

RAINFOREST ALLIANCE

Experiences in participatory monitoring with smallholder farmers

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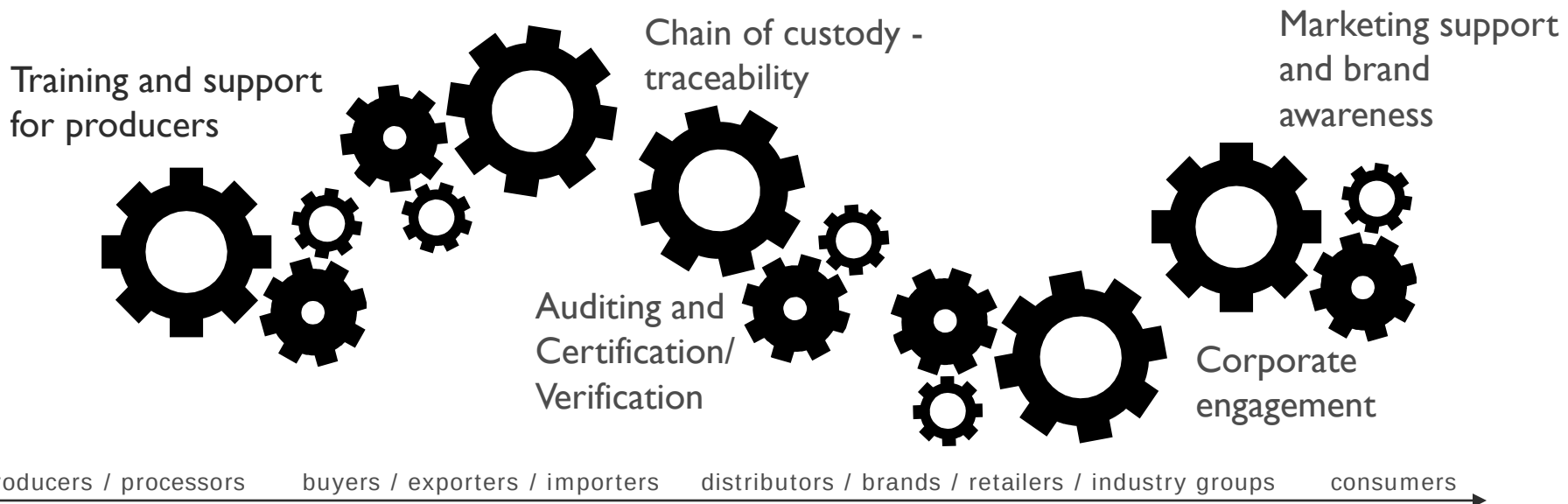


VALUE CHAIN APPROACH

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.



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?



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



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.

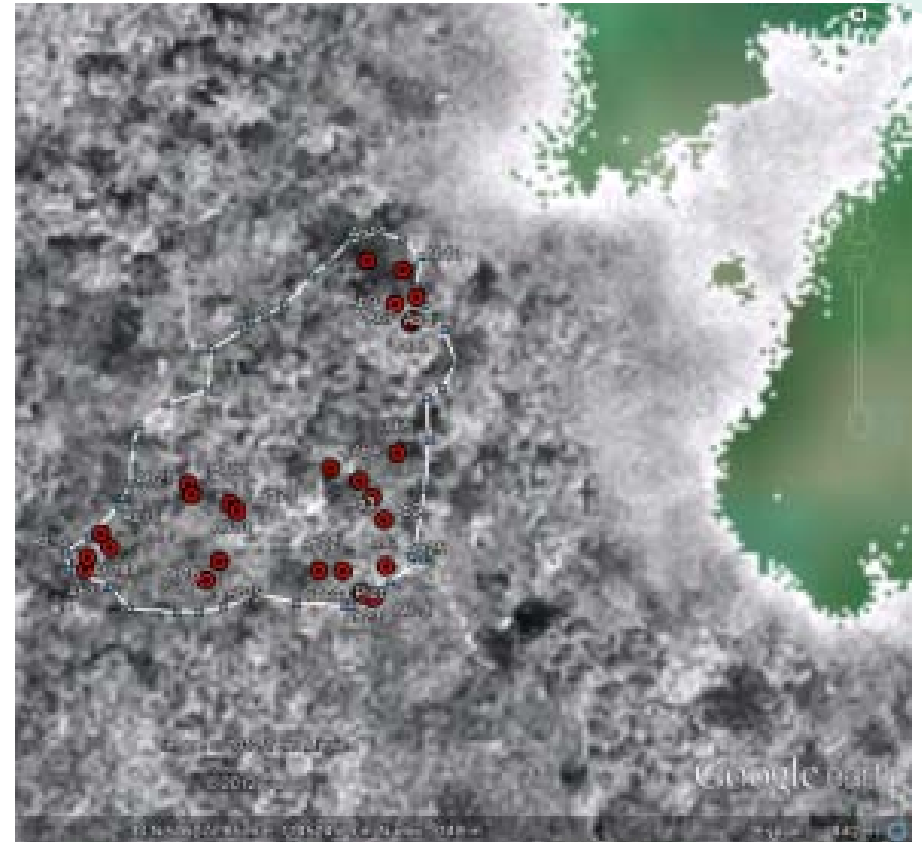
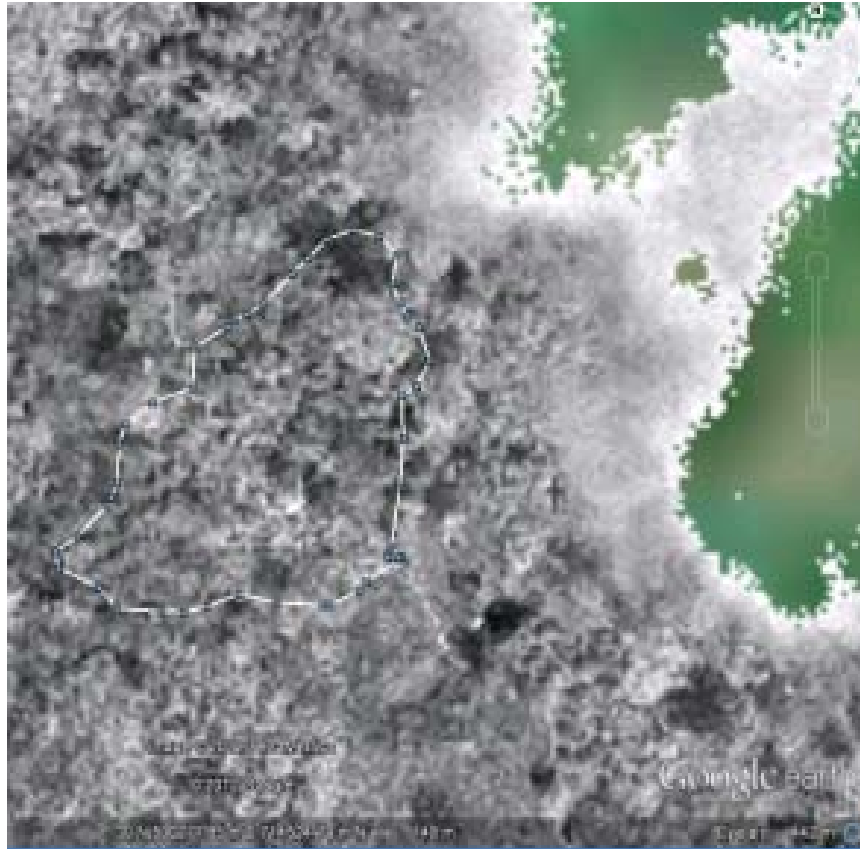
- Build capacity for producers to achieve SAN certification, Climate module verification
- Establish “lead-farmer” program
- Develop MRV tools that are cost-effective & participatory
- Pilot use of new technology (smartphones/tablets) in the field to measure carbon at landscape level



FIRST ATTEMPT: FARM-LEVEL CARBON PLOTS

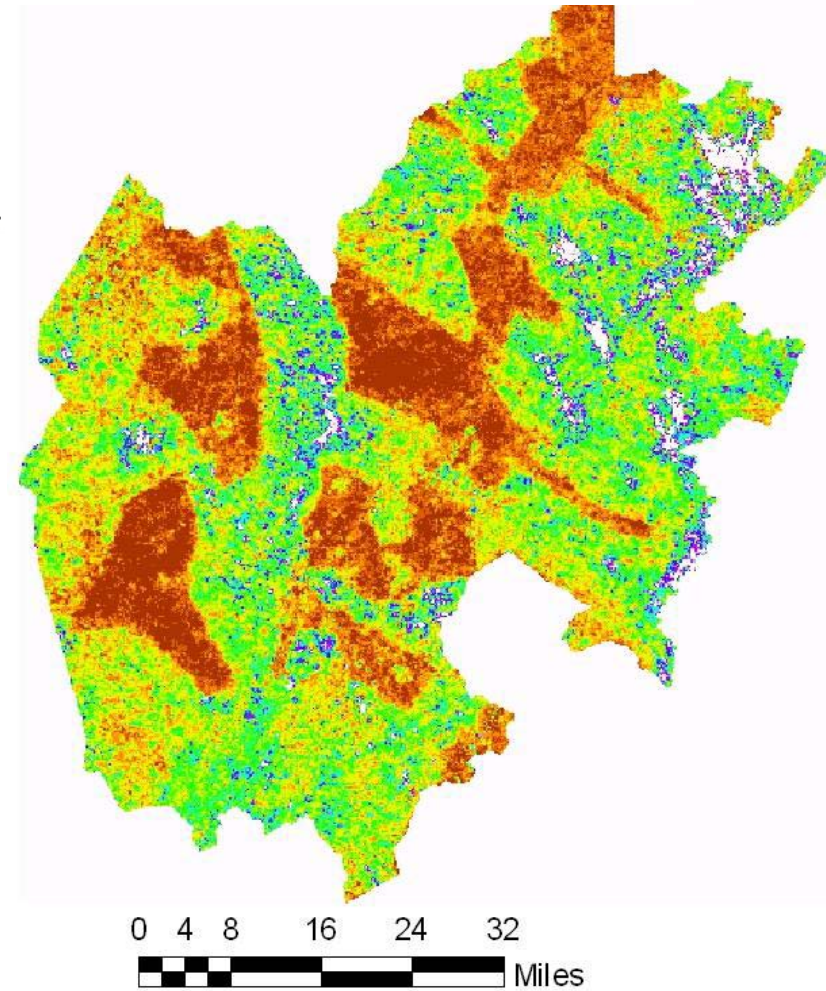
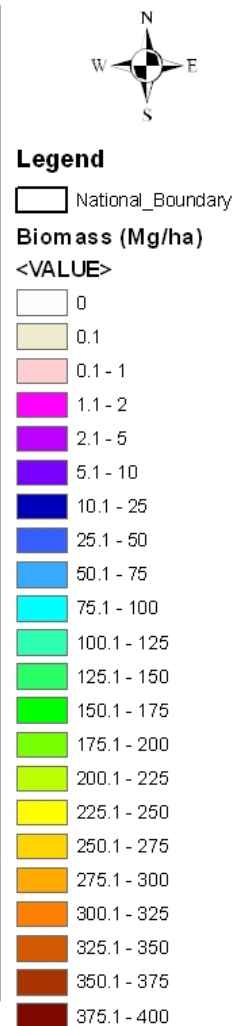
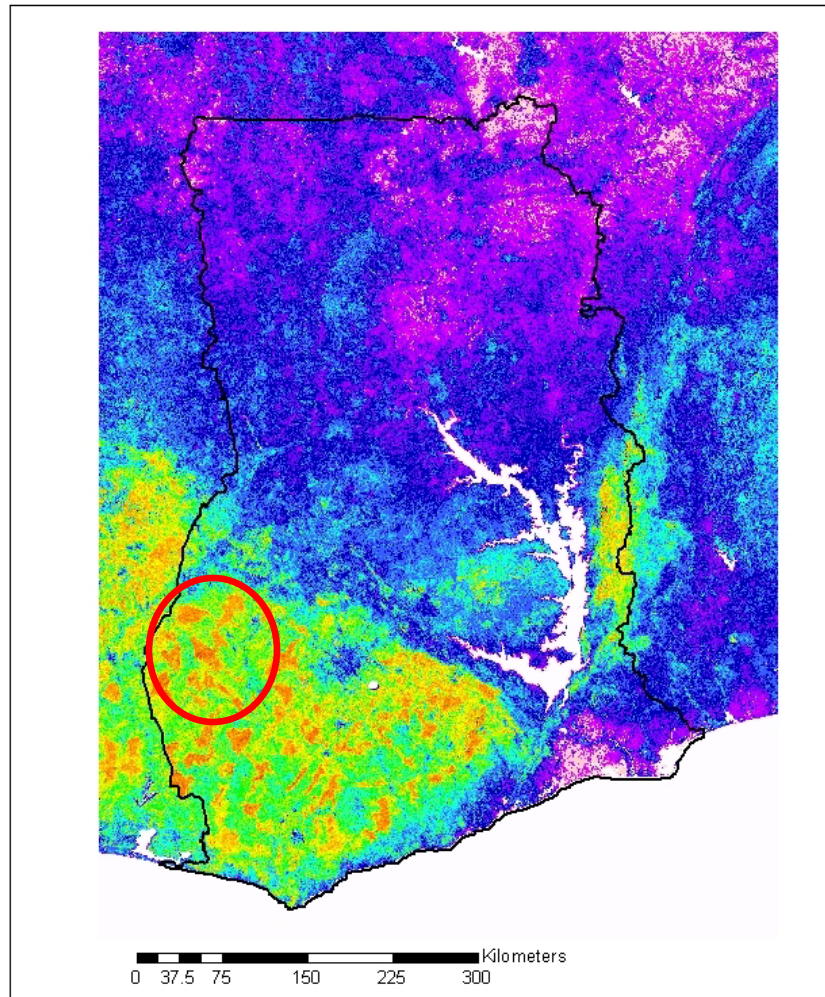


SECOND ATTEMPT: HIGH RES IMAGE ASSESSMENT



THIRD ATTEMPT: COUNTRY BIOMASS MAP

Biomass Map of Ghana for 2008/2009 (Ghana Boundry)



From: Nature Conservation Resource Centre, 2011

FOURTH ATTEMPT: FARM & LANDSCAPE C ASSESSMENT

Landscape Level

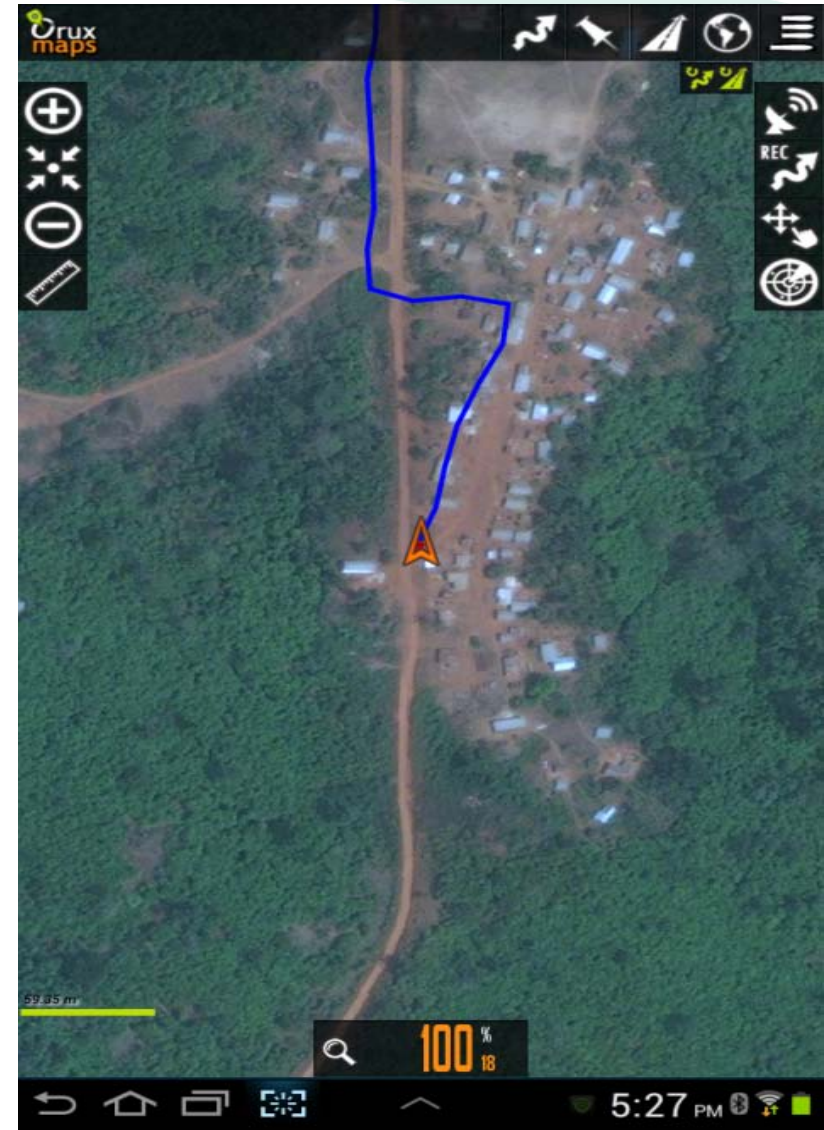
- Acquired high resolution imagery
- Stratified landscape and identified 8 land cover strata

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
- Farmer data can be uploaded directly into tablets and transferred to landscape level stratification
- Google Earth Engine, Outreach



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



FARM DELINEATION AND GEO-REFERENCING...



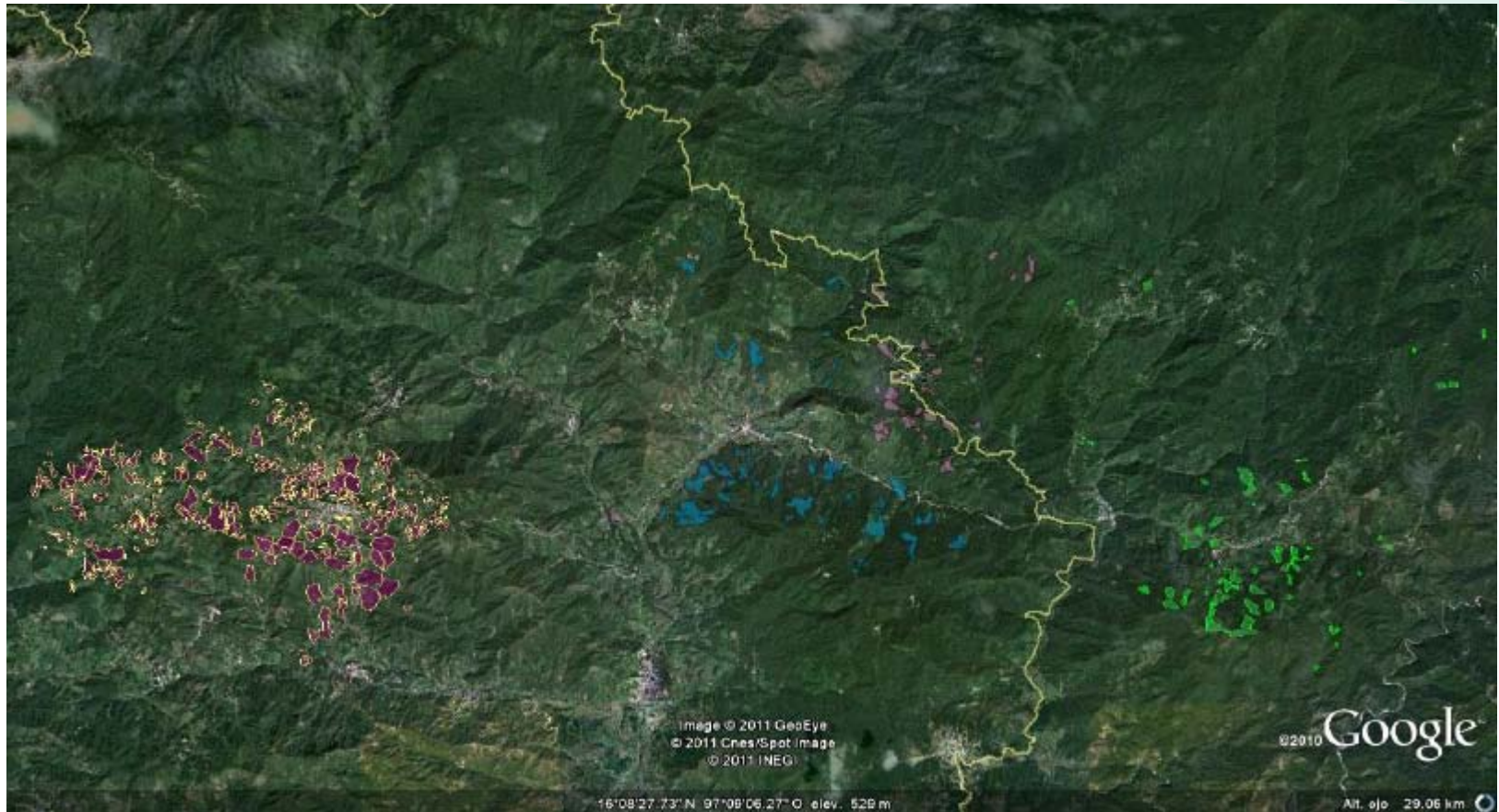
Soledad Piedra Larga: Parcela 1 de Panuncio Lopez Cosme



Proyección: Transversa de Mercator UTM Zona 14 WGS84 Meridiano central = -99 Elaborado con datos obtenidos por GPS y mapas de Google Earth del año 2011 Autor: Ralph Eichenbarger



...ACROSS 400 FARMS IN 4 COMMUNITIES



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



Rainforest Alliance

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