

Presentation given at the Katoomba XV Meeting entitled

Integrated Solutions: Water, Biodiversity and Terrestrial Carbon in West Africa

October 6-10, 2009

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Hosted by:

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and the Nature Conservation Research Center



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Makira Forest Protected Area, Madagascar: linkages between biodiversity and REDD



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**West Africa Katoomba Meeting
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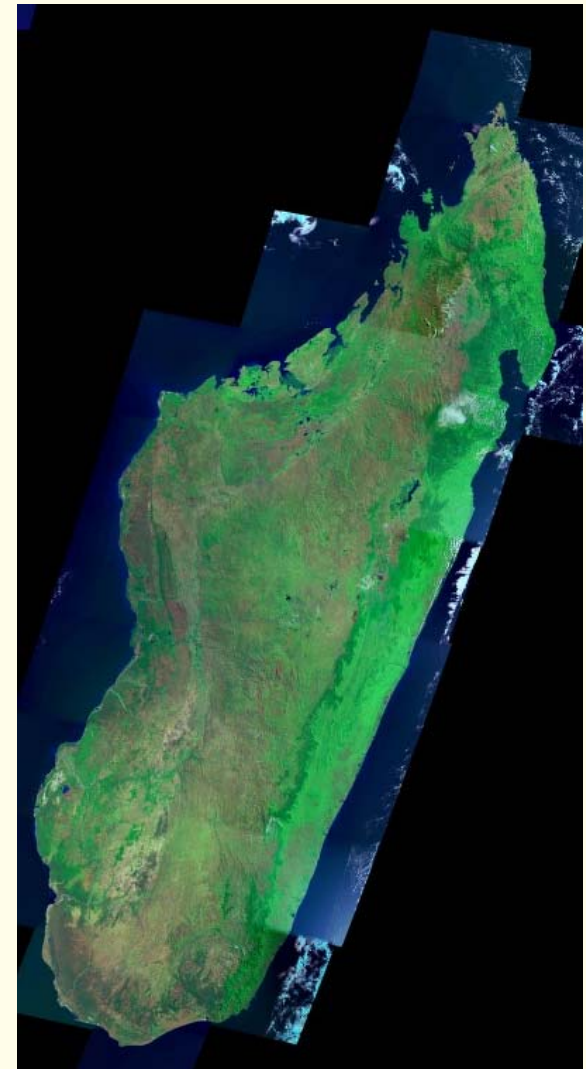
Conservation in Madagascar: challenges

A biodiversity **hotspot** country (very high diversity, endemism, and threats): more than 80% of flora and fauna are endemic

Environmental **degradation** due to deforestation and slash and burn practices: 15% of forest remaining

More than 70% of the population of 18 million below the **poverty** line: 75% in rural areas

A **challenging** combination of population growth, resource dependence to meet subsistence needs, and global biodiversity importance.





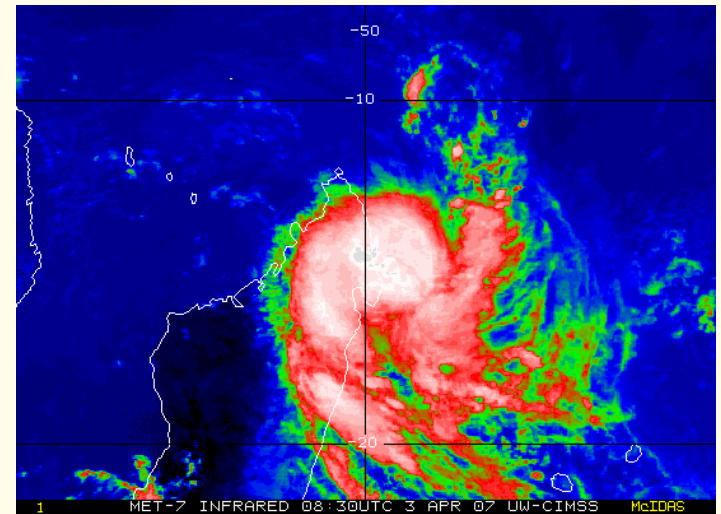
Conservation in Madagascar: climate change

90% of Madagascar's GHG emissions are from deforestation driven by unsustainable land use practices

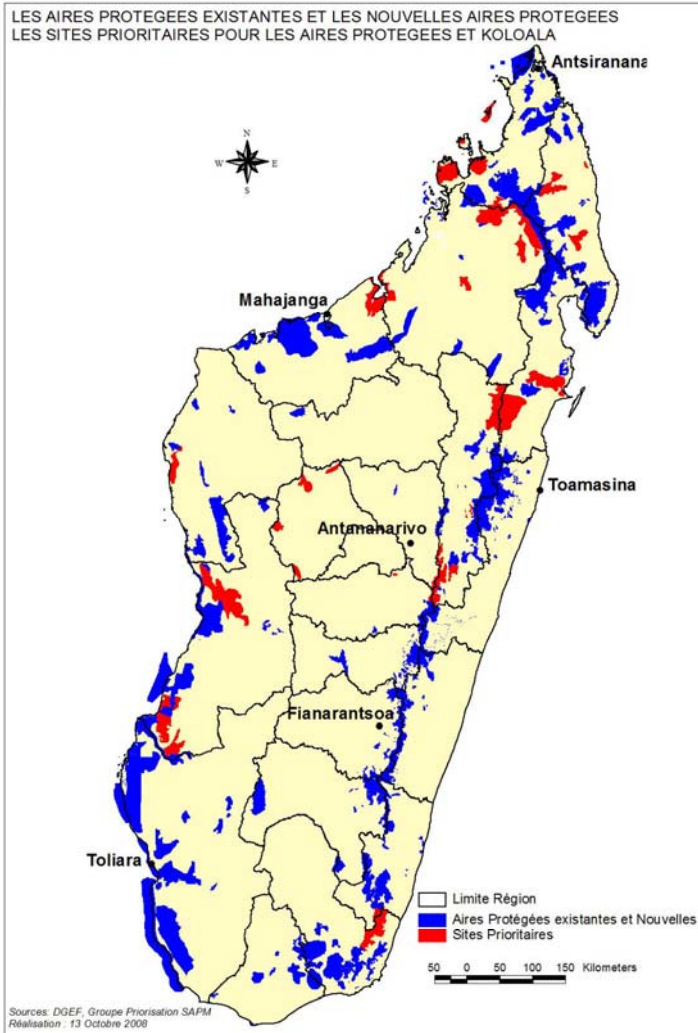
A 0.65°C increase in average annual temperature

A reduction in annual days of rainfall equivalent to 1 day

An increase in frequency of violent cyclones



Ensuring community involvement in governance and resource management



The government is committed to a new system of protected areas that better integrate communities through new governance structures

- PA limits, internal zoning and resource use rules defined in public consultation at local levels - **Up to 25% of new PAs can be zoned to allow community resource use**
- Forest resource-use rights are transferred to community associations (COBAs) by the state - **COBAs involvement in PA management structures**
- Promotion of alternative livelihood revenue generating mechanisms and approaches: ecotourism, artisanal products

Communities derive long term benefits from secured access, sustainable use, limited sale of resources



Multiple benefits: subnational projects addressing national interests

Madagascar has engaged in the FCPF process and is working toward the development of a national REDD strategy

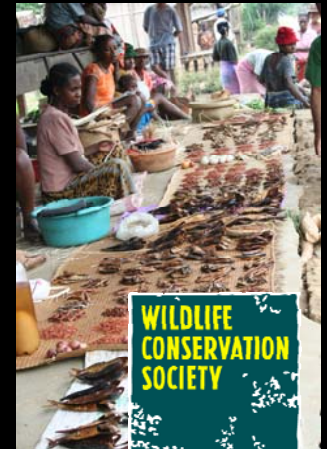
- Potential model for conservation-related carbon offsets
- Implement long-term funding instrument for community integrative biodiversity conservation
- Achieve social and conservation-related benefits in addition to carbon emission reductions
- Provide immediate benefits for communities adjacent to sites of high conservation value



Makira Forest Project Landscape



- Largest intact eastern rainforest
- Connectivity
- Exceptional biodiversity
- Ecosystem services
- Watershed protection
- 300,000 inhabitants
- Subsistence agriculture & cash cropping
- Dependence on forest products



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Makira Landscape: conservation threats

- Slash/burn agriculture (Tavy)
- Hunting: lemurs, birds, bats, carnivores
- Over-exploitation of forest resources
- Illegal logging (rosewood and ebony)
- Illegal artisanal mining (quartz, gold)
- Burning of forest for cattle





Engaging communities to ensure permanence

Establishment

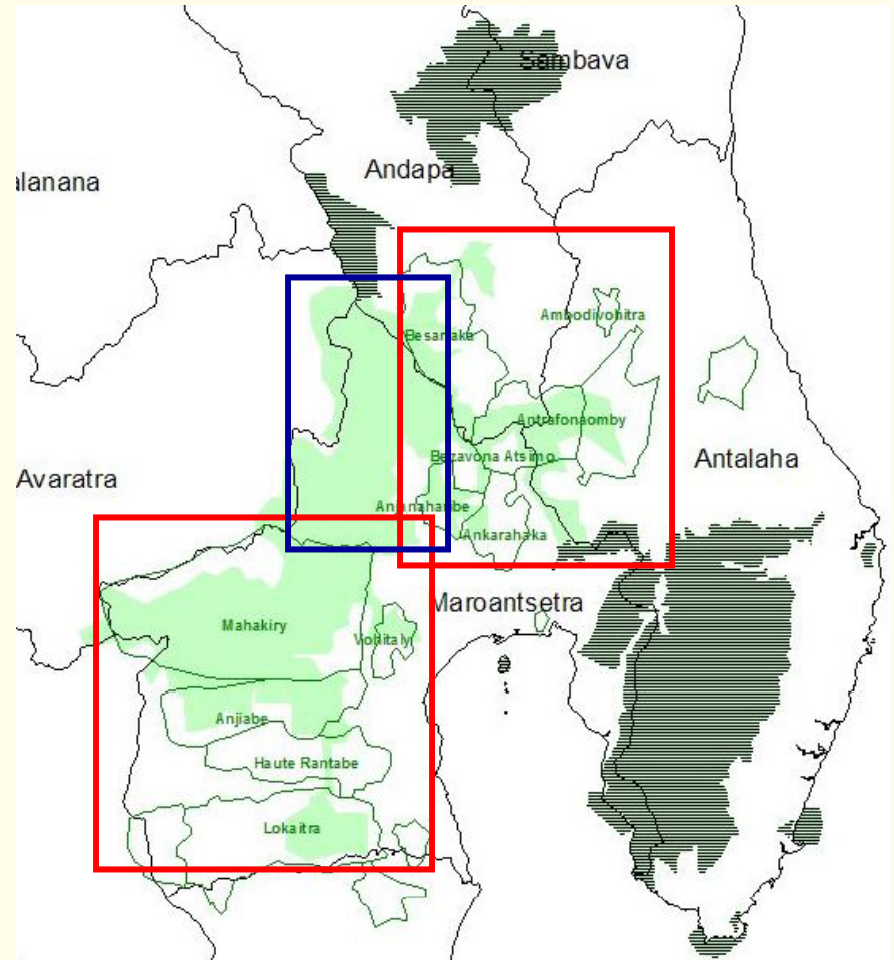
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- 2004: Avoided Deforestation feasibility study
9.2 million tons CO₂e over 30 yrs
- 2006: Pilot program to market 40,000 ton CO₂e
- 2009: 697,893 ha total
374,470 ha protected area,
323,383 ha zone of community mgmt
permit for permanent status

Community Engagement

- 2009: 20 sites, 35 villages, +13,000 inhabitants, 47 associations, +50,000 ha
- 2013: 86 sites, +100 villages & 306,230 ha forest under community management

Governance

Collaborative co-management with federation of local community associations (COBAs)





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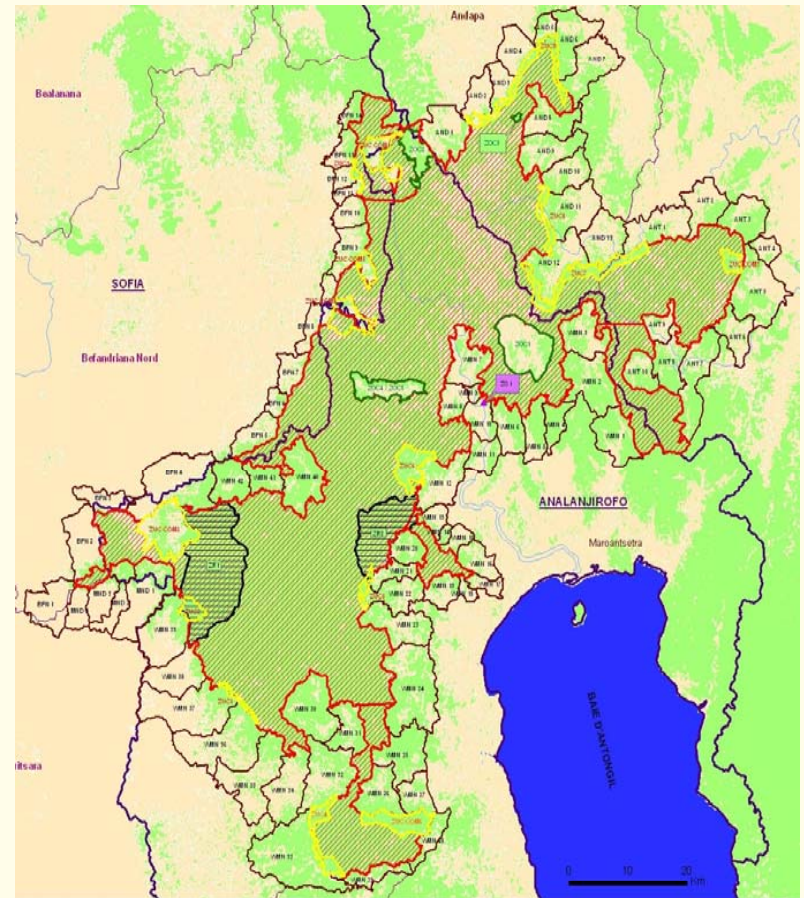
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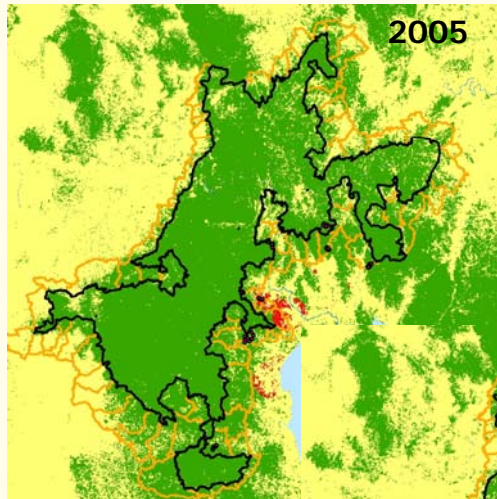
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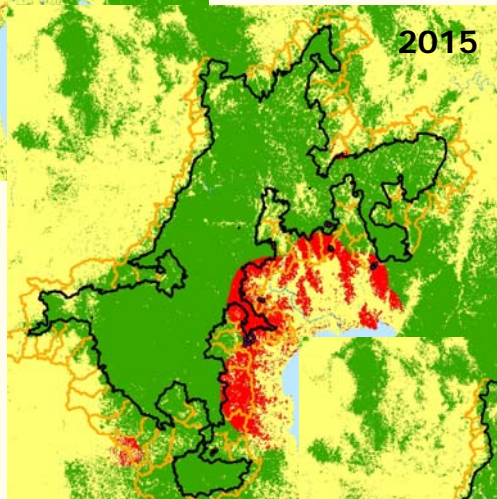




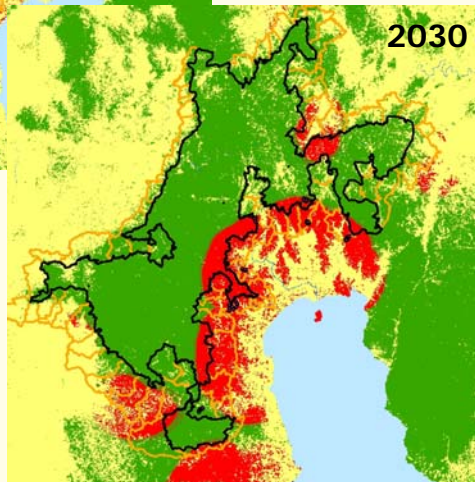
Mechanisms and Standards for REDD



2005



2015



2030

Updating feasibility study for VCS and CCBA certification

VCS for baseline assessment and monitoring protocols

CCB certification for design standard ensuring investors of multiple benefits

PDD to be completed by end 2009



Finance and incentives for multiple benefits

Conservation finance: source of revenue used to pay for forest conservation activities

WCS signs an agreement with GOM to market Makira Carbon 9.1 million tons to 2033 (current contract thru 2012).

Forest Carbon

50% of revenue to communities

25% of revenue to PA mgmt

15% of revenue to GOM

10% of revenue to Marketing, Funds mgmt, 3rd party monitoring



Conservation incentives: provided to stakeholders to conserve forests

Direct payments

In-kind support

Revenue for site management

Additional
Conditional
Measurable





Engaging communities for multiple benefits

Food security and subsistence needs

Improve rural agriculture infrastructure

watershed management
technical training
improved techniques

Activities to improve human welfare

collaboration with partner NGOs
improved access to services

Improve community resource stewardship

Expand network of community resource management sites

Focus on continued capacity building of these communities

Community-based ecological monitoring program

Economic alternatives and sustained revenue generation

Conservation Carbon

Community ecotourism

Partnerships

Organic product sales

Micro-credit programs





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Conservation thru successful community engagement: lessons learned

- Forest protection activities for Makira have shown success: annual deforestation rates decreased from 0.19 to 0.11
- Forest carbon offsets provide long term funding & help leverage sustainable practices at the site level: 40,000 tons CO₂e retired (plus additional 100,000 currently)
- Communities are empowered through resource rights and governance structures : address issues of tenure, equity to reduce risks of impermanence
- Incentives to communities lead to improved management of resources that benefit others : addressing leakage and reducing impermanence
- Site level approaches can inform national level strategy : forest carbon revenue distribution structure, VCS, CCB





Multiple benefits to conservation and community

The government of Madagascar is committed to a new system of protected areas that better integrate communities thru new governance structures

Integrating communities into conservation activities is critical

Community motivation will depend on recognized benefits

Benefits to communities for their management will have to outweigh opportunity costs of management





Makira Landscape: conservation targets



50% of the island's species-level diversity

- 50 of 112 palm species
- 117 reptile and amphibien species
- +100 of 203 bird species
- 22 lemur species (greatest richness of any PA)
- 7 bat species
- 7 carnivore species

