PROGRAMA DE ACCIÓN
ANTE EL CAMBIO CLIMÁTICO
DEL ESTADO DE CHIAPAS

REDD plus México

Efforts of REDD+ in Mexico

Ben H.J. de Jong (ECOSUR)

INEGI

PMC Programa Mexicano del Carbono

ECOSUR

International Technical Seminar on REDD+

Tokyo International Forum, Hall D7 Date: February 16th to 17th, 2011

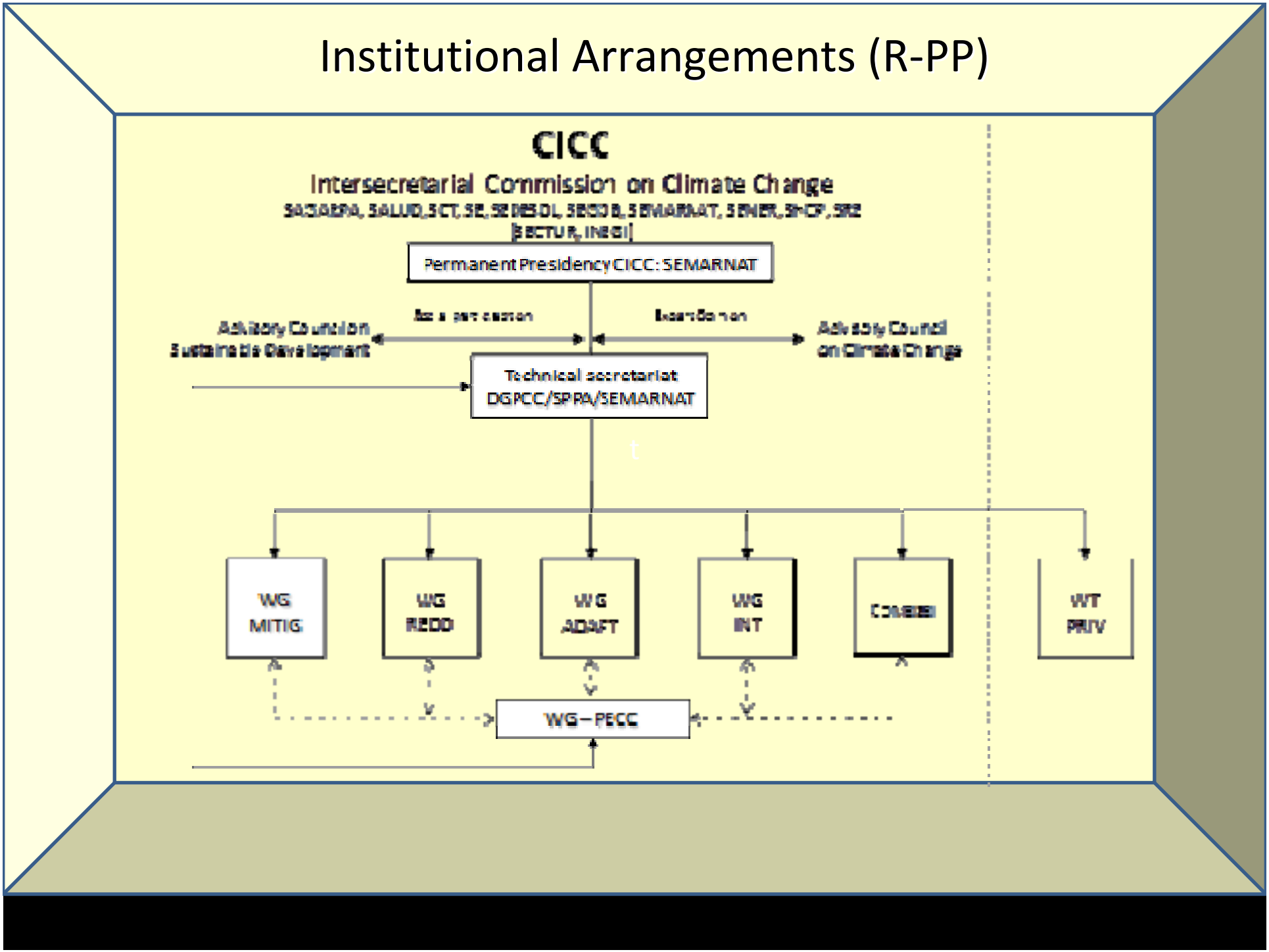
Content

- Position of Mexico
- Institutional arrangements
- Strategy
- Reference Emission Scenario
- Monitoring, Reporting and Verification

Position of Mexico (Vision of Mexico, 2010)

- REDD plus represents an important opportunity
- Flexibility regarding the financial scheme
- Focus on the implementation of REDD plus activities
- Flexible approach to allow national, sub national and project scale implementation
- Recognize the rights of indigenous people and local communities that inhabit the forests
- Associated co-benefits such as conservation of the ecosystems and services they provide should be recognized

Institutional Arrangements (R-PP)



Strategies (Vision of Mexico, 2010)

- Institutional coordination between the secretaries involved in federal land-use programs
- Generate capacities at the local level to instrument REDD+ activities
- Develop early action activities to test various REDD+ based implementation models
- Focus REDD+ activities in priority regions with high risks of deforestation and forest degradation, taking into account environmental and social criteria
- Develop actions that generate sinergies with existing instruments, policies and programs
- Develop joint initiatives between environmental and agricultural agencies.

Reference Emission Scenario (R-PP)

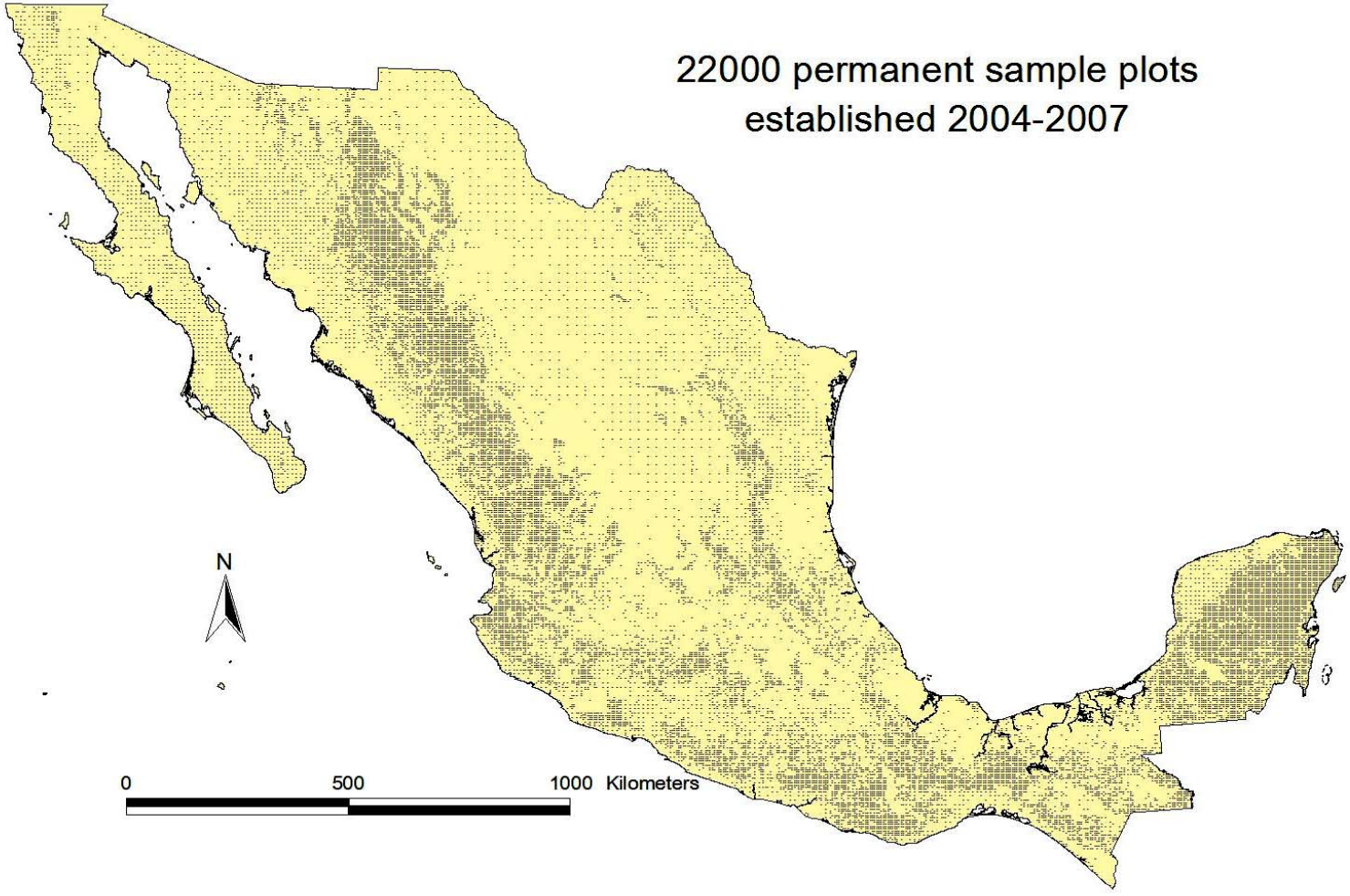
- Identify historical patterns of Land-Use Change
- Develop Biomass density maps to estimate emssions derived from LU-Change
- Analyse impact of recent LU-programs and policies
- Identify key areas, based on historical patterns of LU-Change (risk) and
- Define environmental and social criteria to identify priority areas (co-benefits)

Historical rates of forest conversion

Annual rates of change (ha/yr), based on national LU maps

	1993-2002	2002-2007
Gross Deforestation	595,400	590,400
Reforestation	264,600	392,700
Net Deforestation	330,800	197,700
Degradation	633,000	415,800
Recovering	176,000	109,400
Net Degradation	457,000	306,400

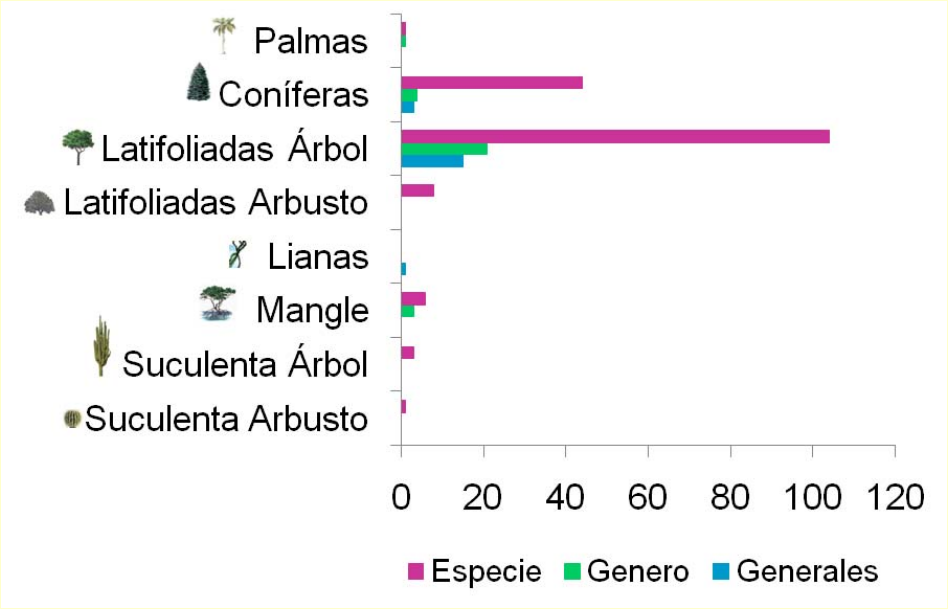
National Forest and Soil Inventory



2004-2008: Data on dead and live standing biomass

2009 → : Data of 5 pools (IPCC)

Allometric equations to convert inventory and other data to biomass

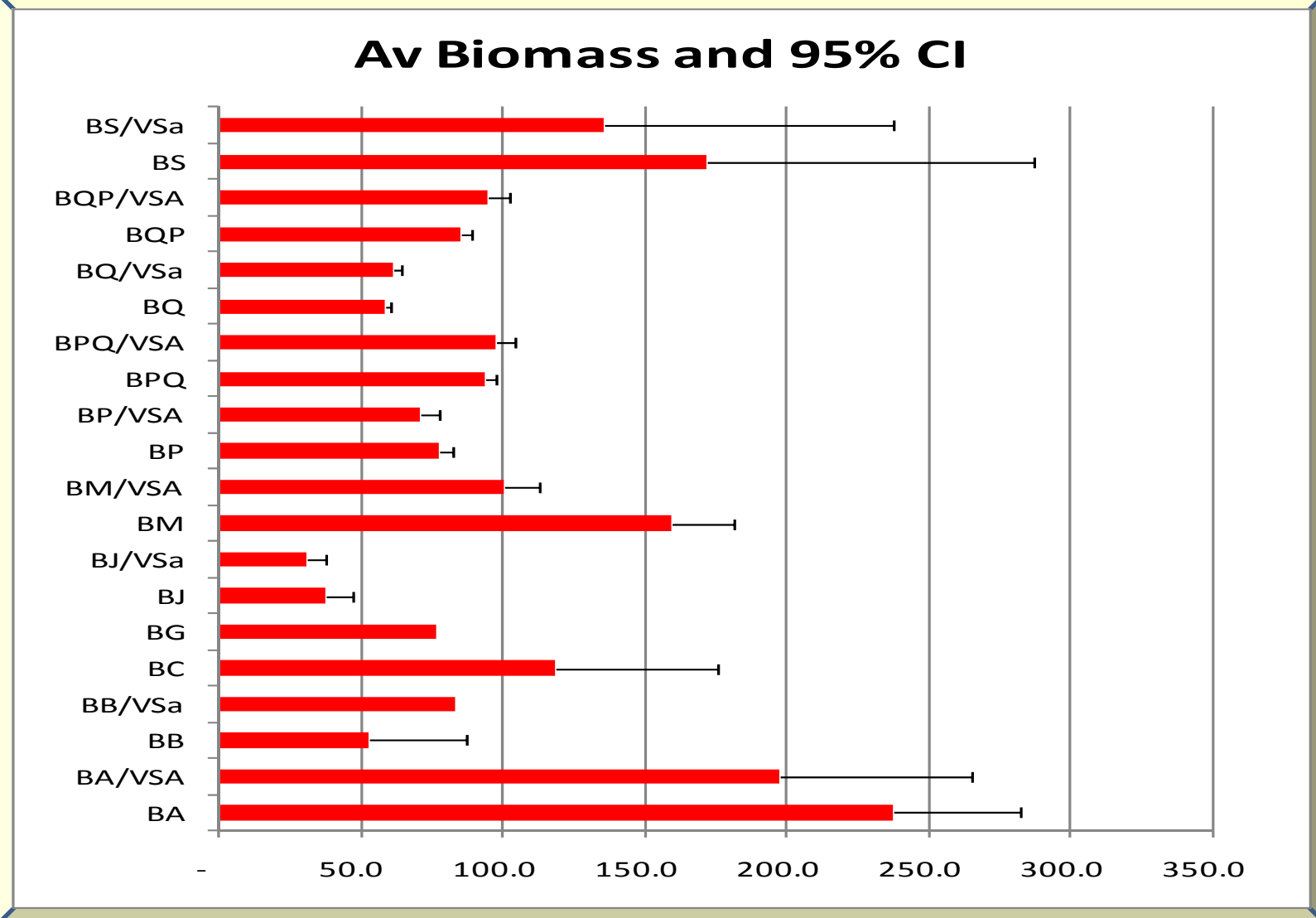


Addionally:

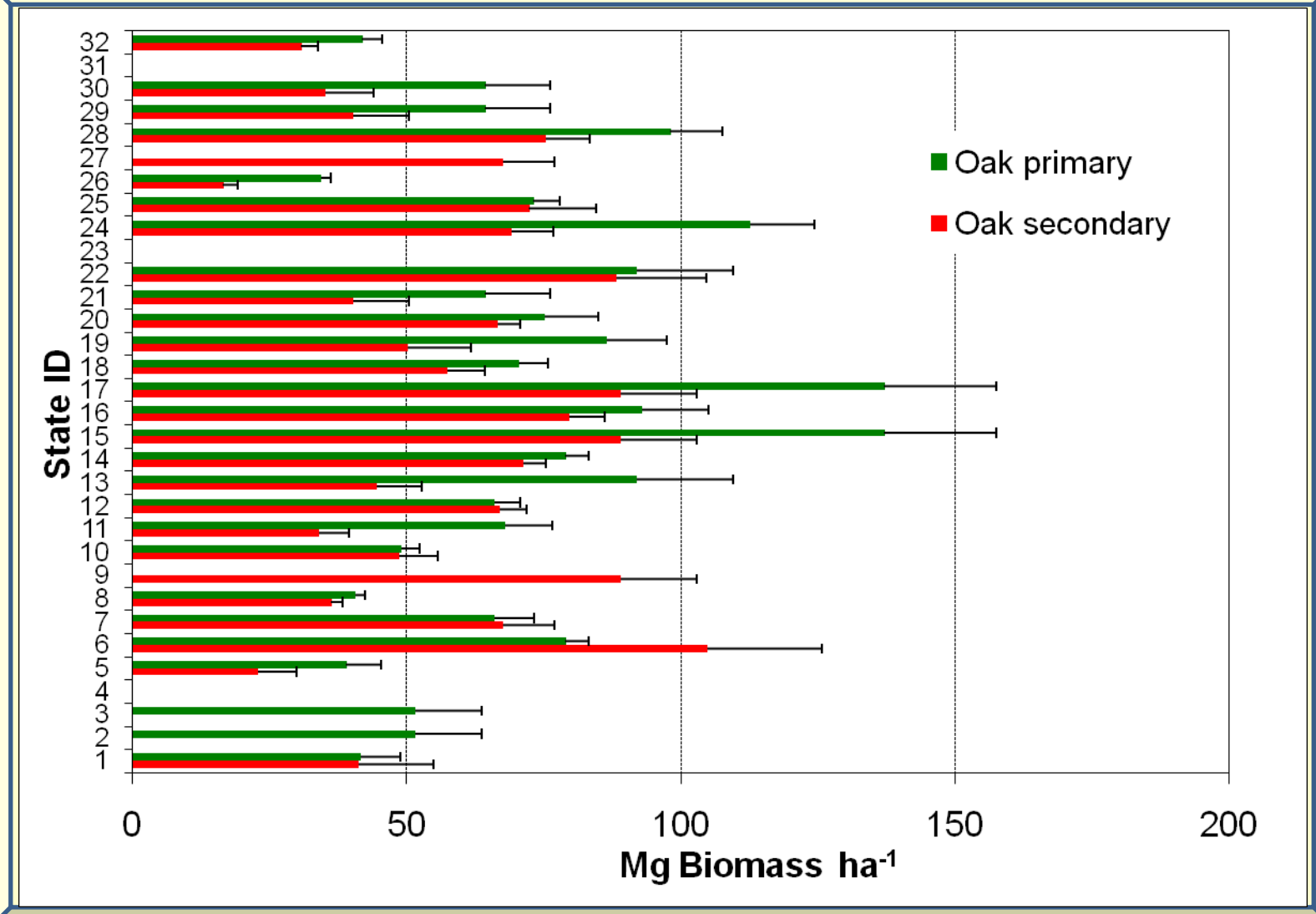
4 Generic equations for trees according to ecosystem (Tropical humid, tropical dry, cloud forest, scrub desert)

Remaining species with generic equations, developed from the existing databases

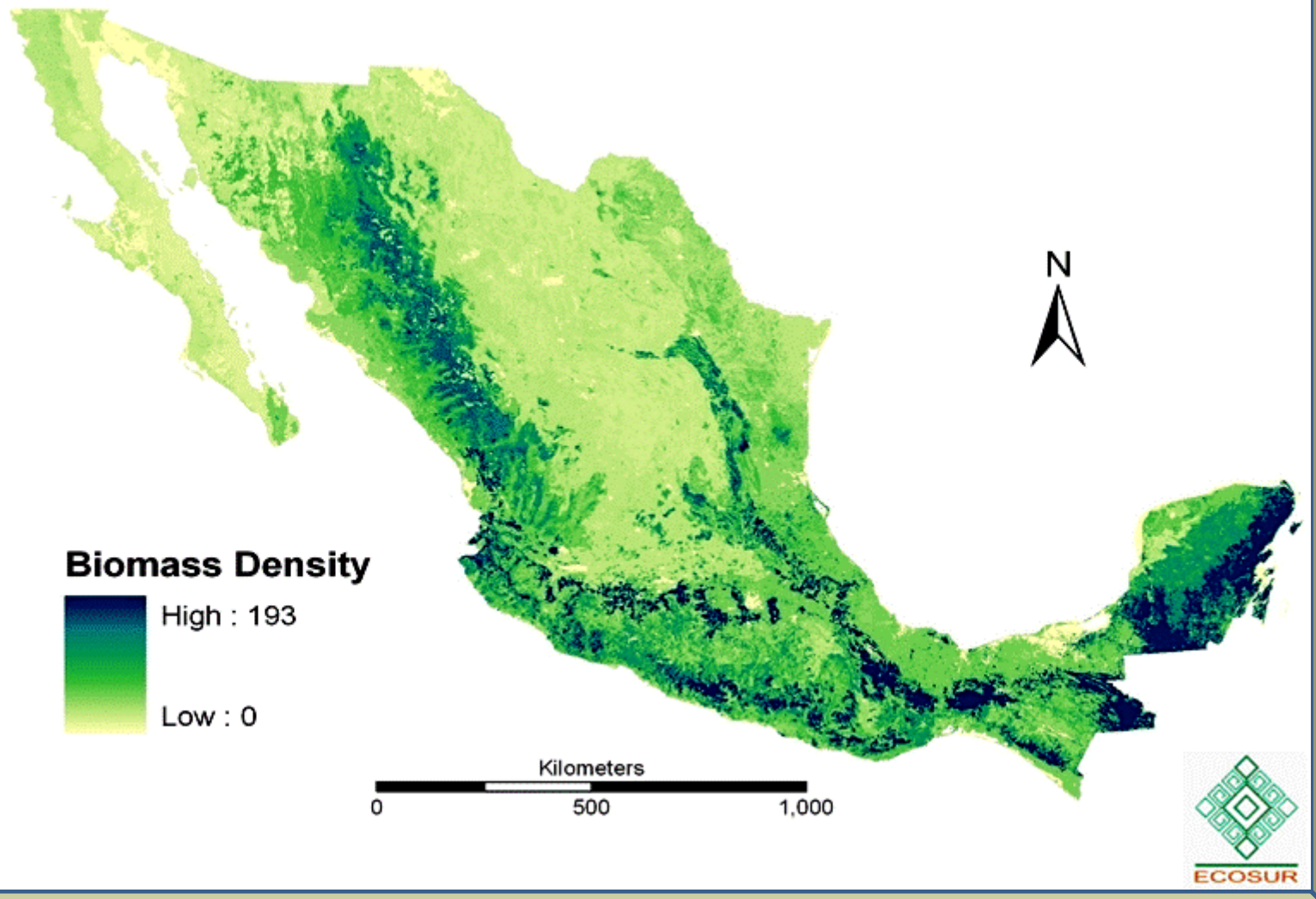
Biomass density in each forest type



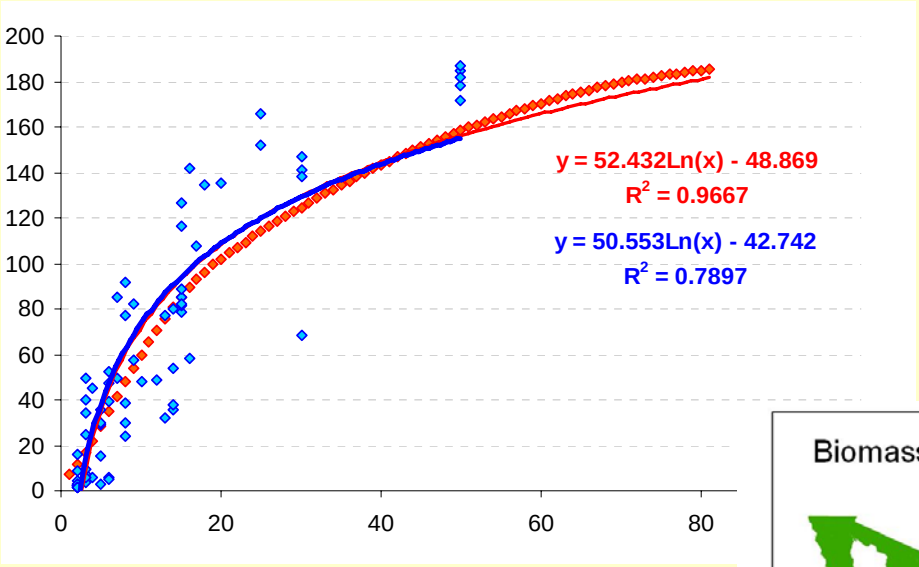
Biomass densities at the state level



Biomass density map derived from LU-map and Forest Inventory plots

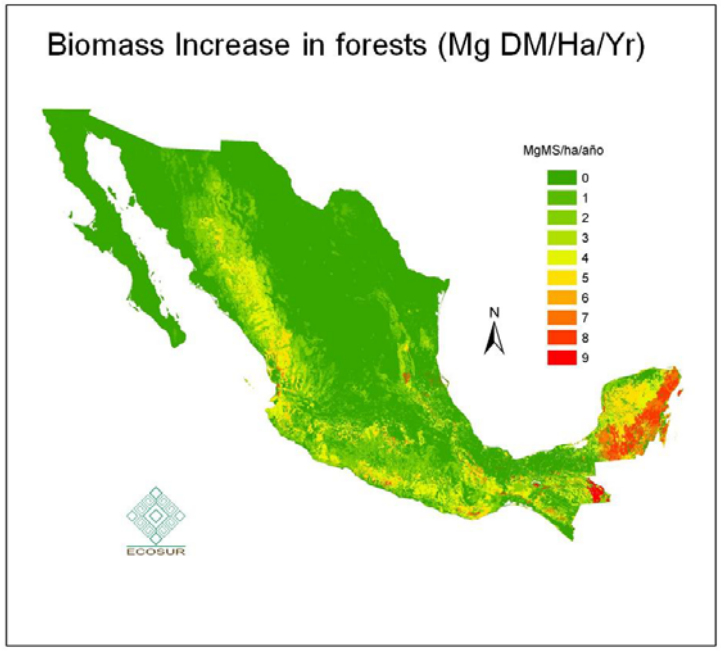


Stock change:



Methodologies to estimate growth

- Chronosequence
- Growth ring analysis
- Permanent monitoring plots

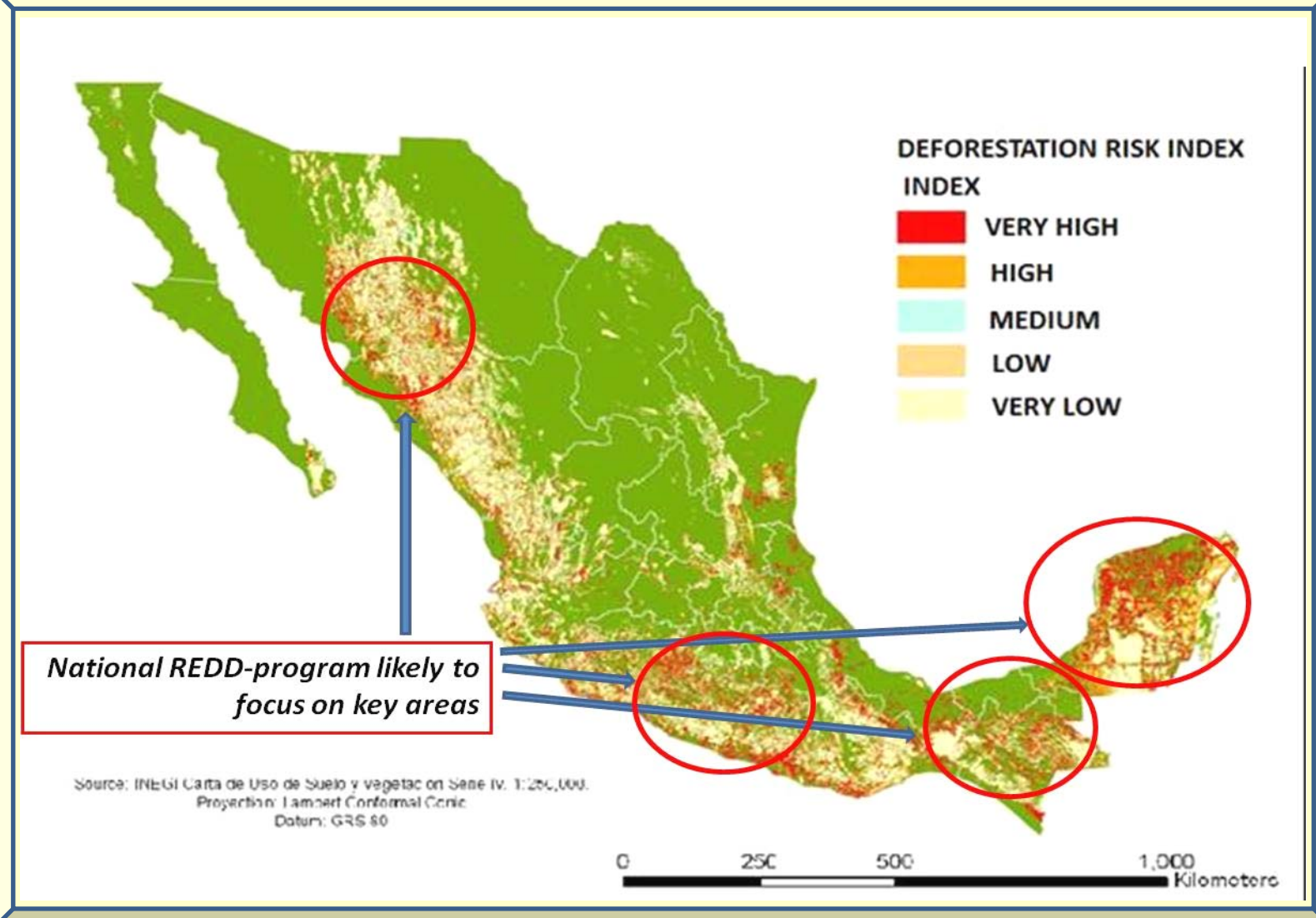


Impact of forest managment and conservation on rate of deforestation

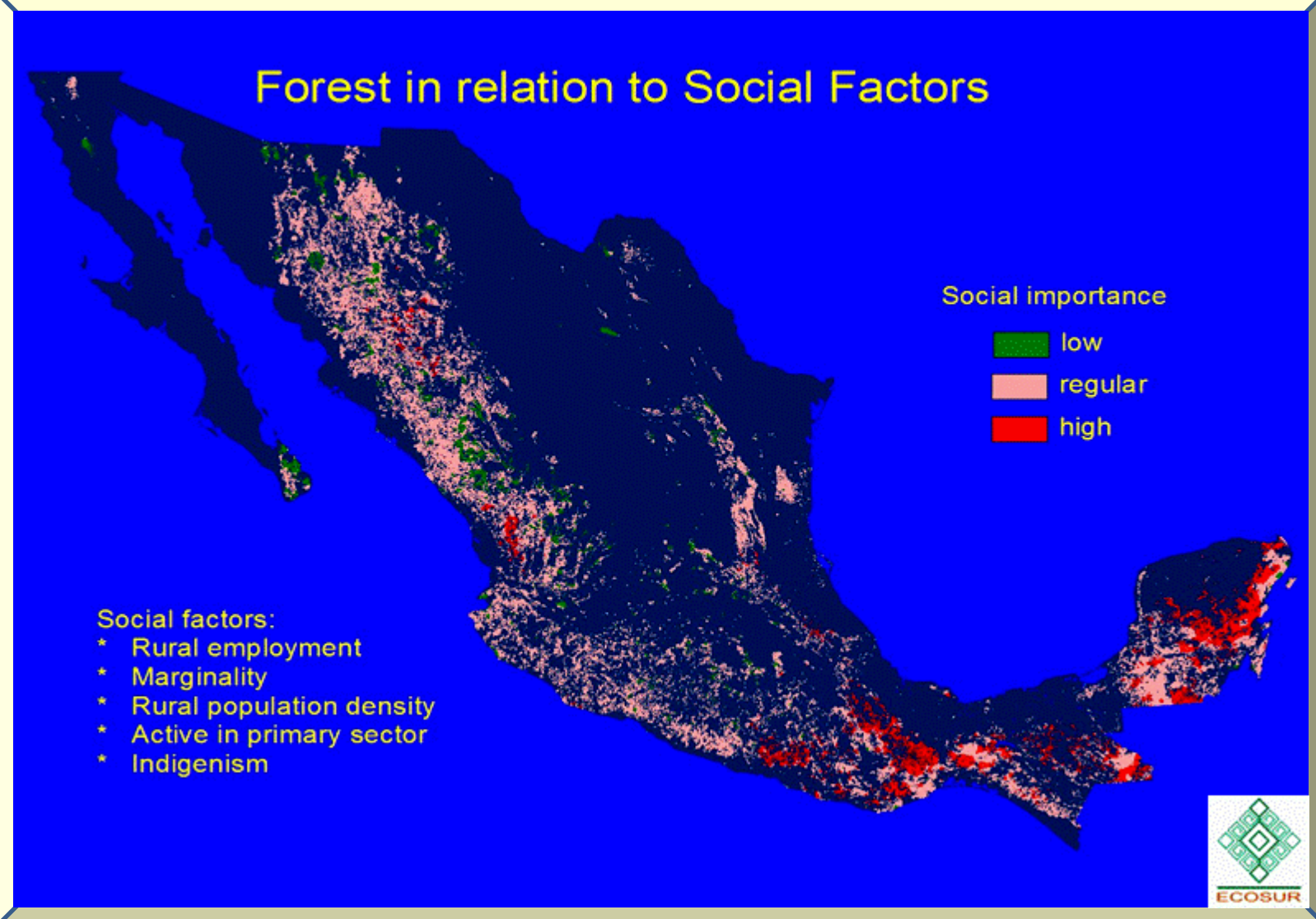
Area changed from forest to non-forest (in %)	**14.0%**
Change forest-nonforest without mgmt	**15.4%**
Change forest-nonforest with mgmt	**10.4%**
Change forest-nonforest without cons	**14.5%**
Change forest-nonforest with cons	**8.6%**
Change forest-nonforest with cons without mgmt	**10.1%**
Change forest-nonforest with cons with mgmt	**5.0%**

ECOSUR

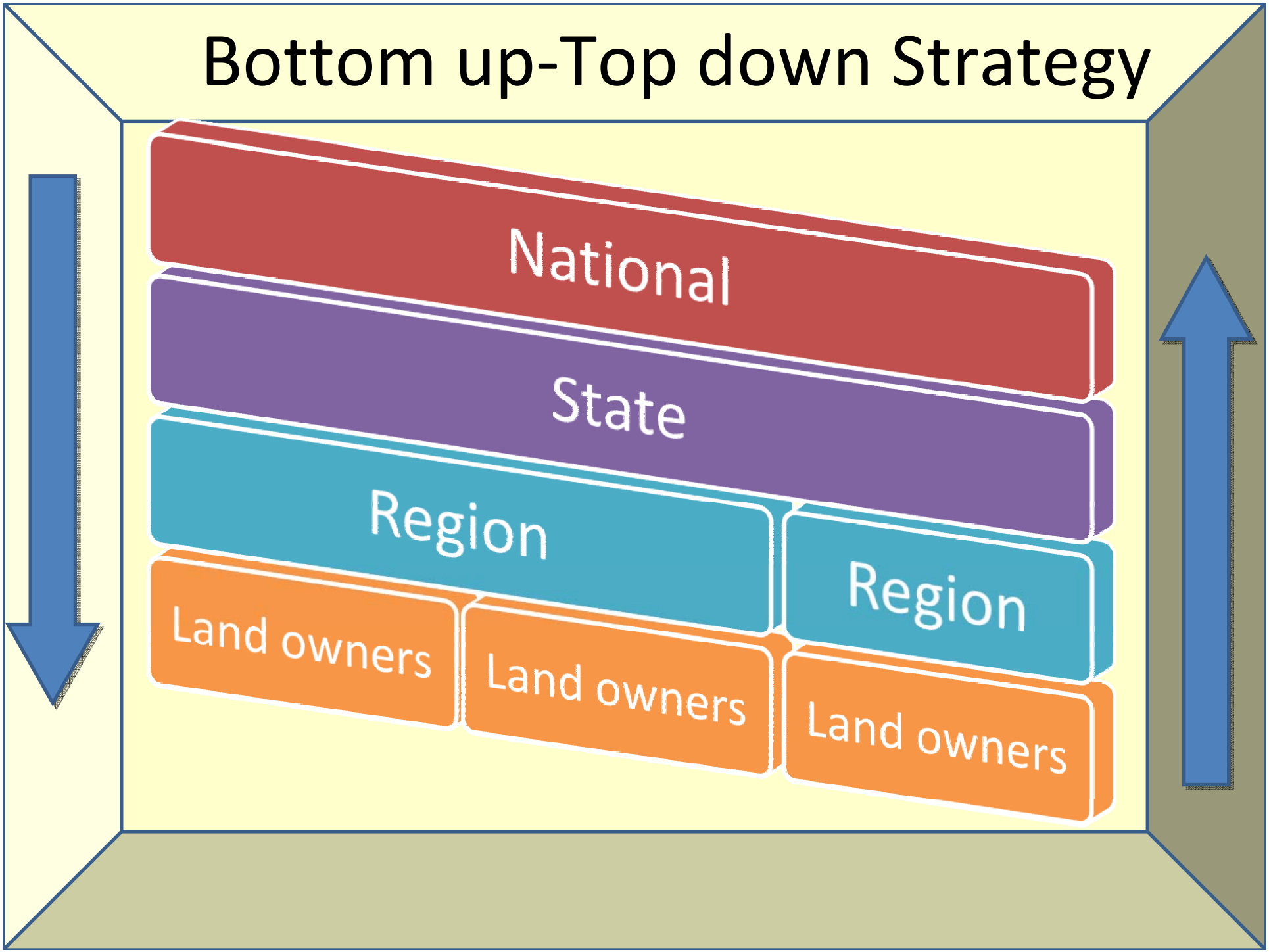
Forest areas that are under high risk due to drivers



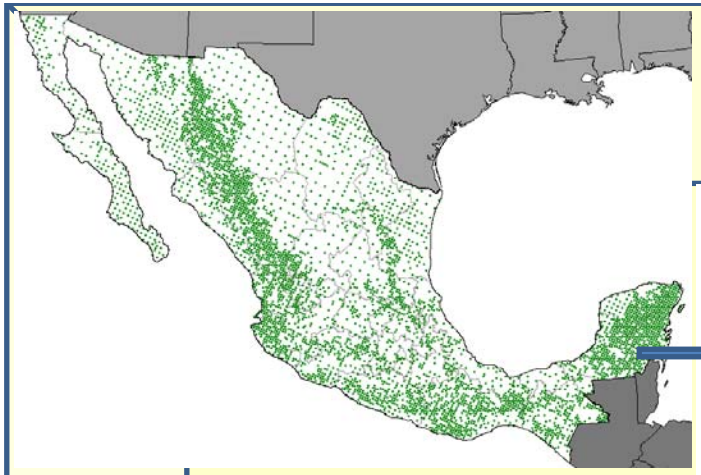
Forest in relation to Social Factors



Bottom up-Top down Strategy



Scaling of RES, MRV and REDD+ strategies

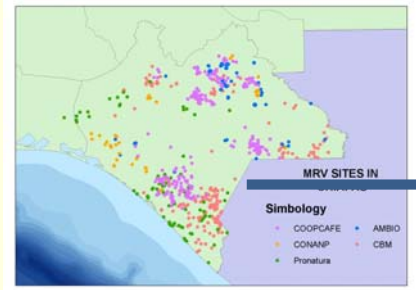


IMPLEMENTATION STRATEGY (MRV)

NFI → NATIONAL

State → CHIAPAS

Regionalization (sub-basin/municipality)

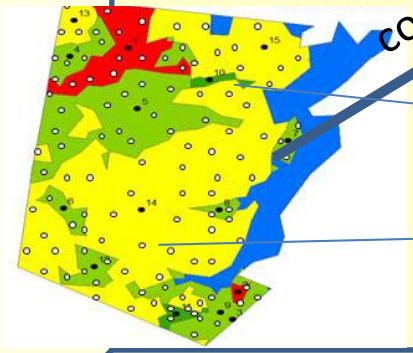


NGOs → Organization 1 of the Región A ..... Organization P of the Región M

A1 A2 ..... An

M1 M2 ..... Mn

Properties (collective or private o federal)

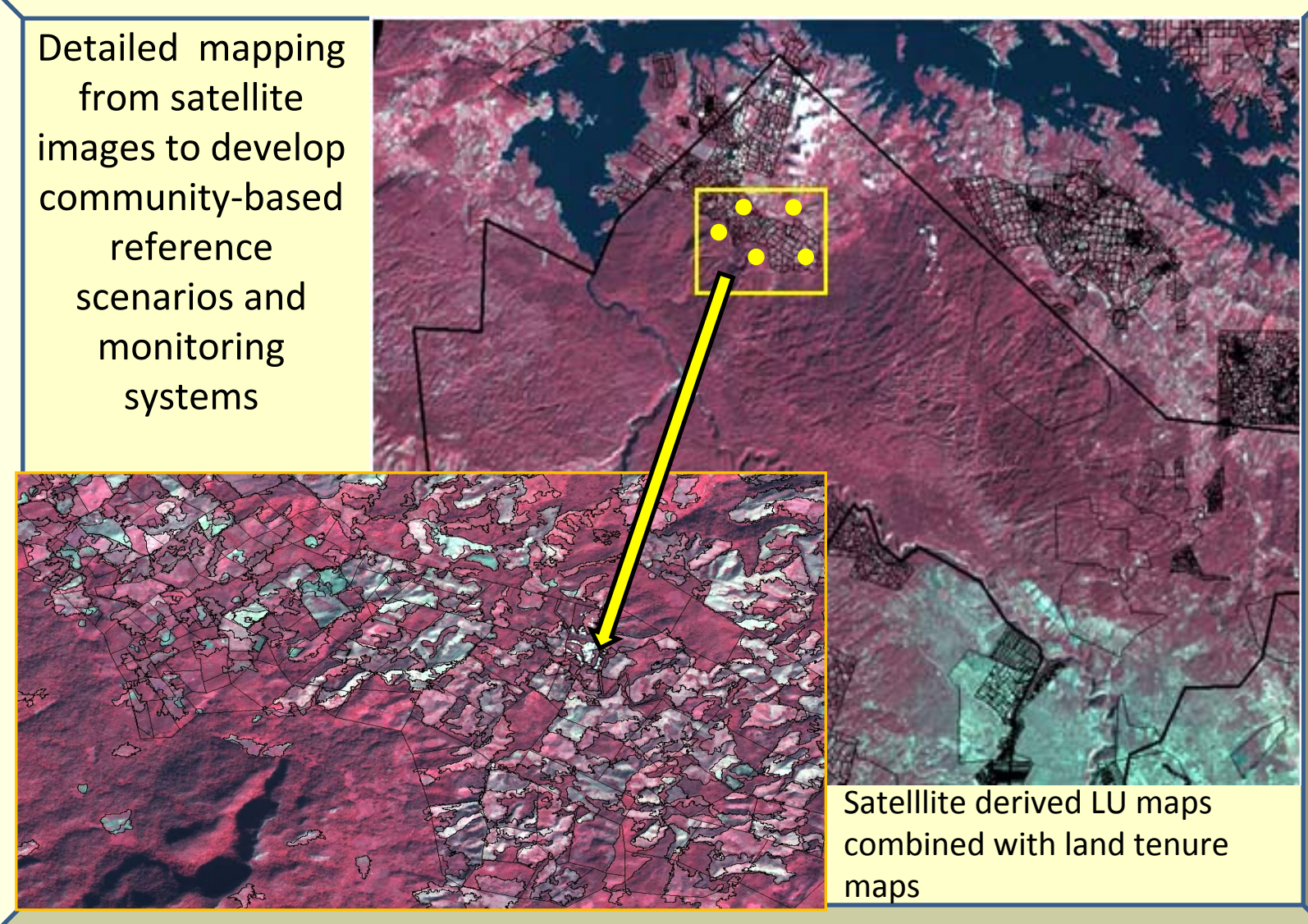


community → Inventory plots

Rapid appraisal plots (Biomass and forest structure Parameters)

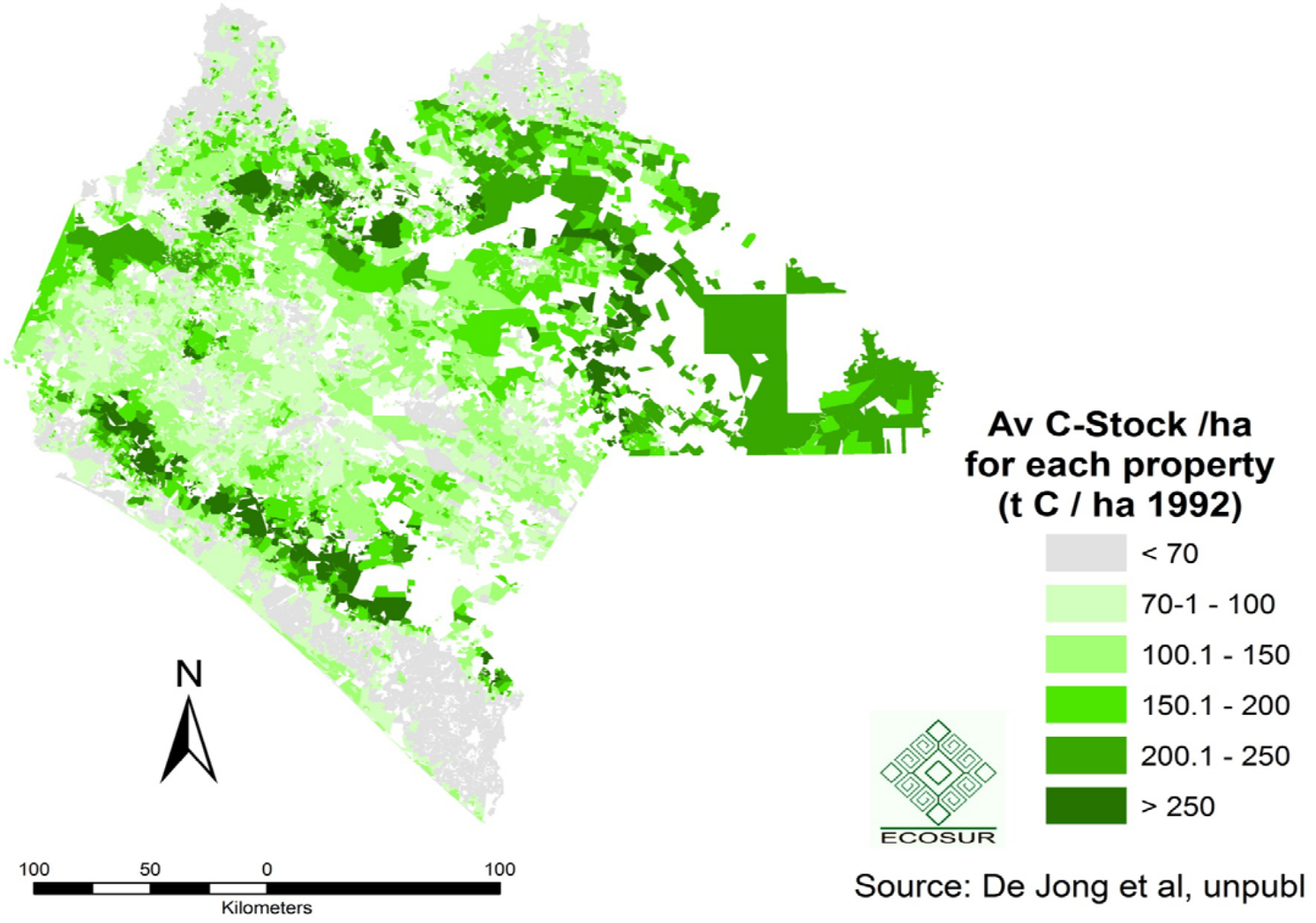
Reference scenarios at the scale of communities

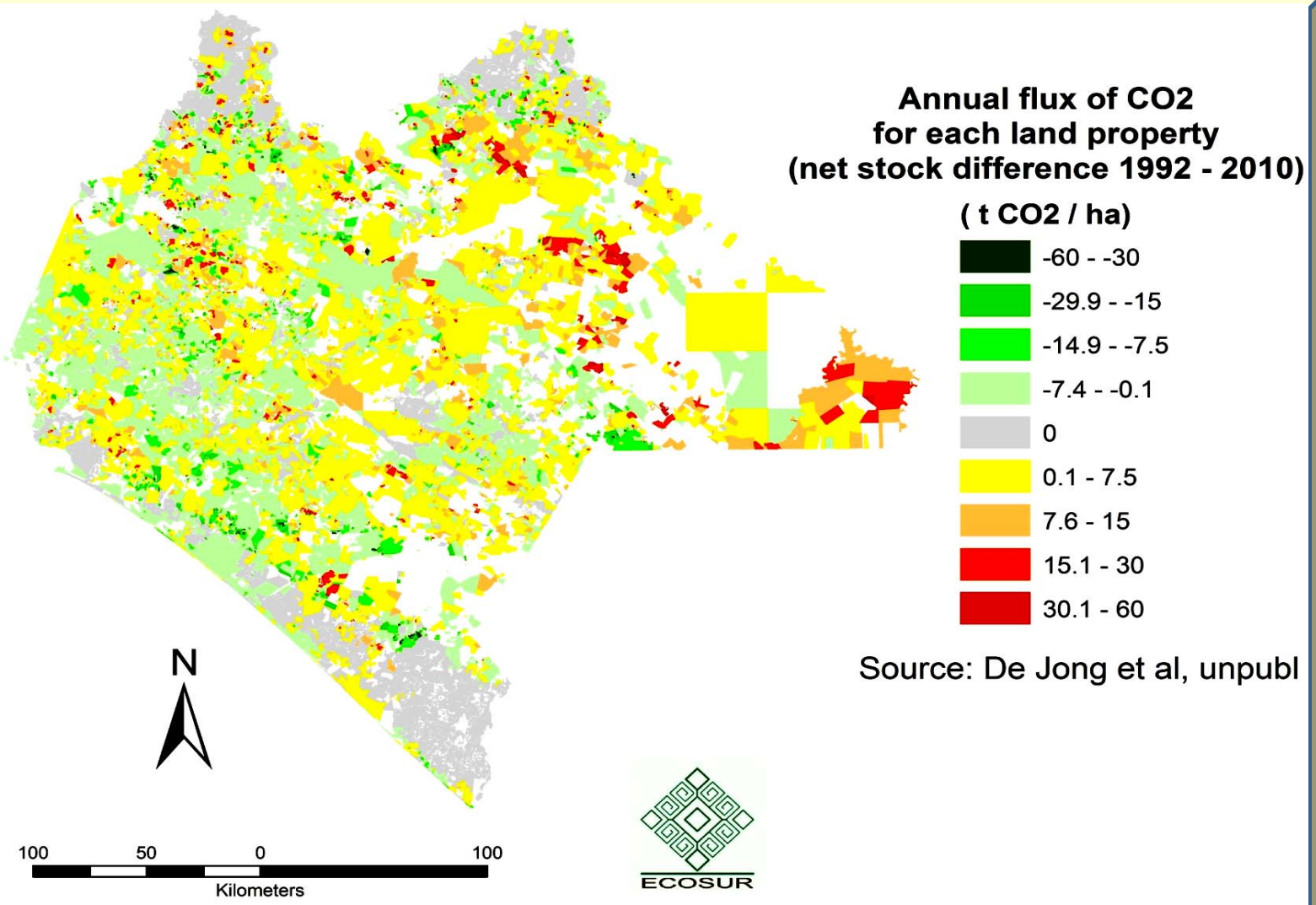
Detailed mapping from satellite images to develop community-based reference scenarios and monitoring systems



Satelllite derived LU maps combined with land tenure maps

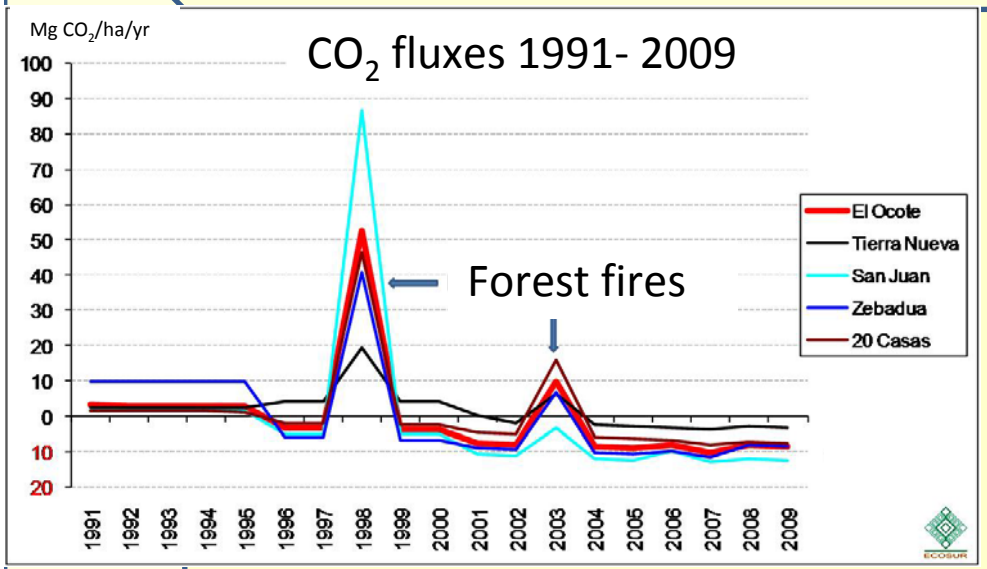
Reference Emission Scenarios at the community level




Annual flux of CO2
for each land property
(net stock difference 1992 - 2010)
(t CO2 / ha)
-60 - -30
-29.9 - -15
-14.9 - -7.5
-7.4 - -0.1
0
0.1 - 7.5
7.6 - 15
15.1 - 30
30.1 - 60
Source: De Jong et al, unpubl
N
100
50
0
100
Kilometers
ECOSUR

Proposed accounting system

Reference Emission Scenario



Community 5-year LU Plan

	Uso actual					
Uso futuro	Acahual	Agrícola	Cafetal	Enriquecido con árboles	Potrero	Selva
Acahual	30.75				2	
Acahual mejorado	1					
Agrícola	43.25	54		0.25		
Agrícola (café abono)	3.5	3.5				0.5
Cafetal	5	1.5	30.31		1	
Enriq. con árboles	0.7			3	1	
Enriq. con chapaya	0.25				3	8
Potrero	1	0.5		1	63.5	
Selva						197.8
Total genera	85.45	59.5	30.31	4.25	70.5	206.3

REDD+ compared to Emission scenario

Community	Comm. Reference scenario (ERC)	Regional Reference Scenario (ERR)	Plan Vivo (PV)	ERC-PV	ERR-PV
Tierra Nueva	1.850	-0.273	-0.391	+++	+
San Juan Chamula	-1.146	-0.273	-0.715	--	++
Armando Zebadua	-0.306	-0.273	-0.200	-	-
Veinte Casas	0.430	-0.273	-0.997	+++	++

Fluxes CO_2/yr/ha
Red → ecosystem
Black →atmosphere

THANK YOU

bjong@ecosur.mx