

An Adaptive Approach to Ecosystem Management from Quintana Roo, Mexico

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Theoretical Concepts

- Adaptive Management-learning from research and adapting to turbulent policy and political environments.
- Common Property Theory-stressing role of formal organizations.
- Social Capital-Rural Mexico unusually rich, both because of government and indigenous traditions.

PPF

- “probably the largest, most important and successful forest management operation in Latin America”
- “the most promising, community-based natural forest management initiative under way in the tropics today”
- 4-5 Organizations-best know in SPEFQR

PPF origins

- Mexican federal government, Quintana Roo state government, German foreign assistance-joining moderate grassroots restiveness.
- Creation of a fluid, non-formalized structure; government technicians with a real vision.
- Wide-ranging participatory principles-but from the top

Ecological and Social Settings

- Dry Tropical Forest. (Mahogany)
- Social Origins of Population: Center-Rebel Mayas-only incorporated into Mexico in 1930s; South-Colonists/state-driven models of cattle ranching and commodity crops.
- Chicle Ejidos-"extractive reserves" 60 years before Brazilian Amazon.

Social Capital in Rural Mexico

- Ejido system created strong framework for local governance-even if frequently corrupt and manipulated.
- Government encouraged a welter of second and third level organizations-even if for control purposes.

Organizations and Common Property in Quintana Roo

- Permanent access to common property resource in two stages:
 - 1) legal endowment
 - 2) social struggle.
- Government and Donor-Initiated, not “Self-Organized”.
- CPR formal organizations focused on commercial timber production.
- Formally constituted organizations at 3-4 levels.

Ecosystem Management

- Establishment of production forests-permanent forest areas.
- Polycyclical silvicultural system-growth assumptions inherited from MIQRO. Sample plots established.
- Little management for other ecosystem values in South (chicle, fauna);more diversification center.

Turbulent Policy Environment

- 1992 Constitution reform/1986, 1992, 1997 Forestry Laws/Procampo/State Politics.
- Chances at constitutional, collective choice and operational levels, compounded by uncertainties in implementation.
- SPEFQR-withdrawal of key support, secessions, emergence of work groups
- OEFPZM-politicization, relative ejido stability.

Adaptive Management

- Inventories/Sample Plots/Observations-
Reduction in logging volume from 35-45%-
Decisions by Communities.
- Scientific Research-change in reforestation techniques (although insufficient technical support to make effective.
- Management uncertainty-75 year or 120 year cutting cycle for mahogany.

Organizational Strategy

- Focus resources on South, most abandon center to its fate. Two organizations established in 1986.
- Center survives on pure grit, begins getting external funding in early 1990s.
- Plan Estatal-two new organizations in 1991.

Social/Environmental Outcomes

- Strong presence in tropical Mexico of autonomous forest management organizations.
- New source of forest income-variable by ejido.
- Noh Bec-2.5 million in assets.
- 75% forest cover in central QR; 52% in South.

Conclusions

- Mexican social capital has created highly favorable conditions for the emergence of formal common property resource management organizations.
- Call attention to importance of analyzing emergence of formal organizations in LDC's.
- Emergence of “new forest culture” in QR.