

Community participatory research experience in Panama



Johanne Pelletier, PhD Candidate

for the

Neotropical Ecology lab:

Dr. Catherine Potvin, Gerardo Vergara Asenjo, Kathryn R. Kirby



Experience from collaborative research settings



Characteristics of capacity building

Iterative, cumulative and continuous teaching

Non-advocacy/neutral training is the basis for well-informed, responsible decision-making.

On-site training provides access to a greater number of participants.

Culturally appropriate – horizontal training, adapted training material

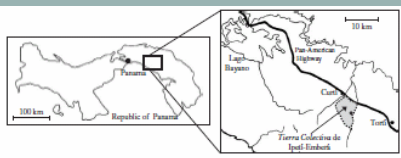


Three different settings in Panama:



- Ipeti-Embera, Eastern Panama
- Valle Abajo, Western Panama
- Conflicts on Indigenous lands- with COONAPIP

Community monitoring in Ipetí-Emberá

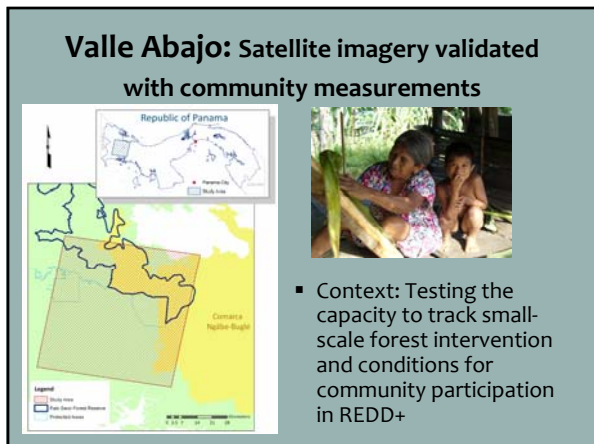
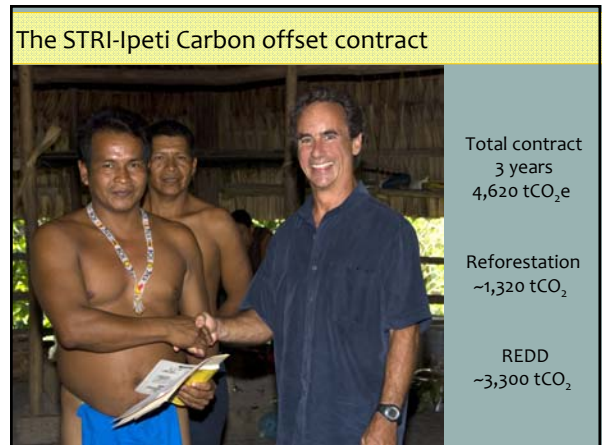
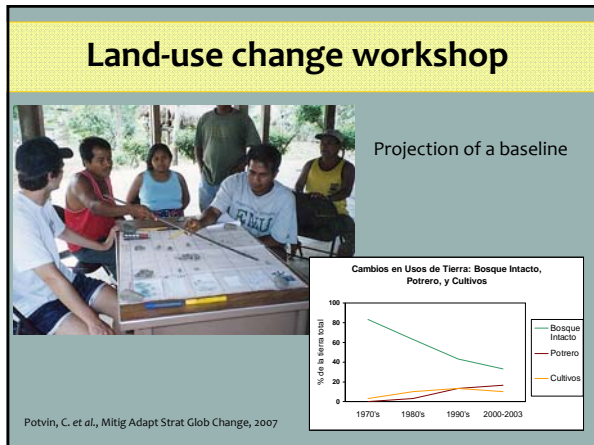
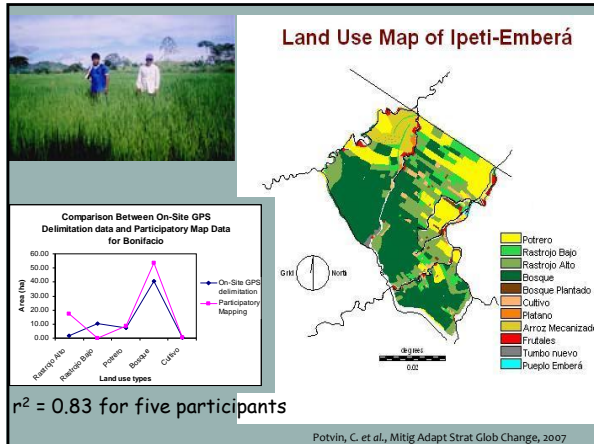


- Context of 2-year feasibility study of Carbon project in 2003
- Carbon measuring, Participatory mapping and land-use change assessment

Tschakert, P., Coomes, O. and Potvin, C. Ecological Economics, 2008

Participatory land-use mapping





Valle Abajo: Satellite imagery validated with community measurements

Ground-Truthing and Community measurements of carbon stocks

Trend analysis: land-use changes and projection into the future

- Basic quantification land-use change with pebble scoring
- Time axis and main drivers of land-use change
- Forest cover predictions 10 years into the future

Methodological advances: synergy between remote sensing analysis and community measurements

R-squared: 0.623927
Adjusted R-squared: 0.5564272

	Df	Var	F	N.Perm	Pr(>F)
Standing C	RDA1	1	3.8736	64.2586	999 0.001 ***
Woody debris C	RDA2	1	0.0268	0.4448	999 1
Residual		39	2.351		

Pelletier, J., Codjia, C., Potvin, C., in prep

Participatory monitoring can also be done at larger scale

Indigenous territories contained 39.5% of the total forest

Indigenous Territories in Panama: A Land under Continuous Conflict

ZONAS DE CONFLICTO EN TERRITORIOS INDÍGENAS DE PANAMÁ

- Invasions
- Illegal Logging
- Mining and hydroelectric projects
- Protected areas

Conflicts →

Vergara, G., Potvin, C., Hernandez, G. in prep

Future work: Empowerment through knowledge, Nation-wide participatory LiDAR C mapping

Dr Greg Asner

Mascaro et al. 2011 Biogeosciences

Conclusions:

- Participatory mapping provides high quality, high resolution information
- Links between remote sensing analysis and community measurements
- Mapping sensitive areas susceptible to deforestation



Community monitoring is valid, promising, and important

Acknowledgements:

- Village of Ipeti-Embera
- Village of Valle Abajo
- Coodinadora Nacional de los Pueblos Indigenas de Panama (COONAPIP)

