

ESTRATEGIA NACIONAL DEL AMBIENTE

Gestión Ambiental para el Desarrollo Sostenible

2008 - 2012



GOBIERNO
NACIONAL

autoridad
nacional del
ambiente

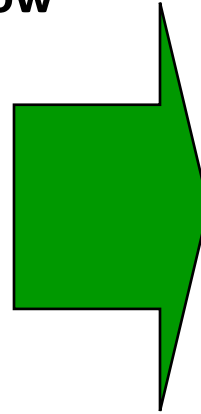


**Estrategia de Reducción
de Emisiones por Deforestación y
Degradación del Bosque de Panamá
(Estrategia de REDD • 2008-2012)**



Development of Country Plan of the Environmental Component:
Strategic Vision of Economical Development & employment to 2009 through Strategy of
Conservation for Sustainable Development
(Strategic Objectives)

- 1. Reduction of Poverty and better income distribution**
- 2. Economical and employment grow**
3. Citizen Security
4. Public finance Transparency
5. Strengthen Democracy & **Community Participation**
- 6. Insertion of Panamá inside the Global World**



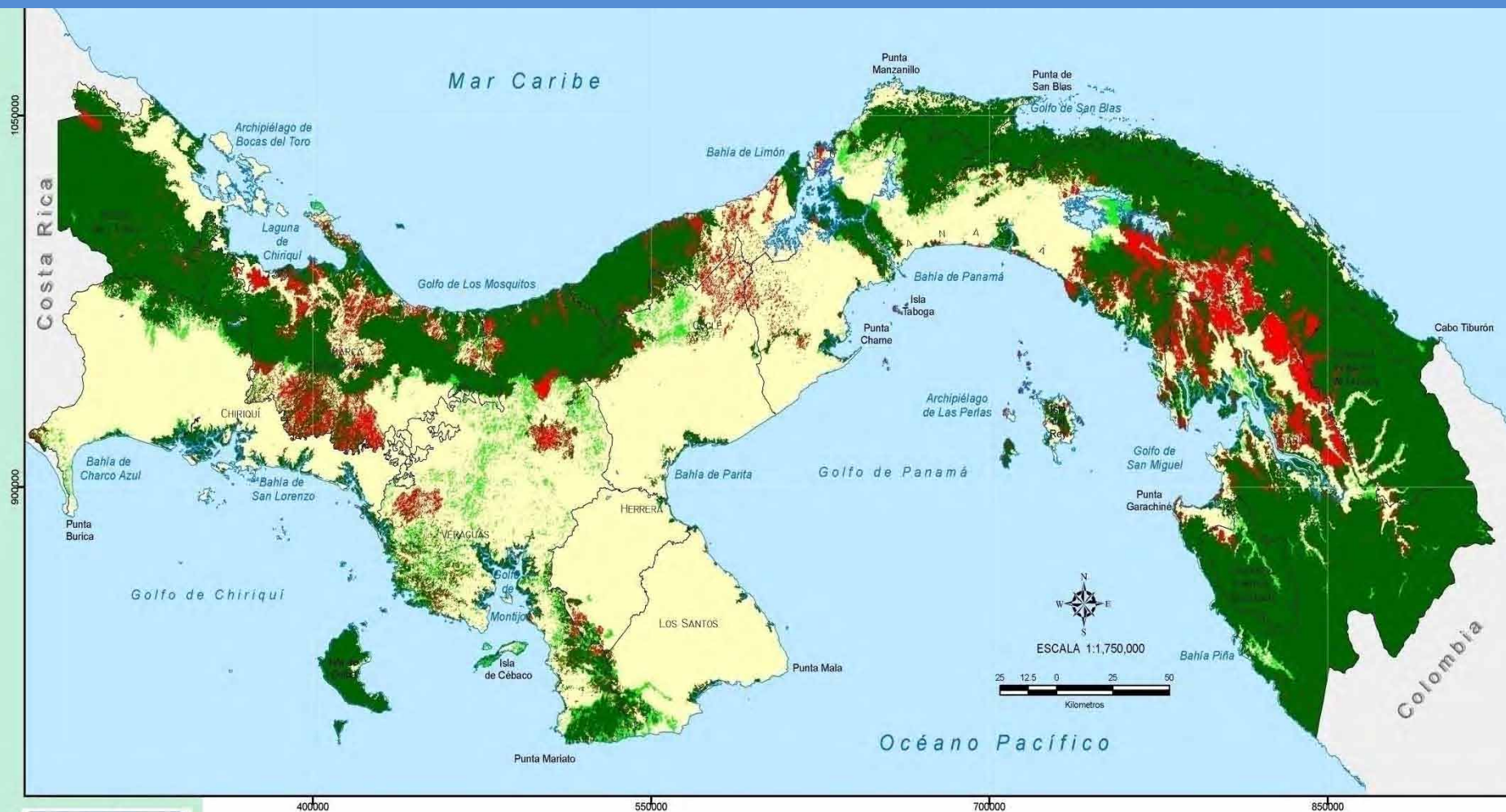
- 1. Strengthen ANAM roll as Environmental Authority**
- 2. Promote a model shared environmental management**
- 3. Develop competitive advantages in Environmental management**
- 4. Protect, recover, restore and improve our ecosystem for sustainable development contribution. (REDD)**

National Environmental Strategy:

Environmental Management for sustainable development

Desarrollo Sostenible	<i>Lines of Action for ANAM</i>	<i>Strategic Objective of ANAM</i>
Institucional	Strengthen Anam Capacity for performances of its duties as an environmental authority.	1. Consolidar el marco jurídico y de políticas públicas ambientales 2. Fortalecer los servicios que presta la ANAM a la ciudadanía para la aplicación de los instrumentos de gestión ambiental 3. Mejorar la Gestión Institucional de la ANAM
Socio / Cultural	Fomentar el desarrollo de una cultura ambiental, que haga de la gestión del conocimiento, de los saberes populares y de la promoción de los elementos ambientales de nuestra identidad factores decisivos para comprender y ejercer los derechos y deberes de todos los grupos humanos de Panamá con respecto a los ecosistemas y recursos naturales de los que dependen la vida y el desarrollo de nuestra sociedad.	1. Fomentar el desarrollo de una Cultura Ambiental para la Sostenibilidad en el país 2. Aplicar mecanismo para la adaptación y mitigación del cambio climático 3. Promover instrumentos y estrategias económicas en la gestión ambiental
Económico	To Work very closely coordinated in collaboration with the State, private sector and civil society to promote the environmental advantages capacity of the country..	1. Fortalecer la función de liderazgo de la ANAM 2. Elevar la Capacidad Técnico-Científica de la ANAM y sus asociados (SIA, gobiernos locales, ONG's, sociedad civil, empresas privada)
Ambiental	To protect, recover, restore and improve the ecosystems to contribute to the creation of jobs, the well-being of the population and sustainable development.	1. Conservación y restauración de las cuencas hidrográficas y áreas protegidas desde un enfoque ecosistémico y participativo 2. Conservación y uso sostenible de la Biodiversidad

Cambio de la Cobertura Boscosa Año 1992-2000



Localización Regional



LEYENDA

- Superficie con bosque
- Superficie con regeneración
- Superficie con pérdida de bosque
- Superficie sin cambio
- Caminos



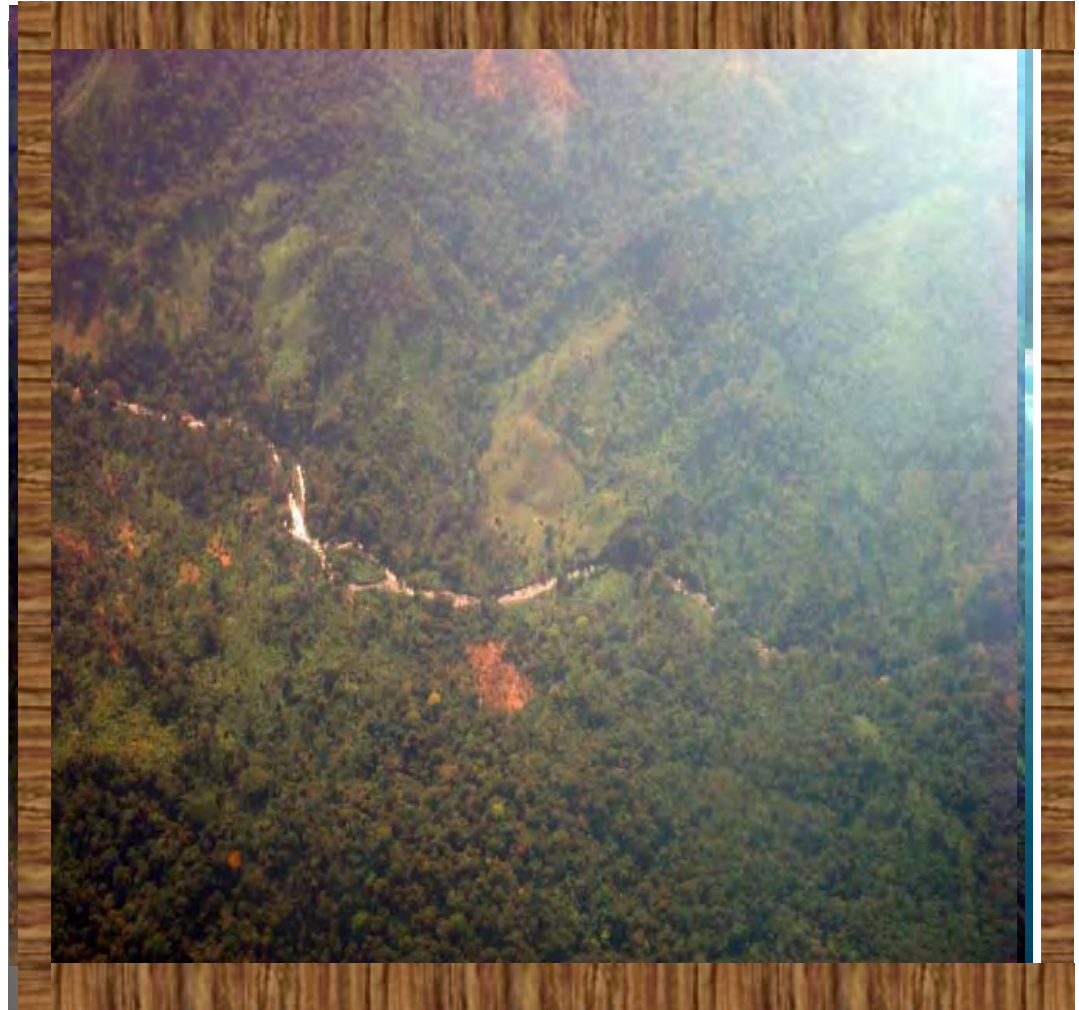
Autoridad Nacional del Ambiente

Unidad de Información Ambiental e Informática

Sección de Geomática

DEFORESTATION DATA

- Forest area in 1947 = 70%.
- 1,591,303 Ha deforested from 1947 to 1992
(35,362 Ha/yr).
- Forest area in 1992 = 49.3%
- 377,264 Ha deforested from 1992 to 2000
(47,158 Ha/yr)
- Forest area in 2000 = 45%
- Forest area in 2008 = ?
- Our goal from 2005 for 2010 (ENA) is to reduce deforestation rate close to 40 or 42,000 Ha/year



Environmental Horizon of Panama Strategy



National Environmental
Strategy (1999-2006)

National Environmental Strategy II:
Environment management aiming
sustainable development (2008-
2012)

ANAM
(1998)

Strategic Participative
Plan (PEP)
(1999-2004)

Conservation for
Sustainable Development
(2004-2009) (REDD)

A
GEO-Panamá
1999

B
GEO-Panamá
2004

C
GEO-Panamá
2009

COP 11
COP 12
COP 13
COP 14

Conservación del Corredor Biológico del Atlántico y Restauración de tierras degradadas para generar conectividad en el Pacífico

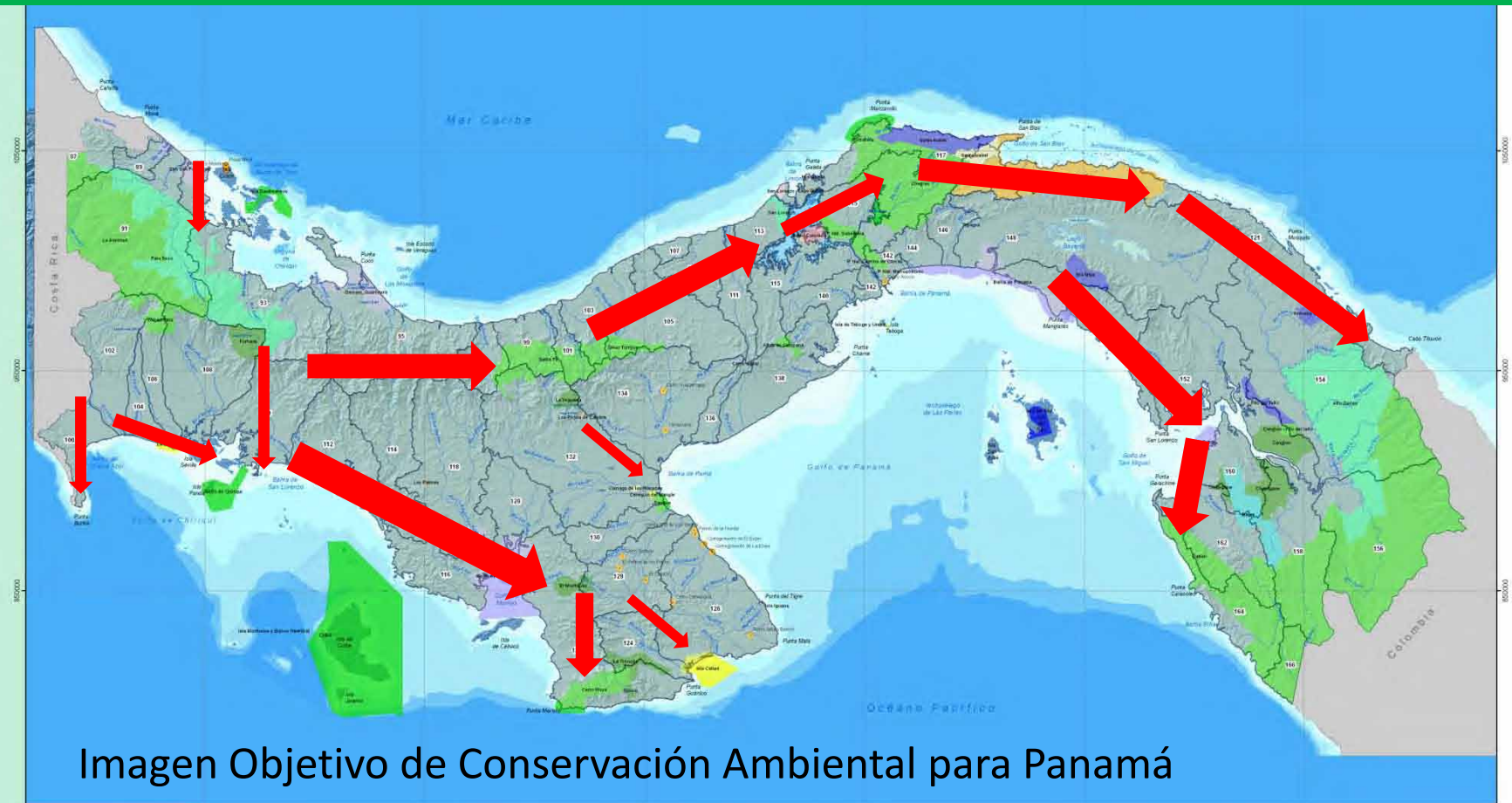


Imagen Objetivo de Conservación Ambiental para Panamá

Cuencas Hidrográficas (ID)

- ☐ Río Cuzco (175)
- ☐ Río Antón (136)
- ☐ Río Sayano (145)
- ☐ Río Belén y entre Río Belén y Río Codo del Huevo (103)
- ☐ Río Carabá (140)
- ☐ Río Cabotiviera (97)
- ☐ Río Changabana (97)
- ☐ Río Chon (106)
- ☐ Río Chiqui Vajo (102)
- ☐ Río Chiqui (108)
- ☐ Río Chocomaque (154)
- ☐ Río Codo del Huevo (105)
- ☐ Río Cobo y Venecia (100)
- ☐ Río Caramalá y entre Caramalá y Cabotiviera (95)
- ☐ Río Escalera (104)
- ☐ Río Fonseca y entre Río Chiqui y Río San Juan (110)

- ☐ *Rei Oscar* (174)
- ☐ *Rei João* (11)
- ☐ *Rei João Duas e entre Rei João Duas e Perceiro* (144)
- ☐ *Rei Juarez* (100)
- ☐ *Rei La Villa* (120)
- ☐ *Rei Maritanga* (119)
- ☐ *Rei Miguel de la Borda* (103)
- ☐ *Rei Perceiro* (140)
- ☐ *Rei Panta* (130)
- ☐ *Rei Sarmis* (162)
- ☐ *Rei San Pablo* (118)
- ☐ *Rei San Pedro* (120)
- ☐ *Rei Santa Barbara e entre Santa Barbara e Chousaque* (172)
- ☐ *Rei Santa Maria* (122)
- ☐ *Rei Skande* (87)
- ☐ *Rei Tolosach* (114)

☐ Río Atrato (124)
☐ Río Cauca (158)
☐ Río Tama (158)
☐ Río Venegoso (101)
☐ Río entre Corral del Viejo y Miguel de la Borda (137)
☐ Río entre Caldivara y Venegoso (96)
☐ Río entre Chigachipa y Chigachito (92)
☐ Río entre el Jotoy y el Caribío (130)
☐ Río entre el Bayano y el Santa Bárbara (152)
☐ Río entre el Caribío y el Juan Díaz (146)
☐ Río entre el Chagres y Mandingo (117)
☐ Río entre el Porosca y el Tabasará (112)
☐ Río entre el Mito y el Chagres (112)
☐ Río entre el Todeygo y Amalia (113)
☐ Río entre el Sábalo y el Jorabá (164)
☐ Río entre el San Pedro y el Tosozi (122)

Categorías de Manejo

- Área Reservada
- Área Converte
- Sincron Protektor
- Canal
- Reservado
- Monumento Natural
- Parque Protegido

Logo del SINAP

 Parque Natural
 Refúgio de Vida Silvestre
 Reserva Florestal
 Reserva Histórica
 MPA
 Zona de Protecção Histórica
 Áreas Protegidas Multicategorias



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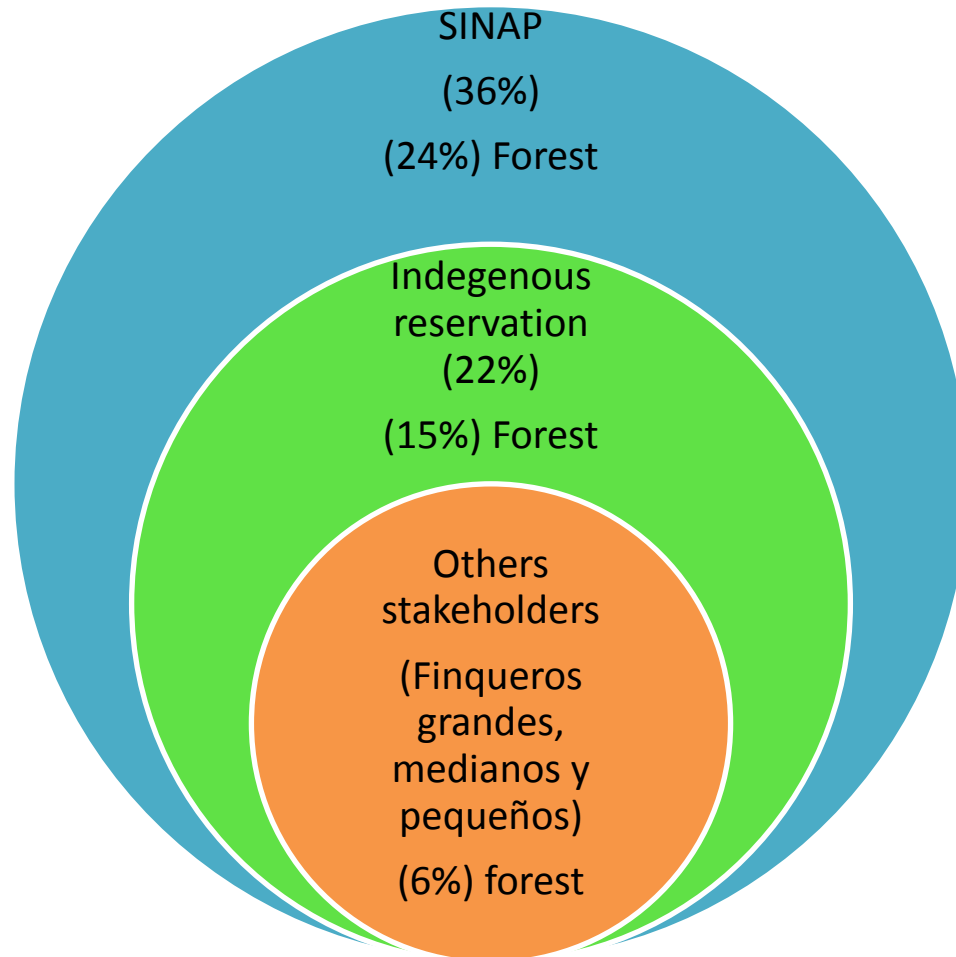
Autoridad Nacional del Ambiente

Dirección de Administración de Sistemas de Información Ambiental
Departamento de Geomática

Fuente: Mapa Base 1:250,000 del Instituto Geográfico Nacional Tommy Chardía
Base de Datos - Dirección de Gestión Integrada de Ciencias Hidrográficas

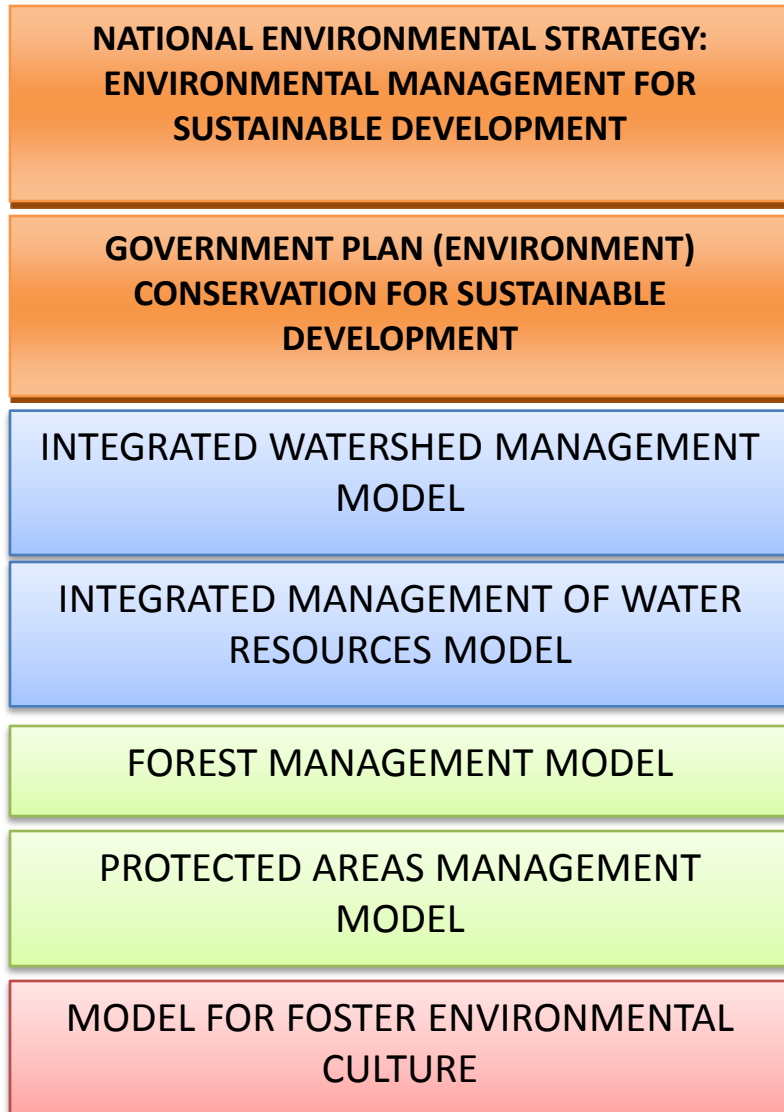
Novembre 2007

National Territory Distribution as Forest Conservation for REDD (Natural Forest 45% national territory 2000).



REDD (Strategic and Operational Coordination)

Strategic

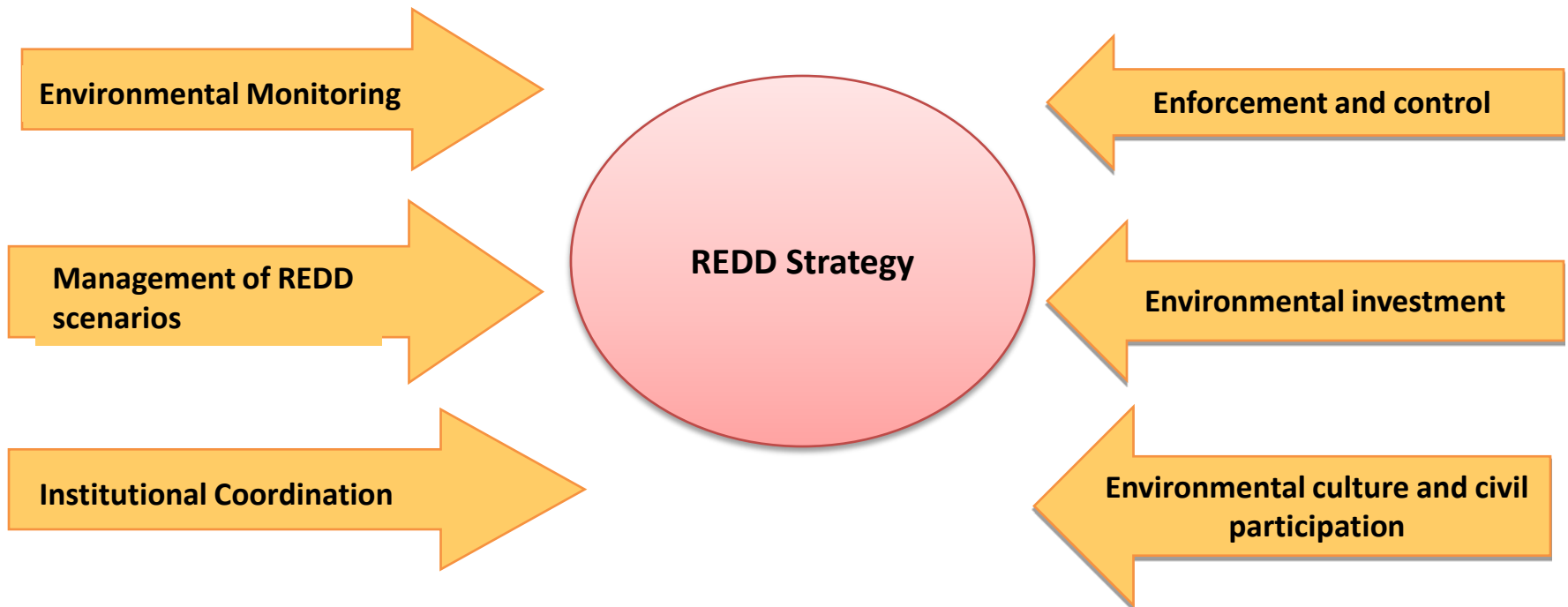


Operational



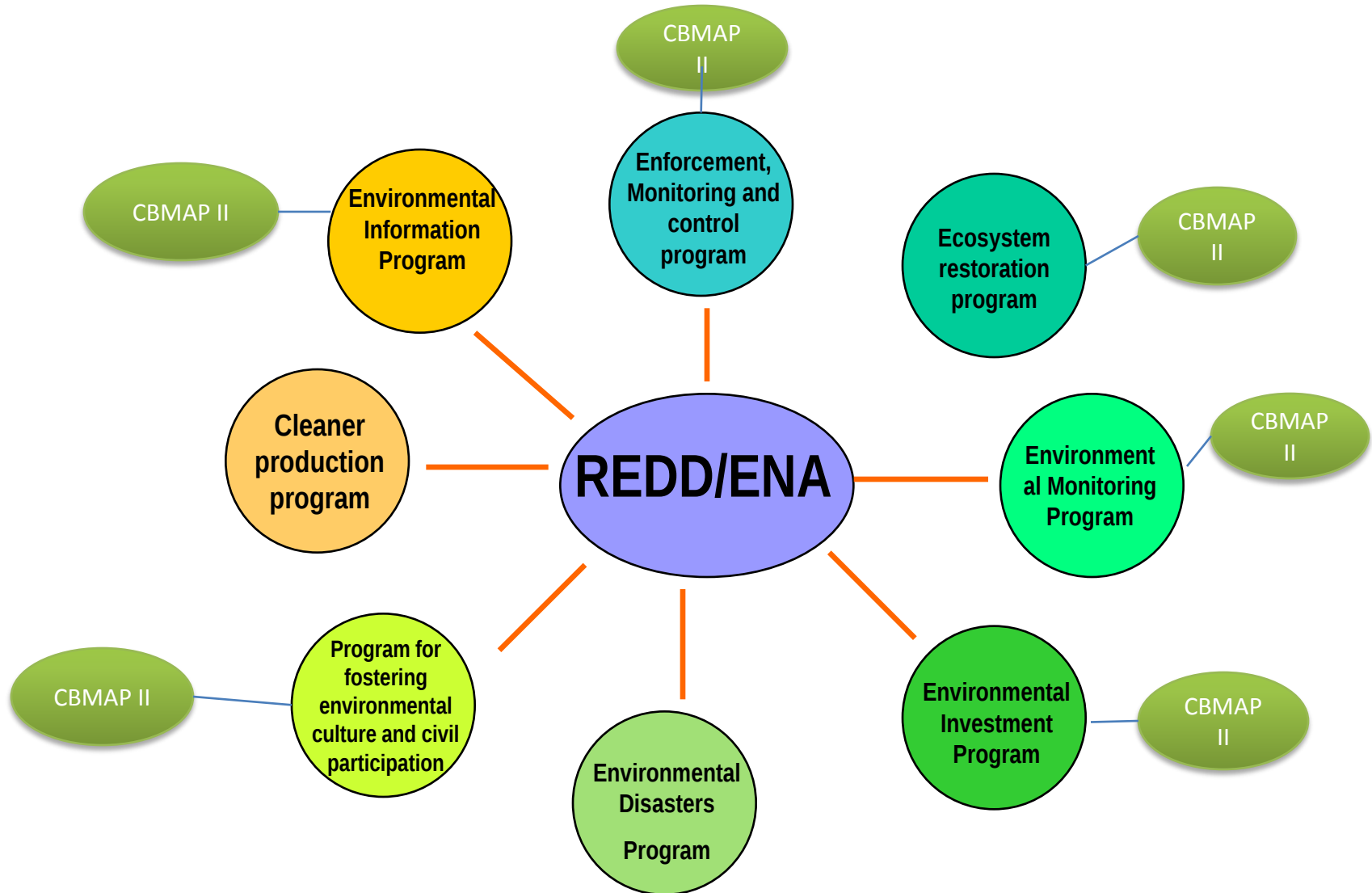
Strategy for implementing REDD

- National Environmental Strategy (Renewed)
- Guidelines from state policy 2004-2009
- Public Environmental Policies
- Operational and Thematic Strategies
- Environmental Management Model Based on Watershed
- Sustainable Development Plans/ Provinces (CONADES)
- Portfolio of ANAM's investment projects (> 200 projects at moment)



Integrated watershed management model

REDD Readiness Strategy



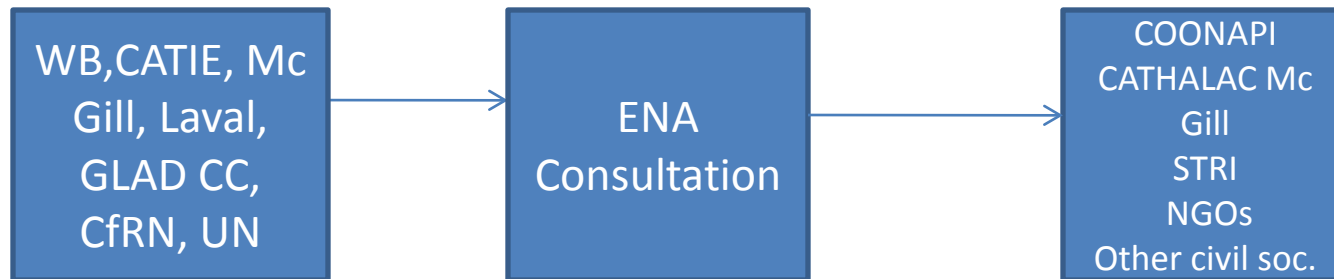
Vivero forestal: Damas Unidas de Caldera



R-Plan Redaction Process:

Panama welcomes the initiative brought by PNG and CR on RED in Dec 2005 = ENA

- 1) From AD to RED (Dic 2005 to Oct 2006)
 - 1) First Central American Submission to UNFCCC led by Panama
- 2) Integrating Ideas and consolidating vision (Oct 2006 to May 2008)
 - 1) R-PIN approval link ed to CBMAP II (WB-GEF-ANAM) and to **ENA**
- 3) 3) Participatory Redaction of R-PLan



COONAPI, Civil Society and NGOs group: Capacity Building: > 87 w/s 2007 up to now
CATHALAC. Remote Sensing (USAID support)

McGill: Monitoring Carbon Stock

STRI. Permanent Forest Plot

SOMASPA: Biodiversity Monitoring

Indigenous Peoples Engagement Process

UNFCCC: SBSTA 2007, Bali 2007, SBSTA 2008, Poznan 2008

ANAM: > 14 dialogues on REDD from 2008 up to date and keep getting inputs.

**McGill/STRI/ANAM: Jan 09 >150 traditional authorities
April 2009 COONAPI, Indigenous NGOs; May 09 COONAPI,
Technical Adviser to traditional authorities; next august 09
Traditional Authorities and Tech. Staff**

WB/UN Agencies/ANAM: Jan 09, march 09, May 09

**Output: COONAPI under consultation with indigenous group
to tell ANAM what they would like to expect from REDD.
This will initiate the next step of participation. This means
that they are in readiness process**



Components of REDD Strategy

Implementation

How do we stop deforestation and degradation? How do we deal with REDD +?

Production of Goods and Environmental Services

Strengthen the National Dialogue and REDD knowledge of all stakeholders

Institutional Articulation

Social Communication, Public Consultation and Capacity Building

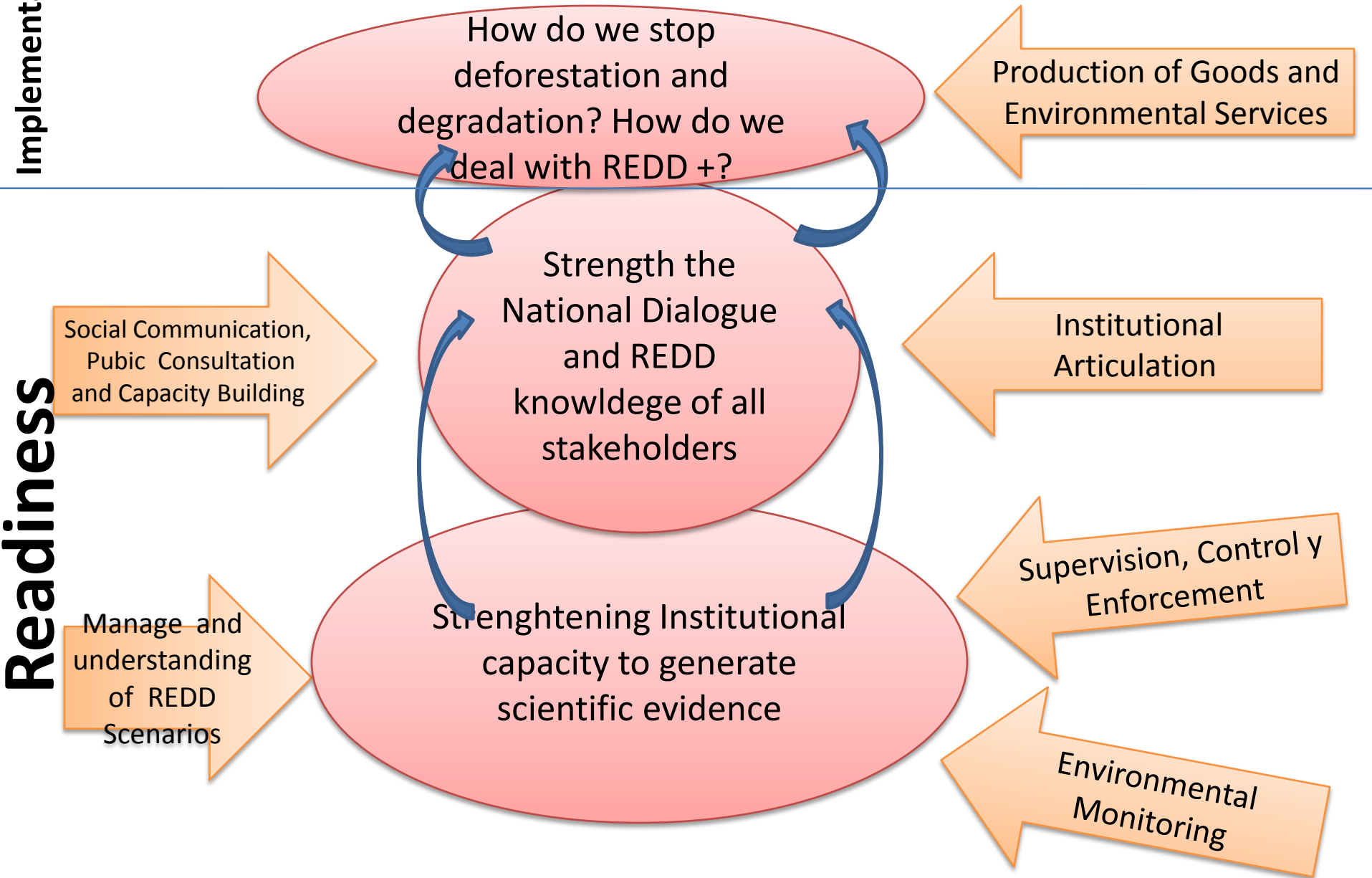
Strengthening Institutional capacity to generate scientific evidence

Supervision, Control y Enforcement

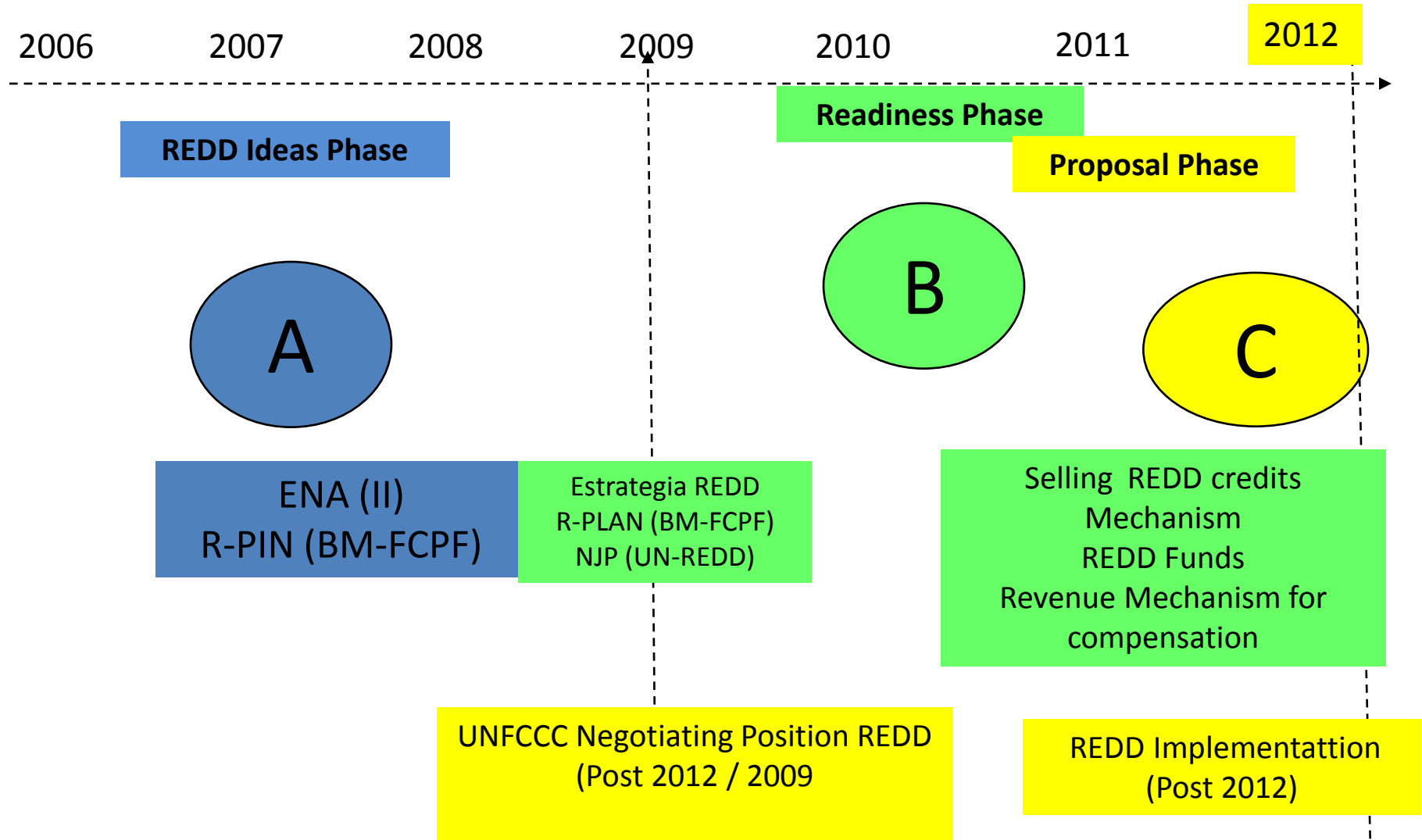
Manage and understanding of REDD Scenarios

Environmental Monitoring

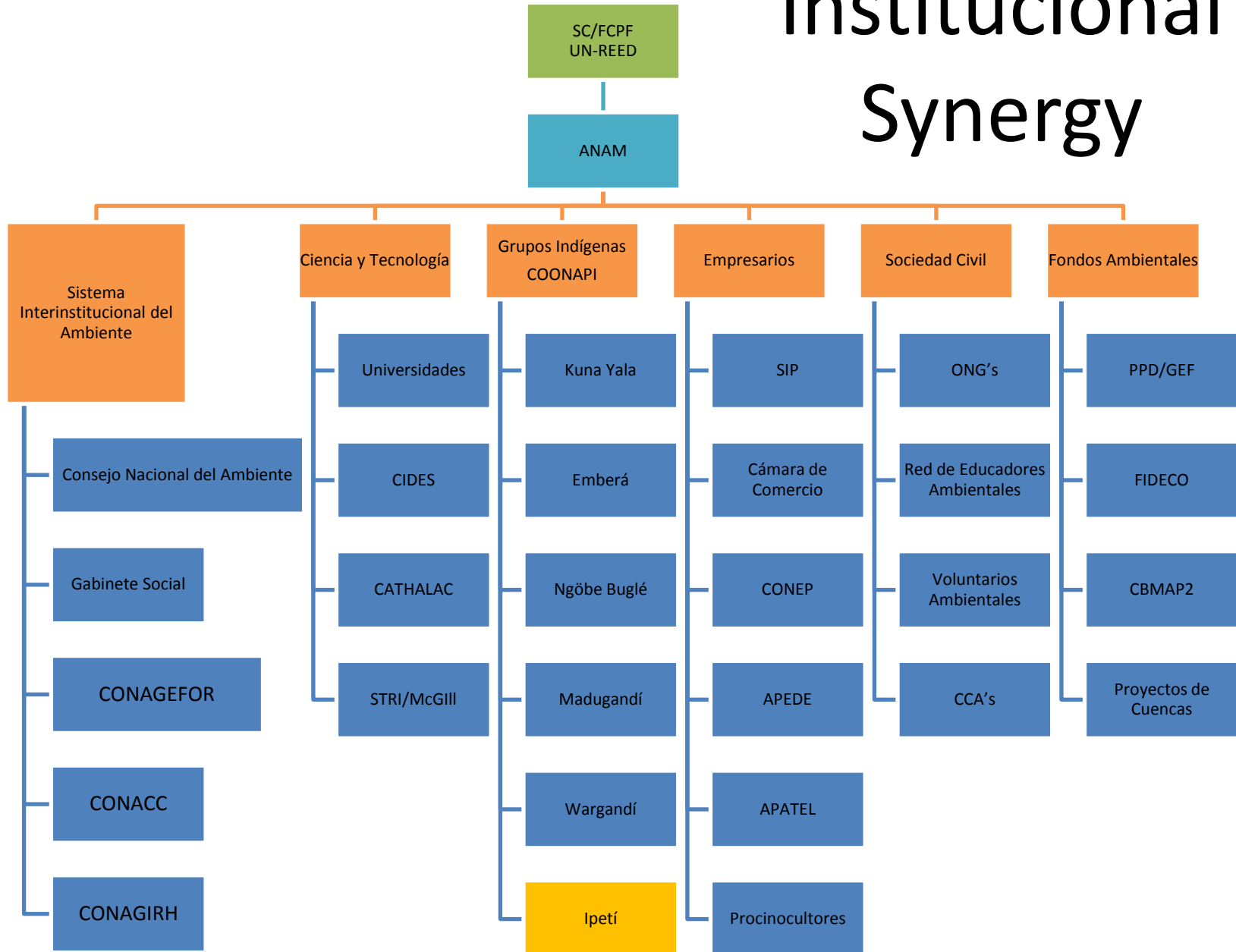
Readiness



REDD PROCESS



Institucional Synergy



EMISIONES GEI

Vulnerabilidad

Inventario
GEI's

Vulnerabilidad
Actual

- P+L
- Reforestación
Forestación
- Energía
- REDD**

- Agropecuario
- Salud
Humana
- Recursos
Naturales
- Asentamientos
Humanos

Economía Baja en CO2

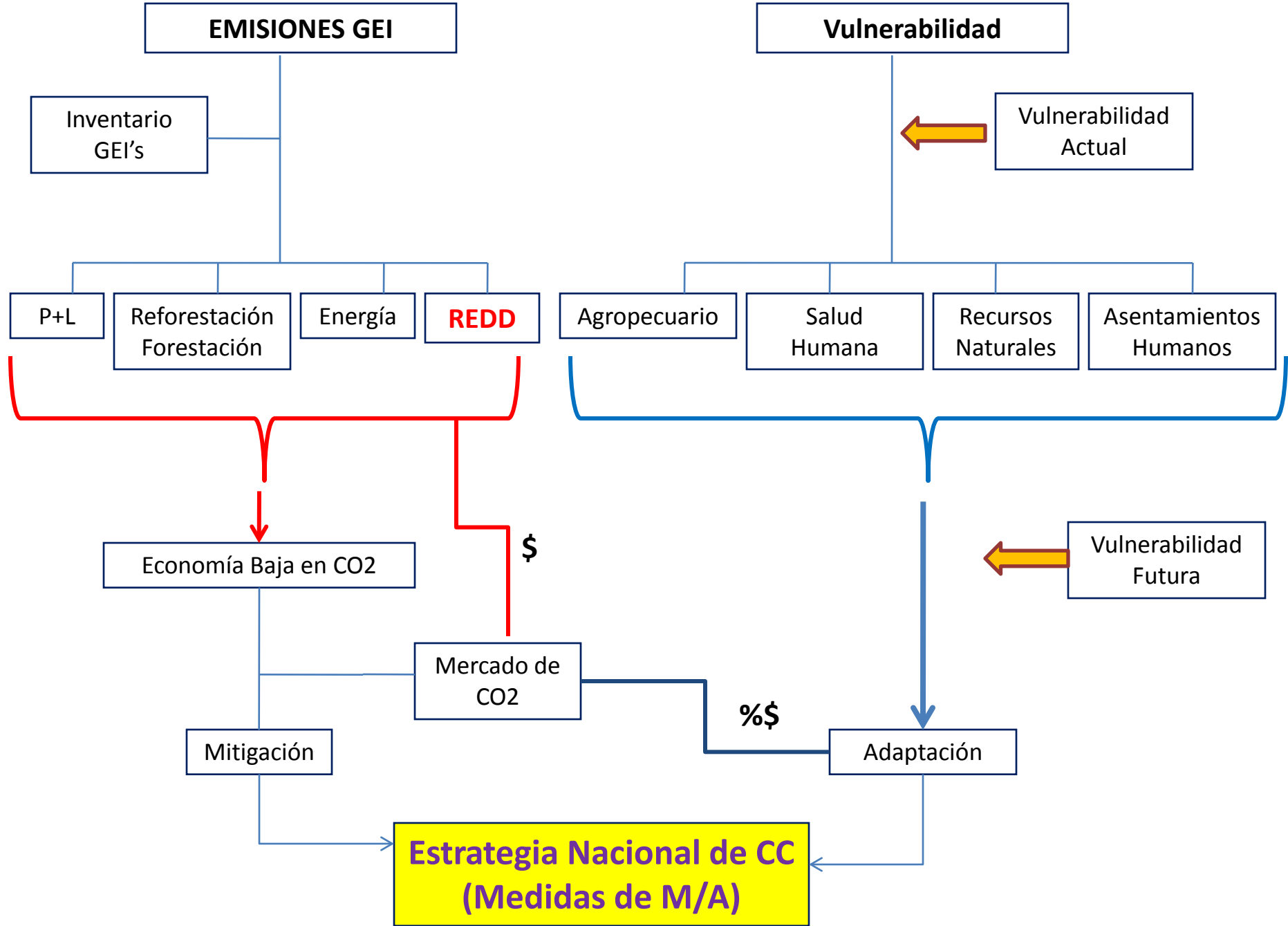
Vulnerabilidad
Futura

Mercado de
CO2

Mitigación

Adaptación

**Estrategia Nacional de CC
(Medidas de M/A)**



Tropical Carbon Stock Monitoring System (TROPICARMS) v 2.0

What? How?

- Comprehensive system for monitoring tropical C stocks
- Estimates both above- and below-ground C stocks, based on CATHALAC's variable-scale C stock model
- Integrates both field and satellite measurements
- Alert system for adaptive mgt. / preventive action



Panama R-Plan: Technical Advisory Panel Synthesis Review

1. Stylistically, the document is too long, excessively vague, somewhat repetitive, difficult to follow in places, and lacks a clear logical structure.
 1. One comment in page 1 refers to literature review. Since when Government institution should do literature review. Wright and Samaniego is very interesting paper but expectation out of space.
 2. On page 2 TAP comments that plan gives insufficient attention to natural resources and land tenure issues and conflicts. Yes we agree,
 3. Recommendation page 4 f, 8 b, 9c,d top down approach on compensation. All stakeholders need to have enough capacity to sit and discuss with ANAM compensation scheme, this may take a minimum of two years.
 4. Design specific mechanisms to ensure that ANAM's coordination of this process does not limit the effective participation of other stakeholders, including other government agencies, sub-national governments, and indigenous peoples and forest dwellers. It is well clear that TAP did not understand the role of Interinstitutional Environmental System (SIA), did not understand the role of Fomento a la Cultura de Ambiente Department and did not understand the plan propose for capacity building.



Reactions of ANAM's REDD+ team on Synthesis Report

- Stylistically, TAP synthesis analysis review is too long (19 pages),
- excessively too deep the analysis they did, maybe a research institution can give such details if enough funds are available,
- somewhat contradictory,
- difficult to understand thinking analysis of TAP members,
- and lacks a clear logical understanding of ground realities (national circumstances).
- TAP has some confusion differentiating from readiness activities with R-Plan propose.



PREPARE
OR
TO BE READY?



REDD STRATEGY BUDGET

Componente	Total	FCPF	UN-REDD	ANAM-CBMAP II
Total	15,680,000	8,580,000	6,100,000	1,000,000
Articulación Institucional	500,000	500,000		
Consulta Pública, Capacitación y Comunicación Social	2,500,000	1,680,000	820,000	
Supervisión, Control y Fiscalización	1,000,000	1,000,000		
Producción de Bienes y Servicios Ambientales	500,000	500,000		
Monitorio Socioeconómico	500,000	500,000		
Monitoreo Ambiental				
Satelital	2,480,000		2,080,000	400,000
Forestal-Terrestre y Biológico	5,900,000	3.900,000	1,400,000	600,000
Inventario Forestal	1,000,000		1,000,000	
Construcción de Línea Base de REDD	300,000		300,000	
Gastos Administrativos	1,000,000	500,000	500,000	

REDD STRATEGY BUDGET

Componente	Total	FCPF	UN-REDD	ANAM-CBMAP II
Total	15,680,000	8,580,000	6,100,000	1,000,000
Articulación Institucional	500,000	500,000		
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Supervisión, Control y Fiscalización	1,000,000	1,000,000		
Producción de Bienes y Servicios Ambientales	500,000	500,000		
Monitorio Socioeconómico	500,000	500,000		
Monitoreo Ambiental				
Satelital	2,480,000		2,080,000	400,000
Forestal-Terrestre y Biológico	5,900,000	3.900,000	1,400,000	600,000
Inventario Forestal	1,000,000		1,000,000	
Construcción de Línea Base de REDD	300,000		300,000	
Gastos Administrativos	1,000,000	500,000	500,000	
TOTAL REQUEST I PHASE		2,680,000		

1992

Baseline

5

3.69 M ha (49.3%)

Land cover types

-  Agriculture - general
-  Agriculture - subsistence
-  Bare land
-  Coastal vegetation
-  Forest - mangrove
-  Forest - plantations
-  Forest - primary
-  Forest - secondary
-  Other uses
-  Scrub

2000

3.34 M ha (44.9%)

2008

3.20 M ha (43.0%)

Panama already
has strong
info base

2008 inventory
completed by
CATHALAC

www.cathalac.org



Participatory Approach for Establishing a Base Line Scenario for Carbon Stocks with Local Experts

Developed by:

University of McGill - Smithsonian Tropical Research Institute (STRI)

In cooperation with ANAM

