

**GCF Database**  
**Version 3 July 30**

**Database purpose: To create a GCF knowledge database that will include the current REDD actions (programs, projects, policies) of member states and provinces and institutional, technical, financial, legal, and other needs to identify possible cooperation niches among GCF members as well as collective needs that could be approached by the GCF as a common benefit to all; and to provide information to elaborate communications materials and fundraising proposals.**

**REDD Action** is defined as the possible initiatives associated with implementation of REDD (i.e., initiatives that seek to limit carbon emissions by reducing deforestation) which encompasses **2 levels of scale**:

1. **REDD projects** – REDD initiatives and activities carried out within a restricted area of defined boundaries (such as Protected Areas or private property) proposed by private actors (e.g. companies and civil society) and/or governments (e.g. State/Provincial, municipal, regional etc)
2. **REDD Program** - REDD initiatives, policies, strategies and activities within a larger scale (larger than REDD projects), encompassing the whole State/Province or regions within, led by the State/Provincial Government or in partnership with civil society. This includes capacity building as part of a phased approach to a REDD program.

**NOTE:** This assessment focuses on REDD Programs in seeking to understand the government’s thinking, solutions and needs related to REDD. But REDD projects will be also assessed within the database.

**Structure of the Database:**

- I. GCF Member name:
- II. General Information of GCF Member  
Components / Elements of REDD Action
- III. Component 1: Environmental Service
- IV. Component 2 : Implementation mechanisms for REDD
- V. Component 3 : REDD Financing

**GCF Database Template**

**I. GCF Member name:**

**II. General Information of GCF Member**

**1. Area (km<sup>2</sup>): 56,858.84**

**2. Population:**

- Total: 754,730 (2005)
- Rural: 196,230 (26 %)
- Ethnic groups (name/number): *describe name and number of indigenous and other rural populations: 13.2% of total population*

Ethnic groups	Total	%
Maya	69,218	77.7
Chol	9,087	10.2
Tzeltal	1,782	2
Kanjobal	1,604	1.8
Mame	980	1.1
Otras lenguas	3,474	3.9
No especificado	2,940	3.3
Total	89,084	

### 3. GCF:

- Total: \$1,740,034 (2005)
- Forest sector:
- Agricultural sector:
- Main income products: Oil Industry

4. **Per capita income:** \$16,346 (2005)

5. **Human Development Index:** For 2008 was 0.7329

### 6. Forests (Typologies and Status):

- Total forest area: 4,611,943.83 ha (2007)
- Main Forest Typologies (type/area):

Humid Forest	Subhumid Forest	Temperate Forest	Mangrove	Other Hydrophilic Vegetation	Halophilic and Gypsophilic Vegetation	Other types of Vegetation
2,222,306.83	1,831,687.02	9,217.68	194,416.22	221,013.79	8,029.30	125,272.99

- Status of Forests (%; km2):
  - o Original forest area (pre-human disturbance) 4,695,000 ha. (Villaseñor, 1959)
  - o Fully protected forests (strict use): 40.1 % of the territory (2,343,188 ha). CORE AREA: 566,008.9 ha.
  - o Conserved forests (managed by traditional or indigenous peoples).

PROPERTIES WITH RESERVES FOR ENVIRONMENTAL SERVICES ("EJIDOS" — COMMUNALLY-OWNED LANDS AND SMALL LANDHOLDERS)

### TOP HEADING OF CHART:

RELATIONSHIP BETWEEN PROPERTIES AND PAYMENT PROGRAMS FOR ENVIRONMENTAL SERVICES--2010

### THREE SUBHEADINGS:

PAYMENT FOR HYDROLOGIC ENVIRONMENTAL SERVICES

PAYMENT FOR ENVIRONMENTAL SERVICES-- CONSERVATION OF BIODIVERSITY

TOTAL ENVIRONMENTAL SERVICES

### HEADINGS OF COLUMNS:

MUNICIPALITY

# OF PROJECTS

AREA

INVESTMENT

MUNICIPALITY

# OF PROJECTS

INVESTMENT

MUNICIPALITY

**# OF PROJECTS  
INVESTMENT**

**FAR RIGHT COLUMN:**

**OBSERVATION: RESOURCE ALLOCATION FOR 2011 WILL BEGIN ON MAY 27  
OF THIS YEAR**

RELACION DE PREDIO CON PROGRAMAS DE PAGO POR SERVICIOS AMBIENTALES PERIODO 2010.										
PAGO POR SERVICIOS AMBIENTALES HIDROLOGICOS			PAGO POR SERVICIOS AMBIENTALES CONSERVACION DE LA BIODIVERSIDAD			TOTAL SERVICIOS AMBIENTALES			OBSERVACION	
MUNICIPIO	NUM PROYECTOS	SUPERFICIE	INVERSION	NUM PROYECTOS	SUPERFICIE	INVERSION	NUM PROYECTOS	SUPERFICIE		INVERSION
CALAKMUL	12	8473.87	24404011.34	0	0.00	0	12	8473.87	24,404,011.34	LA ASIGNACION DE RECURSOS 2011 SE REALIZARA A PARTIR DEL 27 DE MAYO DEL AÑO EN CURSO
CALKINI	0	0.00	0	1	1,820.68	3154306.17	1	1820.68	3,154,306.17	
CAMPECHE	1	444.19	1293206.12	1	154.51	417844.16	2	598.70	1,711,050.28	
CANDELARIA	1	200.00	635500	1	200.00	427528	2	400.00	1,063,028.00	
CARMEN	0	0.00	0	1	402.07	995005.91	1	402.07	995,005.91	
HOPELCHEN	11	15190.10	37104384.25	1	1,131.64	2509149.29	12	16321.74	39,613,533.54	
PALIZADA	0	0.00	0	1	166.57	400654.43	1	166.57	400,654.43	
TENABO	3	1260.49	3551227.98	0	0.00	0	3	1260.49	3,551,227.98	
<b>SUB TOTAL</b>	<b>28</b>	<b>25568.65</b>	<b>66988329.69</b>	<b>6</b>	<b>3,875.47</b>	<b>7904487.96</b>	<b>34</b>	<b>29444.12</b>	<b>74,892,817.65</b>	

**FOREST MANAGEMENT PROGRAMS: TIMBER EXTRACTION AND NON  
TIMBER-YIELDING**

**STATE-BY-STATE REPORT OF AUTHORIZATIONS OF EXPLOITATION OF TIMBER and PRODUCTION  
VALUE**

**CHART:**

**TOP ROW: PRECIOUS WOODS, COMMON WOOD**

**NEXT ROW (COLUMN HEADINGS SEPARATED BY COMMAS): MUNICIPALITY/LOCALITY, AREA OF STUDY (HECTARES), TOTAL MEASUREMENT OF LOGS IN METERS, MAHOGANY (METERS), MEXICAN CEDAR (METERS), PRODUCTION VALUE (PRECIOUS WOODS), DECORATIVE (METERS), PRODUCTION VALUE (DECORATIVES), HARDWOOD (METERS), PRODUCTION VALUE (HARDWOOD), SOFTWOOD (METERS), PRODUCTION VALUE (SOFTWOOD)**

MUNICIPIO / LOCALIDAD	SUPERFICIE DE ESTUDIO (HA)	TOTAL M <sub>3</sub> ROLLO	PRECIOSAS			COMUNES					
			CAOBA (m <sup>3</sup> )	CEDRO (m <sup>3</sup> )	VALOR DE LA PRODUCCION (preciosas)	DECORATIVAS (m <sup>3</sup> )	VALOR DE LA PRODUCCION (decorativas)	DURAS (m <sup>3</sup> )	VALOR DE LA PRODUCCION (duras)	BLANDAS (m <sup>3</sup> )	VALOR DE LA PRODUCCION (blandas)
TOTAL	11,325.680	67,616	3,870.38	1,454.77	15,975,450	3,256.50	9,769,500	96,040.66	115,248,792	12,487.28	34,964,384
CALAKMUL	10,300	43,177	3,370.03	1,335.66	14,117,070	2,490.07	7,470,210	74,600.02	89,520,024	10,877.68	30,457,504
CANDELARIA	688.67	12,941	500.35	119.11	1,858,380	647.77	1,943,310	10,597.61	12,717,132	1,074.44	3,008,432
CHAMPOTÓN	82.08	1,666				20.97	62,910	1,108.99	1,330,788	535.16	1,498,448
ESCÁRCEGA	20	177				35.69	107,070	141.12	169,344		
HECELCHAKAN	14.93	629						628.92	754,704		
HOPELCHEN	220	9,026				62	186,000	8,964	10,756,800		

**Annual volume from 2010**

## STATE-BY-STATE REPORT OF EXPLOITATION OF FOREST NON-TIMBER PRODUCTS AND PRODUCTION VALUE

MUNICIPALITY/LOCATION.	AREA OF EXPLOITATION	ANNUAL VOLUME (KG)	VOLUME IN CUBIC METERS	TOTAL VOLUME (KG)	PRODUCT	VALOR DE LA PRODUCCION
<b>TOTAL</b>	14,564.82	85,013.05	72.74	270,952.25	LATEX, TRUNK OF THE GUANO PALM AND GUANO PALM	
ESCARCEGA - CALAKMUL	14,530.82	46,483.05		232,422.25	LATEX	10,459,001
CANDELARIA	20		72.74		GUANO PALM TRUNKS	36,006
TENABO	14	38,530		38,530	GUANO PALM	57,795

- Forests without protection: 2,268,755.83 ha.

### Components / Elements of REDD Action

#### III. Component 1: Environmental Service

##### 1. Deforestation dynamics monitoring

1.1 Deforestation is known? Y / N YES

1.2 Deforested area (km<sup>2</sup>):

BETWEEN 1993 AND 2002 DE GROSS DEFORESTATION WAS 3,909 KM<sup>2</sup> AND BETWEEN 2002 AND 2007 A TOTAL OF 1,864 KM<sup>2</sup>

1.3 Average deforestation rate (km<sup>2</sup>/year):

- 1995-1999: 434 KM<sup>2</sup>/YEAR
- 2000-2004: 404 KM<sup>2</sup>/YEAR
- 2005-2009: 373 KM<sup>2</sup>/YEAR

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

Mainly driven by conversion to pasture land and to a lesser extend to agricultural land. Lack of forestry related economic activities.

1.5 Monitoring methodologies and accuracy

Rates of deforestation are based on the available LU-maps, produced by INEGI, scale 1:250,000. These maps have a high uncertainty, particularly at the local scale, as the minimum resolution of the maps is 50 hectares (deforestation in Mexico is a small-scale activity)

1.6 Needs identified for deforestation monitoring?

A satellite-based standardized monitoring system needs to be set up in combination with ground-based monitoring plots that can estimate deforestation at a scale of 1-2 hectares. The imagery is available, but a permanent infrastructure and personnel is required. Historic trends can be improved, as imagery is readily available for this scale.

## **2 Forest degradation dynamics monitoring**

### **2.1 Degradation is known? Y / N Yes**

#### **2.2 Degradation level (km<sup>2</sup>; categories of degradation)**

Forest degradation is based on the maps of INEGI 1993, 2002 and 2007, where forests are classified according to type and dominance. 4 categories are distinguished, 3 of which are considered degraded: primary forest (considered as intact forest), secondary forest dominated by trees, shrubs or herbaceous plants (all considered as degraded forests).

Rates of degradation:

between 1993-2002: 255 km<sup>2</sup>/year

between 2002-2007: 39 km<sup>2</sup>/year

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

Degradation is partly due to agricultural practices (shifting cultivation with periods of forest fallow, mixed with periods of agricultural production), due to impacts of hurricanes, and unsustainable forest management.

#### **2.4. Monitoring methodologies used and accuracy**

Rates of degradation are based on the available LU-maps, produced by INEGI, scale 1:250,000. These maps have a high uncertainty, particularly at the local scale, as the minimum resolution of the maps is 50 hectares (deforestation in Mexico is a small-scale activity).

#### **2.5 Needs identified for degradation monitoring?**

A satellite-based standardized monitoring system needs to be set up in combination with ground-based monitoring plots that can estimate forest degradation at a scale of 1-2 hectares. The imagery is available, but a permanent infrastructure and personnel is required. Historic trends can be improved, as imagery is readily available for this scale.

## **3. Forest Carbon Stocks quantification**

### **3.1 Carbon stocks are known? Y/N yes**

#### **3.2 Carbon stocks in forests:**

- C-Veg includes all woody above and below-ground biomass, C-Soil includes carbon in soil organic matter

Forest type	Area (ha, 2007)	C-Veg (tC/ha)	C-Soil (tC/ha)	C-stock-total
Plantations	3,412	2	77.9	272,507
High evergreen forest	7,748	99.6	117.3	1,680,340
High sub-evergreen forest	58,349	99.6	132.4	13,536,761
Medium sub-evergreen forest	472,670	71.2	132.4	96,229,304
Medium sub-deciduous forest	53,413	70.2	141.9	11,332,086
Low evergreen forest	1,337	70.6	117.3	251,205
Low sub-evergreen forest	318,480	70.6	132.4	64,649,833
Mangrove forest	186,094	48.9	130.7	33,414,796
Savannah	91,070	6.2	115.4	11,074,041
Degr Oak forest	8,978	51.1	90.7	1,273,386
Degr high evergreen forest	3,672	87.7	92.2	660,278
Degr High sub-evergreen forest	48,744	87.7	104.0	9,344,207
Degr Medium deciduous forest	293,029	15.0	103.6	34,742,711
Degr Medium Sub-evergreen forest	1,579,179	69.8	104.0	274,464,665
Degr Medium Sub-deciduous Forest	853,592	65.8	111.5	151,381,733
Degr Low Sub-evergreen forest	306,697	54.5	104.0	48,631,593
Degr Galery Forest	1,104	6.2	90.7	106,946
Degr Mangrove forest	863	15.7	102.7	102,080

### 3.2 Method used and accuracy:

The carbon stocks in woody vegetation are derived from the national forest inventory data. About 1000 permanent inventory plots were established in Campeche during 2004-2007. A separate data based on allometric equations, developed in Mexico, was generated from an extensive literature search. These equations were used to convert the inventory data to biomass. A 50% carbon content was used to convert dry biomass to carbon stock. The soil carbon densities are derived from the INEGI national database on soil profiles that were established since 1960. About 220 soil profiles correspond to Campeche.

### 3.3 Needs identified for forest carbon quantification?

Currently, the national forest inventory is re-measuring all the permanent plots. As of 2009 on ward, all carbon pools are measured or estimated. These data are in the process of analysis. With these data a first approximation of the relationships between the various carbon pools and the occurring disturbance regime can be estimated, although with a high degree of uncertainty at the level of the state of Campeche, due to the small number of plots available. A network of permanent plots needs to be established, especially taking into account the various disturbance regimes and the state of recovering of the forest from disturbance.

## 4. Baseline definition and emissions reduction targets

### 4.1 Baseline references used in REDD Program, methods used (historic, projected, and number).

This year, a state-level greenhouse gas inventory for the AFOLU sector will be carried out, that will be a basis to set the reference emission scenario. The above-mentioned data on deforestation, forest degradation and carbon stock densities, will be part of the calculations.

### 4.2 CO2 Reduction Goals for the state and for REDD program, calculation method (reduction target, calculation, carbon stocks/ha used, ...)

Nothing has been carried out by the State Government as of yet.

### 4.3 Estimated CO<sub>2</sub> savings per period

Nothing has been carried out by the State Government as of yet.

### 4.4 Needs identified to improve baseline definition?

To improve the baseline estimation, an analysis of the impact of recent LU policies should be carried out, particularly the policy changes in the 2000s of the animal husbandry and forestry sector

#### IV. Component 2 : Implementation mechanisms for REDD

The definition of REDD+ policies should be carried out under close consultancy with all stakeholder groups.

#### 5. Structural policies in place for reduction of deforestation

List and characterization of policies that enable deforestation reduction and promote the value of forests, describing:

Policy	Objective	Target public	Expected Results	Proponent	Relation with REDD action
State Development Plan	Sustainable exploitation of natural resources  Promote territorial legislation Promover el ordenamiento Territorial del Estado.	The entire state territory		Secretariat of the Environment and Sustainability	Regulation of exploitation for conservation of forest areas. Establishment of priority regions for REDD projects.
Procuraduría de Protección al Ambiental Estatal.	Monitor and supervise compliance with legal codes having to do with environmental issues.	The entire state	Environmental conservation	Secretariat of the Environment and Sustainability	Promote the conservation of forest resources
Special Agency for Environmental Crimes, State, Environmental Prosecution Office	Attention to and follow-up for reports of environmental crimes	The entire state	Reduce the damage caused by environmental crimes.	State Attorney General's Office	Protection and conservation of natural resources.

#### 6. REDD strategy concept

6.1 GCF Member has a REDD Program now? Y/N (NO)

6.2 GCF Member has been planning a REDD Program ? Y/N (SI)

6.3 REDD strategies conceived or in process of conception to reverse deforestation and degradation (*short description of the main concepts adopted by the REDD program, please include details related to **territorial approach of REDD Program** (Territory-wide and/or Regions within territory (how many and area size; method for selection) and/or Project-base).*

At the level of the YUCATAN PENINSULA: The three states are promoting a Regional Initiative for Climate Change that includes a REDD+ Program for the the three states in coordination with CONAFOR

#### 7. Target population and rights recognition

**7.1 Social groups reached by the REDD Program and number of people directly benefited**  
As of the present there is no information since there is no project in progress.

**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?**

As of the present there is no information since there is no project in progress.

## **8. Participation and Transparency mechanisms**

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

As of the present there is no information since there is no project in progress.

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)

As of the present there is no information since there is no project in progress.

**8.3 Information on transparency of REDD program:**

- Available information
- Medias used
- Public access

As of the present there is no information since there is no project in progress.

**8.4 Needs identified for improvement in participation and transparency?**

These have not been identified.

## **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

Undefined.

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

Undefined.

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**

As of the present there is no information since there is no project in progress.

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

- Forest Management
- Agricultural Sector
- Control of fires

- Management of Protected Areas and Indigenous Territories
- Forest / Deforestation Monitoring
- Law enforcement
- Climate Change

	FEDERAL	ESTATAL
Forest Management	CONAFOR	SMAAS
Agricultural Sector	SAGARPA	SDR
Control of fires	CONAFOR	SMAAS
Management of Protected Areas and Indigenous Territories	CONANP	SMAAS
Forest / Deforestation Monitoring	CONAFOR	SMAAS
Law enforcement	PROFEPA	PROCURADURIA AMBIENTAL
Climate Change	SEMARNAT,CONAGUA	SMAAS

Name	Responsibilities	Relation with REDD Program

10.2 For the REDD Program, was an institutional capacity needs assessment made?, Y/N (NO)

10.3 Functioning and institutional framework (existing and to be created) related to the governance of REDD program, (include organizations responsible for monitoring, reporting and verification (MRV)):

Name	Responsibilities	Status (created, implemented, fully functional)
Secretaría de Medio Ambiente y Aprovechamiento Sustentable.		INDEFINIDO

**10.4 Needs identified for improving capacities of REDD Program organizations?**

## **11. Land/forest tenure administration and relation with REDD**

INDEFINIDO

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

**11.8 Needs identified?**

**12. REDD MRV systems**

- 12.1 Does the State/Province have a GHG emissions inventory? Y/N (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

SMASS will promote the execution through ECOSUR of the GEI Inventory

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

**12.5 Needs identified in order to MRV systems in REDD Program?**

**13. REDD Projects within State/Province NOSE TIENE NINGUN PROYECTO EN PROCESO**

This section is dedicated to assess the **REDD projects** in process of development or implementation within the State/Province that are proposed by private sector, NGO and/or communities:

**Project Name:**

- Location:
- Year of initiation/proposed year of initiation:
- Status of project (planning or in progress):
- Land area (km<sup>2</sup>) of REDD area:
- Pre-existing special status of land, if applicable (state/national conservation area, indigenous reserve, etc.)
- Number of people living in REDD area:
- Organizations (governmental or non) operating project:
- Source(s) of funding:
- Proposed life of the program (years):
- Estimated avoided emissions through the life of the program (tons CO<sub>2</sub>):
- Baseline method (projected, historical or other)
- MRV protocol:
- Other (any important and relevant details on supporting programs, income-generating activities, transparency and participation, etc.)

**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?

The State Government together with CONAFOR promotes the implementation of a REDD strategy in the Yucatan Peninsula

**V. Component 3 : REDD Financing**

UNDEFINED

**15. Current strategies to finance REDD Program Elaboration**

UNDEFINED

- 15.1 Costs and financing sources to elaborate a REDD program

## **16. Strategies to finance REDD implementation**

**UNDEFINED**

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?**

**IN PROGRESS**