOTS AND PRIORITY AREAS

Deforestation hotspots



Priority areas

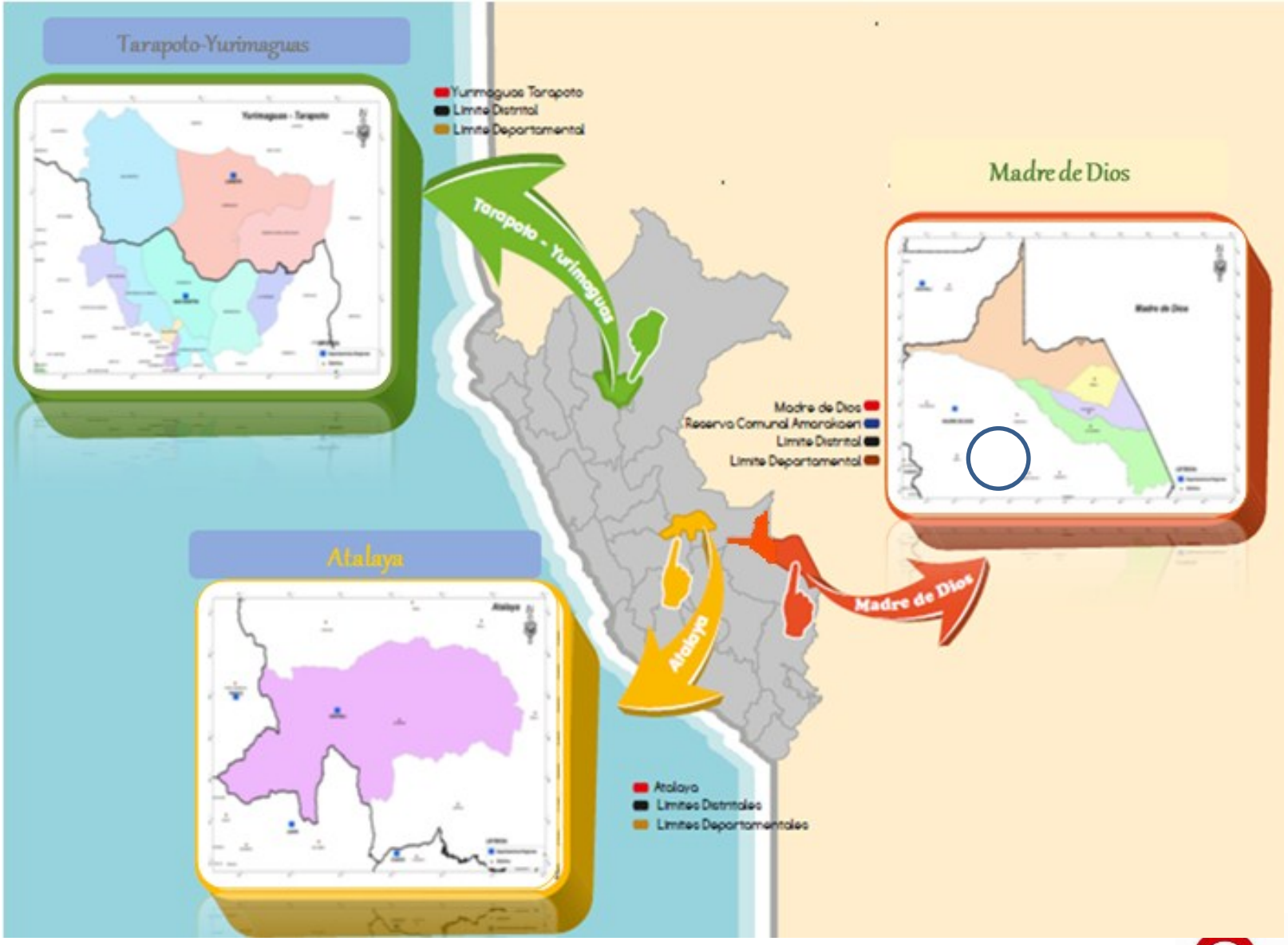


PERÚ PROGRESO PARA TODOS

Zones of Intervention

- Based on deforestation rates, indigenous communities, biodiversity, and opportunity costs.
- 4.2 million ha total: 3.8 million ha are forests.
- Together, represent main drivers and underlying causes of deforestation in the Peruvian Amazon.
- Also represent 3 main socioeconomic environments: settled areas, agricultural frontier, relatively unsettled forest.
- High extrapolability to other Amazon areas.

Zones of Intervention



PERÚ PROGRESO PARA TODOS

Amazon deforestation and degradation

SMALL SCALE TRADITIONAL FARMING

- Main driver of deforestation
- Areas between 5 and 30 ha
- Low productivity
- Weak linkages to market

MID AND LARGE SCALE AGRICULTURE

Units larger than 30 hectares

Increasing productivity of land and labor

Annual crops, agro-exports (oleaginous and bio-fuels).

EXTRACTION OF TIMBER AND NON-TIMBER PRODUCTS

Main sources of forest degradation, includes timber companies, small loggers, native communities, and non-timber products producers.

Selective timber harvesting

Low productivity 1 - 2 m3/ha

UNDERLYING CAUSES:

- Social factors mainly related to poverty
- Economic factors, such as low profitability of forests in comparison with other uses
- Institutional factors, such as sector and territorial approaches of public policies and resource management
- Amazon mega-projects factors, such as highways, hydroelectric plants, and hydrocarbons foster migration.

Causes and Solutions

Causes	Interventions
Inadequate coordination of policies and institutions	Elimination of perverse policies. **Coordination of public institutions and policies** for the management of forests, agriculture, and climate change.
Low forest and agricultural productivity and competitiveness	Development of **financial instruments, technologies, and market linkages** that are aimed at increasing productivity and profitability.
Inadequate knowledge, capacity, and communication at the level of institutions, organizations, and other social actors	Technical assistance, formation and **strengthening of institutions and organizations**, incorporation of stakeholders in **decision making bodies**, **public access** to project and **market-based information**, training.

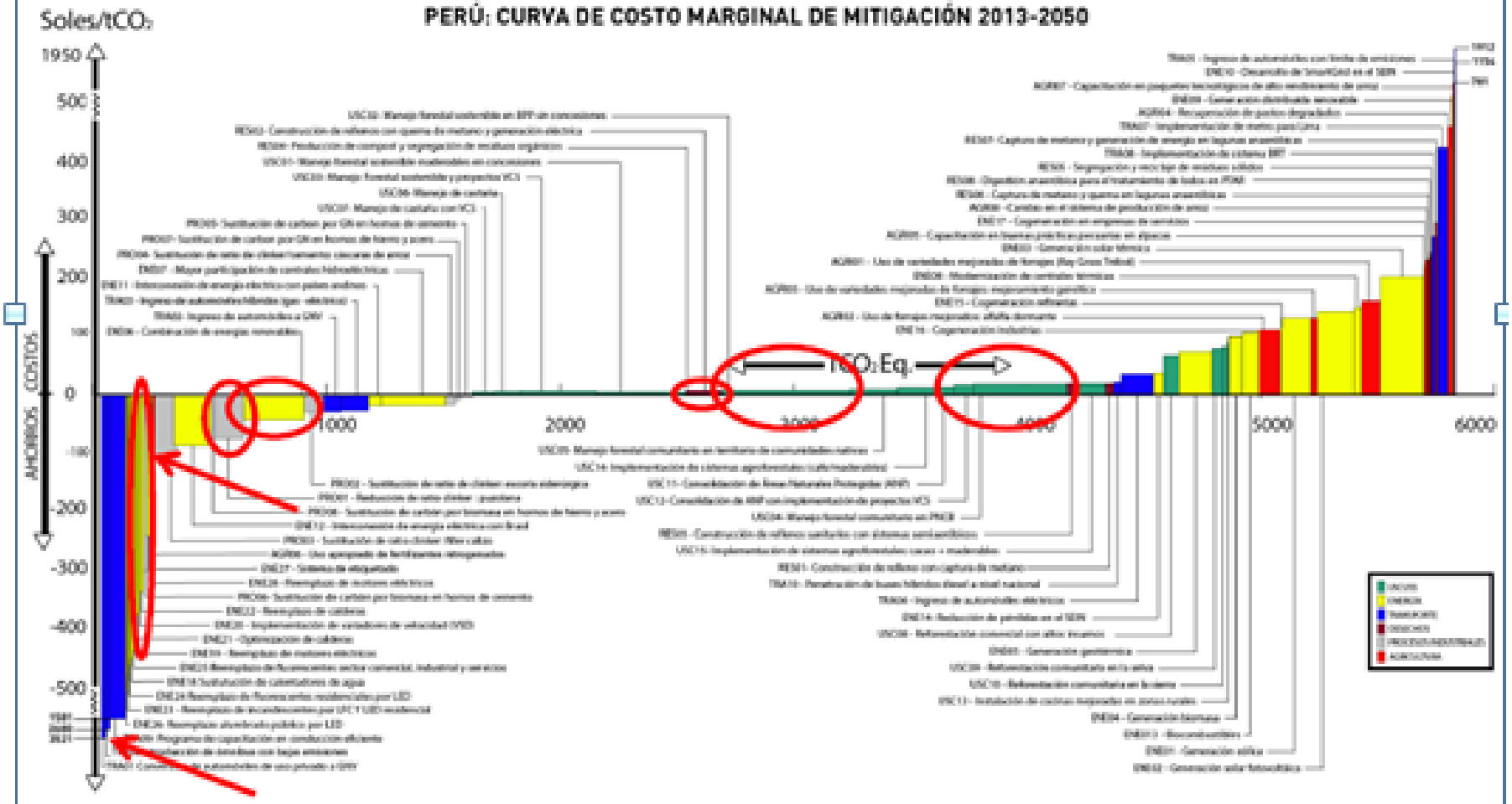
Spatial Priorities of the Interventions

- Four land use categories account for 85% of deforestation. Satellite image analysis should be used to identify "geographical hotspots" showing high deforestation rates.
- Policy and institutional issues are a priority due to their effect on land use, particularly where land rights are weak: forests areas with unassigned rights and non-concessioned Permanent Production Forests.
- Issues regarding productivity/competitiveness are more important where property rights, such as those of native communities and private holdings, exist.
- The need to increase institutions and producers capacity cuts across every land use category.

Land Use	Policies/Institutions	Productivity / Competitiveness	Capacities
1. Forests with no rights allocated			
2. PPF without concessions			
3. Indigenous communities			
4. Land holdings			

Note: Darker color of the ovals indicate greater importance.

SFM, Reforestation, and Agroforestry Can Help Mitigate Emissions



Reference Level

- Based on IPCC Approach 3 and Tier 2 methods.
- Satellite images used to estimate changes in forest cover, 2000 – 2009/2010  annual deforestation rate.
- Will update to 2012 in November 2014.
- Amazon emissions factor (179 tC/ha) based on ICRAF data.
- Degradation assumed < 10%
- Emissions reductions of 50%

HFLD Adjustment

- Atalaya is mostly forested, with low historical rates of deforestation.
- Recent highway construction is increasing deforestation in Atalaya much above avg. deforestation rate (0.05% annually).
- Extrapolation of changes in deforestation rates in highway-affected areas adjacent to Atalaya suggest a rate of 0.34%.
- This trend will be confirmed by more recent analyses.

Expected Emissions Reductions

Zone	Total area (ha)	Remaining forest (ha), 2016	Deforestation rate 2000-2010	Emissions (2016-2020) ($MTCO_2e$)	Reduction in emissions (%, $MTCO_2e$)	Reductions assigned to C Fund ($MTCO_2e$) y % of emissions reductions
Tarapoto-Yurimaguas	1,204,910	905,294	0.64%	18.79	50% = 9.40	5.0 (53%)
Atalaya	1,235,074	892,734 874,761*	0.05% 0.34%*	1.46 9.70*	50% = 0.73 50% = 4.85*	2.0 (41%)*
Pto. Maldonado-Iñapari	1,776,182	1,641,377	0.19%	10.20	50% = 5.10	3.0 (59%)
Total	**4,216,166**	**3,439,405** **3,421,432***		**30.45** **38.69***	**50% = 15.23** **50% = 19.35***	**10.0 (51%)***

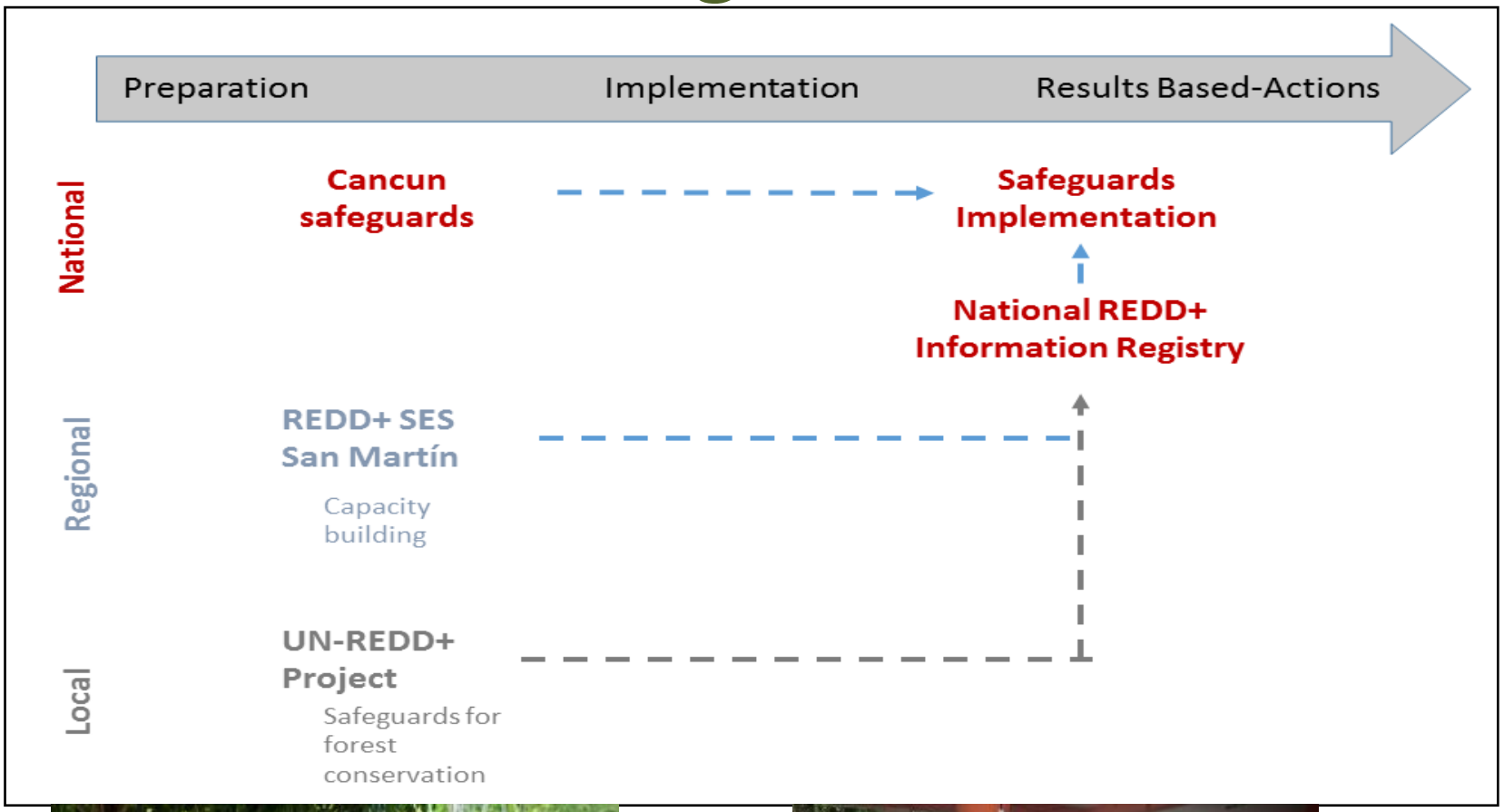
*Calculations based on upward-adjusted deforestation rates.

PERÚ PROGRESO PARA TODOS

Risks of Leakage and Reversion

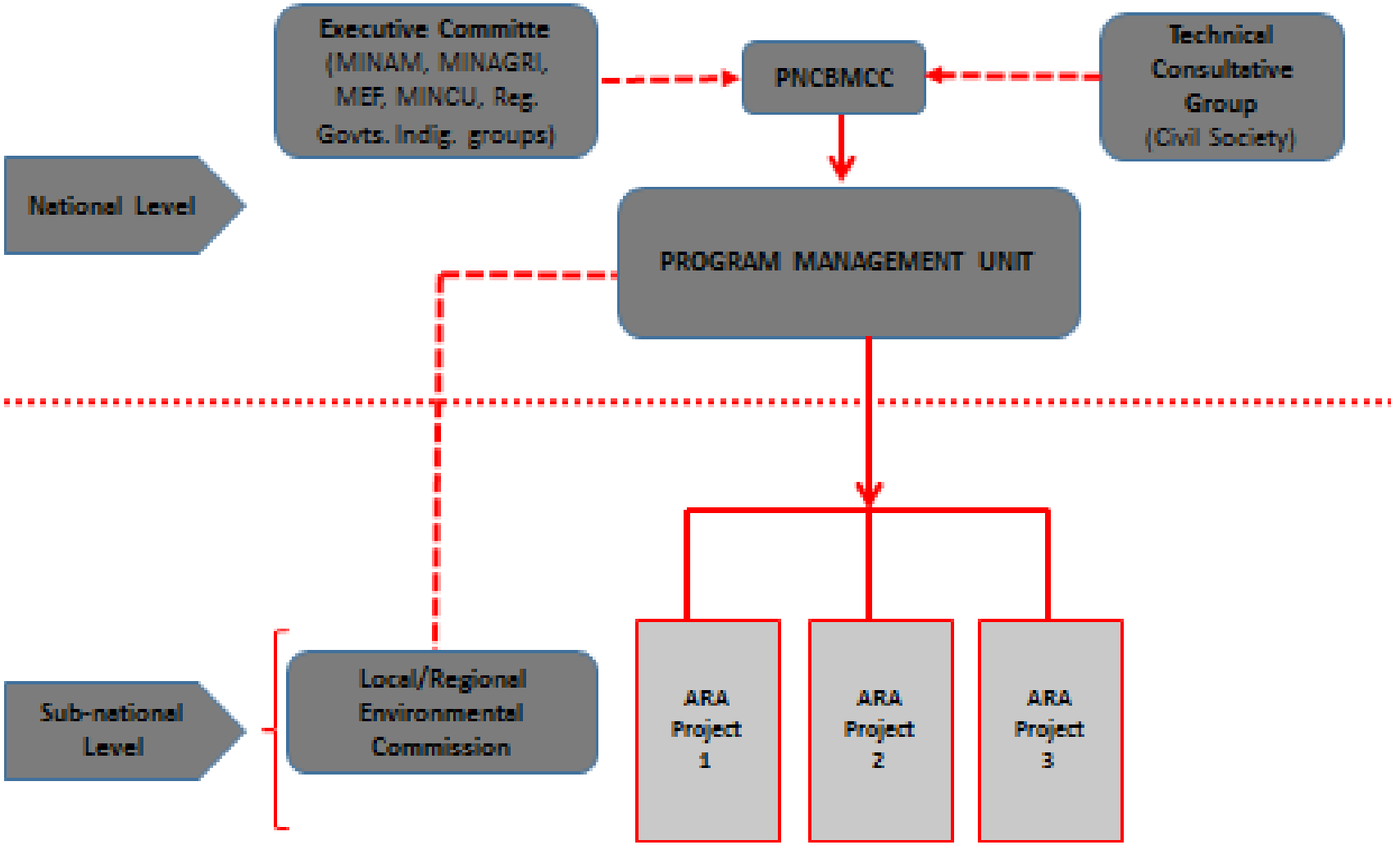
	Risk	Measure
Reversion	Reversal of SFM	Monitoring and control and early warning systems, sanctions. More efficient silviculture and forest cluster development. Better control of and financing of illicit land use.
	Agriculture	Land use zoning, monitoring, and control. Agroforestry systems.
Leakage	Adjacent untitled forests and titled areas with low productivity.	Land use zoning, monitoring, and control of leakage belts. Increases in productivity and promotion of sustainable land use. Compensations from insurance policies, buffer funds, or interests from Peru Forest trust fund.

Safeguards

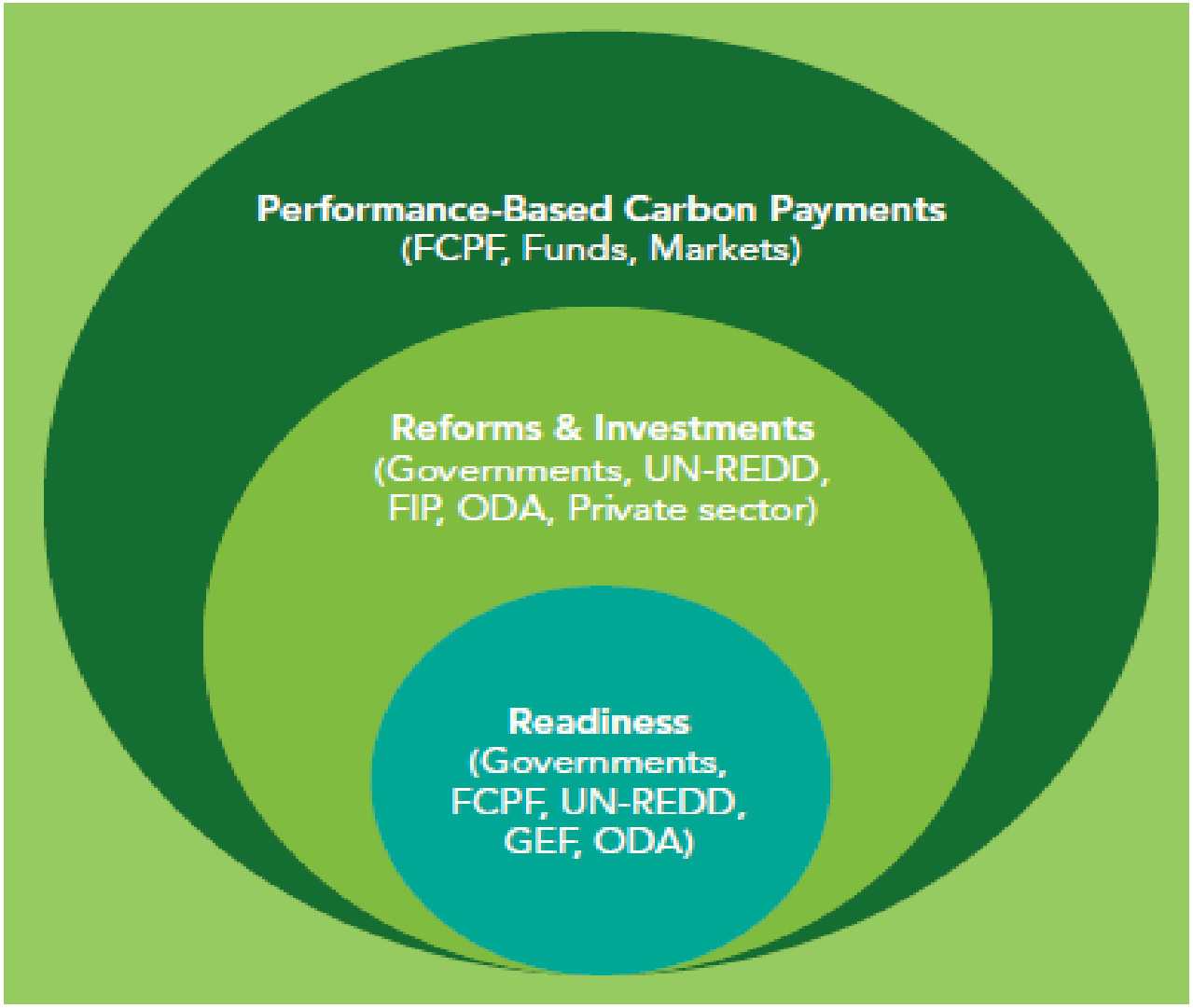


PERÚ PROGRESO PARA TODOS

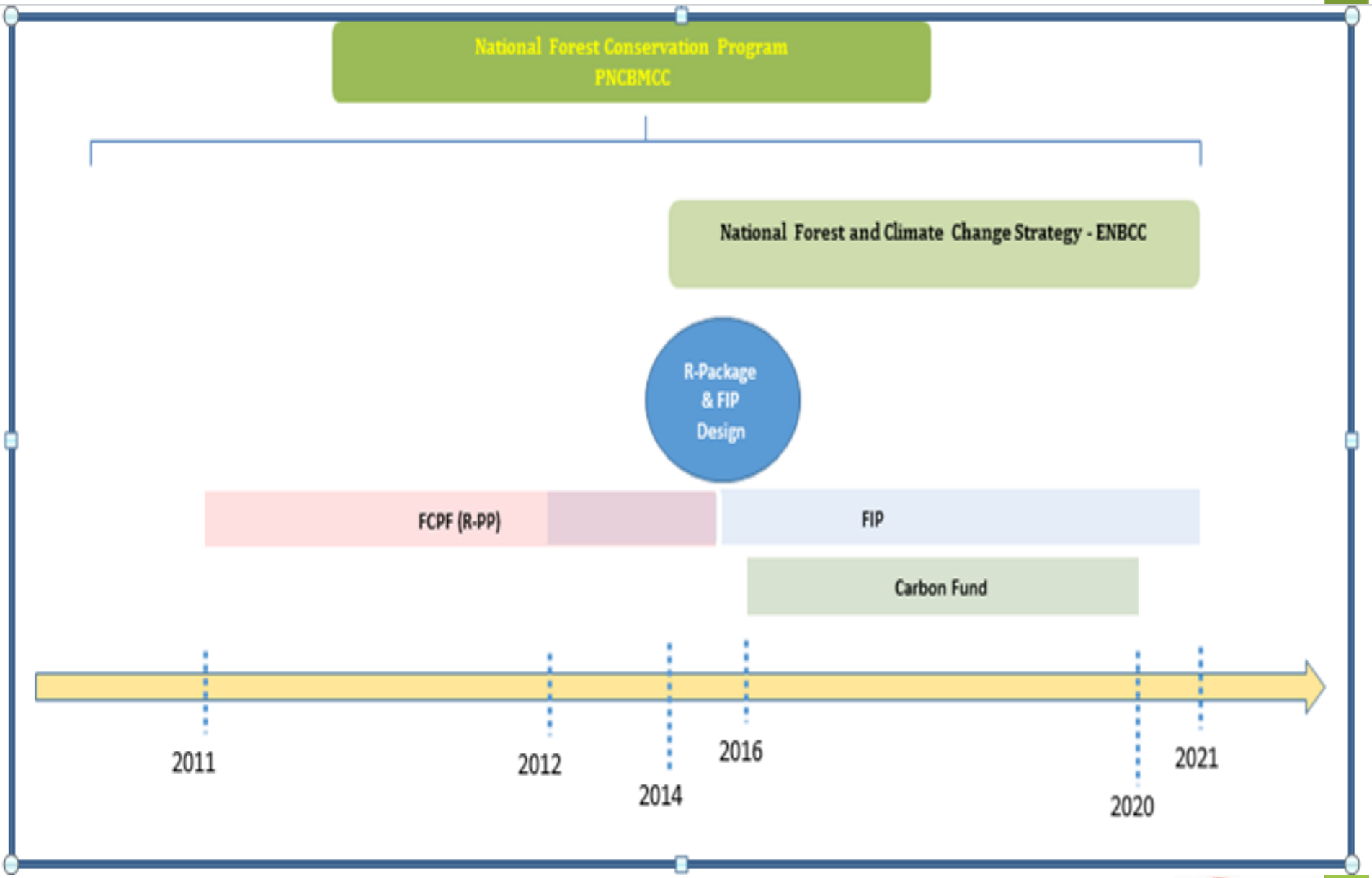
Participatory Program Management



FIP Enables Carbon Fund Investments



FIP – Carbon Fund



Finances

- FIP: $26.8 million (grants) + $23.2 million (loans) + $37.3 million in co-financing.
- $14.5 million earmarked for indigenous communities.
- Approx. $130 million in support of REDD+, CC, forestry.
- Expected income: $110 million from forestry and agriculture, $135 million from carbon.
- Carbon markets are uncertain.

PERÚ PROGRESO PARA TODOS

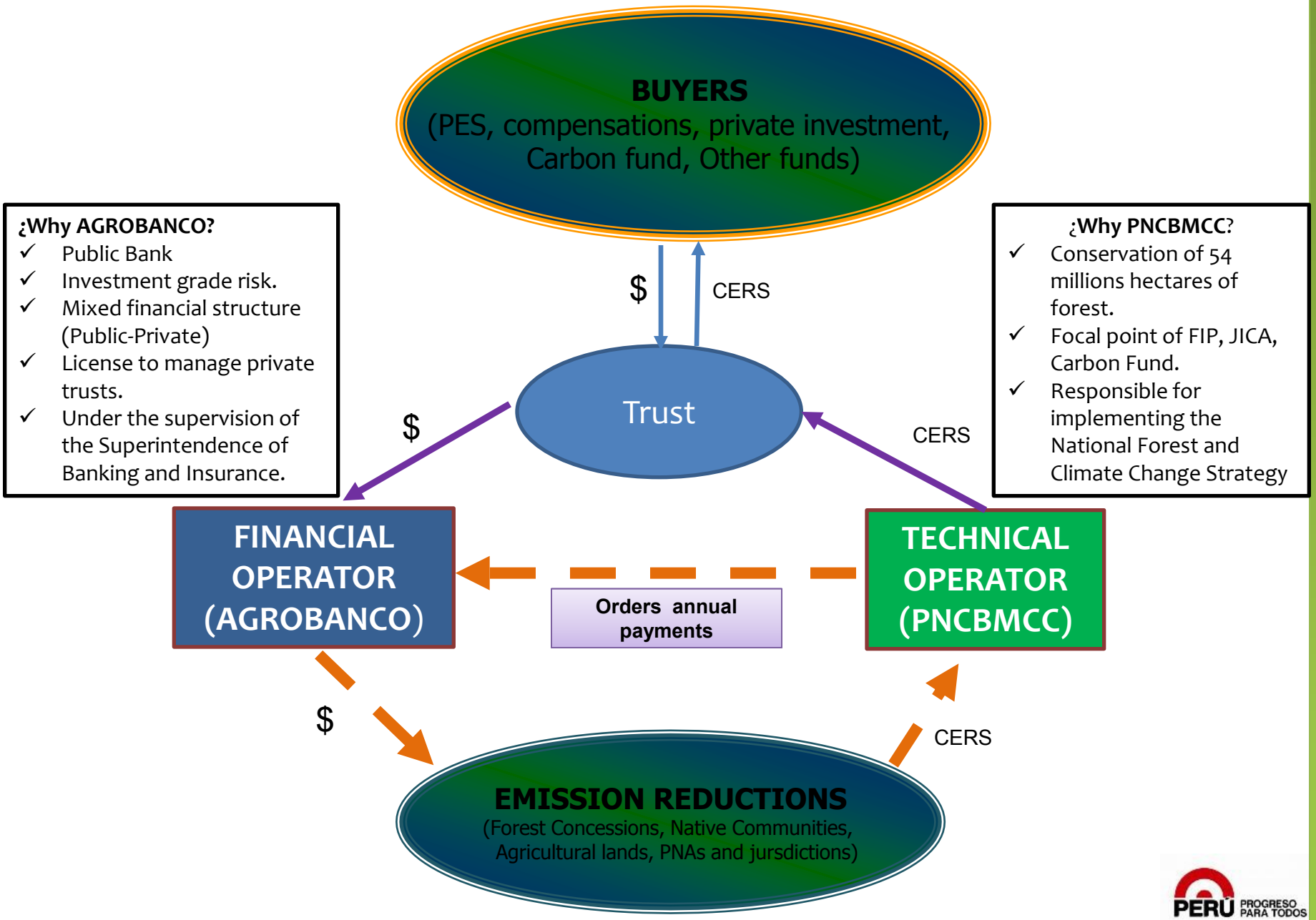
Sustainability

- Results-based payments by international cooperation.
- Bilateral transactions with Peruvian entities.
- Compensations of impacts caused by infrastructure, non-renewable resource development.
- Pension fund investments.
- Changes in credit policies in favor of “green” production systems.
- Peru Forest Fund.

Sharing Carbon Benefits

- Differentiated payment, based on Indigenous REDD+ concept: conventional, “gourmet”, and “gourmet plus” (biodiversity, cultures).
- Most recent sale of “gourmet” carbon = $7/tCO2e.
- Key benefit sharing elements are defined in the legal framework (carbon rights).
- Benefits shared between the national and local jurisdictions (administration and enabling conditions) and emission reductions generators.
- Benefits may be monetary or services.
- In the three proposed areas there is consensus with indigenous organizations. Further discussion is needed with the other stakeholders.

Peru Forest Fund



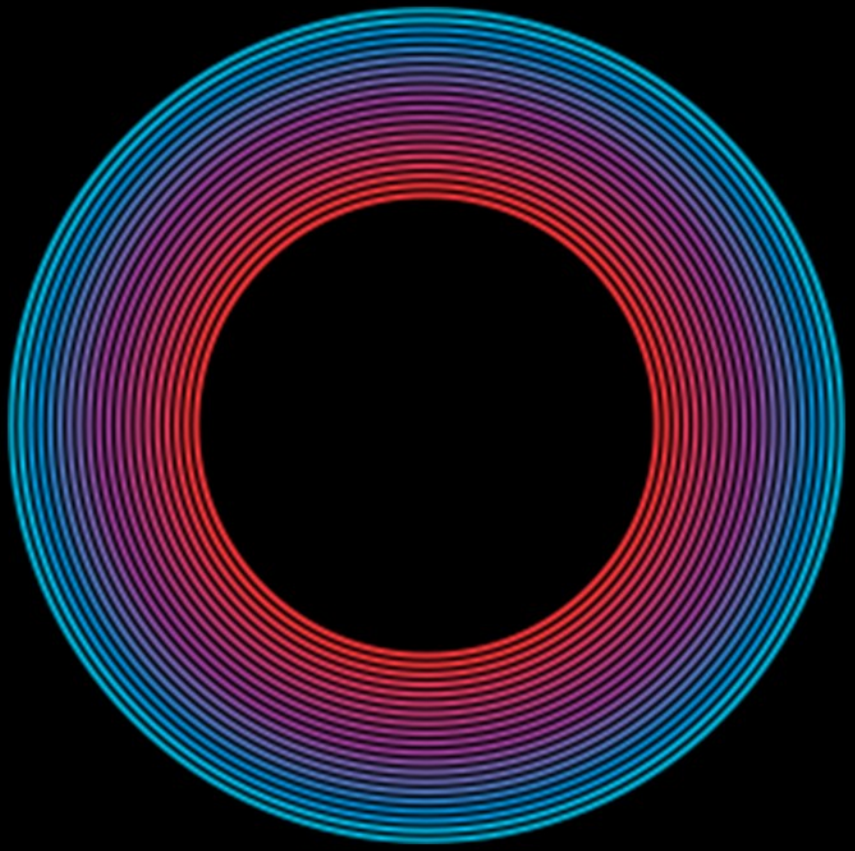
¿Why AGROBANCO?

- ✓ Public Bank
- ✓ Investment grade risk.
- ✓ Mixed financial structure (Public-Private)
- ✓ License to manage private trusts.
- ✓ Under the supervision of the Superintendence of Banking and Insurance.

¿Why PNCBMCC?

- ✓ Conservation of 54 millions hectares of forest.
- ✓ Focal point of FIP, JICA, Carbon Fund.
- ✓ Responsible for implementing the National Forest and Climate Change Strategy

PERÚ PROGRESO PARA TODOS



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UN CLIMATE CHANGE CONFERENCE

Perú