RAINFOREST ALLIANCE

Experiences in participatory monitoring with smallholder farmers

UNFCCC COP18
Doha, Qatar

Mark Moroge
Climate Program Projects Manager
Wednesday, 5 December 2012

VALUE CHAIN APPROACH

Capacity Building & Technical Assistance

Certification & Sustainability Standards

Market development & Corporate engagement

LAND USE PRACTICES **BUSINESS PRACTICES** **CONSUMER BEHAVIOR**

PERSPECTIVES ON SUSTAINABLE LAND MANAGEMENT AND COMMUNITY MONITORING

- Extensive forest inventories; aligned with day-to-day management.
- Large-scale REDD+ projects can invest heavily in MMRV
- Most challenging participatory monitoring scenarios found in complex, mosaic agroforest landscapes.

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PARTICIPATORY MONITORING AND SMALLHOLDERS (I)

WHY IT'S HARD

- Mosaic landscape, dispersed land-holdings
- Many small parcels, few large ones
- Financial incentives uncertain
- Complicated methodologies
- Long-term implementation?

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PARTICIPATORY MONITORING AND SMALLHOLDERS (II)

WHY IT'S STILL WORTH IT

- They are the land managers
- Informs local decision making
- Fosters co-ownership
- Getting REDD-ready
- Validates spatial mapping data

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GHANA: COMMUNITY, COCOA, CARBON

REDD+ Strategy:

Enable smallholder cocoa farmers to practice climate-smart agriculture; restore ecosystems, enhance remnant forest, conserve nearby forests, reduce GHG emissions.

- Build capacity for producers to achieve SAN certification, Climate module verification
- Establish "lead-farmer" program
- Develop MRV tools that are cost-effective & participatory
- Pilot use of new technology (smartphones/tablets) in the field to measure carbon at landscape level

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FIRST ATTEMPT: FARM-LEVEL CARBON PLOTS

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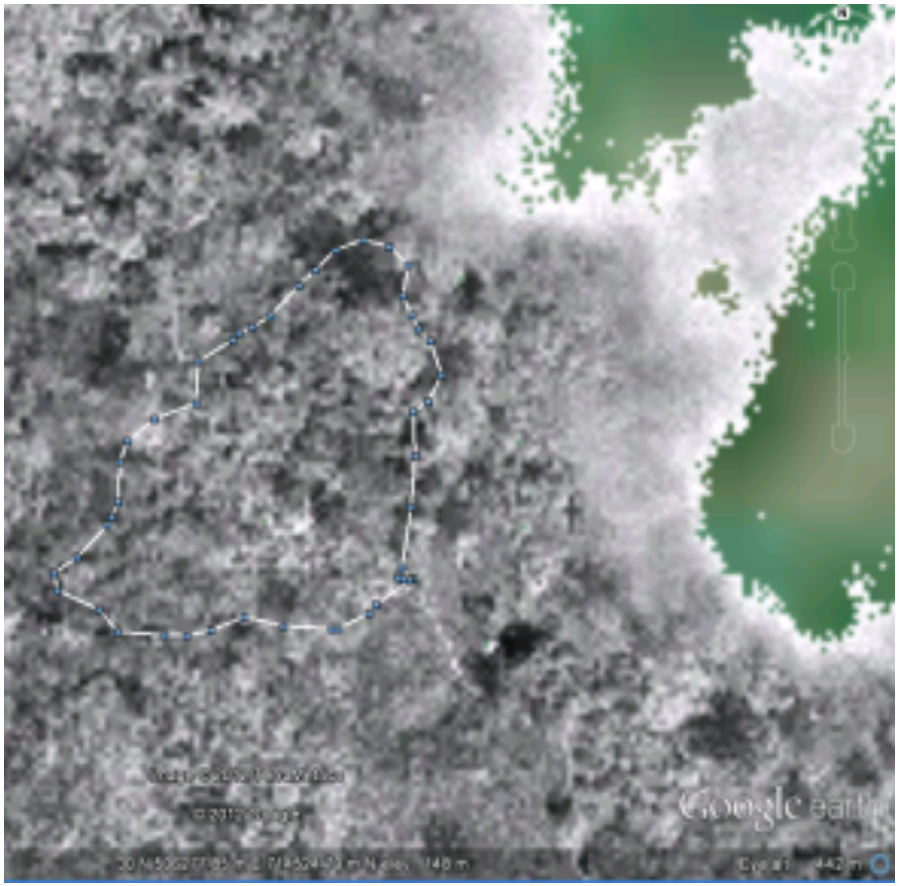
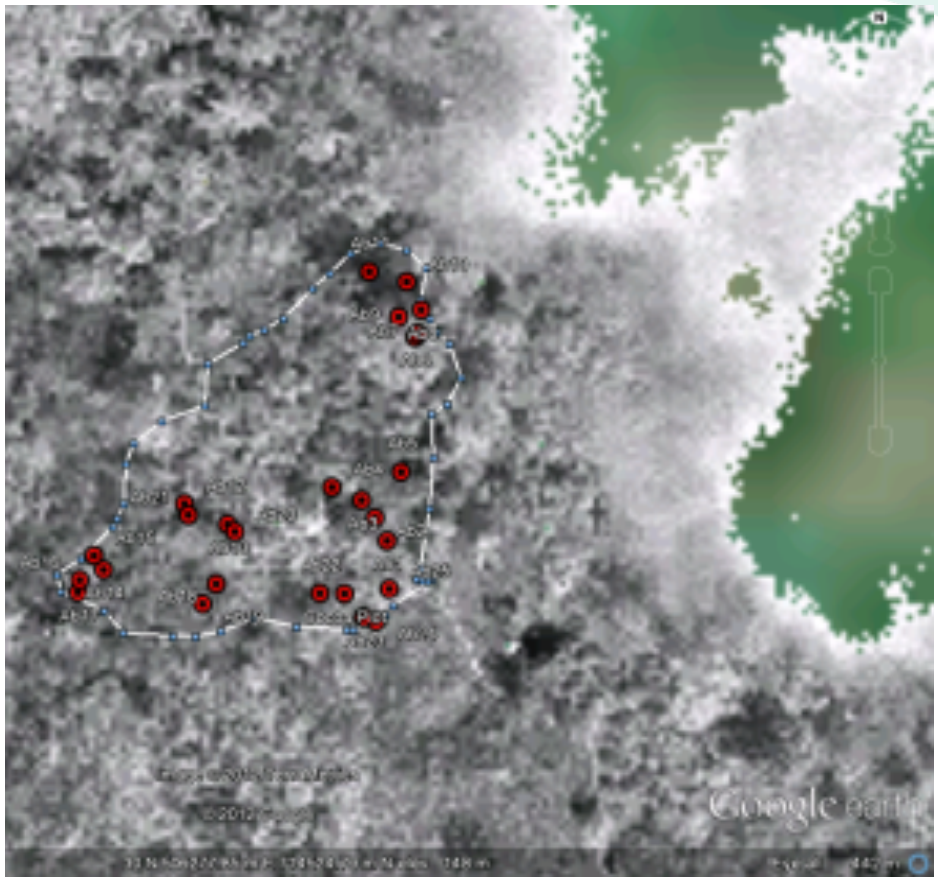
SECOND ATTEMPT: HIGH RES IMAGE ASSESSMENT





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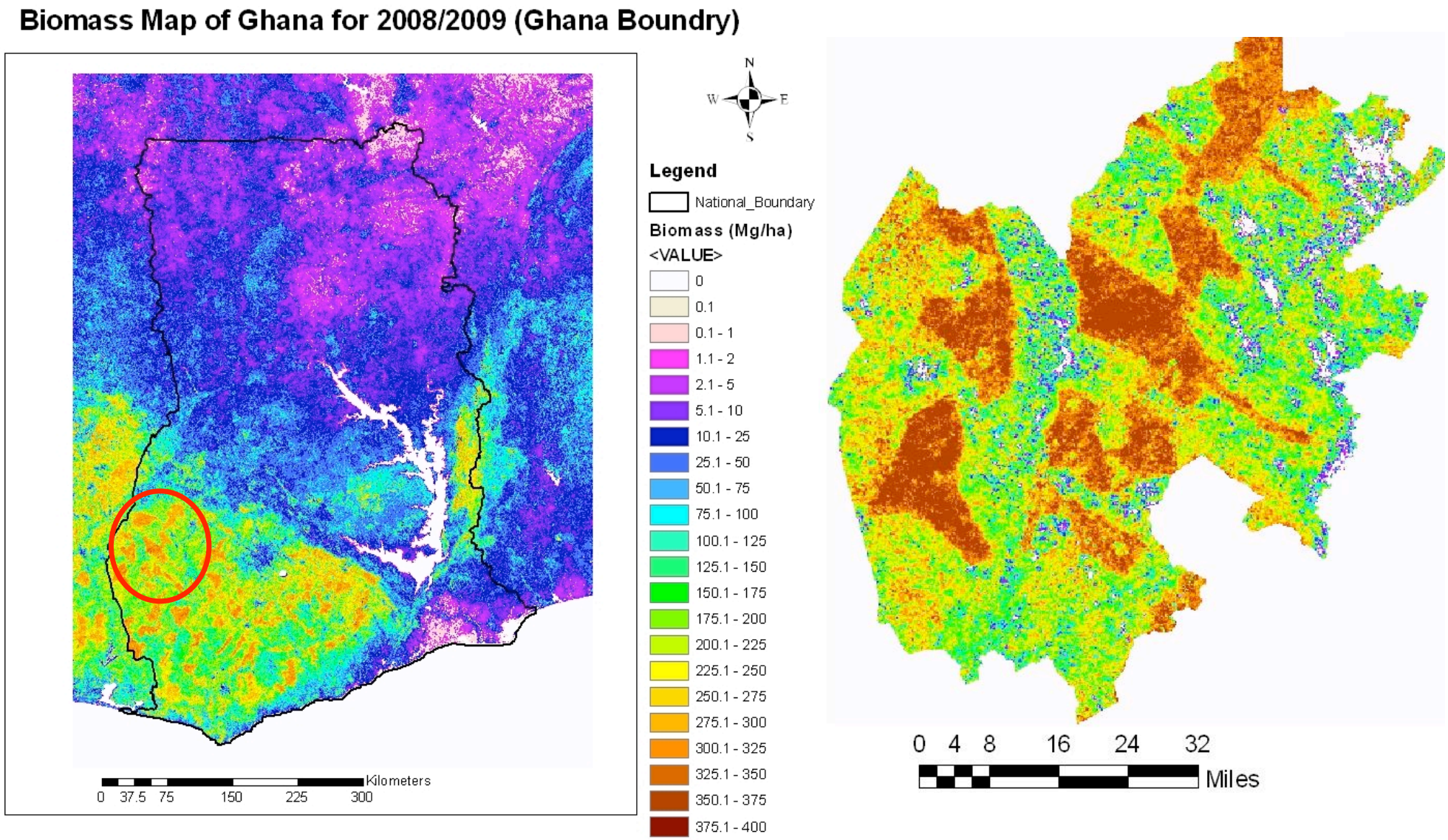
THIRD ATTEMPT: COUNTRY BIOMASS MAP



From: Nature Conservation Resource Centre, 2011

FOURTH ATTEMPT: FARM & LANDSCAPE C ASSESSMENT

Landscape Level

- Acquired high resolution imagery
- Stratified landscape and identified 8 land cover strata

Farm/Field Level

- Verify stratification in field using tablets
- Digitize farm boundaries using GPS – this information will be superimposed into stratification
- Classify strata through plot sampling
- Help farmers characterize the land on their farm (e.g. # of shade trees). Aggregate information into strata definitions.

Expected benefits

- Ability to track land-use changes over time
- Famer data can be uploaded directly into tablets and transferred to landscape level stratification
- Google Earth Engine, Outreach

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OAXACA, MEXICO: CARBON COFFEE

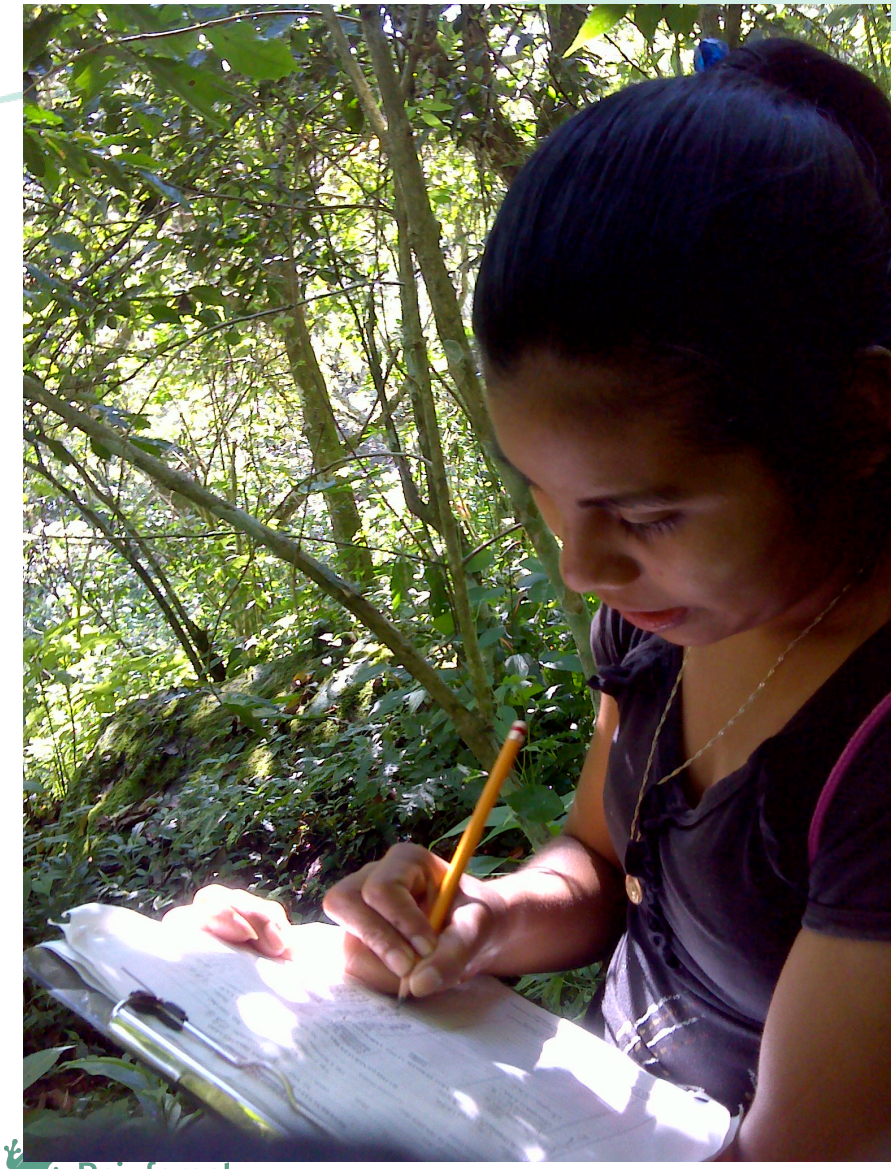
Strategy:

Restore degraded lands, reforest pasture areas, and enhance shade and improve production practices in coffee lands to enhance local livelihoods.

- Partnership with coffee buyer (AMSA), local trainer (UNECAFE), Pronatura Sur
- Carbon finance to reinforce RA certified sustainable agriculture
- Long-term capacity building to increase local ownership over time
- Participatory MRV, targets youth

- 400 smallholder farmers across 1,100 ha
- RAC certified
- Indigenous language (Chatino) is recognized as endangered by UNESCO
- One of the most impoverished regions of Mexico
- ½ of project beneficiaries/farmers are women

YOUTH COMMUNITY TECHNICIANS



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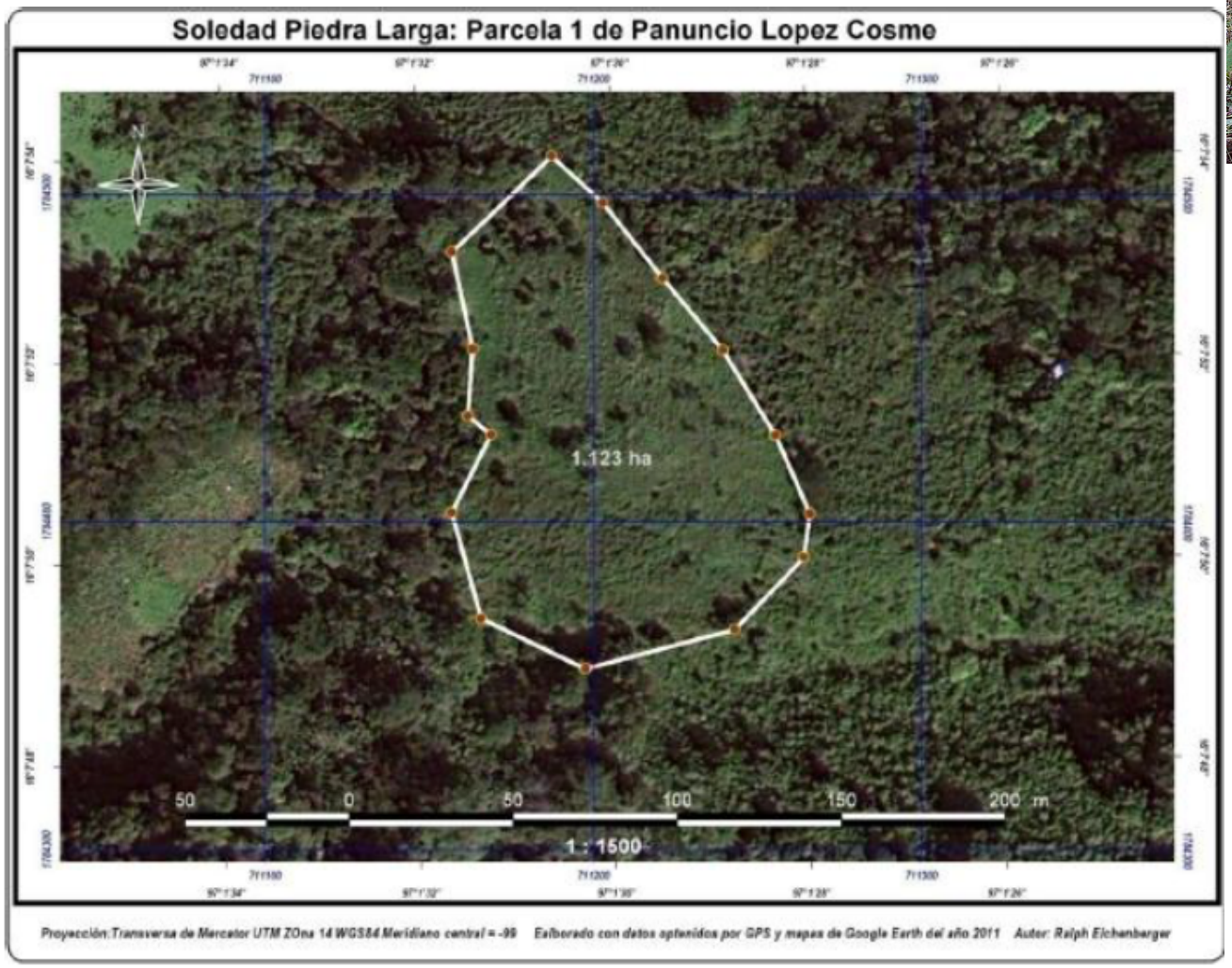
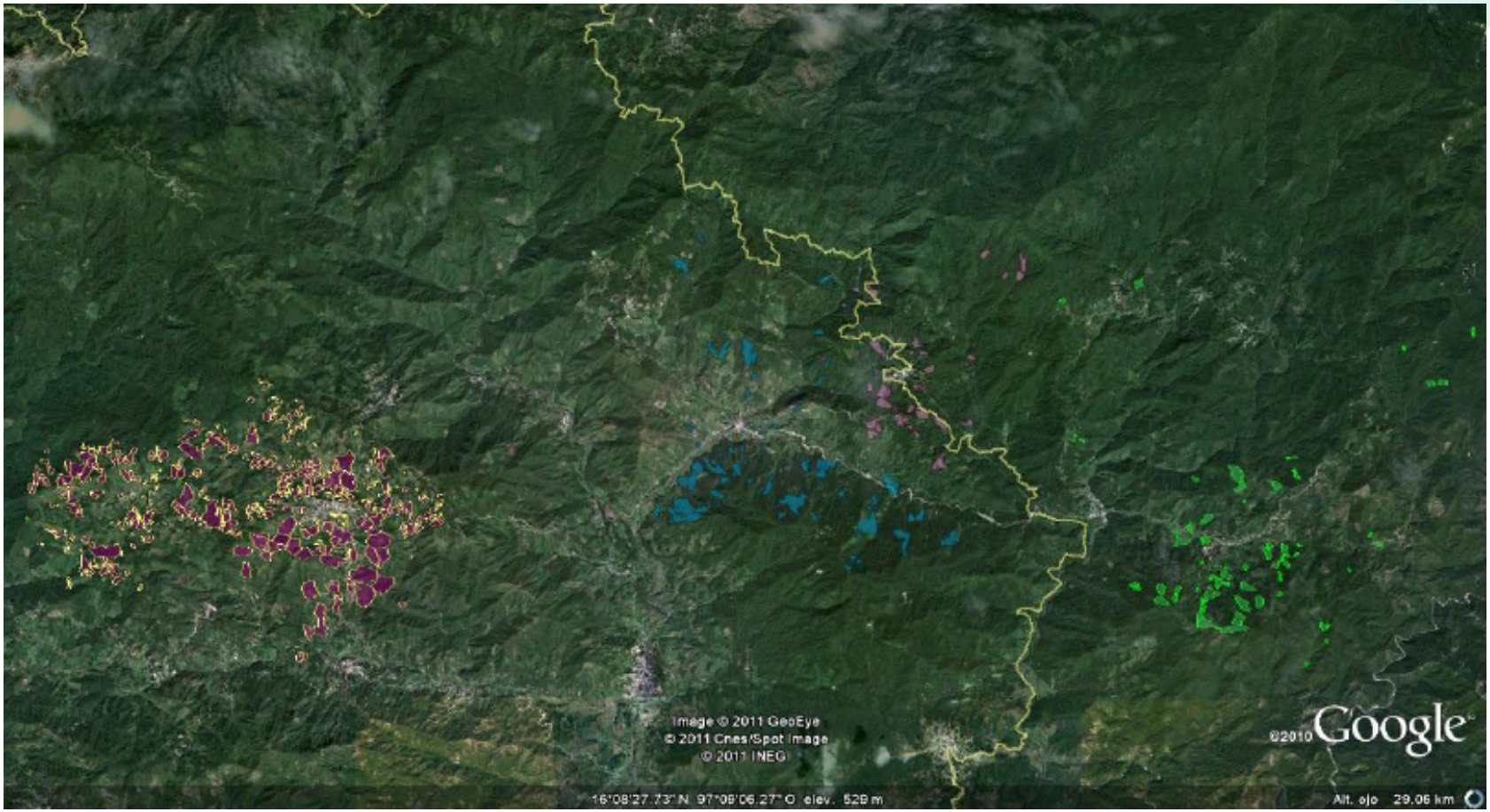
FARM DELINEATION AND GEO-REFERENCING…



…ACROSS 400 FARMS IN 4 COMMUNITIES



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LESSONS LEARNED

Challenge	Ghana	Mexico
Mosaic landscape, dispersed land-holdings	Focus carbon counting on the landscape Don't measure by parcels, but allow farm data generation	Align with existing certification monitoring protocols
Financial incentives uncertain	Direct/in-direct benefits; carbon is the co-benefit	Direct/in-direct benefits; carbon is the co-benefit
Complicated methodologies	Simplify, share the burden	Develop agroforestry methodology
Long-term implementation?	Training-of-trainers approach	Build ownership over time

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The Rainforest Alliance works to conserve biodiversity and ensure sustainable livelihoods
by transforming land-use practices, business practices and consumer behavior.

HARMONIZING MRV APPROACHES ACROSS THE ANDEAN AMAZON

Promoting "Zones of Net Zero Deforestation"(NZDZ); enabling REDD+ via planning, capacity-building, and community forest monitoring across 3 countries

MRV

- Developing community-based forest monitoring system – tailored to local circumstances in each country yet designed to be comparable across the 3 countries.
- Working in coordination with local partners and government to ensure our project is aligned, and positively contributes to national MRV systems and goals.

➢ 3 regions: Madre de Dios, Peru; Sucumbios, Ecuador; Caqueta, Caqueta, Columbia
➢2,100 local community stakeholders will receive REDD+ training; 12 REDD+ tools, technologies and methodologies to be developed

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PARTICIPATORY MRV PROTOCOLS FOR NZDZ

Middle of the way approach to involving community members in following processes:

- Understanding land use history and current land use practices and patterns
- Farm stratification
- Sampling design for carbon stocks
- Data collection
- Data Processing
- Data Analysis

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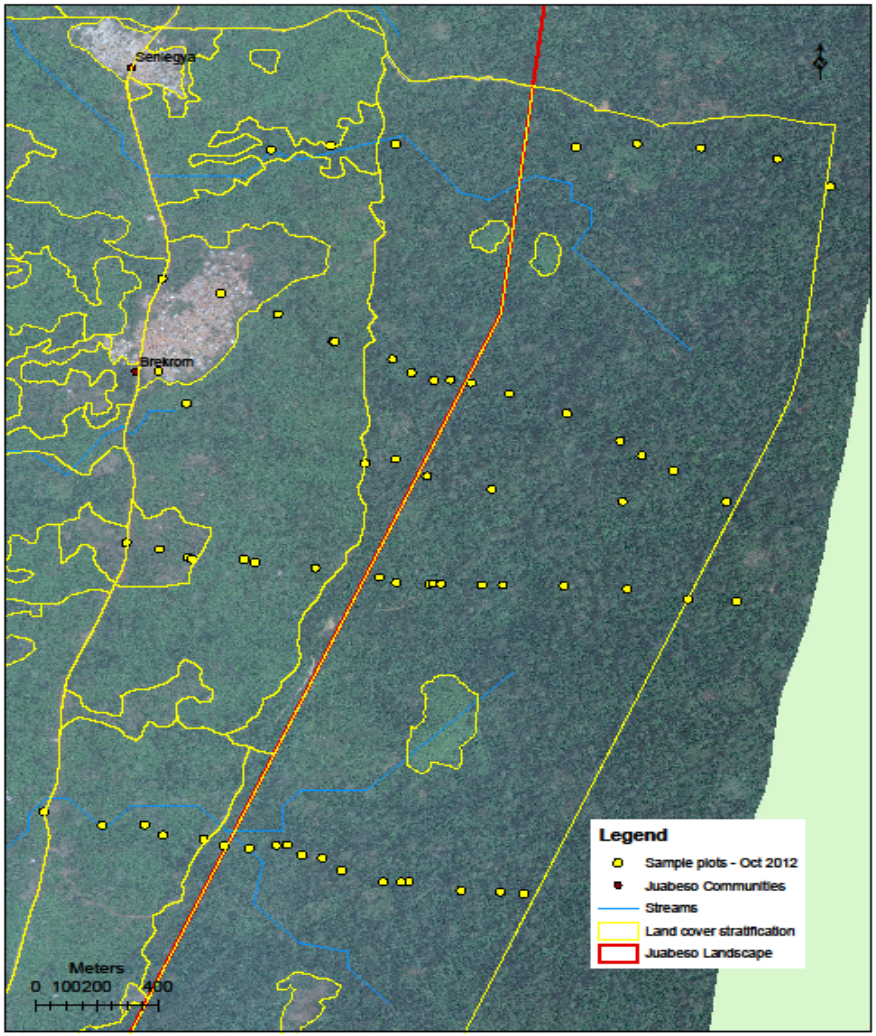
ASSESSING CARBON AT FARM AND LANDSCAPE LEVELS

- **Landscape Level**
  - Acquired high resolution imagery
  - Stratified landscape and identified of 8 land cover strata
- **Farm/Field Level**
  - Conduct field verification to confirm stratification using tablets Characterization of strata through plot sampling
  - Characterize strata through plot sampling
  - At farm level, field technicians are digitizing boundaries using GPS – this information will be superimposed into stratification
  - RA is working with farmers to help them characterize the land on their farm (e.g. # of shade trees). This information can be aggregated into strata.
- **Expected benefits**
  - Ability to track land-use changes over time
  - Famer collected data can be uploaded directly into tablets and transferred to landscape level stratification

MAPPING

Screenshot of tablet for field-level data collection



Landscape Level Stratification Map

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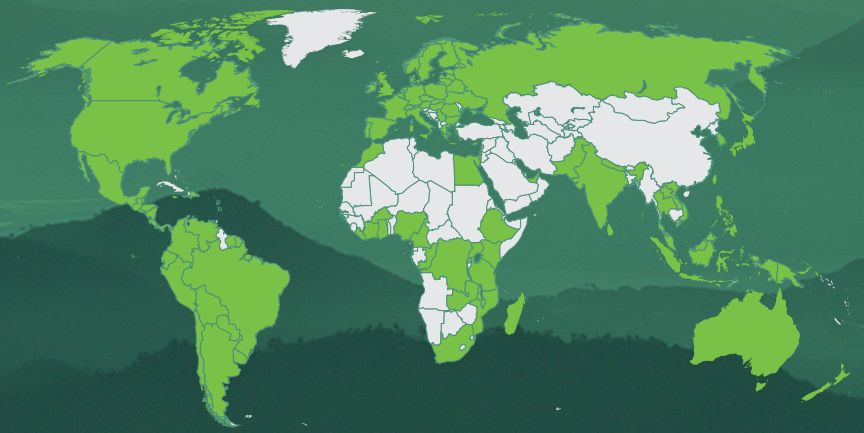
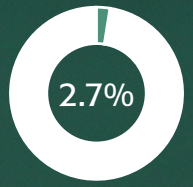
Rainforest Alliance at 25 Years Old



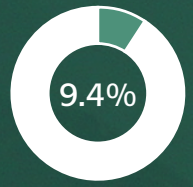
stats at 20th anniversary (2007) in green

2.7 million people impacted (1.2 million)*
101 countries (60)
> 70 million hectares (40 million)
$48 million budget ($21 million)
313 total staff (138)
20 offices worldwide (11)

of global coffee market is Rainforest Alliance Certified (1.4%)



of global cocoa market is Rainforest Alliance Certified (0.2%)



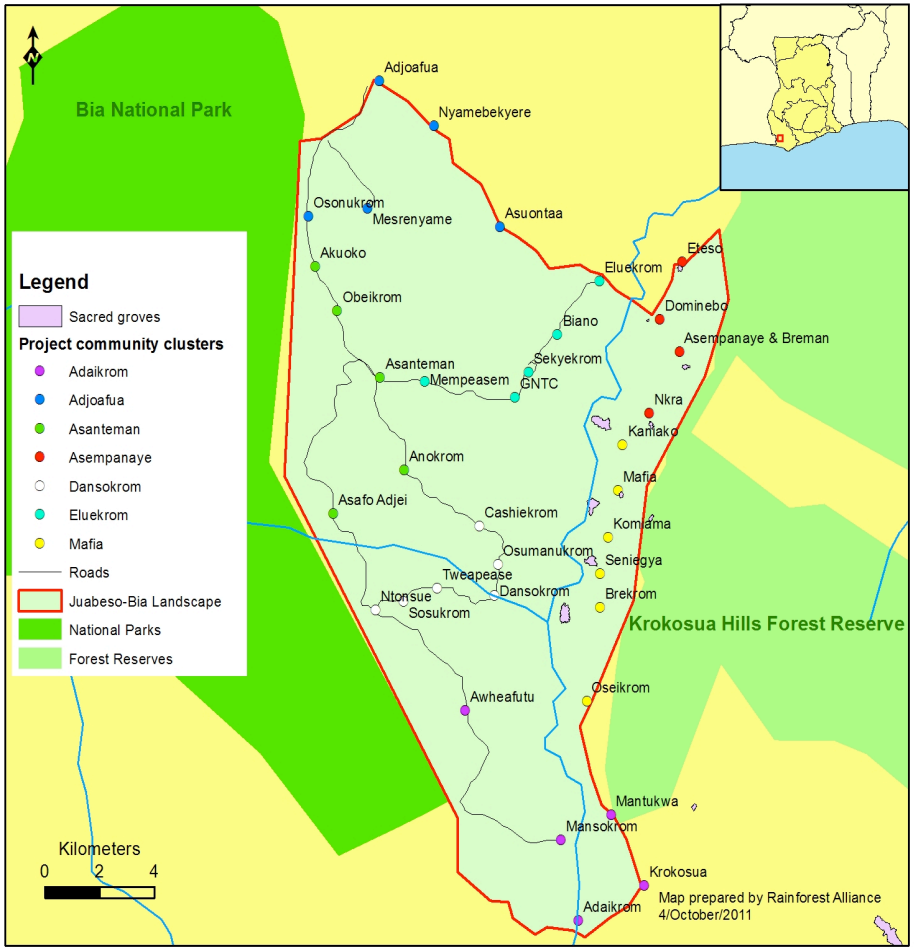
of global tea market is Rainforest Alliance Certified (0%)

* based on average family sizes

GHANA: JUABESO – BIA LANDSCAPE

- Five pillars (the ++s):
  - Forest landscape governance
  - Agro-forestry improvement
  - Forest conservation and enrichment
  - Small enterprise development
  - REDD+ preparation
- Standards-based approach:
  - ✓SAN + Climate Module, CCB

➢ 25,000 ha cocoa agroforest surrounded by forest
➢ 4,000 smallholder farmers, 36 communities
➢ 1,200 farmers trained in SAN standard



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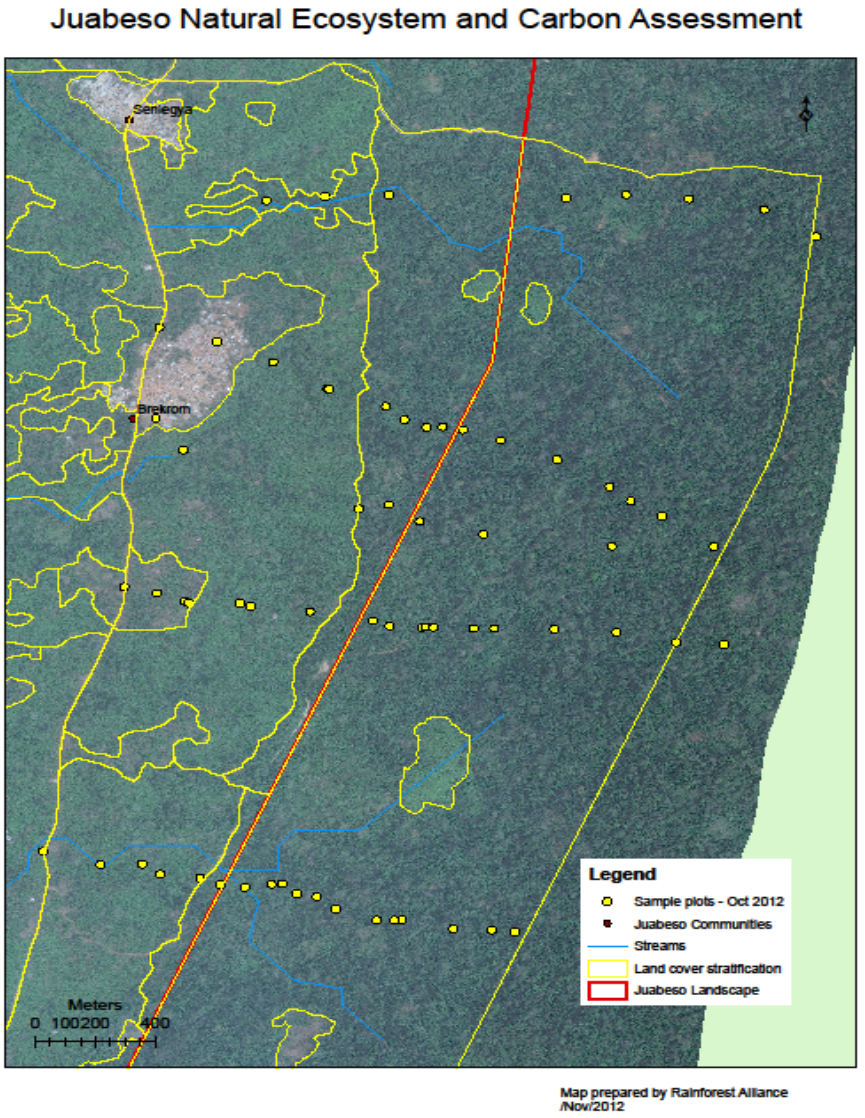
FOURTH ATTEMPT: FARM & LANDSCAPE C ASSESSMENT



Landscape Level

- Acquired high resolution imagery
- Stratified landscape and identified 8 land cover strata

CARBON-COFFEE: LOOKING AHEAD

1. Establish and implement more robust capacity-building program for MRV
2. Capture synergies between MRV and internal monitoring protocols (SAN Standard)
3. Replicate project model in other Oaxaca cooperatives

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