

I. GCF Member name: State of Amapá**II. GCF Member's Profile**

1. Area (km²): 143,453 Km²
2. Population:
 - Total: 587,311 ²
 - Rural: 58,731 (10% in rural areas)
 - Social groups (name/number): White (21.4%); Black (4.5%); Pardos (mix black and white) (74.4%); Indigenous (0.8%) ²
 - o 5 indigenous groups; 6,832 people ³
 - o Extractivists: 38,450 people ⁴
 - o Families in Settlement Projects: 6,100 families in 31 Settlement Projects ⁵
3. GDP: R\$ 4,89 billion ¹
 - Mining: 0.5% (R\$ 26 million per year) ¹
 - Agriculture, Forestry: 2.7% (R\$ 130 million per year) ¹
 - Main income products: Mining (manganese and gold), Forestry (brazil nut, timber), Silviculture (timber), Açaí fruit ¹
4. Per capita income: R\$ 10,254 ¹
5. HDI: 0.780 ⁷
6. Forests (Typologies and Status):
 - Total forest area: 115,479,66 km² ⁶
 - Forest Typologies (type/area): ⁶
 - o Savannah (fields and forests): 8.8% of State area
 - o Terra Firme Highland Dense Forest: 80.5% of State area
 - o Mangroves and transition zones: 10.3% of State area
 - Status of Forests: ⁶
 - o Original forest area (pre-human disturbance): 130,829 Km², 91.2%
 - o Fully protected forests (strict use): 53,318 km², 37.2%
 - Federal: 53,318 km²
 - State: 5 km²
 - o Conserved forests (managed by traditional or indigenous peoples): ⁶ 24,717 km², 17.2%
 - Federal:
 - Extractive Reserve: 4,816 km²
 - Indigenous Territories: 11,838 km²
 - State : 8,061 km²
 - o Sustainably managed forests (under forest concessions): ⁶ 27,814 km², 19,4%

¹ Filled out by Luis Meneses in August 10, 2010 and reviewed by Bianchetti (Amapá Government) in September, 21, 2010.

² IBGE. Coordenação das Contas Nacionais- CONAC. Censo Demográfico; Contagem Populacional, 2007.

³ IBGE, Pesquisa Nacional por Amostra de Domicílios. In: Síntese de Indicadores Sociais: Uma Análise das condições de vida da população Brasileira, 2009 .

⁴ ECOTEC - Estudo de Pré-investimento - Projeto RESEX/PPG-7.

⁵ IBGE, Projeto Levantamento e Classificação do Uso da Terra - Relatório Técnico do uso da Terra no Estado do Amapá, 2004.

⁶ Instituto Estadual de Florestas do Amapá – IEF/AP- Plano Anual de Outorga Florestal Amapá, PAOF-Amapá, 2010.

⁶ Programa das nações Unidas para o Desenvolvimento - PNUD/Fundação João Pinheiro, Ranking do IDH dos Estados Brasileiros, 2005.

- Federal: 4,120 km²
- State Forests: 23,694 km²
- Forests without protection: 24,977 km² ⁶

Components / Elements of REDD Action

III. Component 1: Environmental Service

1. Deforestation dynamics monitoring

1.1 Deforestation is known? Yes

1.2 Deforested area (km²): 1,293 (PRODES, 2009); 2024 (SEMA, 2006)

1.3 Average deforestation rate (km²/year):

- 1995-1999: 19
- 2000-2004: 20
- 2005-2009: 54

1.4 Characterization of deforestation dynamics (direct and underlying causes and drivers of deforestation)

There is no official study on the drivers and causes of deforestation in the State of Amapá. SEMA report on deforestation over 2005-2006 period reveals that 89% of deforestation has occurred along the roads (within 10 km buffer) following the pattern in the rest of the Amazon. The report also quantifies the number and size of deforestation polygons (Table 1), concluding that the majority of deforestation polygons range from 0 to 10 ha. Although the polygons ranging from 10,1 to 50 ha accounted for the largest total deforestation area (32.6%), followed by the smallest polygons 0-10 ha (31,6%). Important to notice that bigger polygons (100.1-500 ha) accounted for 25% deforestation in only 15 polygons detected. The report also quantifies that within the 31 Settlement Projects 18% of the total deforestation has taken place. Another relevant data is that PRODES has detected an increase in deforestation in 2008 (100 km²) while 2007 it was seven km². The difference may be justified by the methodological problems (see monitoring methodology) but it has been shown that deforestation rates have been increasing year after year.

Table 1. Number, size and percentage of deforestation polygons during 2005-2006 period (SEMA).

Polygon size (ha)	Polygons (n)	%	Deforested Area (ha)	%
0-10	1,328	84	4,124	31.6
10.1-50	216	14	4,247	32.6
50.1-100	20	1	1,364	10.5
100.1-500	15	1	3,298	25.3
Total	1,579	100	13,033	100.0

Considering that 81% of the deforestation in 2005-2006 has taken place in the savannahs (Cerrado) and in the Terra Firme Highland Forest and that 37% of this deforestation has happened in the cerrado, it is possible to assume that silviculture (eucalyptus) has been growing in the cerrado areas and may probably be responsible for the big deforestation polygons over 100 hectares. In Highland Dense Forest it was observed that 63% of deforestation has occurred and that deforestation encompasses settlement projects and other small households in protected areas, dedicated to subsistence agriculture.

1.5 Monitoring methodologies and accuracy

Due to the geographic location of Amapá (on the equator line and in the intertropical convergence area), the cloud cover is very abundant all year around, especially from November to June when is the rainy season. Therefore, it is very hard to select satellite images to compose the mosaic of scenes and temporal image that are free of clouds. Due to this, INPE has not estimated deforestation or estimated zero deforestation in years 1993, 1994, 1996, 1999, 2000 and 2002. And

probably the years with deforestation estimates may have low accuracy because of the influence of clouds.

SEMA has decided to develop a deforestation estimates methodology using Landsat 5TM and CBERS images. Due to the difficulty to find images without clouds, SEMA has been doing estimates every two years, starting in the period 2001-2002, the second report was 2003-2004 and the last one for the period 2005-2006. SEMA had the prevision to finish the 2007-2008 report in the beginning of 2010, but so far it has not been completed yet.

Comparing 2009 PRODES estimates and SEMA's 2006, there is a considerable difference of 56% higher estimates made by SEMA, even considering three years before. This fact reveals a great level of uncertainty in deforestation estimates in Amapá.

Amapá State is hiring 11 specialists in geoprocessing (3 for IMAP and 8 for SEMA) and is negotiating with federal government the funds to implement a geoprocessing laboratory. The project intends to: 1. Monitor deforestation; 2. Establish a geodesic grip and a reliable cartographic base; 3. Scenarios modeling.

1.6 Needs identified for deforestation monitoring

- More information on the drivers and dynamics of deforestation
- Technological improvement on deforestation monitoring and annual estimates with support for senior specialists consultancy and capacity building of SEMA staff

2. Forest degradation dynamics monitoring

2.1 Degradation is known? Yes

2.2 Degradation level (km²; categories of degradation): No official data available but according to INPE's assessment Pará had 50.42 km² of degradation in 2007 and 63.18 km² in 2008.

2.3 Characterization of degradation dynamics (direct and underlying causes and drivers of forest degradation)

Logging may be the most important cause (Unknown, yet)

2.4 Monitoring methodologies used and accuracy

DEGRAD method from INPE:

- LANDSAT and CBERS images (minimum scale 6.25 hectares) are enhanced for contrast
- Images classified in fairly arbitrary way described above
- 86% of degradation/deforestation detected was confirmed, but false negatives (non-detection) is common at low and medium degradation
- Levels of degradation assessed:
 - low degradation: predominance of green pixels with some small purple pixels found in low density and frequency
 - medium degradation: dominance of green pixels with slightly larger purple pixels in a mid-level density and frequency
 - high degradation: dominance of purple pixels, or smooth green ones, with spots of forest

2.5 Needs identified for degradation monitoring

- More information on the drivers and dynamics of degradation
- Technological improvement on degradation monitoring and annual estimates with support for senior specialists consultancy and capacity building of SEMA staff

3. Forest Carbon Stocks quantification

3.1 Carbon stocks are known? Yes

3.2 Carbon stocks in forests:

- Aboveground and underground: 179,94 ± 7,6 t C / ha

3.3 Method used and accuracy:

In partnership with INPA (National Research Institute for the Amazon), IEF (State Forest Institute) has developed the Amapá Carbon Project in order to estimate de carbon stocks in one of the State

Forest's module, number II. The methodology in the field consisted of collection of allometric data of above and below ground parts of the trees (leaves, branches, trunks, roots) of all individuals within four plots of 100 m² (10x10m). Samples were sent to laboratory to determine organic carbon. The data of the four plots were extrapolated to the State Forest's areas as the average carbon stocks is being used to elaborate a PDD for State Forest module IV.

3.4 Needs identified for forest carbon quantification?

- Improve the carbon quantification methodology for the whole state

4. Baseline definition and emissions reduction targets

- 4.1 Baseline references used in REDD Program, methods used (historic, projected, and number)
- 4.2 CO₂ Reduction Goals for the state and for REDD program, calculation method (reduction target, calculation, carbon stocks/ha used)
- 4.3 Estimated CO₂ savings per period
- 4.4 Needs identified to improve baseline definition

IV. Component 2 : Implementation mechanisms for REDD

5. Structural policies in place for reduction of deforestation (Table 2)

Table 2. List and characterization of policies that enable deforestation reduction and promote the value of forests

Policy	Objective	Target public	Expected Results	Proponent	Relation with REDD action
Ecologic and Economic Zoning	Not concluded developed for the south part of the State at 1:1million scale, objectives are ecosystems and biodiversity conservation, development of economic activities on sustainable bases	Rural, forest and urban population		State Government elaborated by IEPA	EEZ is important to guide REDD actions on the ground according to the vocation of local contexts
PPDAP – Amapá State Plan for Deforestation and Burnings Prevention and Control	Plan’s objectives are: to avoid increment of GHG emissions from deforestation and burnings; to generate jobs and income associated with forest and landscapes conservation; to strengthen state systems related to forest, agriculture, land tenure, environment; to get involved in news mechanisms for compensation of environmental services. The plan is structured in four lines of action: Territory Planning; Monitoring and Control; Promotion of sustainable activities and; Governance and Institutional Strengthening	All rural and forest population		State Government demanded by Federal Government	PPDAP may be considered as the “reddiness” phase of the future State REDD Program
CAR – Rural Environmental Registry	CAR is a registry system that intends to identify each rural property and contribute to a sector planning.	Every rural property from private properties to small households in protected areas		State Government elaborated by IMAP	The CAR is the first step for land tenure regulation of rural properties and addresses environmental liability measures that are fundamental for the implementation of a REDD program.

Land tenure regulation within Amapá State Forest	To clear land tenure in the federal areas belonging to INCRA transferred to the State.	Populations living within Amapá State Forest	2.3 million hectares of federal land transferred to the State with land tenure sorted out	State Government carried by IMAP	The first areas of the REDD program will be in the State Forests
Carbon Project	To estimate the carbon stocks in Amapa State Forest.	Amapa State Forest	Carbon Stocks in four modules of State Forest	Government carried on by IEF	Fundamental information to define baseline in REDD Program
Municipal Environmental Management Program	Program intends to strengthen the capacity of municipalities for environment management.	Municipalities			
Forest Fires Prevention and Control Programs	Control of fires and burnings within the State under a strategy of risk management.	Civil Defenses and State and Municipal Environment agencies			
Environmental Agendas	Led by SEMA, there are three Agendas: Green (focusing on deforestation); Blue (focusing on water resources) and Brown (focusing on solid residues)				

Obs.: The only State Programs currently being implemented are the Carbon Program executed by IEF and the Protected Areas Management led by SEMA. All other programs and projects mentioned are paralyzed.

6. REDD strategy concept

6.1 GCF Member has a REDD Program now? No

6.2 GCF Member has been planning a REDD Program? Yes

6.3 REDD strategies conceived or in process of conception to reverse deforestation and degradation

Amapá State is still in the early stages of the REDD strategy elaboration. Having already carried studies on carbon accounting, the State is also looking for funds to structure a proper deforestation monitoring methodology and scenarios modeling in partnership with research institute for the definition of baseline.

Amapá State has already decided that the State REDD Program will focus on the State Protected Areas and intends to develop a REDD strategy to benefit Indigenous People. Regarding the State Protected Areas, the phase 1 of a REDD Program will be developed in 950,000 ha of Amapá State Forest Module IV. The second phase of the REDD Program can encompass the other three Modules of State Forests (totaling 1,350,000 ha) and RDS Iratapuru (806,000 ha). Conversations with Indigenous People interested in REDD projects made the State Government interested and committed with the development of a REDD program directed to these people, starting with the Wajãpi people. Total indigenous population in Amapá is 6,200 living in five indigenous territories within 1.1 million hectares.

6.4 Needs to develop a REDD Program

The redness phase is fundamental to develop elements for decision as well as for implementation of a REDD program. Therefore structural policies such as the Zoning, Land tenure regulation, Geoprocessing Laboratory and methodologies for deforestation monitoring, Carbon Stocks within the State are crucial to be developed and implemented in order to have a high confidence REDD Program that could attract investors. It is vital that the State Government dedicate efforts and look for federal resources to get these policies going while the REDD Program is being designed.

7. Target population and rights recognition

7.1 Social groups reached by the REDD Program and number of people directly benefited

7.2 Procedures taken by proponent and evidence that REDD Program acknowledges the rights and role of indigenous peoples and local communities

7.3 Needs identified for rights recognition improvement?

8. Participation and Transparency mechanisms

8.1 What actions have been taken to guarantee free, prior and informed consent?

8.2 Briefly describes mechanisms for consultation and continuous participation addressed or planned by REDD Program in the development and implementation phases, include target groups assessed or planned to be, methods used (particularities to deal with capacity, timing and understanding of indigenous peoples and local communities)

8.3 Information on transparency of REDD program:

- Available information
- Medias used
- Public access

8.4 Needs identified for improvement in participation and transparency?

9. Benefit sharing mechanisms

9.1 Describe the broad picture of how REDD program addresses social and economic well-being of forest dependent communities, including poverty reduction, equitable benefit sharing

9.2 Description of the PES or benefit sharing mechanisms currently in place or planned (concrete elements)

9.3 Describe evidences for participation of stakeholders in the development of the mechanisms

9.4 Needs identified?

10. Institutional framework and arrangement for REDD program and Government's capacity to implement REDD

10.1 Describe characteristics (in the table 3) for existing Agencies related to:

Table 3. Characteristics of existing Agencies in Amapa State

Name	Responsibilities	Relation with REDD Program
SEMA – Secretary of Environment	Policy and norms development related to Protected Areas management	Potential role of coordination of REDD program in State Protected Areas and Deforestation monitoring
IMAP – Amapá Environment and Territory Ordainment Institute	IMAP is linked to SEMA and has three main attributes: land tenure regulation and environmental licensing as well as control and surveillance	Deforestation monitoring and land tenure regulation within REDD program areas
SDR – Rural Development Secretary	Policy and norms associated with agriculture and cattle ranching	Potential role of coordination of actions associated with RURAP and IEF in the REDD Program.
IEF – State Forests Institute	IEF is linked to SDR and responsible for executing the forest policy and management of Amapa State Forests	IEF is currently developing the carbon studies in the State Forests and is responsible for the management of State Forests where REDD program will start
RURAP – State Institute for Rural Development	RURAP is linked to SDR and is responsible for rural extension and technical assistance	REDD areas with the presence of communities will depend on quality extension service to change land use paradigm
IEPA – Scientific and Technologic Researches Institute	State Research Institute linked to the Secretary of Science and Technology is responsible for the elaboration of the EEZ	Not directly involved with the REDD actions but is responsible for finishing the EEZ that will be an important tool for REDD Program. IEPA may develop an important role in the future of the REDD program
EMBRAPA	Federal Research Institute dedicated to research in agriculture, cattle breeding and forestry	EMBRAPA is supporting the carbon accounting project and will start a socio-economic assessment in State Forest module 4 as well as develop baseline scenarios.

10.2 Legal Framework that enables structural policies and REDD Program (Table 4)

Table 4. Legal Framework

Name / Number / Date	Objectives	Status *
Climate Change Policy Law Minute	The current minute of the law is a broader framework for climate change mitigation and adaptation measures. The law is structured in principles, definitions, objectives and instruments to address actions related to energy, transport, solid waste, REDD and others. The law creates the Climate Change System with the institutional arrangement (see 10.3) as well as the instruments such as Climate Change Plan with 5 programs: Education and capacity building for CC; Bolsa Floresta as compensation mechanisms to the forest people; Carbon Stocks monitoring; Clean Technologies and Clean Alternative Energies.	Elaborated by the Government waiting appreciation by Public Attorney to be sent to Assembly

10.3 For the REDD Program, was an institutional capacity needs assessment made? No

10.4 Functioning and institutional framework (existing and to be created) related to the governance of REDD program:

Table 4. Organizations (existing and to be created) described in the to-be-approved Climate Change Law.

Name	Responsibilities	Status *
Climate Change State Commission	Composed by the Government will elaborate the CC State Plan, oversee the execution of programs and projects, execute and coordinate the elaboration of GHG inventory	To be created
State Forum for Climate Change	Consultation body chaired by the Governor composed by different sectors, it will support the commission's works and debate and mobilize society for the decision making within the CC Plan	To be created
State Environment Council	This existing structure will have add its attributes in order to establish norms and guidelines required to implement the CC State Policy.	Functional
Municipal Forums for Climate Change	Similar function as State Forum but at Municipal level.	To be created

10.5 Describe in more detail the Law Enforcement capacity of the State/Province and the needs foreseen in order to have a performance considered good for a REDD Program.

Not applied yet in the stage of the REDD program.

10.6 Needs identified for improving capacities of REDD Program organizations?

All agencies like SEMA, IMAP, IEF are short staffed and have been developing programs with temporary staff. New and fully engaged staff is fundamental for these agencies to develop their role in a REDD program, as well as infrastructure, equipments and capacity building tailored to the actions required in a REDD program. The recent admission tests have been carried by the State and 11 new geoprocessing staff is engaging in SEMA, another 17 environment analysts were hired for licensing in IMAP. IMAP still requires specialized staff for land tenure regulation and for law enforcement.

11.Land/forest tenure administration and relation with REDD

Amapá is a frontier state and due to sovereignty issues, most of the land belongs to the Federal Government (88%) and only 12% belongs to the State Government. Federal areas are distributed as 40% belonging to INCRA – National Institute for Colonization and Rural Land Reform; 40% to IBAMA and 8% to FUNAI (Indigenous Agency). Agreements between state and federal government determined in 2007 (Decree 6921) that 40% of lands belonging to INCRA were transferred to the State, under the condition that IMAP would clear land tenure in a 4-year period. State Government has created in these areas the Amapa State Forest divided in four modules (totaling 2,3 million hectares). Unfortunately, IMAP was able to conclude land tenure regulation in 10% of the area and the due date to conclude land tenure regulation is 2011.

11.1 Legal support and protection of forest tenure

11.2 Clear responsibilities, capacity and authority for forest tenure administration

11.3 Actions planned or developed by governments to solve issues related to land tenure uncertainties within REDD priority areas

11.4 Relation of forest tenure solving and REDD objectives/actions

- 11.5 Recognition of communities and indigenous peoples' rights
- 11.6 Participation of communities and indigenous peoples in forest tenure definition
- 11.7 Definition of legal aspects related to property and rights to forest carbon in REDD project areas
- 11.8 Conflict resolution measures in place
- 11.9 Needs identified?

12. REDD MRV systems

- 12.1 Does the State/Province have a GHG emissions inventory? No
- 12.2 If yes, is the inventory performed or validated by an independent party?

12.3 Strategies thought by the State/Province for monitoring, reporting and verification

There is an agreement signed in August 2nd between Markit Group Limited and Amapá Government that expresses the interest to use the registry services from Markit for the carbon credits originated by Amapá's REDD program. Markit will provide secure electronic infrastructure for registry making possible the issuing, negotiation, property transfer and retirement of environmental credits certificate from Amapá State. Markit will have exclusivity for a 5-year period over environmental assets certificates originated in Amapá State's environmental projects.

No other strategy related to MRV has been developed so far.

12.4 Protocols being used to validate and certify state-wide REDD programs

Not defined yet

12.5 Needs identified in order to MRV systems in REDD Program

13. REDD Projects within State/Province

No REDD Projects in Amapá State

14. Relationship with National Government

What mechanisms and/or forums does the State/Province currently employ to negotiate the integration and/or harmonization of the state REDD strategies with a national one?

Amapá State Government understands that the politically relevant mechanism to negotiate with the federal government is the Amazon Governors Forum. The Forum was responsible for the creation of the task force that forged a new position of Brazil in UNFCCC considering the subnational level. The continuity of the Forum is threatened with the change of several governments' offices next year.

V. Component 3 : REDD Financing

15. Current strategies to finance REDD Program Elaboration

15.1 Costs and financing sources to elaborate a REDD program

Currently the State Government is negotiating a project to structure the Geoprocessing Laboratory with the Federal Government. SEMA and IMAP have been developing projects to the Amazon Fund and expects to develop another project in the same value for IEF.

16. Strategies to finance REDD implementation

- 16.1 Costs for the implementation of REDD Program
- 16.2 Economic viability studies: Y / N
- 16.3 Description of strategies designed and in place to finance REDD costs
- 16.4 Needs identified in terms of financing?