Reducing Emissions from Deforestation and Degradation: Lessons learned from USG-supported programs

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Photo: Winrock International

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  - Integrated approach to forest conservation and sustainable forest mgmt that contributes to REDD
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  - Potential global adoption through similar efforts in other regions
- Indonesia: Alliance to Promote Forest Certification and Control Illegal Logging
- Winrock tools: Assess carbon impacts of Avoided Deforestation and Reduced Impact Logging in Indonesia and globally

A sustained and ongoing commitment to climate and development

- An approach which integrates climate objectives within broader development goals
- Bilateral development assistance (50 countries, \$80-\$100 million annually committed to the forest sector)
- Debt relief (TFCA agreements will generate \$135 million for tropical forest conservation in 11 countries)
- Technical cooperation and leadership



#### Principles we follow in our programs

- Multiple objectives:
  - economic development
  - governance
  - environment
- Partnership based
- Seek market-based approaches
- Ensure financial sustainability
- Results oriented



#### Guatemala: Maya Biosphere Reserve

- Located in the Petén, the largest Central American forest
- World-heritage archaeology and biodiversity
- 5 National Parks, 3 reserves, multiple-use buffer areas



Guatemala: Assessing and Analyzing for Program Design since 1987

- Biodiversity
- Forest fire occurrences
- Locations and levels of deforestation
- Mapping of forest resources and use
- Forest markets and trade
- Governance and policies
- Community capacities and needs



## Guatemala: A multi-faceted design

- Parks in Peril program strengthens National Council of Protected Areas (CONAP) to manage protected areas
- Cooperation between fire experts in US and Guatemala to strengthen fire management capacity
- Assistance to community groups to manage commercial concessions and to prevent forest fires
- Establishment of FORESCOM: a broker for community enterprises

#### Guatemala: Monitoring for many objectives

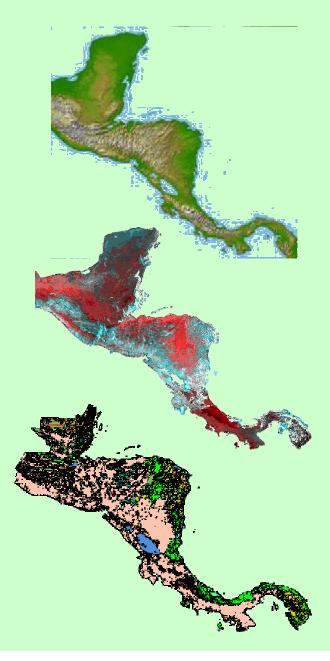
- Monitoring of income generated, new policies implemented, hectares under improved conservation, hectares under SFM
- Major results:
  - Communities obtained a price premium for certified wood
  - Forest fire incidence reduced in project areas
  - Adoption of national Forest Management and Non-timber Products policies



# SERVIR: Adding carbon and LULUCF

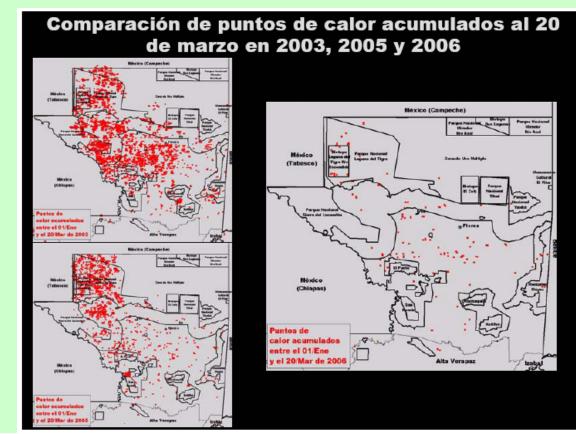
#### Inventory components

- Provides capacity for Central American GHG inventories including LULUCF
  - Land classification mapping based on MODIS to track changes in land use, including deforestation (consistent with GPG 2003)
  - Research and use of more appropriate carbon factors
- Ground-truthing of MODIS maps
  - Consultations with local experts found some errors in land classification – reinforced that ground-truthing is essential
  - New project to refine the maps through targeted ground-truthing



#### SERVIR: Capacity to predict and fight forest fires

- Historical comparisons provide feedback for project planning and raw data for calculating carbon emission trends
- Daily hotspot mapping allows rapid response



Indonesia: Alliance to Promote Forest Certification and Control Illegal Logging

- A partnership between USAID and WWF and TNC, mobilizing more than \$24 million over 5 years
- Ties into the Global Forest and Trade Network which includes producers and buyers of sustainably produced forest products
- Goal to increase the percent of Indonesian timber exports that are legal and third party certified



#### Indonesia: Assessment for a market-oriented design

- Assessment of the scale of illegal timber, the market for certified and legal wood, causes of illegal logging, relevant national and international policies
- Increase supply of legal timber in Indonesia, boost demand for that timber in East Asia, Europe and North America, and link buyers to sellers
- Develop legality standard and log tracking to support legal trade



#### Indonesia: Monitoring for adaptive management

- Indicators include:
  - % volume of Indonesian exports that are verified legal wood / third party certified
  - Hectares of High Value Conservation Forests protected
- Markets not enough: policy framework is essential
- Collaborate with local governments on land use planning and with national government on legality standard
- Alliance expanding pilot log tracking to 8 concessions in order to inform possible national system

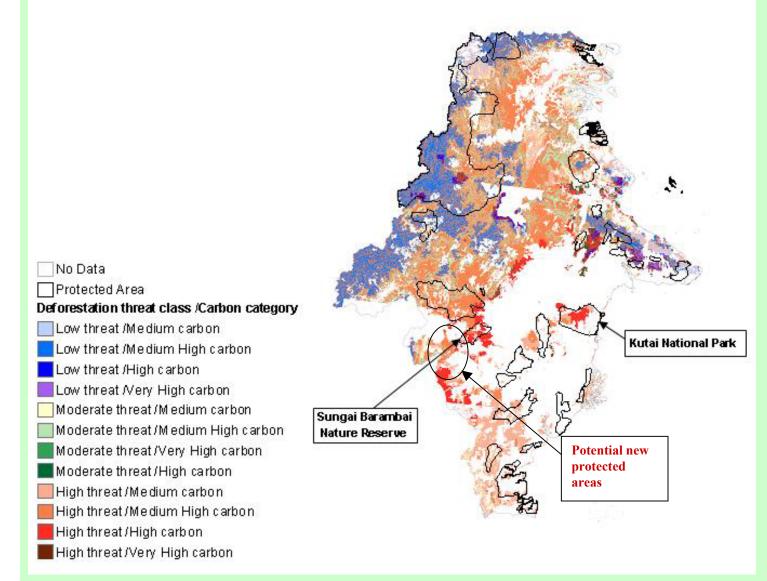


# Calculating the carbon benefit of avoided

#### deforestation

- Winrock partner first compared land cover maps between two periods
- Determine what deforestation drivers best predict the changes
  - Main drivers in East Kalimantan, Indonesia are distance from sawmills and previously deforested areas, and the elevation above sea level
- Use drivers to create map of future deforestation threat
- Combined with map of carbon biomass, allows calculation of the carbon benefit of a project
- Better planning for location of protected areas or other interventions

#### East Kalimantan: Potential conservation priorities



Areas that could create high carbon benefits, if they were protected, were identified as being under high threat and having very high carbon stocks

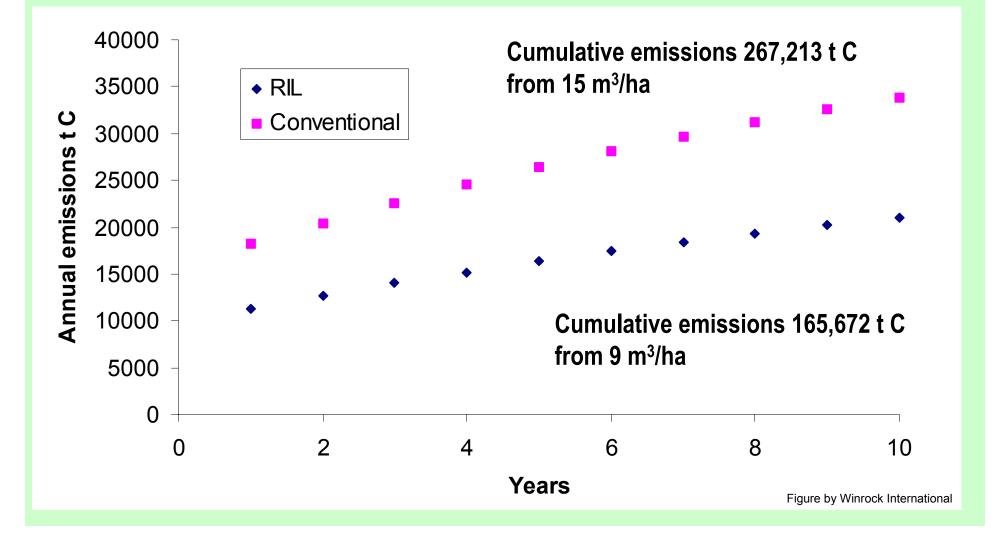
All of the remaining forest in Kutai national Park and Sungal Bararbal Natural Reserve are under high threat for deforestation and have medium high to very high carbon stocks

Figure by Winrock International

**Reduced Impact Logging tool** 

- Winrock collected carbon impact data of logging practices in Republic of Congo, Brazil, Mexico, Indonesia
- Results show that RIL significantly reduces carbon emissions
- These models are now being expanded with more region-specific data to create a global carbon impact estimation tool for all USAID SFM projects

# Simulation of changing from conventional to RIL in Republic of Congo forest



#### Conclusions

- USG is committed to working with other countries to combat deforestation
- USG is a leader in solving the technical challenges of documenting the carbon emissions benefits of forestry activities
- Information about the carbon impacts of our programs will be fed back into project design
  - Combating deforestation and accounting for the associated carbon benefits are complex, multi-faceted tasks

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