

GEO FCT activities in MEXICO







Progress and Plans

Fernando Paz, COLPOS
Michael Schmidt, CONABIO
Ben de Jong, ECOSUR
Jose Carlos Fernandez, CONAFOR



MRV Joint Workshop 22-24 June 2010, Guadalajara, Jalisco Mexico





Table of contents

- Institutional framework
- Current Status of Carbon Emissions Estimation
- REDD readiness & MRV implementation
- Forest & carbon overview/historical data
- Available Data
- The Verification Sites (VS)
- Spatial Data Infrastructure & Data processing
- Capacity-Building & Support Needs





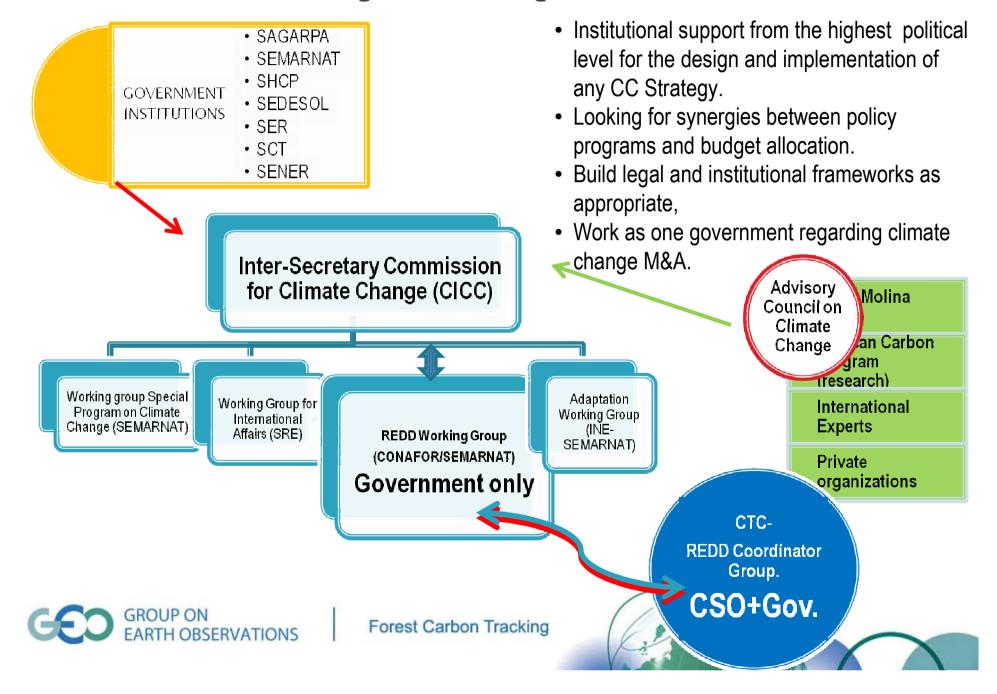
Institutional framework

- •CONAFOR is the focal point in Mexico for REDD+
- •MRV coordination group (government + academia + OSCs) is engaged in the implementation
- Mexico has the R-PP approved for WB FCPF
- Mexico is an observer in UN-REDD
- •Mexico has bilateral negotiations with Norway about MRV fast implementation





National Readiness Management Arrangements



www.earthobservations.org www.geo-fct.org

Current Status of Carbon Emissions Estimation

 Mexico is using approach 3 and a mix of tier 2-3 for C emissions on the AFOLU sector

 Mexico is planning to use Approach 3 and Tier 3 in 2012 (5th National Communication): an hybrid approach using ground and satellite data through modeling





REDD readiness & MRV implementation

- MRV implementation:
 - + CoP 16: full implementation in pilot areas (Chiapas and Jalisco states; Cutzamala basin)
 - + 2011-2012: national full implementation
 - + Hybrid system: ground and satellite data
- •GEO FCT support: radar imagery, capacity building, guidelines, standards, validation
- •Planned resources: FCPF WB, Norway, own resources





Forest & carbon overview/historical data

Land-use maps (to derive major activity data):

1970s LU/LC map; scale 1:250,000, min resolution 50 has, based on aerial photographs

1993 LU/LC map; scale 1:250,000, min resolution 50 has, based on Landsat

2002 LU/LC map; scale 1:250,000, min resolution 50 has, based on Landsat

2007 LU/LC map; scale 1:250,000, min resolution 50 has, based on SPOT imagery

Inventory data (to derive emission factors)

1992-1994 National Forest Inventory (16,000 plots)

2004-2007 Permanent National Forest and Soil Inventory

(>22,000 permanent plots established)

2008-2009 Re-measurement of approximately 9,000 plots

Other data sources

National, state and municipality-level statistics on forest harvesting and fire disturbances





Forest & carbon overview/historical data

Differences in area change according to approach

		Approach 1	
		1993-2002	2002-2007
Deforestation		330,800	197,702
Degradation		294,762	181,534
Total (ha/yr)		625,562	379,236
		Approach 2-3	
		1993-2002	2002-2007
Gross deforestation		595,413	590,418
Degradation		633,018	415,803
Recovering		176,079	109,375
Reforestation		264,612	392,715
Total (ha/yr)		1,669,122	1,508,311



Available Data

- Full access to MODIS, Landsat and SPOT (2,4,5
 - 2003 till today)
- Full coverage from RADARSAT-2 and ALOS-PALSAR (2009 -)
- Complete NFI (systematic grid): all 5 IPCC pools measured since 2009
- LU maps every 5 years (1:250,000): INEGI
- LU maps being developed (1:5,000): 2003 -

















geo-fct.org

The Verification Sites (VS): documentation

GEO-FCT VALIDATION/CALIBRATION SITES FOR MEXICO

Prepared by:

Fernando Paz (coordinator) Colegio de Postgraduados (COLPOS)

Participants:

Ben de Jong, ECOSUR, Tabasco Miguel Angel Castillo, ECOSUR, Chiapas Sara Covaleda, COLPOS, Chiapas Fermin Pascual, COLPOS, Montecillo Mario Manzado, ITESM, Monterrey Rainer Ressl, CONABIO, D.F. Gildardo Gil, PATROCIPES, Sonora Stephen H. Bullock, CICESE, Baja California Jaime Garatuza, ITSON, Sonora

> October 30, 2009 Montecillo, Estado de Mexico, Mexico



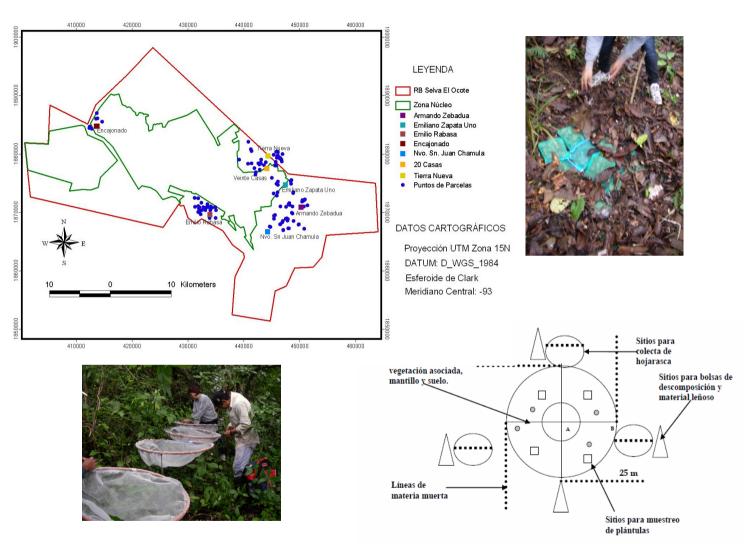


The Verification Sites (VS)



Intensive Research Sites

El Ocote (Chiapas) and La Mojonera y Atopixco (Hidalgo)







www.earthobservations.org www.geo-fct.org

Spatial Data Infrastructure & Data processing

- •Mexico capacity for massive processing limited, own software development, Google alliance for cloud computing and Internet uploading and visualization.
- •Full national capacity to process data and prepare forest/non-forest maps and carbon estimates. Needs to reinforce national capacity building (technical issues)
- Support needs: radar / lidar processing
- •Full local scale mapping of LU and carbon estimates under progress



Capacity-Building & Support Needs

Main capacity building: active sensors imagery technology

 On going/Required support from the GEO FCT: radar imagery processing, guidelines, standards, methodological issues, and calibration / validation issues



