Facilitating carbon market participation for small scale and community-based forestry

Cecilia Danks for

Forest Carbon & Communities Research Group

University of Vermont

ISSRM

June 8, 2011

Context

2007…

- **Market based solutions**
- Housing boom
- Forest fragmentation
- Wealth disparities
- Energy prices
- Climate change concerns
- Kyoto protocols
- Climate change legislation

Definitions

- Small scale forestry (SSF)
  - Small scale forest landownerships (family forests)
  - Small scale forest enterprises

- Community-based forestry (CBF)
  - Urban forestry
  - Community-owned forests
  - Community-based conservation
  - Collaborative management
  - Community-based forest enterprises

Importance

“Family forests” = 35% of US forest land

- average size 58 acres

Butler 2008

CBF growing worldwide:

- > 25% of developing countries’ forests

Scherr, White and Kaimowitz 2003

- “govern close to an additional 200 million hectares of forests compared to the 1980s”

Agrawal, Chattre and Hardin 2008

SS & CBF face challenges in accessing markets & succeeding in global marketplace

- Integrated conservation & development
- Community-based forestry
- Forest certification
- **Forest carbon markets?**
- **Ecosystem services markets?**

The Question:

What are the …

opportunities, challenges & successful models

for small-scale and community-based forestry projects in the US

to participate in the voluntary carbon market?

The Team:
Forest Carbon & Communities Research Group

- **Rachel Beddoe**
- **Elise Schadler**
- **Jennifer Wright**
- Ken Brown
- Amanda Egan

- Sarah Crow
- Graham Leitner
- David Kuhn
- Kim DePasquale
- Charles Kerchner

The Methods

- **Literature**
  - International & US for SS & CBF
  - Market-based: Forest carbon, Forest certification, Ecosystem service mkts
- **50 state review:** role of states in facilitating forest carbon market participation
- **Case studies of Early Adopters**
  - Interviews project developers, partners & participants
  - Documentation, protocols
- **Action Research**
  - Northern Forest Carbon Consortium (Green Mountain Carbon?)
  - Victory Project (1,000 ac)
  - Brand Attributes & Marketing for Local Carbon
- **Multiple products for multiple audiences**
  - Website (www.uvm.edu/forestcarbon)
  - Market chain maps

Findings: Literature

Barriers:

- Scale
- Power
- Rights
- Governance
- Global markets
- Capacity
  - specialized knowledge

Opportunities:

- Aggregation, cooperatives
- Empowering policy changes
  - Tenure recognition
  - Co-management
- Niche, regional & institutional markets
- Partnerships, “facilitators”

Lit Findings: CBF & Certification in VT

- **Worthwhile, even without market premium**
  - Demonstration for public, membership
  - Walking the talk; supporting sustainable forestry
  - Professional relationships
  - Learned more; improved practice

- **What made it work (affordable in time & $):**
  - Group certification option & FSC/SLIMF
  - Trusted "facilitators" w/ specialized knowledge of certification

- **Capacity building?**
  - In **forestry facilitators (mostly NGOs)** – not in CBF groups

Crow & Danks 2010 *SSF*

Findings: 50 State Study

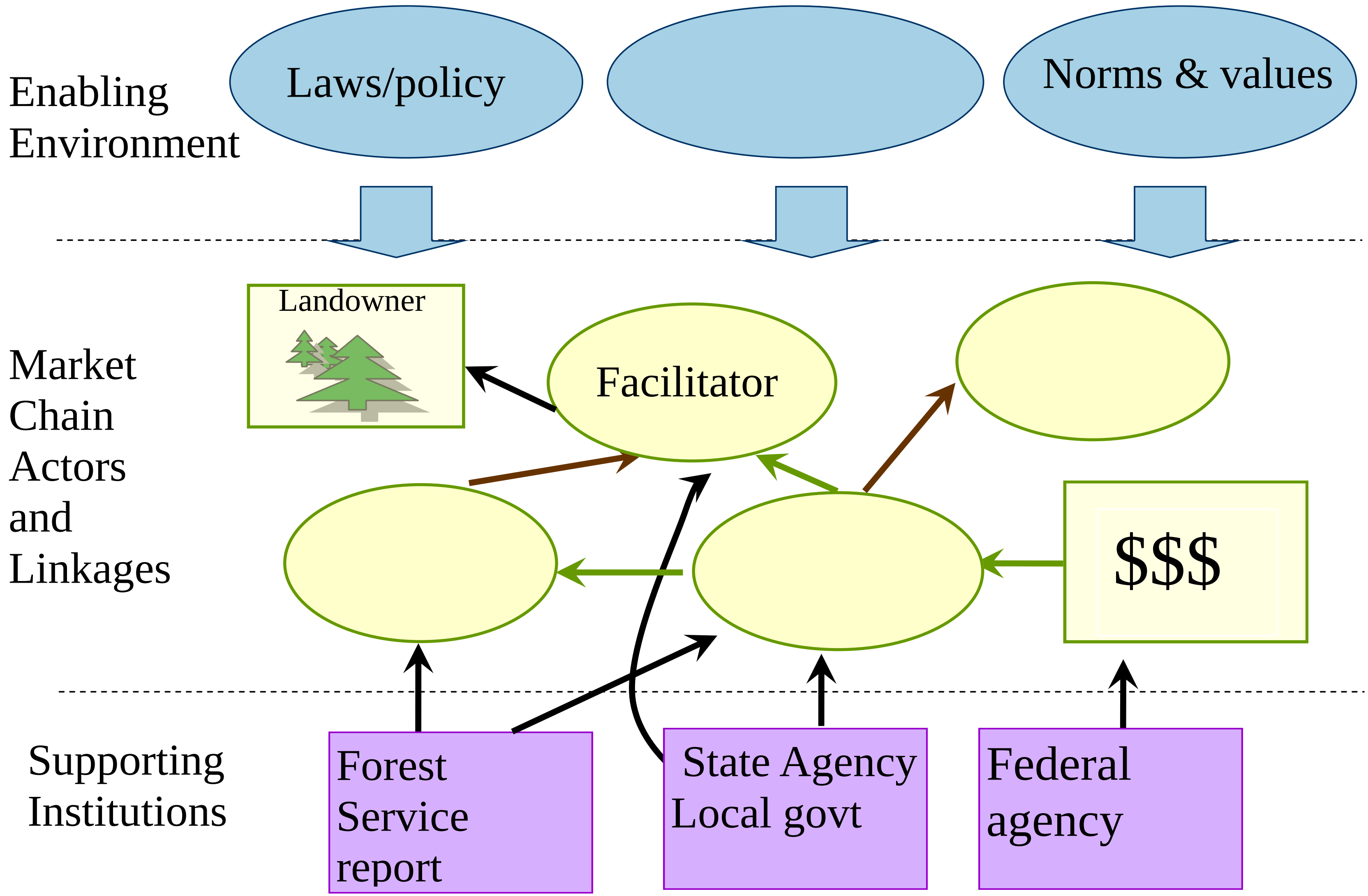
In 2008…

- 20+ had programs underdevelopment
- 6-8 had programs facilitating SSF in forest carbon markets (e.g. MI, IL, GA, CA, OR)
  - Registry (w/protocols), interactive web tool – no takers
  - Direct outreach to landowners (by state or its contractors) – had enrollees
    - Specialized knowledge
    - Aggregation function
  - **Need all pieces in place to work** (market chain map)

Case Studies so far

- Michigan/Illinois Delta Institute
- Oregon Forest Trust
- Sacramento Tree Foundation
- Carbon Plus Calculator (Philadelphia, Boston, NYC)
- Cascade Land Conservancy
- Arcata Community Forest
- Michigan State University

Market Chain Map



Adapted from Practical Consulting, 2008. Small Scale Bioenergy Initiatives. FAO

Findings: Case Studies

- Pioneers, not early adopters
- Technical outreach critical
  - Minimize demands on landowner
  - landowners not aware of details
- Revolving fund for upfront costs
- Generally satisfied even if credits didn’t sell
- Not all participating landowners convinced of climate change – market incentive works!

Findings: “Urban” forestry cases

- Lots of interest
- Often one-off “arrangements”
- Need viable protocols
- Need help with marketing
- Not just funds, but educational value

Overall Findings

Enabling/Disabling Environment

- Uncertainty about future
- Still interest in voluntary carbon market
  - sustainability commitments

Market Chain Actors

- Varied widely, little overlap
- Multiple hats
- From all three sectors – government, non-profit and for-profit

More Overall Findings

Market Chain

- Financial arrangements & protocols varied widely
- Price of carbon varied: \$0.15 to \$130 per tCO_2e

- Upfront *costs*– addressed fairly easily
- Upfront *capacity* – a real barrier

- Importance of a "trusted facilitator"
  - Handles nearly all details
  - Not usually building capacity in SS &CBF at grassroots level

Preliminary Recommendations

1. Focus on voluntary market opportunities
   – Emphasize co-benefits
   – Tie to sustainability values & commitments
   – Incentivize good behavior vs. strict rigor

2. Consider whole market chain
   – supporting and enabling environments
   – role of state?

Recommendations

3. Suggested models?
   – Multiple – identify conditions under which most appropriate

4. Focus of capacity-building: “trusted facilitator”
   – consulting forester,
   – extension foresters, NRCS agents
   – regional CBF or FF organization,
   – Land trust?, environmental organization?

In the works…

- Follow up on role of the state in promoting forest carbon management in SSF
- Going local with forest carbon…
  - Protocol compatibility, Brand attributes
  - Marketing strategies (institutions)
- Role of forest carbon & climate change
  - burn it or store it?
  - Comparative incentives for biomass harvesting vs carbon sequestration for SSF
  - Decision support for woody biomass energy

Thanks!

Funders:

- USDA Forest Service
  - National Urban & Community Forestry Advisory Council
  - McIntire Stennis Program
  - Northeastern States Research Cooperative
- NRCS – CIG grant

Participants:

- FCCRG
- Partners – CDL, ComCom, ConsColl, ACT, many more
- Interviewees

www.uvm.edu/forestcarbon/