

Mexican Political Development, Common Property Institutions, and Opportunities for Collaborative Environmental Management

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Abstract

The political, economic, and social institutions within a society directly influence the structure, direction, and vitality of collaborative or co-management systems of environmental management and governance. Mexico has the opportunity to more fully embrace sound progressive environmental policies because of the dramatic political and economic developments of the last twenty years; particularly the signing of the NAFTA accords in 1992 and the elections of 2000. The *ejido*, or common property system of land reform, borne of the Mexican revolution and codified under the Lazaro Cardenas administration, could provide a basis on which to build more accountable, collaborative environmental management regimes in the 21st century. This research seeks to understand the relationship between recent political and economic restructuring in Mexico and the development of more collaborative environmental management regimes based upon the traditional ejido system of common property management. The author will examine recent research on collaborative or co-management with a focus on community/greater-state relations. Then a survey of Mexican history with a focus on recent trends – the last twenty years – in decentralization and institutional development will be presented to provide the reader with a sense of the scope of change in the country’s political culture. Finally three case studies will be examined that represent distinct ejido community environments in which the move towards collaborative management of forested regions in Mexico is taking place.

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Chapter 1: Introduction

Collaborative management and governance of renewable environmental resources is not a new phenomenon. Political culture - political, economic, and social institutions shaped by historical events - determine the vitality of these arrangements and their institutionalization into public policy. Political institutions that favor particular groups, economic and financial institutions that constrain private investment, and social constructs developed over time may either facilitate or discourage the development of sound environmental policy, be it the regulation of industry or the local management of natural resources (Common 1995, Agrawal 2001).

The ejido system of common property tenure, unique to Mexico, could provide a firm base on which to build collaborative environmental management regimes. Because it has endured since the Mexican revolution as a system of common property management, it has been institutionalized - by law if not in fact - over a 70-year period, with legally mandated processes for governance, including General Assemblies, Commissions, and Advisory Committees (Bray 2000). In fact, new ejidos were still being created until 1992, when land reform legislation was introduced under the Carlos Salinas administration. But any study of collaborative or co-management of common property regimes must include the political, economic, and social institutions in place – and evolving – in both the community and within the greater state itself. Mexico is no exception, and indeed, the dramatic changes in government structures and social institutions, and in turn the evolution of governance, within the nation over the last 20 years necessitate their inclusion into any research of the ejido as a common property institution. This research therefore devotes a substantial chapter to developments in Mexican political culture and societal changes such as decentralization, judicial reform, and levels of government social spending and involvement at the state and local levels.

The Mexican political system since its inception has been referred to as both corporatist and authoritarian, with the brunt of political power vested in the presidency. Over the past several years, however, and culminating with the 2000 presidential elections, Mexican political institutions have begun a process of decentralization. Concomitantly, the Mexican political arena is gradually becoming more pluralistic. While true that the “opening” of the political system began – though haltingly – in the 1980s, it is really within the last ten years that the liberal democratization of Mexico has been a foregone conclusion. Several events may be considered crucial in compelling more pluralist political change.

The signing of the North American Free Trade Agreement (NAFTA) accords in 1992, the peso crisis of 1994, the congressional elections of 1996, and the 2000 presidential elections in which a new government came to power for the first time in 70 years, are all major benchmarks of the evolving Mexican politic. The corporatist model of Mexican politics is eroding. Mexican political structures are becoming more decentralized, and more than ever, power and decision-making authority is being devolved to local and state authorities. With local leaders being held more accountable, and President Fox’s apparent mandate to combat corruption and graft, the opportunities for more responsive and inclusive approaches to environmental accountability and management are greater than ever.

The effects of these changes on the ejido system in Mexico have been far-reaching. Structural reform of the land tenure system began in 1992, when for the first time, ejidatarios were able to take title of their land. Additionally, the new reforms prohibited the further creation of new ejidos. The major elements of the 1992 forest law included:

- The requirement of a forest management plan as the centerpiece to regulate forest use in native forests and forest plantations, which incorporates environmental protection and impact prevention measurements
- The creation of a technical forestry advisory committee as a way to incorporate public participation and technical assistance to the decision making process
- Separate criteria to regulate management of tropical and temperate forests, commercial plantations, and non-timber forest products
- The deregulation of the transportation, industrialization and commercialization of forest products
- The liberalization of the technical assistance services provided to communities to manage their forests
- Greater coordination of efforts between the natural resources and environmental protection agencies with less duplication of initiatives and bureaucratic efforts in the authorization and supervision of management activities.

(Seguro 2000)

The research will draw on a diverse collection of literature ranging from contemporary political theory, collaboration, the Mexican ejido system, and evolving research and trends in environmental management. Demographic trends and statistics are gathered primarily from the United Nations Development Bank (UNDB), the World Bank, The Organization for Economic Cooperation and Development (OECD), and the Mexican National Institute of Statistics and Geographic Information (INEGI).

Three case studies will be examined from the Mexican agro forestry sector, The studies were chosen because all three examine communities and ejidos in southern Mexico, in what are considered the more underdeveloped, yet biologically “mega-diverse” regions in Mexico, including the states of Guerrero, Oaxaca, and Quintana Roo. The cases examine common property, environmental management issues in the context of the ejido system of common property tenure. All regions under study have a history of involvement with greater state political and economic institutions – albeit in varying degrees – but the struggle towards more collaborative control and management of natural resources in each area is distinct. Finally, all three regions examined have arguably been most affected by economic and political restructuring over the last twenty years, including the NAFTA accords, economic liberalization, and political decentralization culminating with the defeat of the Institutional Revolutionary Party (PRI) in the 2000 presidential elections.

The examined cases, although similar in that they are all in regions that are comparatively less developed than Mexico as a whole, all represent significantly different settings in which in which the move towards more collaborative or co-management is taking place. Yet commonalities exist among all the communities including: the ejido system, political and economic restructuring at the national level, decentralization and devolution of many traditionally federal responsibilities to the state level, and a change in social norms due to increased federal and state government involvement at the local level.

Several key assumptions are made that are integral to the research. First, Mexico is unique in its political, economic, and social development for many reasons including historical political and social antecedents, proximity to the United States, relative stability as compared to other Latin American nations, and its ongoing democratization efforts. Second, the author supports the idea of community as complex with competing interests and actors; this research supports the idea of community as non-linear, both affected by and influencing public policy in a symbiotic fashion. Finally, any study of collaborative management/co-management/commons governance must include an examination of the historical processes; including the political economic, and social environment in which collaborative management or co-management regimes develop and are institutionalized.

Chapter 2: Collaborative or Co-management Research and Environmental Policy.

“The term ‘collaborative management’ (also referred to as co-management, participatory management, joint management, shared-management, multi-stakeholder management or round-table agreement) is used to describe a situation in which some or all of the relevant stakeholders in a protected area are involved in a substantial way in management activities” (The World Conservation Union, <http://www.iucn.org/>). It involves devolution of power from the state to some extent, and the sharing of responsibility and authority in the governance of natural resource regimes.

Collaborative, community-based or co-management of natural resources has enjoyed something of a renaissance over the last 20 years. It is not so much that the theory and concepts are new, but with the emergence of new, more liberal democratic regimes around the globe – particularly in the developing world – these approaches to the management of common pool resources and environmental regimes have gained a stronger resonance at the state and international levels. It could be said that the trends towards democracy and decentralization of state government have provided fertile ground for these “postmodern” experiments in local governance of the commons. Theories and research on collaborative governance or co-management of natural resources are discussed in this chapter, and the evolution of these theories – values placed on, and conceptions of governance and community – are particularly pertinent when reviewing the case studies presented in chapter five of the research.

The drive to reintroduce or adapt traditional forms of common property resources management is in no small part attributable to the declining ability of the greater state to fund and manage these initiatives alone, but also, because of the increasing belief that the involvement of affected communities in the management of common pool resources can help alleviate rural poverty while aiding the conservation of biological diversity (Kellert 1999 et al.). In the context of market liberalization and democratic pluralism, civil society and invigorated local governance structures have emerged as the arena in which many development objectives may be achieved (Mohan 2000). This in turn sits well with development and environmental policies that involve local stakeholders as well as national policy makers.

Political culture and the dynamic community

Many obstacles to collaborative or co-management are deeply embedded in the philosophy and patterns of activity associated with a more positivist management era (Holtbrügge 1999). Despite their inappropriateness in a global environment, old practices do not change overnight, and resistance to changing established practices is a predictable human response (Gray 1989). Common property institutions, particularly in those states whose institutions are undergoing democratic transitions and in which there are no clear property right mechanisms or community influenced institutions, have tended towards over harvesting of resources, and in some cases, overcapitalization by those members of the community who depend on the resource (Christy 1997). But overemphasis on property rights as the predominant issue in common property research may come at the expense “contextual analysis of the situation within the commons and the relationship between commons management and other regional, national, and international structures” (Klooster 2000 p.11)

At the institutional level, common property regimes which are ineffectively managed from outside of the community and without the input of the primary stakeholders can often be seen as illustrative of deeper flaws in a policy system which relies too heavily on centralized and rigid bureaucratic structures of control (Symes 1998). This can create obstacles to effective co-

management planning including: (1) distrust and resistance of management agencies, and (2) a lack of broadly organized political support (Pinkerton 1999).

From the economist's perspective, government intervention in the economy can be anything but benign. They see "Government Failure" occurring when government action is inconsistent with the attainment of allocative efficiency (Common 1995). Government as sole regulatory authority in environmental management – industry pollution standards *or* environmental management regimes – will not necessarily mitigate the propensity of firms, communities, or individuals to pollute or over-harvest, as long as there is an economic disincentive for them to regulate their own behavior. As such, firms, communities, or individuals will often exploit the opportunity to overuse – or misuse - resources as long as they believe they have the opportunity to earn a profit by doing so (Common 1995). Likewise, the establishment of rules in any co-management or collaborative natural resource management regime faces a dilemma: "How to create rules that allow for the sustainability of a common pool resource in the face of individuals pursuing their interests" (Bray 2000, p.4)? Many researchers argue that for collaborative or co-management systems to be effective, there need to be effective and legal property rights regimes in place that codify – both *de jure* and *de facto* – community rights over local resources. "It is the absence of these rights that have allowed governments and private concerns to annex or appropriate communal lands/resources and endanger communities or community conservation" (Kapoor 2001).

In other words, concordant with the Tragedy of the Commons, individuals or firms, acting "rationally", have the incentive to maximize profits while a resource is available and particularly given its uncertain availability in the future. It is with this knowledge that governments and local communities have increasingly sought ways to devolve regulatory and management authority of common pool resources to local interests and stakeholders, banking on the fact that communities who understand the resource and its limitations, and are active in its maintenance, will realize their own interests in maintaining the resource. Structural reform policies have also encouraged – if not compelled – this form of decentralization as well (Ibarra, 2000). But decentralization and privatization schemes have also exacerbated the uncertainty prevalent within some common resource areas where boundaries are not well delimited among stakeholders, and when communities have become dependent on – and expect – state subsidies.

At least two factors have strengthened the resistance to top-down environmental management strategies: "(1) the inability of states to police people and prevent them from accessing the environmental resources required for their survival; and (2) the notable failure of state-run conservation projects, many of which have been unable to provide adequate incentives for people to 'buy into' such projects" (*Wells and Brandon* in Kapoor 2001). Collaborative or co-management of commonly held resources, on the other hand, implies various degrees of integration of local and state level institutions, and by necessity requires governments to devolve some of their power to the level of the community. There are, however, multiplicities of 'forms' that this power sharing arrangement might take (See Figure 1), and the levels of participation and cooperation may vary dramatically depending on the community, the level of decentralization of government, and the level of state control and dominance over the policy agenda.

Figure 1

7	Partnership/Community Control	Partnership of Equals; Joint decision-making institutionalized; power delegated to community where feasible.
6	Management Boards	Community is given the opportunity to participate in developing and implementing management plans.
5	Advisory Committees	Partnership in decision-making starts; joint action on common objectives.
4	Communication	Start of two-way information exchange; local concerns begin to enter management plans.
3	Co-operation	Community starts to have input into management, e.g., use of local knowledge, research assistants.
2	Consultation	Start of face-to-face contact; community input heard but not necessarily heeded.
1	Informing	Community is informed about decisions already made.

Levels of Co-management (Berkes, 1994)

Creating community: the evolution of co-management research

With the relatively new attention to the theory and practice of collaborative or co-management at the local level, an introspection borne of both success and failures at the community level has come to the forefront of the literature. Two themes are predominant in much of the literature, and center on the conception and realities of what constitutes “community,” and the greater political environment of which the community interacts and is a part. This research supports the idea that any study of common property management must include the “contextual factors such as state policies, demographic shifts, technology, and markets” (Agrawal 2001). Focusing on the local of collaborative initiatives at the expense of overarching political, economic, and social structures can “underplay both local inequalities and power relations” (Mohan 2000).

Researchers and practitioners have begun to suggest that the common property resource tradition has not offered an adequate theory of the individual community member – or stakeholders – as a political actor (Holm et al. 1998). Traditional “neo-institutionalist” thought regarding institution building and change in common property resources has tended to view political and economic rights within a given study area as symmetrical, meaning that the two are mutually, and simultaneously affected by changes in institutional structure. The changes in political and economic rights of different stakeholder groups, however, and are not necessarily symmetrical. The nature of stakeholder relations, and the resiliency of the institutions to external pressures can vary greatly depending on individual community dynamics as they interplay with greater state institutions (Agrawal 2001, Leach 1997).

In an article on community based sustainable development, Leach et al. (1997) reiterate the concept – first introduced by Amartya Sen - of ‘environmental entitlements’ as an approach to development given social and environmental differentiation within a community. The concept of community endowments can be best understood as the rights and resources that a given community has over such “commodities” as land, labor, and skills. Environmental entitlements, on the other hand, represent an as-yet unexploited set of benefits that *could be* possible given a community's specific endowments. They are manifested in the “alternative sets of benefits derived from environmental goods and services over which people have legitimate effective command and which are instrumental in achieving well being” (Leach et al. 1997).

The nature and dependency of endowments and entitlements are not necessarily static, but rather, are shaped by both community dynamics and the greater external forces shaping a community's institutions. In other words, what constitutes endowments and entitlements is dependant upon "empirical context and time... what are entitlements at one time may, in turn, represent endowments at another time period, from which a new set of entitlements may be derived" (Leach et al. 1997). Bonnie McCay has written extensively on community-based co-management approaches to the problems confronting the modern fishery, but her delineation of 'nested structures' within a given community is helpful in framing the *dynamic* of community as it relates to common property management and political and social conditions. McCay's and Leach's approaches to community are complimentary; both view community 'endowments' or 'nested structures' as essential in understanding how community is shaped, how it interacts, and how it develops.

"Communities have various and variable assignments of collective and individual political and property rights and responsibilities. They are nested within other social and political structures, and they may vary with respect to the autonomy they have within those structures. They may be thought of as contexts for decision-making and action by households, firms, individuals, and other social units; they may also be the forum for collective decision-making and action. Political opportunity structures available to stakeholders are vital in examining how this interaction plays out - both politically and economically" (McCay 1999, p.3).

Similarly, Holm et al (1998) have argued that those stakeholders benefiting most directly from collaborative arrangements will tend to become politically dominant and are likely to form new, vested communities (Holm 1998, 115). At the same time, there will be those who feel that they are not benefiting as much from the system, and subsequently become part of oppositional communities. The 'vested' community in this sense is organized around a particular issue or condition; i.e. the community has a vested interest in promoting their particular objectives or goals. Holm et al support a theoretical model in which political and economic rights are independent variables and the success or failure of collaborative arrangements is the dependent variable, and their approach compliments that of McCay. They propose that institutional systems can be modeled as *nested systems* in which "economic and political actions occur within separate arenas, characterized by different actions and decision-making rules" (Holm, 1998 and Mohan 2000). Like-minded researchers suggest that the nested system of analysis allows for examination of political and economic effects precipitated by a change in the institutional structure of a regime.

The Dynamic Community and Social Capital

Social Capital has been described as the "socio-cultural glue which binds communities together and ensures both political and economic progress" (Mohan 2000, p.255), or as "the rules, norms, obligations, reciprocity and trust embedded in social relations, social structures and society's institutional arrangements which enable members to achieve their individual and community objectives" (Narayan, D. in Hobbs 2000). Political theorists such as Robert Putnam have posited that social capital tends to be self-generating as successive generations within a given society are socialized to the evolving norms and mores of the community (Putnam 1993 in Hobbs 2000). "In a community the probability that members who interact today will interact in the future is high, and thus there is a strong incentive to act in socially beneficial ways now to avoid retaliation in the future" (Bowles 2000, p.7). This interchange affects the institutions upon which a community and society as a whole are built and vice versa. In states undergoing sustained democratic reform, and in which value is placed on the educational and social development of the populace, this interchange is both reinforced and driven.

Co-management literature has tended to focus on the community as a discreet unit or actor with universally shared norms, interests, and standing (Leach 1997). This view of community has proven to be much easier to work with because it may be broken down at the political, economic, and social levels, providing a “level playing field” with which researchers and development practitioners could in turn build models to predict and interpret group behavior and interaction with external actors. Furthermore, the literature tended to focus either exclusively on the community under study, or with a minimal of attention given to the greater state environment in which the community’s norms, interests, and aspirations – for better or for worse – have developed (Agrawal 2001, Kapoor 2001, et al).

Communities, however, are not necessarily bounded, homogenous entities, but may be socially differentiated and radically diverse. Gender, race, economic standing, age, origins, and other aspects of social identity may divide and delimit community boundaries (Leach 1997), belying the view of community as harmonious and homogenous entities characterized by consensus and communal ‘needs’ (Mohan 2000). Many researchers argue that ‘community’ itself is a concept that has been used by both states and external organizations for specific agendas, and thus carries with it “connotations of consensus and ‘needs’ determined within parameters set by outsiders” (Ibid. p.252). Attention to the unique and nuanced attributes of the individual community, as it exists and has developed over time, has been omitted from much of the literature. Consequently, this has been at the expense of attention to the dynamic relations within a community and the symbiotic relationship between community and broader economic and political structures.

In this sense, there has been a trend of placing the role of the state legal, political, and economic institutions to the periphery. Thus examination of community and greater governance structures have tended to focus on major triggering events for social action and change, often at the expense of examining the historical context that predates the event and foments change. The confluence of state and local interaction over time, tempered by institutional development *and* decay shapes community in profound and nuanced ways. The production of local, hegemonic structures must be understood in the broader context of national political and economic development before the appropriate form of collaborative management – or even the possibility of – can be examined. In other words, any application of a collaborative system of management or governance must transgress the boundaries between ‘local’, ‘national’, and ‘global’ scales (Mohan 2000).

Many problems with implementing community based development programs relate to assumptions made about “community, environment and the relationships between them which inform current approaches” (Leach et al. 1997). The environment and definition of ‘community’ must include the state as power broker. The degree to which devolution occurs and is transparent and institutions accountable, however, delimits and shapes the power relations between community and state. Acknowledgement that communities are “multi-dimensional, often containing within them differences, divisions, conflicts and inequalities” (Kapoor 2001) can provide a sounder base upon which to conduct research on collaborative or co-governance of common pool resources. Those studies which include internal aspects of the community along with “external social, physical, and institutional attributes of the greater state may provide insight into that relationships affects on “institutional durability and long-term management at the local level” (Agrawal 2001, p.1651).

Local organization, community aspirations, and institutional support

Environmental issues affecting communities, although similar in scope, may vary due to local circumstances and issues, requiring local application of knowledge and the active participation of stakeholders in order to build trust in the institutions as they are developed (Gray 1989). Whether in large or small regions, in the developed or developing world, the negative consequences of resource depletion or conflict on the community are fairly clear in social and economic terms. One thing is clear, those attempts at community based natural resource management that have enjoyed success tend to have strong legal support and adjudication mechanisms, an organizationally developed and financially supported infrastructure, and robust community involvement (Kellert 2000). In examining the opportunities and challenges to community natural resource management, Stephen Kellert has listed six attributes commonly found in successful attempts at collaborative or co-management of environmental resources:

1. Equity – the distribution and allocation of socioeconomic benefits and resources.
2. Empowerment – the distribution of power and status, particularly among local peoples, including authority devolved from central and state governments to local peoples and institutions; as well as participation in decision-making, sharing of control and/or democratization.
3. Conflict resolution – the handling and resolution of conflicts and disputes over resources among local peoples and among local, state, and national entities and interests.
4. Knowledge and Awareness – the consideration, incorporation, and production of traditional and modern ecological knowledge in managing natural resources.
5. Biodiversity Protection – the conservation and protection of biological diversity and associated habitats, including the preservation and recovery of rare, imperiled, or flagship species, or imperiled populations of stocks and species.
6. Sustainable Utilization – the consumptive and non-consumptive utilization of natural resources in ways intended to maintain the long-term availability of these resources in a non-diminished manner for present and future generations.

(Kellert et al. 2000)

Research efforts on the problem of achieving economic sustainability within a common pool resource must be addressed from an interdisciplinary perspective (Agrawal 2001, Common, 1995, Rijsberman 1999, Sampford 2002). Thus research must include the political, economic, and social dynamics at play in a given community, and indeed, at the level of the national government. The democratic process, particularly as related to collaborative or co-management and sustainable development, can be best understood by applying it to the assumption of self-interested behavior used for the analysis of market processes (Common 1995) when four types of participants exist. Individuals who become politically active when their own self-guided interests are in question; elected officials who act in the interest of maximizing their own chances for reelection or enrichment; bureaucratic functionaries who act to maximize the involvement of their agency – and interest – in the process or political alignment; and pressure/interest groups who act to maximize the particular interests of the groups they represent (Common 1995).

Co-management or collaborative arrangements can create an environment that invites the sharing of knowledge and information between these interests, the ‘local’ and larger state institutions (Berkes 1994), but a major obstacle to many attempts at community based natural resource management has been the inability of those involved in the effort to “control and guide the behavior of complex organizations, particularly bureaucratic and local institutions” (Kellert 2001), who often have an embedded interest in maintaining existing management and administrative systems. Although there are differing views as to what conditions provide a crucial foundation for governance of common pool resources, Marco Janssen and Elinor Ostrom

(2001) suggest that several attributes of community, or “appropriators” – resource users – are essential:

- Stakeholders must have access to accurate information about the condition of the resource and an understanding of the benefits and costs of maintaining the resource.
- Users of the resource intend to live and work in the area for a long time.
- Users and stakeholders are dependent on the resource in some way or another for their livelihood.
- Stakeholders use “collective choice rules that fall between the extremes of unanimity or control by a few.”
- The group using the resource is relatively stable.
- The group using the resource is relative small and homogenous.
- The community has developed - over time - norms of trust and reciprocity that are a foundation for the growth of social capital.
- Stakeholders are able to implement accurate and low-cost monitoring and sanctioning arrangements.

(Janssen & Ostrom 2001, p.8-9)

Decentralization, Democratization, and collaborative management in Mexico

The process of decentralization may enhance the local as a functional political and economic space (Mohan 2000) in the face of these competing interests. Particularly in those states undergoing democratic transitions, decentralization strengthens the local to relieve pressures on the central government, and may facilitate the delivery of services in a more efficient and accountable fashion. The local, in this respect, is not seen as an autonomous space, differentiated from the state, but as a functional, economic space with policies directed towards more efficient delivery of public goods and services (Ibid). Sara Singleton (2000) presents a concise model depicting the strengths and weaknesses of *community, state* and *collaborative* management of natural resources:

Figure 2

Governance Structure

	<i>Strengths</i>	<i>Weaknesses</i>
Community Management	<ul style="list-style-type: none"> • Cost of obtaining fine-grained information about local ecosystem is lowered • Participatory system of rule-making increases likelihood that users will comply • Increased security of property rights creates greater incentives for sustainable management 	<ul style="list-style-type: none"> • Local users must have sufficient social capital to solve collective action problems associated with creating and enforcing rules • Weak incentives to protect public goods • Weak incentives to conserve resources in trans-boundary system
State Management	<ul style="list-style-type: none"> • Greater incentives to protect public goods due to greater accountability to larger publics • Better access to system-wide data • Greater leverage over competing users from outside the community 	<ul style="list-style-type: none"> • Higher costs of information • Top-down regulatory system may be insensitive to local needs • Inability to tap into pre-existing local systems of social control
Co-management	<ul style="list-style-type: none"> • Potential of productive division of labor between states and local communities • Encourages greater coordination between various local communities 	<ul style="list-style-type: none"> • High initial costs of establishing system • Greater uncertainty with respect to outcomes

(Singleton 2000)

In states such as Mexico that are undergoing rapid decentralization and democratization, existing community power structures are either tacitly blessed or overtly supported by the state power structures; the two are linked by both political expediency and social/organizational constructs shaped over time. Both are compelled to evolve through economic necessity and by changing perceptions of citizenship within the community, and as part of the greater state. The following chapter addresses the political, economic, and social changes in Mexico and the environment that this has created for more collaborative or co-management of environmental regimes.

Chapter 3: Mexican Political Development: Corporatist Authoritarianism to Liberal Democracy

“One could say that when the various disciplines look at government and governance, they see different things:

- Economists see the formulaic interplay of interests.
- Political scientists see power.
- Criminologists see compliant and non-compliant behavior.
- Lawyers see formal rules.
- Ethicists see values claimed and values followed.

“Successful governance requires an inter-disciplinary and multi-disciplinary approach because it is not possible to use one approach in isolation from the others or to compartmentalize them” (Sampford 2002).

This chapter will discuss the evolution of the Mexican political system with particular attention given to increasing decentralization – dubbed the *New Federalism* under the Zedillo administration (1994-2000) – economic restructuring, and social developments. Although this research examines the Mexican ejido and opportunities for collaborative or co-management of common pool resources, an examination of the change in institutional environment in Mexico is necessary to understand the breadth of change in Mexico. The influence that these developments have had – and continue to have – on common property institutions in Mexico is paramount in the study of the ejido as model for collaborative or co-management of common pool resources, notably, Mexico’s forest lands.

The Ejido and common property systems under the PRI

Property systems in Mexico may be broken down into three distinct subsets. *Private property* is that held by individuals or organizations, *communal property* refers to indigenous common property areas, and *ejidos* are administratively devised common property areas held by individuals – usually campesinos. Members of ejidos are called ejidatarios, and the land which they have usufruct rights to is divided into “parcelas.” Most of Mexico’s forestlands - some 80 percent – are under either ejido or indigenous community property systems, thus making community forestry the major type of organization for production (Segura 2000). Despite the putative ‘equity’ of the system, poorly defined property rights and inter-community disputes over ejido boundaries – particularly in more remote areas of Mexico – have been common. In addition to poorly defined property or usage rights in many common property resource regimes, researchers generally agree that there are two phenomena that facilitate the drive towards the privatization of a resource. These include an increase in both population density and demand for the resource, and the increased value of the resource in more open and competitive markets. (Muñoz-Piña 2002).

The Mexican ejido system was established to address the inequities of land distribution in pre-revolution Mexico, where some 80 percent of Mexican territory was under private control. “Both ejidos and indigenous communities are, at the same time, instruments of political control, a means for the organization of production, and a body of peasant representation” (Bray 2000 p.8). Arable land, as in most other countries in Latin America, was owned primarily by wealthy beneficiaries of the Spanish colonial era under the hacienda system. Campesinos, or subsistence farmers, were relegated to either small plots of land, or as in most cases, served as labor on the larger haciendas. Many of the landless campesinos had been co-opted into the revolution with promises of land reform, social justice, and the rule of law. Many researchers contend that the overriding objective of the land reform and creation of the ejido system was to avoid recurrence of peasant-led uprisings such as had spurred the initial revolution (Muñoz-Piña 2002).

In 1917, the ejido system, along with communal lands for indigenous peoples, was officially established in the Mexican constitution under Article 27. The modern Mexican ejido was a product of the revolution and the accompanying drive for agrarian reform as social pressure grew in the countryside. Reformers attempted to wed traditional, indigenous systems of common property management with legal governance structures established by the new Mexican state. Ejidos themselves are collectively owned tracts of land in which the users (ejidatarios) have exclusive rights to use, but do not actually own the land. Furthermore, the law stipulated that ejido lands could neither be sold, thus preventing the return of large tracts of land to the private sector, as had happened under the hacienda system.

It was not until the Agrarian code of 1934, however, that large-scale expropriation of hacienda¹ lands and subsequent redistribution to landless campesinos began in earnest (Thoms 1998). As the Partido Revolucionario Institucional (PRI) consolidated its power in the post-revolution era, large tracts of land formerly under private control were expropriated by the state and redistributed to landless peasants for agricultural use. By the late 1930s during the administration of Lázaro Cárdenas (1934-40), this redistribution of land reached a climax. Between 1934 and 1940, Cárdenas expropriated over 18 million hectares of land for redistribution to over 800 thousand campesinos. This corresponded with Cárdenas's policies of expropriation of many foreign held industries such as oil and gas, beginning a long trend within the PRI of heavy state involvement in industry across all sectors.

The administrative structure of the ejido was firmly mandated by law and to this day consists of General Assemblies, Leadership Councils (a commissariat including a president, treasurer, and secretary), Vigilance Councils (a commissariat including a president, secretary and spokesman), and Community Advisory Committees, all elected by the ejido community (Article 27 Mexican Constitution). It is this characteristic of governance and interaction with state structures that differentiates the Mexican common property system from other Latin American nations and most nations in the developing world. As Mexico has developed over the last twenty years, the laws governing the use of ejido land have changed to address the new demands and challenges of the communities. Appendix B surveys the progression of government policy and legislative action as it pertains to the ejido and the management of communal property in Mexico.

In examining the level of involvement of the ejido - or unions/groupings of ejidos - in the management of common property at their disposal, one finds that there have been marked differences as to their participation and influence in decision-making and long-term planning. This has tended to range from *cooperation*, in which community members begin to have some influence in the management of the resource, to the use of *management boards*, in which community members have the opportunity to participate directly in the development and implementation of management plans (Berkes 1994). The ejido system has often been criticized as a tool of the political elite – i.e. a means of ameliorating larger social issues. But it has proven to be one of the more progressive and innovative experiments in the management of common pool resources, and has been characterized by a pervasive state presence and structuring (Bray 2000).

Democratic consolidation and decentralization

The Mexican political system has been referred to as both corporatist and authoritarian, with much of the political power vested in the presidency, and from 1934 to 2000, in the

¹ The hacienda was a large landed estate devoted to agricultural production or cattle ranching.

predominant political party, the Partido Revolucionario Institucional (PRI). For political theorists, it has proven a difficult country to classify for many reasons:

It had the trappings of a pluralist system without pluralism, and a federalist system without federalism, free presidential elections that were always won by the ruling party. It was a revolutionary government that had become institutionalized, and an authoritarian government, but not of the classic bureaucratic authoritarian type (Williams 2002).

Many Latin American scholars view the “state-building” of Lazaro Cardenas – arguably the father of the modern Mexican state – as a systematic consolidation of PRI power through a “simultaneous forging of multiple regional arrangements - each a distinct combination of bargaining, coercion, and alliances - that together reinforced the power of the center in broadly similar ways” (Rubin 1996 p.1). The intricate network of control established by the PRI influenced policy at every level of society.

The PRI as a party rose to prominence after the Mexican revolution as a means of controlling regional strongmen and ensuring political stability within the new state. In effect, regional chieftains “ceded direct control over territory in exchange for personal security and a share of the national spoils” (Lawson 2000, p.269). These networks of party control, known as ‘Camarillas’ “promoted career advancement through reciprocal exchanges between patrons and clients...and provided patrons with important information on political developments and policy discussions” (Williams 2002). To hold true to the promises of social reform of the revolution, and to ensure a broad base of support among the masses, state control of industry and land reform were institutionalized under the presidency of Lazaro Cardenas from 1934-1940.

One aspect that the literature is clear on is that the Mexican political system under the PRI structured society vertically to ensure the control of key aspects of production and to ameliorate social unrest among the burgeoning population, and in particular, among the landless masses in rural Mexico (Auer 2001, Rubin 1996). Labor, the agricultural sector, and the middle classes were co-opted through officially organized and recognized unions or government sponsored civil society organizations (Williams 2002), creating loyalty-based networks of control that permeated all levels of government, both local and state. This effectively enabled the governing regime to rule with a relatively low level of overt violence or repression (Rubin 1996). By the 1960s, the corporatist nature of Mexican political culture began to fray “The structures of corporatism and caciquismo² on which the system was built could not respond to diverse challenges brought about by economic differentiation and demands for political participation” (Rubin 1996 p.7).

There are two main fields of thought concerning the centralization of authority in Mexico. The classic political model of Mexico asserts that the basic patterns of governance included highly centralized power, based on corporatist representation, highly limited political contestation, and heavily centralized and controlled decision making processes (Williams 2002). Alternative models suggest that centralized authority has not been as pervasive as previously thought, but that power structures, “contrasting economies, cultures, and political identities and alliances of the various regions” have diffused power from the state over the last 70 years, created an elaborate system of dependencies, and undermined the argument for excessive centralization (Rubin 1996). Both of these views regarding the particularisms of the Mexican system acknowledge the omnipresent role of the state in all political spaces.

² Caciquismo is a traditional form of paternalism in which a local “boss” exercises power and authority over the inhabitants of an area.

The corporatist model – and networks of control – of the Mexican political system with the lion’s share of power vested in the presidency is giving way to more inclusive and transparent institutions. In this respect, the Mexican democratic transition is distinguished by at least four factors: the end of institutionalized one-party rule under the PRI in 2000; economic liberalization begun in the 1980s and accelerated by NAFTA; the “professionalization and decentralization of public policy making to strengthen state and municipal capacities for governance” (Cabrera-Mendoza 2000); and the increased attention to civil and political rights as compared with the traditional focus of the Mexican constitution on social rights (Domingo 1999).

Figure 3
Mexico’s Classic versus Post-Classic Political Models³

Classic Model	Post-Classic Model
POLITICAL POWER	
<i>Highly centralized</i> <ul style="list-style-type: none"> Vertically concentrated at federal level Horizontally concentrated inside the executive 	<i>Increasingly decentralized</i> <ul style="list-style-type: none"> New federalism stresses decentralization Axis of politics shifts from president to congress
REPRESENTATION	
<i>Corporatist</i> <ul style="list-style-type: none"> Peak organizations incorporated into PRI (Labor, peasantry, and middle classes) Prioritized social control over interest representation 	<i>Post-corporatist</i> <ul style="list-style-type: none"> Social and civic groups work increasingly outside party organizations Growing opposition parties Increasingly independent congress
CONTESTATION	
<i>Public Arena</i> <ul style="list-style-type: none"> Confined to policy implementation Engaged in by disparate social groups <i>Private, elite arena</i> <ul style="list-style-type: none"> Elite realm in executive branch Issues of policy content 	<i>Public Arena</i> <ul style="list-style-type: none"> Both policy content and contestation Engaged in by congress, social groups, partisan affiliates <i>Private, elite arena</i> <ul style="list-style-type: none"> Elite realm in executive branch Issues of policy content
DECISION-MAKING STYLE	
Closed, top-down Reserved for executive elite	Increasingly open, porous Executive-congressional negotiations Inter-party negotiations

Williams, Mexican Studies 2002, p.178

Generations of Mexicans – in the cities and rural areas – have grown and become accustomed to the corporatist structures inherent in the Mexican political system. They have been both constrained by the close hold nature of political and economic decision-making, and yet have been beneficiaries of many progressive – if not shortsighted and politically motivated – social programs. As a matter of course, what has occurred in Mexico over the last 20 years is nothing short of phenomenal. But the older habits of clientelism, excessive centralization and cynicism continue to shape the Mexican perspective on politics and the federal government. (Cabrero-Mendoza 2000). This will not change overnight, or perhaps not in a generation, but Mexico’s political and economic liberalization, its increasing ties to its northern neighbor, and its increasing presence and influence in the international arena, are all drivers of change in the country.

Traditionally, the executive branch has dominated the legislative agenda in Mexico, and has been by far the most powerful branch of government. Through at least 1993, around 90 percent of all bills were generated through the executive branch, not congress. The locus of power therefore in terms of agenda setting for any type of legislative action was set through the

³ The “classic” model refers to the political regime existing under the PRI. The transition of this model began in earnest during the Salinas administration (1988-1994).

executive, effectively ensuring that the legislature's authority extended only to ratification (Williams 2002). A broader effect of this "stovepipe" type of decision-making and policy power was to mollify any influence of interest groups operating outside of the executive sphere of influence. This combined with a fixed six-year term for legislators – with no re-election – and no independent, professional civil service has combined to produce a winner-take-all mentality towards political office at the state and federal levels.

The New Federalism: Increasing Autonomy of the Mexican State

The role of state government, and in particular the governor's office has evolved over the last 15 years. In the past, the governors in each of Mexico's states were considered more "political prefects" of the federal government, directly nominated by the president (Ward 1999) as opposed to independently supported representatives of states' interests. In turn, the Governors were then expected to nominate municipal presidents and other officials who were palatable to the federal executive. These nominees were often "unpopular with (or unknown to) the general public, local politicians, and members of the city council" (Cornelius and Craig in Ward 1999).

Governors who kept social unrest at a minimum while ensuring a favorable turnout for the PRI in national elections could expect relative autonomy from the trappings of Mexico City. Those governors who were not able to ensure support for the PRI, or lost favor with the president for any other reason, were likely to be "replaced" as happened to governors in both Chihuahua and Guanajuato in the mid-1980s under President de la Madrid (Ward 1999). The result of this was a federalist system in which state power brokers – governors, legislators, and local municipal presidents – were in effect at the behest of the current president, and in the case of Mexico, under control of the PRI and its benefactors.

By the 1970s, however, there was an increase in demands by independent union and peasant movements for more independence from the state supported clientelist networks (Auer 2001, Domingo 1999). This corresponded with a general demand during the period for more political representation and effective political rights (Domingo 1999). At the level of state government, gubernatorial power is much less a function of allegiance to the president as in the past, and Governors are increasingly "on their own, and must seek to work collaboratively with state politicians and populations within their states, as well as to play the intergovernmental relations game with upper and lower tiers of government" (Ward 1999, p.16). Part and parcel to this trend is the 2001 formation of the multi-partisan Association of Mexican Governors, which has gained prominence of late as a forum for information sharing and policy research among Mexico's thirty-one states.

Decentralizing initiatives between 1982 and 1988 included measures that attempted to strengthen state and local governments through the creation of Development Planning Committees (COPLADES). The aim was to involve the state and local municipalities in decisions regarding public investment and thus enhance accountability and efficiency in the allocation of resources. This did not, however, result in the devolution of policy-making authority to the local level, but rather, when the coplades were organized, "they turned out to be largely ceremonial forums to legitimize decisions already taken by the governor and a small group of federal officials" (Cabrero-Mendoza 2000, p.375). Decentralization of authority and fiduciary responsibilities gained momentum in the 1990s, first under Salinas (1988-1994) and in earnest under the Zedillo administration (1994-2000).

Local government in Mexico continues to be the central political actor in municipalities. The promotion of locally based development organizations, despite the shortcomings mentioned, have tended to facilitate citizen participation and resource exchange between the public and

private sector on a host of issues (Porrás 2002). For example, decentralization of the health and education systems began in earnest during the Zedillo administration as part of the overall policy of devolution to the state level, and is indicative of this evolving relationship. From 1994 onward, most federal employees in both of these vital social service sectors were transferred to their respective state governments. Consequently, state governments saw their staffs grow by 200-300 percent, and state budgets in health and education were doubled (Cabrero-Mendoza 2000).

In Mexico, the complexity of governance has increased with economic liberalization and opening of the political arena, not only because of the ubiquity of new public-private networks, but also because enduring patterns of co-governance and power dependence have changed. The balance of power between state and federal has increased significantly with stronger state legislatures (Ward 1999), and despite continuing fiscal dependency on the federal government, state and municipal governments are more autonomous than in the past (Porrás 2002). Although Mexico has no formal civil service, deregulation and divestment of the state from industry, along with the decentralization of government as a whole, has facilitated the growth of a highly trained and professional technocracy within Mexican government at both the state and national levels. The emergence of this new professional class in policy formulation and implementation has, to a great extent, created a more progressive and publicly accountable playing field.

In the late 1970s and early 1980s, most Mexican civil society organizations or associations were creatures of the state (Cabrero-Mendoza 2000). In the 1980s and 1990s, however, Non-governmental Organizations (NGO) operating autonomously from the state increased significantly. Civil society organizations offered little as a counterbalance to the governor's or municipal president's power until the late 1980s, as structural adjustment programs were initiated, government social programs were curtailed, and the traditional aversion to NGOs operating in Mexico had abated (Ward 1999). The rapid growth of Non governmental Organizations in Mexico (both international and domestic) during the 1980s and early 1990s coincided with the expansion of structural adjustment – including privatization – policies under the Salinas administration and the opening of the political system.

Mexico has traditionally had government extension programs in the rural areas of the country, but NGO involvement was largely eschewed as interventionist, and limited to government sponsored – and constrained – agencies. However, as corporatism as a political system has declined in the face of decentralization and economic liberalization, civil society organizations and NGOs have flourished as new social movements, accommodating the space left as corporatism proved ineffective as a “mechanism of interest representation and social control” (Williams 2002, p.186). The increasing autonomy of the state and devolution of fiscal responsibility has complemented this increase in NGOs operating at the municipal level as well.

The Mexican Judicial System

The 1917 Mexican Constitution established the groundwork for an independent judiciary in the Supreme Court, with eleven judges selected and approved by Congress with tenure for life. This structure for judicial independence was quickly abandoned by President Plutarco Elías Calles (1924-8), who instead handpicked 16 political supporters who would acquiesce to the demands of the executive. This set a precedent of judicial subordination and pandering to the executive that would remain until reforms under the Zedillo administration in 1994 (Ward 1999). Under the PRI, the judicial branch in effect served as an extension of executive authority. Indeed, the Supreme Court would not rule on political matters, and constitutional review and

interpretation invariably supported the PRI or presidential perspectives and initiatives (Lawson 2000).

Without a substantial level of autonomy and professionalism, and access – physical and institutional – to the courts, participation in this vital avenue of democratic resolution has restricted civil contestation. Accountability and transparency in government, therefore, has suffered because of the intricate patronage systems devised to ensure the political livelihood of political actors and judicial appointees. The socio-economic costs and constraints to civil courts and legal representation are high in more homogenous and developed societies but these inequities are dramatically compounded in unequal societies such as Mexico (Domingo 1999, Lawson 2000, Romero-Lankao 2000). However, the Mexican system of district courts has expanded dramatically since 1980 - from 91 in that year to 148 in 1990 (Domingo 1999). This in turn has opened up new avenues for contestation and dispute resolution that did not previously exist in many areas.

The constitutional reforms of 1994, enacted in the first year of the Zedillo administration, have been crucial to help de-politicize the appointment process of supreme court judges, and in turn, district judges. Prior to 1994, the executive appointed all judges, who in turn appointed district judges. The effective control by the PRI over legislative action and judicial appointments maintained a bias in the judicial appointment process (Domingo 1999) and by no means ensured that the most qualified or competent judges served on the courts. Ernesto Zedillo introduced reforms in 1994 aimed at increasing the independence of the Mexican courts, and to no small degree, to protect the judicial institutions from the “predations” of the executive (Lawson 2000).

One such action allows the court to review and rule on constitutional disputes between the federal government and the individual states. Another reform enables legislators to compel the court to rule on the constitutionality of any law passed by congress. Thirty-three percent of legislators must vote for this review to take place. These reforms of the judiciary have both enhanced the autonomy of the court while allowing for constitutional review of contentious legislation (Ward 1999). While progressive in terms of promoting a more autonomous judiciary, the challenge remains to ensure that the court - and the function of judicial review – is not used to create political stalemate; a challenge that exists in any democratic government.

In the absence of a yet fully accountable and accessible judiciary, Mexicans have been using other channels to protest malfeasance or negligence in the public sector. In response to growing demands for action against impunity, corruption and accountability, the *Comision Nacional de Derechos Humanos* (CEDH) was created in 1990. Individual state offices opened soon thereafter. The CEDH, though primarily an advisory and putatively autonomous institution, with no statutory authority to enforce its findings and recommendations, has become an important avenue for exposing both corruption and impunity in the absence of civil and political channels⁴. Increasingly, Mexican policy has turned more towards civil and political rights as opposed to the much more dominant weight of social rights enshrined by the revolutionary constitution (Domingo 1999), and this trend has corresponded with reform of the judiciary, to make it both more accountable and accessible to the public.

Institutional change within the state directly impacts communities, whether in reform of financial markets, political liberalization, or in the transparency of those institutions. In June 2002, the Mexican congress passed the country’s first “Freedom of Information Act.” To date, Mexican public institutions – all branches of government and state enterprises such as the

⁴ Interview with Guadalupe Morfin, former ombudsman of the Jalisco State Human Rights Commission (1996-2000).

nation's petroleum giant Petroleros Mexicanos (PEMEX) – have been able to operate in near secrecy, with virtually no accountability to the public. The act “requires agencies to publish in a routine and accessible manner all information concerning their daily functions, budgets, operations, staff, salaries, internal reports, and the awarding of contracts and concessions...and grants citizens the right to seek the release of information that is not already public through an uncomplicated request process (Doyle 2002 p.1).

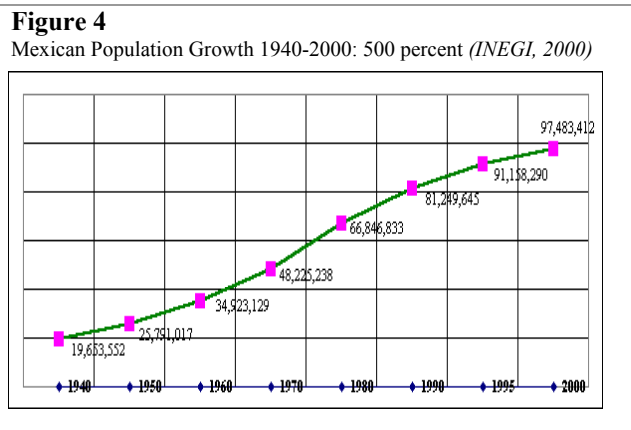
Underdevelopment, social pressures, and assuagement policies under the PRI

Mexico has seen rapid growth in its educated middle class, and investments in both public education, and research and technology have increased exponentially. Since 1995, for example, expenditures in science and technology and research and development have increased over 300 percent in overall funding for institutes of higher learning, and national research organizations (INEGI 2003). But there remain large areas of underdevelopment – particularly in the south – and remnants of clientelism and patronage at the local level are pervasive. For example, indigenous politics and social movements, as exemplified by the ongoing rebellion in Chiapas, are often guided by a mistrust of government borne of the colonial era and 70 years of graft and authoritarian decision-making (Boyce 2001, Cabrero Mendoza 2001).

The Mexican government's concern with environmental degradation and sustainable development led to the creation in 1994 of an overarching environmental protection secretariat similar in scope to the Environmental Protection Agency (EPA) in the United States. Since 1994, the *Secretariat of Environment, Natural Resources, and Fisheries* (SEMARNAP), which in 2000 became the *Secretariat of Environment and Natural Resources* (SEMARNAT), has consolidated many other independent agencies under its purview and expanded its influence at both the state and national level. While largely viewed in its early years as a toothless agency with inadequate funding or support, SEMARNAT since 2000 has seen its budget increased and its presence and statutory authority expanded substantially, along with a litany of other social and environmental programs and initiatives (Emanuel 2000).

Population Growth and Social Expenditures

The population control policies of the 1970s managed to slow the exponential growth in population that began in the 1950s and 1960s. It is reckoned that without these policies in place, Mexican population in the year 2000 would have exceeded 138 million, as opposed to the 100 million counted during the last census



million counted during the last census (Herrero 2001). As it is, the Mexican population grew from just over 19.5 million in 1940 to over 100 million in 2001. As Figure four illustrates, Mexico's population increased over 500 percent between 1940 and 2000. This growth – once the highest birth rate in the world – has placed extreme strain on the state's ability to provide a litany of services to its citizenry, including public education, social security, outreach, and clearly economic development as a whole. But over the last ten

years increased government expenditures and state attention to public education has increased substantially.

While it would seem intuitive that overpopulation would strain the already limited resources of a developing nation, it is only recently that development practitioners and governments have again begun to acknowledge that overpopulation in the developing world can be detrimental to growth (Economist, December 7, 2002). The leveling off of population growth in Mexico was accompanied in the 1990s with an increased attention to the educational institutions of the country, and as the drive towards decentralization moved forward under the Salinas and Zedillo administrations, increased funding at the state level ensued.

Between 1990 and 2000, total education expenditures as a percentage of GDP increased from 4.6 percent to 6.1 percent. In real terms, this has meant an increase from \$111.4 billion USD in 1991 to \$228.8 billion USD in 2000 (Corbacho 2002) in constant US Dollars. Indeed, the educational policies of Mexico over the last five to ten years have been described as progressive by the International Monetary Fund, with over 50 percent of overall benefits in primary education allocated for the poorest 40 percent of the population (Ibid). This is not to say that the budgets of the Mexican states were increased at an equal level – funding at the state level is as much a matter of political deals in Mexico as in any federalism – but it is noteworthy that a sustained increase in attention and spending towards education and infrastructure occurred at the pace that it has. Francis Fukuyama has written that governments have their greatest influence in the production and growth of social capital through education. “Educational institutions do not simply transmit human capital, they also pass on social capital in the form of social rules and norms” (Fukuyama 1999).

NAFTA, growth in trade, and environmental accountability

Trends in economic policy in Mexico since the mid 1980s have markedly influenced environmental policy at both the local and national level. The Mexican economy has been marked by heavy state influence, involvement, and populism since the administration of president Cardenas in the 1940s. At that time, many industries, such as petroleum and electricity, were nationalized and brought under state control. All major banks were controlled by the state. The Mexican government has traditionally had a strong role in the economic development of the nation, relying more on public ownership of vital industries, rather than allowing private or foreign investment or ownership. This heavy state involvement is often traced back to the Cardenas Administration (1934-40) when the petroleum and other industries were nationalized. In any event, by 1982, the state owned roughly 1,155 public enterprises in a multiplicity of industries such as telecommunications, commercial banking, mining and steel, and notably, petroleum (Williams 2002).

Mexican divestiture of the public enterprises (PE) under its control began under the de la Madrid administration (1982-88), but these divestitures were seen largely as symbolic since they included mostly small-scale enterprises outside of the manufacturing sector. Large-scale divestiture of enterprises in the manufacturing sector began under the administration of Salinas de Gortari (1988-94) and included most PEs with the exception of those industries deemed strategically vital to the state such as petroleum, electricity and the Mexican railroad system. In 1983 the state owned 1090 PEs but by 1994, that number had dropped to just 252⁵ (Ibid).

In the 1980s, the Mexican economy was marked by severe swings, prompting the administration to move towards more liberal policies regarding trade and finance. This culminated with the signing of NAFTA in 1992. It was at this point, many argue, that the

⁵ During the same period 114 Public Enterprises were created by the state.

Mexican economy began a watershed shift from the traditionally state-driven economic models of Latin America with the exception of Chile and Argentina. The benefits of NAFTA to the Mexican economy – and more importantly to the Mexican worker – continue to provoke heated debate, but in spite of the recent economic turmoil to the south and the downturn of the US economy, the Mexican economy continues to grow. Between 1985 and 1993, non-petroleum based exports from Mexico increased from \$12.2 billion USD to \$44.5 billion USD, and doubled again from 1994 to 1998 to over \$110 billion USD (Tamayo-Flores 2001). But the implications of the NAFTA accords on Mexican society as a whole eclipse the changes in agriculture, heavy industry and business. The effects of the NAFTA accords go well beyond changes in Mexican agriculture and business. Changes in academic approaches, increased exchanges among the three NAFTA countries complement the changes in Mexican political culture and society as a whole. “The new insights will at times be acutely disturbing, but with free markets come free minds” (Tellez 1997 p.3).

One of the most divisive issues in the implementation of NAFTA has been the possible negative effect on the environment. The role of Environmental Non-governmental Organizations (ENGOs) in environmental governance has been extremely important at the policy level, but perhaps more importantly for the long-term, in informing the public in an aggressive, highly organized manner. Until the NAFTA debate, members of the trade community had managed to keep issues of social and environmental concern separate from issues of trade (Sanchez 2002). NAFTA’s environmental clauses were included in the text of the agreement only after considerable pressure from environmental groups within Canada, Mexico, and the United States, as well as from the international community.

The North American Commission for Environmental Cooperation (NACEC) was established during negotiations in part due to pressure brought to bear by environmental groups, and serves to address environmental issues in the context of economic integration. But many argue that the commission’s authority was negligible from the start due to specific national interests of the three NAFTA members. First, None of the NAFTA member countries wished to give the commission supra-national governing and regulatory authority, raising questions of national sovereignty and state interest. Secondly, none of the member countries wished to have their environmental agencies opened up for review – possibly revealing bureaucratic deficiencies – by either the other members’ agencies or the NACEC (Sanchez 2002).

Environmental Non-governmental Organizations (ENGO) fought hard to ensure that environmental concerns were in the minds of the negotiation participants, and although they did not get all the conditions hoped for in the final NAFTA agreements, they did exert enough pressure to ensure that environmental provisions were included in the text of the trade agreement. Furthermore, they lobbied tirelessly for, and succeeded in ensuring the creation of the environmental side agreement, and the formation of NAFTA’s environmental bodies (Sanchez 2002). Once the NAFTA agreement went into force, there was a decrease in ENGO activity at the international level, but this decrease in activity at the international level has been matched by an increase in Mexican state and NGO activity at the local level. SEMARNAT’s consolidation of many of the functions previously dispersed through different federal and state agencies has led to a more streamlined and accountable environmental agency, and enhanced its role as a coordinating body for environmental efforts at the state and federal level.

NAFTA, and Mexico’s increasing ties to its northern neighbor, have undoubtedly played a large role in strengthening Mexico’s environmental protection regimes (Auer 2001). But environmental conundrums such as pollution and overpopulation – particularly in Mexico City – various major watershed issues nationwide, and deforestation in the central and southern regions,

have also brought together a diverse group of stakeholders. These range from middle class activists disgruntled with the poor environmental conditions in many urban centers, indigenous and human rights groups, and a growing number of educated and involved environmental activists.

Challenges and opportunities for collaborative governance under the evolving political model

This chapter has offered a glimpse into the evolution of the Mexican state since its conception, and more importantly, over the last 20 years. An attempt to comprehensively cover Mexican political and social change is well beyond the scope of this paper given its enigmatic and complex history, but this chapter has attempted to provide the reader with a general sense of the scope of change underway in the Mexican state. Political decentralization and an increasingly competitive party system, constitutional and judicial reform, and liberalization of the Mexican economy have been - and are - occurring at a pace that could be considered revolutionary. Mexican society is more educated, cosmopolitan, and internationally engaged than ever before, with increased connectivity in policy discourse among the public sector, civil society, and a growing professional class of technocrat akin to a civil service (Williams, World Development 2002).

For the ejido, and indeed the agricultural sector as a whole in Mexico, changes in economic and social institutions have meant insecurity as to how they will perform in a more competitive, and less financially subsidized market. This is perhaps the greatest challenge for the state and communities in establishing more collaborative and sustainably managed environmental institutions. Despite greater trends towards more collaborative management and an increased recognition as to the value of environmental protection and sustainable use, the friction between conservation and sustainable harvesting of forests and other common pool resources and day-to-day needs of individual families and communities remain (Segura 2000).

Chapter 4: Community and Institutional Environment – A Work in Progress

The analytic framework introduced in this research will not be presented because it is “the best,” but rather, because it represents an attempt to examine the symbiotic exchange between communities and the state as both evolve through the development of political and economic institutions, the generation of social capital; be it through community involvement and participation, education, extra-communal interaction, etc. The framework is comprised of four attributes of community – or factors – as they exist within a greater state framework, which the author suggests are important in the development of collaborative management arrangements. Upon reviewing the case studies, the author will describe the particular attributes – or factors - of the communities in the region under study. Finally, a larger table with all three cases presented together will include a fourth column that examines commonalities among the three case studies. The factors introduced in the framework are conceptualized in the following pages.

1. Community Dynamics

Aggregated Relations imply the sum of community or societal interaction among each other and with actors from outside of the community. Much has been written regarding “communities of place” and “communities of interest.” The former is self-evident and describes a spatially bounded community. As mentioned earlier in this chapter, communities of interest are “constituted by people with shared interests and occupation regardless of place” (McCay 1999, p.3). Bonnie McCay has suggested that there are management communities as well which must be taken into account when examining common property management. For the purposes of this paper, the “Epistemic community” is of particular interest as it relates to both communities of place and communities of interest. McCay describes the epistemic management community as:

“organized around challenges of knowledge and science, and the application of science to policy, communities develop that involve scientists, industry members, government officials, NGOs, media personnel, and more, negotiating toward, if not entirely creating, shared visions of a future and goals for action...[with] government agencies as key actors” (McCay 1999 p.3).

Inter-community interaction and social capital

The manner and degree to which members of one community interact with neighboring communities, or even more distant communities with similar interests, indicates a level of organization and relationship building that may be beneficial in the building and maintenance of collaborative arrangements. Exchanges of information, technical skills, and the organization of associations among communities can build trust, empower community leaders and members, and facilitate even greater discussion regarding resource management and governance. As Samuel Bowles has written, “the frequency of interaction among community members lowers the cost and raises the benefits associated with discovering more about the characteristics, recent behavior and likely future actions of other members” (Bowles 2000, p.7).

As discussed in chapter two, social capital has been described as the rules and norms that exist and which are generated within a community. It is constructed of those institutions – social, political, and otherwise - that bind communities together and facilitate both political and economic progress (Mohan 2000). Forms of social capital tend to be self-generating as successive generations are socialized to evolving norms of the community and greater state structures. Interaction - both within and among communities, and with the state - and evolving values placed on social goods such as education or environmental protection are examples of

activity that can generate social capital. As mentioned, the exchange and re-conception of community mores and values affect the institutions upon which a community and society as a whole are built and vice versa. In states undergoing sustained democratic reform, and in which value is placed on the educational and social development of the populace, this interchange is both reinforced and driven.

Leadership and participation

A strong leader or group of leaders is vital to the success of any endeavor involving the management of a resource, and collaborative efforts involving government and community are no exception. Without a strong leader or leaders who both cultivate and facilitate community action, a movement, organization, or association has little chance of success. Effective leaders are able to motivate other members of the community and effectively communicate a vision and facilitate involvement of the community towards a specific goal or set of goals. They should be knowledgeable about the environment in which they are operating and the goals towards which they are working, and are able and willing to involve - and delegate - others in the leadership process as well. They are able to be persuasive as well as patient, recognizing that commitment to change may be a difficult step for many members of the community. This is particularly important in the developing world, where changes in the institutional environment in the community and the greater state can be confusing and intimidating.

Resilience and Conception of the Commons

As communities develop through in and out migration, interaction with the state and non-state actors, the view of environment changes to encompass ‘spatial and temporal variability’ and facilitates a very different view of the environment by community. Rather than a static, zero-sum view of the commons, “environments come to be seen as the outcome of dynamic and variable ecological processes and disturbance events, in interaction with human use” (Leach 1997, p.7). Ethnologists have documented that in Mexico, “land,” or the commons, is conceptualized as a place of work, and thus subsistence farmers can tend to see standing forests negatively, or as the absence of productive human activity. It follows that as fields are places of work and agriculture, forests are places of future work (Haenn 1999).

Research shows that collaborative efforts are more likely to succeed when the commons are conceived in a holistic manner, and when the following conceptions of the resource exist: First, community members must have a preference for sustainable management as opposed to viewing the resource as a zero-sum issue. Second, they must have the social and material wherewithal to deal with the challenges associated with creating and managing collaborative resource regimes. Third, they must understand – and have information available through different technical and governance channels – what strategies are necessary for effective management (Singleton 2000).

2. Commons Experience

The importance of history on current dynamics at the community level and beyond cannot be understated since it is the failures and successes of community/state initiatives that shape current and future endeavors. This concept has led to a greater attention to the importance of time-scales and evolving local-state relationships when examining environmental change (Leach 1997).

Co-management Experience

Whether or not the community has had experience with collaborative or co-management is an important – although some would argue not entirely necessary – factor in that relationships

are built among participants, institutional knowledge is transferred not only among community members but with state employees employed in the community or NGOs operating on the effort. One of the strengths of collaborative or co-management management institutions is the horizontal production of ownership in the process and outcomes. Social capital is built as members of the community take ownership of and learn from “the fruits of their success or failure in solving the collective problems they face”(Bowles 2000), and as their interaction with external actors increases.

3. State Interaction

Neo-liberal thinking regarding state intervention as inherently bad has not only given way to the belief that the state does in fact have a positive role to play in development, but that social processes and cultural underpinnings must be taken into account when considering long-term strategies.

“The face-to-face local interactions of community are thus not a substitute for effective government but rather a complement...both a legal and governmental environment that complements the distinctive governance abilities of communities and a distribution of property rights that makes members the beneficiaries of community success are key aspects of policies to foster community problem-solving” (Bowles 2000).

Level and nature of Interaction

In many states undergoing democratic transitions, historical relations with the state are a mixed bag. In Mexico’s very particular form of authoritarianism, the interaction with communities has ranged from outright coercion, to subsidies and extension programs to alleviate social pressures. This has traditionally been accompanied by a patronage system at the local level in which beneficiaries are expected to support the federal government, and more importantly, the PRI, which governed Mexico for 70 years until the 2000 elections. The interaction of the Mexican state with traditionally more marginalized areas has been far more progressive over the last 10-15 years, spurred to a great extent by economic necessity, political liberalization, and more transparent and objective development strategies. But the state has always had a presence at the local level. Although periods in the relationship between the local and state may have not have been productive in the short-term, the institutions mandated by the state from governance to administration have become intertwined with local culture, and thus have formed a concrete connection with the state.

State interaction as overtly coercive can be seen as a “negative.” But this could be misleading, since many social movements that rise in opposition to the coercive power of the state provide the grist for a multitude of other attributes of community development, such as action committees, relationships with NGOs operating in the area, and so on. Overall, however, as witnessed with the on-going rebellion in Chiapas state, the reaction to the coercive power of the state has not been positive, in that single issues have tended to obviate other substantive development concerns. In the case of Chiapas, for example, development issues such as education and commons management have become muddled and at worst subsumed by the rebellion. Consequently, Chiapas remains one of the poorest regions of Mexico, suffering from the lowest levels of education nationwide, burgeoning birthrates, and deforestation.

Funding

Generally, collaborative efforts at resource management have enjoyed greater success when the communities have at their disposal developed judicial systems and legal support, and an institutionally developed financial infrastructure (Kellert 2000). In the public sector, the government at both the state and federal level must be willing to adequately support

collaborative efforts, particularly in those communities with severely limited financial support, and where exploitation of the resource for today's needs may obviate more sustainable-use management plans. Indeed, one of the main causes of deforestation in the community forests of Mexico has been that agricultural subsidies have provided strong incentives to convert land for that use, while conservation or sustainable use subsidies have not been forthcoming.

4. Political “Winds”

Decentralization

One of the greatest challenges to collaborative resource management efforts has been the “inability to control and guide the behavior of complex organizations, particularly bureaucratic and local institutions” (Kellert 2000, p.713). Decentralization of government, while presenting challenges for local governments, opens up new opportunities to address more local issues (Fox 2000). In the presence of true reform and measures of accountability built into decision-making processes, decentralization can offer local and state governments – and civil society organizations – more leeway to develop regionally germane plans of action and long-term strategies as opposed to top-down, and often politically motivated, decision making institutions (Porras 2000). In the interim therefore, while devolution of authority and mechanisms of accountability and control are being developed at the local level, governments and communities face the enormous task of navigating through the rules of the new institutions and management authority.

Legal/Constitutional Reform

Without the rule of law, and when existing laws can be manipulated and even superceded by the interests of those in positions of influence, trust in the institutions supported by the state are compromised. Legal and constitutional reform to ensure the civil and political rights of citizenry and to firmly establish property title and rights is essential in any democracy. Without clear lines of accountability and channels for contestation, the legal system may remain a powerful tool for those who hold the most power in a community. Likewise, the level of transparency and access to adjudication in the courts – both in terms of bureaucracy and physical proximity – is important in gauging public trust in that institution *and* in the rule of law.

Economic Restructuring/Liberalization

The economic development in Mexico has been discussed at length in chapter three of this paper, and certainly reforms in the financial sector and NAFTA's economic and social impact have been enormous. Privatization and reform of the financial sector and institutions and a more competitive market for credit access can help alleviate the strain on state and federal governments in developing countries. Leveling out the playing field in terms of access to these key components of capital and growth is essential in ensuring individuals and communities have the ability to finance projects in the private sector. This is particularly important in those communities seeking alternatives to forestry as their main source of income generation.

The Analytic Framework

Figure five illustrates the analytic framework that will be used to evaluate each case study in chapter five; the factors examined have been conceptualized previously in this chapter. The “Legal/Constitutional Revision” and “Economic Restructuring/Liberalization” fields – under the “political winds” factor – represent changes at the national level but imply policy effects at the state level as well. These fields remain constant across the case studies.

Figure 5

<i>Factor</i>	<i>Region under study</i>
Community Dynamics	
Inter-community interaction and social capital	
Leadership and participation	
Resilience and conception of the commons	
Commons Experience	
Co-management Experience	
State Interaction	
Level and Nature of Interaction	
Funding	
Political “Winds”	
Decentralization (federal and state) ⁶	
Legal/Constitutional Revision (federal) ⁷	<ul style="list-style-type: none"> • In 1988 Mexico passes first environmental law requiring notifications of management activities and environmental impact assessments. • In 1992 article twenty-seven of the Mexican constitution is amended to allow ejidatarios to take title of their land, use it as collateral for loans, or sell it. • 1992 forest law substantially deregulates the forest sector and is subsequently blamed for an increase in clandestine logging in many forest communities. • 1997 forest law re-regulates various aspects of forest management and establishes new restrictions on the harvesting of timber.
Economic Restructuring / Liberalization (federal)	<ul style="list-style-type: none"> • Mexico joins the GATT in 1986 and NAFTA in 1992. • Democratization and decentralization efforts under the Zedillo administration are dubbed the “New Federalism.” • Social and civic groups work increasingly outside party organizations. • Growing opposition parties, and an increasingly independent congress. • Policy content and contestation increasingly engaged in by congress, social groups, partisan affiliates. • Executive-congressional, and inter-party negotiations more frequent.

⁶ Describes decentralization at both the Federal and State level.

⁷ Describes changes at the national level but implies policy effect at the state level as well.

Chapter 5: Collaborative Management and Mexico's Ejido Communities

Introduction

In Latin America, some 80 percent of forests are under the direct control of the state, or are part of a larger reserve area. Mexico, however, is different in that upwards of 80 percent of forestlands are held under *de jure* common property management arrangements under the federal ejido system (Klooster 1998) established by article twenty-seven of the 1917 constitution. The ejido provides a good unit of analysis for several reasons including: The ejidos, though frequently manipulated and often corrupt, provided and still provide community members with a distinct connection with the state, through formalized rules and governance structures; for all intents and purposes, they were fairly progressive models for community-based management in spite of their political and economic limitations within a greater Mexican political system.

They were “endowed with juridically prescribed forms of internal political organization and external representation, which sometimes operated conjointly with others forms of traditional community organization” (Bray 2000). Furthermore it has been shown that more often than not, the deterioration of natural resource regimes within the ejido system has been due to socio-economic problems and mismanagement – graft or lack of technical knowledge – by administrators rather than specific faults in the system (Jimenez 1998, Klooster 2000).

As discussed in chapter two, the administrative structure of the ejido is the creation of the Mexican Agrarian Code of 1934, and is in fact required by law in the operation of the ejido. The perspective of many is that this top-down structural and management approach has hindered the ejidos to create their own, homegrown governance institutions. However, this requirement has given ejidatarios a governance structure that has existed for several generations, and created at the very least a legacy of organizational management, and a rich history of interaction with greater state institutions (Bray 2000, Robinson 2000). The consequences of this interaction are important in at least three ways: First, the governance structure of the ejido as mandated by law explicitly legitimizes community administrative processes within the ejido; second, it provides an omnipresent conduit between the local and state in terms of legal and structural continuity, even given the changes in land use law and environmental governance regimes; and third, it has created a unique form of social capital in the form of aggregated experience with the state and federal government, non-governmental or civil society organizations, and environmental administration and management (Bray 2000).



The case studies examined in this chapter focus on groupings – unions and formal associations – of ejidos in the Mexican states of Guerrero, Oaxaca, and Quintana Roo. While the ejido as a national form of communal land tenure is the unit of analysis, the research will not necessarily focus on one distinct ejido. The case studies themselves are not uniformly focused on one particular ejido, although several are examined more closely as part of a larger union or

geographic region. They were chosen because they examine communities and ejidos in what are considered more underdeveloped, yet biologically “mega-diverse” regions of Mexico. All three regions under study have a history of involvement with greater state political and economic institutions – albeit in varying degrees – but the struggle towards more collaborative control and management of natural resources in each area is distinct. But as discussed in chapter one,

commonalities exist among all the communities, including the ejido system, political and economic restructuring at the national level, decentralization and devolution of many traditionally federal responsibilities to the state level, and a change in social norms due to increased federal and state government involvement at the local level.

The Mexican cases are good examples of how both community dynamics and greater state and national developments – democratization, decentralization, economic reform, etc – may help shape and direct more collaborative or co-management of natural resource regimes, but this does not mean that the framework cannot be applied elsewhere. The framework suggests – as does the literature on collaborative or co-management – that a multiplicity of factors influence the vitality and form of collaborative or co-management regimes. Community attributes, experience with resource management, and greater political, economic, and social institutions will vary greatly around the world and influence management regimes in distinct ways. Again, the analytic framework presented in this research represents a “work in progress” and compels further research.

Southern Quintana Roo, Mexico



Quintana Roo as a state was virtually uninhabited until fairly recently – 150 years – and prior to the colonial efforts of the Mexican government in the region in the early 20th century, the area had undergone little change since the Mayan civilization centuries before (Bray 2000). Michael Kiernan is a private consultant and was working under a grant from the Biodiversity Support Program (BSP)⁹, a consortium of the World Wildlife Fund (WWF), The Nature Conservancy (TNC), and World Resources Institute (WRI). The study was funded by the United States Agency for International Development (USAID).

The study focused on the southern region of QR, where there has been substantial in-migration from neighboring states. Some of the characteristics of the southern region communities include a higher level of education at the primary and secondary levels, with a higher rate of adult literacy. Additionally, many community members have returned to the area after attending universities, bringing with them a wealth of management experience and knowledge accrued in Mexican or foreign institutions. There is a much greater cohesion among ejidos and ergo communities. Communication and interaction among ejidos, communities, and the state is much higher in this area than in comparable areas in QR as a whole.

Successful attempts at co-management are often dependent on the community's ability to adapt to changing and often ambiguous operational environments, both within the community and the larger state. Common property regimes in the state of Quintana Roo have been hailed as some of the most promising in the developing world, but have also experienced profound challenges in terms of legal and constitutional structure and operation. The communities examined in this section were established ejidos, or common property systems set up by the Mexican Government in the 1960s. Quintana Roo's forest ejidos' experience with co-management of the forests has several unique attributes including:

- Aggregated experience in the context of Mexico's *ejido* system, and substantial in-migration from neighboring states.
- Involvement in the industrial production of timber for commercial markets through formally organized community enterprises, "an economic activity that occurs in few other community-based natural resource management regimes in the world outside of Mexico" (Bray 2000).
- The communities have created new and innovative common pool resource management regimes at the local and state levels in a rapidly developing political and legal environment, in "interaction with rules changes emanating from frequent shift in relevant national laws in Mexico" (Ibid).

In southern QR, the management of the forests was assigned to the parastatal corporation, Maderas Industrializadas de Quintana Roo (MIQRO), which operated under a 29-year concession from 1953 until 1982. In this period, land use patterns changed drastically after 1953, however, and the population of the area grew exponentially due to in-migration and natural

⁸ <http://www.travelamap.com/mexico/quintanaroo.htm>

⁹ The BSP as a consortium began operations in 1988 and closed down in December 2001.

growth. The original MIQRO concession transpired during a period in which cattle ranching and commercial agriculture began to rapidly infringe on forested areas, as campesinos sought the agricultural subsidies offered by the federal government. Notably, the number of ejidos created during this period increased from 6 to around 60 (Bray 2000).

Ejidatarios in the state overwhelmingly voted against the continuation of the concession in 1982, and in 1983 a group of around 50 ejidos came together as part of an ambitious effort to sustainably manage the forest regions of the ejidos. Community leaders of the southern communities worked with state and federal authorities and NGOs to form the Sociedad de Productores Forestales Ejidales de Quintana Roo (SPFEQR). The overall management plan when initiated was known as the Plan Piloto Forestal (PPF), and its development was facilitated to a large extent by the German *Agency for Technological Cooperation* (GTZ) in an association known as the Acuerdo Mexico-Alemania (AMA). Prior to 1983 ejidatarios had little say in how the forest was managed and exploited, leaving management and technical services to the MIQRO (Jimenez 1998, Bray 2000, Kiernan 2002). Rather, as was common in most wooded areas in Mexico, a stumpage fee was assigned by each community to the concessionary. It is important to note however, that despite not being directly involved in the development of management plans and harvesting, ejidatarios and community leaders were at least exposed “at the periphery” to the workings of forest management during the years that the MIQRO concession operated (Jimenez 1998).

Beginning in 1983, the federal government initiated a much more proactive and involved policy in QR, particularly with a strong presence of the federal forest service and the active support of the state governor (Robinson 2000). By 1987 the AMA, federal forestry teams, and ejidos participating in the initiative formed formal associations of forested ejidos in QR (Sociedades Civiles) that included a technical directorate and professionally trained Mexican Forestry personnel (Kiernan 2002). For many years following the formation of the PPF the technical directorate worked in conjunction with different ejidos to inventory timber volumes in each ejido, analyze data for sustainable yields, and submit a management plan to the individual ejidos for vote by the ejidal assemblies (Ibid). This interaction provided the communities with expertise that would eventually allow them to take on many of the technical aspects of management previously held by foresters and the German NGO.

By 1994 and the passing of regulations in the forestry code, a further decentralization of management authority took place as restrictions on marking timber for harvest were relaxed. When evidence of illegal poaching and harvest of younger timber came to light, pressure was brought to bear by both ejidatarios and NGOs in the affected areas, and a 1997 forestry law again tightened the restrictions on harvesting of timber in communal areas. The new laws have been strengthened by the presence of the environmental super agency SEMARNAT and its increasing role in both state and federal environmental protection.

The communities of southern QR have proven remarkably resilient and adaptive in light of the many changes in Mexican federal law regarding the management of forestlands, and the skills that they have gained from their experience with government agencies, NGOs operating in the area, and other communities has proven to be invaluable. Although the AMA formerly ended operations in 1998, five of the major community forestry organizations in the state formed the Coordinating Committee for Peasant Forest Organizations of Quintana Roo (COCAFQRO) in 1999 (Bray 2000), which continues to serve as a focal point among the communities for information and technical assistance.

Community and State Attributes in Southern Quintana Roo

Factor	Quintana Roo
Community Dynamics	
Inter-community interaction and social capital	<ul style="list-style-type: none"> • Early composition of southern QR primarily mestizo colonists from neighboring states. • Early opposition to the parastatal logging concession brought many of the ejidos together towards a common goal of increased community control of forestry management and operations. • These same communities in 1987 formed civil society organizations among ejidos that that included a technical directorate and professionally trained Mexican Forestry personnel. • Substantial in-migration to the state and the return of many university educated community members.
Leadership and participation	<ul style="list-style-type: none"> • Community leaders work with the state and federal authorities and NGOs to form the Sociedad de Productores Forestales Ejidales de Quintana Roo (SPFEQR).
Resilience and conception of the commons	<ul style="list-style-type: none"> • The communities created new and innovative common pool resource management regimes at the local and state levels in a rapidly developing political and legal environment.
Commons Experience	
Co-management Experience	<ul style="list-style-type: none"> • Aggregated experience in the context of Mexico's <i>ejido</i> system • Since 1983, formal involvement in the industrial production of timber for commercial markets through formally organized community enterprises. • The Coordinating Committee for Peasant Forest Organizations of Quintana Roo (COCAFQRO) is formed in 1999 and is comprised of the five major community forest organizations in QR.
State Interaction	
Level and Nature of Interaction	<ul style="list-style-type: none"> • Early state concessions to parastatal logging firms ended in 1982 due to community opposition and management failure. • State involvement relatively positive, increasing substantially in 1983 with the creation of the Acuerdo Mexico-Alemania (AMA), involving state and federal agencies and the German <i>Agency for Technological Cooperation</i> (GTZ). • Interaction with NGOs and government foresters and technical advisors provided the communities with expertise that would eventually allow them to take on many of the technical aspects of management.
Funding	<ul style="list-style-type: none"> • Funding from both the federal government and the German government was strong beginning in 1983. • Subsidies for agriculture still remain much higher than those for forestry or conservation. • Limited funding also provided in recent years by organizations such as The MacArthur Foundation, Inter-American Foundation, and the World Wide Fund for Nature.
Political "Winds"	
Decentralization (federal and state) ¹⁰	<ul style="list-style-type: none"> • Rule making and enforcement authority divided among state and federal government agencies. • Decentralization of federal government begins under Salinas (1988-1994) but is institutionalized under Zedillo's "New Federalism" (1994-2000)
Legal/Constitutional Revision (federal) ¹¹	<ul style="list-style-type: none"> • In 1988 Mexico passes first environmental law requiring notifications of management activities and environmental impact assessments. • In 1992 article twenty-seven of the Mexican constitution is amended to allow ejidatarios to take title of their land, use it as collateral for loans, or sell it. • 1992 forest law substantially deregulates the forest sector and is subsequently blamed for an increase in clandestine logging in many forest communities. • 1997 forest law re-regulates various aspects of forest management and establishes new restrictions on the harvesting of timber.
Economic Restructuring / Liberalization (federal)	<ul style="list-style-type: none"> • Mexico joins the GATT in 1986 and NAFTA in 1992. • Democratization and decentralization efforts under the Zedillo administration are dubbed the "New Federalism." • Social and civic groups work increasingly outside party organizations. • Growing opposition parties, and an increasingly independent congress. • Policy content and contestation increasingly engaged in by congress, social groups, partisan affiliates. • Executive-congressional, and inter-party negotiations more frequent.

¹⁰ Describes decentralization at both the Federal and State level.

¹¹ Describes changes at the national level but implies policy effect at the state level as well.

policy towards community held lands in many parts of Mexico. However, the corporatist structure of the Mexican political system has traditionally made concessions to ameliorate social pressures or unrest to maintain support for the PRI. Furthermore, the relative flexibility of the state was not accompanied at that time by reform of the governance institutions – political or judicial – at the state or local level. The inequity of the previous management system in these communities ended with the establishment of community forestry in 1980 (Ibid). At this point, reform-minded community leaders elicited the help of the state Agrarian Reform agency, and terminated the concession. The following period ushered in an era of community ownership with the caveat of strict guidelines for the technical and administrative management of the forests.

But the new system exacerbated inequalities between the more elite central village of SMO and the poorer outlying villages. “Social investments with forestry profits aggregate in the central village, including the Catholic temple, a cobblestone street, a health clinic, government buildings, and the community-owned sawmill. This contrasts with the outlying settlements, which consistently see their requests for funds for electrification, schools, roads, and communal pickup trucks rejected” (Klooster 1998, p.5). Furthermore, the elites within the central community began to use community forest revenue for personal enrichment, and by 1995, some \$208,000 pesos had been “borrowed” by community elites for personal expenses, yet the debt was never acknowledged (Klooster 1998).

Mirroring the culture of favoritism and clientilism seen in the traditional relationship between the PRI and the state (Williams 2002, Ward 1999), the forestry elite of SMO dominated the budgetary and management agenda through “intimidation, manipulating elections, dodging oversight, and discouraging participation in community assemblies. Threats, violence, bribes, and the manipulation of reciprocal obligations are common tools of internal politics” (Klooster 1998, p.6). Accountability is severely undermined in common property regimes under these circumstances because those in charge of addressing mismanagement and controlling unlicensed activities are thought to be those who most gain from those activities.

The experience in SMO is in sharp contrast to the other communities in the region. They were able to exercise more effective democratic community control and introduce verifiable accountability structures within their areas of influence. In 1982, three communities from Ixtlan, UZACHI, and the Sierra Norte de Oaxaca effectively halted the renewal of a concession with a parastatal organization (FAPATUX) and formed their own community forest enterprise. The influence of a Mexican NGO and indigenous, university-trained professionals who returned to work in the community was crucial to the success of this exercise in devolution (Klooster 1998). Similarly, the community of Nuevo San Juan Parangaricutiro (NSJP) broke from the government-controlled union of which it was a part in 1981. “University-trained members of the community and returning emigrant workers played key roles in establishing the community business. When community members lacked skills such as marketing, and business administration, the community hired outsiders, but with the caveat that they take on community members as apprentices” (Klooster 1998, p.8). The successful, or rather, more adapting communities in the study all share distinct characteristics that did not exist, or were highly controlled in the main town of San Miguel Ocotlan:

1. Robust and well-attended community assembly meetings.
2. Vigorous debate over investment and management decisions.
3. Accountability mechanisms built into each level of management.
4. Transparency and reporting to community members.
5. Social capital in the form of university educated community members returning to the community.
6. Equitable distribution of benefits derived from the logging enterprise.

7. Capital and social investments back into the communities in the form of infrastructure development.

As noted, SMO's situation appears to differ in at least two distinct aspects. Compared with the other communities, which are more ethnically homogenous, SMO is fairly heterogeneous, with the more affluent members located in the main village, while poorer communities – primarily indigenous – are located in outlying villages. Despite the pitfalls the communities have faced in SMO, they have proven to be markedly resilient in terms of utilizing available channels for dissent, including formal procedural rules and at one point, the blockading of logging roads to prevent unauthorized harvesting. In 1995 greater community involvement and a deeper democratization of the community governance structure occurred. Several members of the outlying communities were elected to positions of authority in the community council for the first time in 20 years, and community members demanded and received audits of management and operations in the forested areas.

Community and State Attributes in San Miguel Ocatlan, Oaxaca

Factor

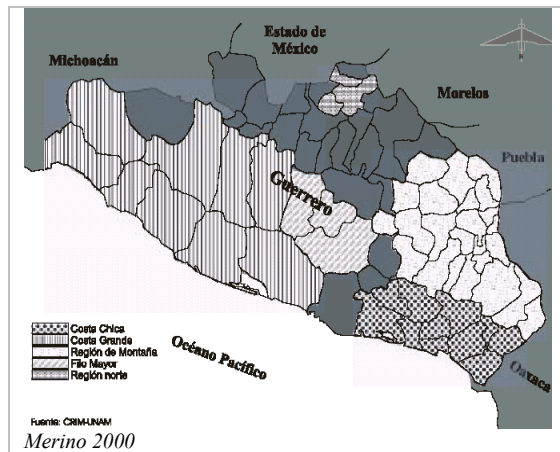
Oaxaca

Community Dynamics	
Inter-community interaction and social capital	<ul style="list-style-type: none"> Economic differentiation and ethnic differences create strong cleavages in the community. Power and influence centered in the main town of San Miguel Ocotlan (SMO) where primary language is Spanish and inhabitants are mestizo, or mixed descent. With the establishment of community forestry in 1980 community inequities were exacerbated between SMO and the outlying communities with the brunt of forestry benefits going to the main town. Forest elite seen as corrupt and self-serving. Participation of outlying communities in assembly meetings is negligible until late 1990s when for the first time, members were elected to positions of authority in the community council and more transparent accountability mechanisms were introduced.
Leadership and participation	<ul style="list-style-type: none"> Local leader elicited support of the official peasant union and the Agrarian Reform Agency to break free from the parastatal concession in 1980. Local leaders from the outlying villages organize opposition to SMO corruption and dominance of forestry management, increasing participation in political processes of the Community Assembly.
Resilience and conception of the commons	<ul style="list-style-type: none"> Recognition of the long-term value of the forest. Timber smuggling seen as theft against the community.
Commons Experience	
Co-management Experience	<ul style="list-style-type: none"> Aggregated experience in the context of Mexico's <i>ejido</i> system. From 1958 until the mid 1970s, the community received substantial benefits from state concession in terms of consistent employment and improvements in infrastructure, but they were alienated from real participation in forestry management. Reform in the 1970s allowed communities to form and manage their own timber enterprises under the condition that they seek help from professional forestry services. Government agrarian and well-connected private interests effectively controlled all aspects of technical management until 1980, when community forestry programs were initiated.
State Interaction	
Level and Nature of Interaction	<ul style="list-style-type: none"> Reform within the agrarian and forestry departments of the Mexican government in the 1970s, aimed at persistent forest degradation and social unrest. Federal Agrarian Reform agency assists communities to end parastatal concession in 1980.
Funding	<ul style="list-style-type: none"> Limited government funding to communities, but with the advent of community forestry in 1980, profits increased by some 600 percent (Klooster 2000), although the distribution of benefits was more confined to the main town of SMO.
Political "Winds"	
Decentralization (Federal and state) ¹⁴	<ul style="list-style-type: none"> Decentralization of federal government begins under Salinas (1988-1994) but is institutionalized under Zedillo's "New Federalism" (1994-2000) Reform within the agrarian and forestry departments of the Mexican government in the 1970s, aimed at persistent forest degradation and social unrest Decentralization of management authority to the community of San Miguel Ocatlan in 1980
Legal/Constitutional Revision (federal) ¹⁵	<ul style="list-style-type: none"> In 1988 Mexico passes first environmental law requiring notifications of management activities and environmental impact assessments. In 1992 article twenty-seven of the Mexican constitution is amended to allow ejidatarios to take title of their land, use it as collateral for loans, or sell it. 1992 forest law substantially deregulates the forest sector and is subsequently blamed for an increase in clandestine logging in many forest communities. 1997 forest law re-regulates various aspects of forest management and establishes new restrictions on the harvesting of timber.
Economic Restructuring / Liberalization (federal)	<ul style="list-style-type: none"> Mexico joins the GATT in 1986 and NAFTA in 1992. Democratization and decentralization efforts under the Zedillo administration are dubbed the "New Federalism." Social and civic groups work increasingly outside party organizations. Growing opposition parties, and an increasingly independent congress. Policy content and contestation increasingly engaged in by congress, social groups, partisan affiliates. Executive-congressional, and inter-party negotiations more frequent.

¹⁴ Describes decentralization at both the Federal and State level.

¹⁵ Describes changes at the national level but implies policy effect at the state level as well.

La Costa Grande, Guerrero, Mexico



Rural Guerrero was largely marginalized until recently and is marked by both poverty and since the 1970s, drug-related violence in the mountainous regions. Leticia Merino is a researcher at the Universidad Autónoma de México in Mexico City, D.F.. She relied on interviews of ejido members, historical survey of the area, and statistical data from SEMARNAT, the Mexican environmental super-agency. Fieldwork for the study was carried out for a consultancy for SEMARNAT and the World Bank. The author's findings were included in a report to those organizations and in a paper presented at the seventh annual Conference of the

International Association for the Study of Common Property, held in Vancouver, CA in June 1998.

Political violence in the state has been endemic over the last century as well, with insurgency groups rising in the 1950s with demands for the democratization of the municipalities. A strong military presence has existed there for several decades, ostensibly to address drug cultivation. From 1975 until 1987, Guerrero was considered one of the most authoritarian and militarized enclaves in rural Mexico. Furthermore, virtually all state funding in the past has been directed towards coastal resorts such as Acapulco and high rent urban districts, increasing both the marginalization and neglect of the region both in economic and political terms. Indeed, in the 36-month period preceding the 1993 elections in the state, 45 opposition candidates were murdered (Wexler 1995 in Merino 2000). It is ironic that Acapulco, the destination of millions of foreign tourists since the 1960s, is part of the same state.

This study of four common property areas in the western state of Guerrero examined the patterns of both resistance and adaptation to changing legal and social conditions. Two of the regions are predominantly mestizo and have had a greater history of interaction outside of the community and with the state. The ejidos under study were established in the 1950s, and thus have an accumulated experience with the state and federal institutions. The other two regions are predominantly indigenous; their primary language one other than Spanish, and their isolation has delimited their interaction with the state and other communities. In depth analysis of all four regions is beyond the scope of this paper. Instead, the community of ejidos in the region of *La Costa Grande*, which are ejido based and predominantly mestizo are examined.

The Costa Grande has the largest woodland areas under ejido community control in the state of Guerrero. There is a much lower population density in the forested communities in this region and it boasts large tracts of arable land and forested areas. The ejidos within La Costa Grande are relatively more connected than other regions in the state in terms of interaction and communication with each other and with state entities. Family and communal feuds, however, are common and are usually due to property boundary disputes among ejidos. As mentioned, the Costa Grande has traditionally had much more contact and interaction with the state.

The history of timber harvesting in La Costa Grande began with an American firm, which operated between 1912 and 1945 without the involvement of local inhabitants. The firm

operated during and following the Mexican revolution until the codification and expansion of the ejido system under Lazaro Cardenas. Beginning in the 1950s the federal government permitted four large, parastatal firms open access to timbered areas of the Costa Grande without the consent or involvement of the local communities; this in spite of the fact that under Mexican law, ejidos had exclusive rights to use the forest resources (Thoms 1998, Emanuel 2000). The marginalization of the population and their exclusion from any decision-making regarding the management of the forests helped to spur greater calls for democratization in the state.

In the late 1970s, the state granted the parastatal concession, Forestal Vicente Guerrero (Fovigro), exclusive rights to exploit the region's forests. Although by law, ejidos have exclusive rights to the forests and timber products, the concession meant that they could only sell to Fovigro, and consequently, relied on the concession for administrative and technical support in the management of the forests. From that point until 1989, parastatal-logging firms controlled the management and exploitation of the state's forested areas.

Fovigro failed for several reasons. Opposition to the state concession had been gaining strength for several years, and calls for greater community involvement in the management and harvesting of the forests increased statewide. Furthermore, Fovigro as an administrative body proved unable to handle the burdensome task of financial and strategic management, prompting then Governor Ruben Figueroa to approve timber extraction by several privately held firms operating under the Fovigro structure, but from outside of the ejido communities. There has, however, been a higher level of development in forestry activities due to greater community involvement, cohesiveness, and organizational management. It was in fact the ejido communities of La Costa Grande that led the opposition to the continued forest harvest concession to Fovigro in 1989.

They did so by forming the *Coalition of Forest Communities of the Costa Grande* (CCFCG), a group of ejidos brought together in opposition to the management and harvesting of timber without their active participation. Most of these same ejidos would later form the *Union of Forest Ejidos and Agro Forestry "Hermenegildo Galeana"* (UEFAHG), a coalition that was established to encourage and help organize community forestry within the ejidos. It is important to note that this involvement and coordination of many distinct communities did not come about overnight. Rather, it was established over several years, and involving not only community members but NGOs, state environmental extensionists, and the communities' experience – technical and administrative – gained under the Fovigro concession.

The ejidos of the Costa Grande region have gained valuable experience in community organization and the management of their forested areas in an often changing and volatile policy environment. Attributes of the communities include:

- Prolonged interaction with the state and federal government that was largely antagonistic until 1989.
- Greater technical experience – albeit without direct participation – through the Fovigro experience, and some NGO activity.
- Sustained organization, information sharing, and communication among communities.
- Benefits of management have been diffuse among communities.
- High levels of community participation in matters concerning the forestlands.
- High level of inter-community organization in the form of associations with other ejidos and communities.

The UEFAHG today boasts one of the more productive and lucrative forestry management operations in the state, generating jobs in the communities and investing back into the community with forestry earnings (Merino 2000), but challenges still remain. For many communities in Guerrero, the problem of drug cultivation and the violence it brings continues to

plague areas of the state and even as recently as 2002, boundary disputes led to violent encounters among communities in the more mountainous and remote regions of the state.

Community and State Attributes in La Costa Grande, Guerrero

Factor	Guerrero
Community Dynamics	
Inter-community interaction and social capital	<ul style="list-style-type: none"> Community interaction moderate until the movement opposing Fovigro gains strength. Then a sustained pattern of organization, information sharing, and communication among communities ensues. <i>Coalition of Forest Communities of the Costa Grande</i> (CCFCG) is formed in 1986 and is made up of a group of ejidos brought together in opposition to the management and harvesting of timber without their active participation. <i>Union of Forest Ejidos and Agro Forestry "Hermenegildo Galeana"</i> (UEFAHG) formed to encourage and help organize community forestry within the ejidos.
Leadership and participation	<ul style="list-style-type: none"> Leaders of community councils of different ejidos agree to work together and oppose continued concession to the parastatal company Forestal Vicente Guerrero (Fovigro)
Resilience and conception of the commons	<ul style="list-style-type: none"> Drug related cultivation and activity becomes pervasive in the Costa Grande in the 1970s and 1980s. The lucrative short-term gain of the drug trade as opposed to the long-term investment necessary in forestry. Social cleavages and government neglect foster a "zero-sum" view of the commons.
Commons Experience	
Co-management Experience	<ul style="list-style-type: none"> Aggregated experience in the context of Mexico's <i>ejido</i> system. From the late 1970s until 1989, parastatal-logging firms controlled the management and exploitation of the state's forested areas. Although the 1986 forest law opens up the service provision portion of management, ejidos are not able to attain full ownership of forest services; this remains with the Department of Agriculture and Hydraulic Resources (SARH), one of the federal agencies that in 1994 would become part of SEMARNAT. <i>Union of Forest Ejidos and Agro Forestry "Hermenegildo Galeana"</i> (UEFAHG), a coalition of ejidos in La Costa Grande that was established to encourage and help organize community forestry within the member ejidos.
State Interaction	
Level and Nature of Interaction	<ul style="list-style-type: none"> Interaction with state and federal authorities extensive but not positive; drug cultivation used as a pretext to increase military presence in the 1970s. Relationship marked by highly authoritarian and centralized state governance structures. Management of forests much more tightly controlled than in other areas under study. Involvement of state environmental extensionists to help organize ejido communities.
Funding	<ul style="list-style-type: none"> Funding absent in the countryside as state revenue spent on resort areas on the coast. Government funding dissipated with the end of the Fovigro concession in 1989 but has increased in recent years.
Political "Winds"	
Decentralization (Federal and state) ¹⁶	<ul style="list-style-type: none"> Decentralization of federal government begins under Salinas (1988-1994) but is institutionalized under Zedillo's "New Federalism" (1994-2000) Decentralization of forest services and federal to state government does not occur with the same pace as other communities under study
Legal/Constitutional Revision (federal) ¹⁷	<ul style="list-style-type: none"> In 1988 Mexico passes first environmental law requiring notifications of management activities and environmental impact assessments. In 1992 article twenty-seven of the Mexican constitution is amended to allow ejidatarios to take title of their land, use it as collateral for loans, or sell it. 1992 forest law substantially deregulates the forest sector and is subsequently blamed for an increase in clandestine logging in many forest communities. 1997 forest law re-regulates various aspects of forest management and establishes new restrictions on the harvesting of timber.
Economic Restructuring / Liberalization (federal)	<ul style="list-style-type: none"> Mexico joins the GATT in 1986 and NAFTA in 1992. Democratization and decentralization efforts under the Zedillo administration are dubbed the "New Federalism." Social and civic groups work increasingly outside party organizations. Growing opposition parties, and an increasingly independent congress. Policy content and contestation increasingly engaged in by congress, social groups, partisan affiliates. Executive-congressional, and inter-party negotiations more frequent.

¹⁶ Describes decentralization at both the Federal and State level.

¹⁷ Describes changes at the national level but implies policy effect at the state level as well.

Analysis of the Oaxaca, Guerrero, and Quintana Roo Communities

Quintana Roo, Southern Region

Of the three case studies examined, Quintana Roo (QR) has received the most support from the state, federal agencies, and NGOs operating in the region under the auspices of the Forestry Pilot Plan (PPF). Members of over fifty ejidos in the southern region of the state brought the nearly thirty-year state concession to an end, and ushered in a new era of community based collaborative management. From its inception in 1982, the SPFEQR enjoyed strong political support from the state government, and strong and sustained financial and technical support from both state and foreign development organizations (Robinson 2000). The communities were thus able to navigate the complex changes in forest legislation and common property that took place over a twenty-year period.

The QR case study represents the benefits of state involvement and appropriate support – administrative, financial, and technical – for collaborative management of the forests. The overall process involved the transfer of invaluable technical and administrative skills, which in an accommodating and receptive environment, were readily adopted by community members. The community members also benefited enormously over the years from the return of university educated community members to the region. The communities’ ability to organize as effectively as they did is noteworthy in the southern region of QR, but early state and NGO support and facilitation helped to make the region one of the most promising models for collaborative management of natural resources in the developing world (Bray 2000).

San Miguel Ocatlan (SMO), Oaxaca

The communities examined in San Miguel Ocatlan (SMO) Oaxaca are distinctive in that institutional choice theory¹⁸ does not explain the outlying communities’ drive to first break with the parastatal logging concession and then challenge the power structure of the main village in SMO. Although the state and the concession – during the concession period from 1958-1980 – controlled all aspects of management and operations, the company guaranteed community members a certain amount of economic security in terms of steady seasonal employment and frequent infrastructure improvements. Still, the community as a whole effectively brought the concession to an end in spite of the uncertain benefits generated by collaborative management (Singleton 2000).

Socioeconomic cleavages between the main town and outlying villages were exacerbated when the concession ended, and management authority was wrested by a more influential and organized elite in the main town. The earlier benefits to the outlying communities, although unequal to those in the main town, were consistent and somewhat predictable. Yet the outlying communities struggled to force their inclusion as equal “partners” in the management of the forests, placing themselves in a potentially vulnerable position given the time and investment necessary for long-term sustainable forestry. Two of the potential weaknesses or challenges to collaborative or co-management are the high costs of its initial implementation and the greater uncertainty as to the benefits and outcomes of the institution as it’s established (Singleton 2000).

The SMO case represents more a struggle to forge a new sense of community – a new conception of community – outside of the traditional power relationships. That their struggle occurs concurrently with rapid political, economic, and social change is important. The

¹⁸ Institutional choice has its basis in rational choice theory and “rests on a notion of rational individuals making cost benefit analyses of whether to invest in processes of institutional change” (Klooster 2000 p.3).

institutional environment which the state and greater national institutions support – either tacitly or overtly – and the vested communities that develop in this environment are symbiotic, as environmental entitlements facilitate the growth of vested communities, which in turn influence local and state policy.

La Costa Grande, Guerrero

Guerrero as a state has had a long history of heavy state control and repression (Merino 2000). Indeed the word Guerrero means “warrior” in Spanish. State repression of peasant-led movements in the 1950s through the 1970s, and the introduction of drug cultivation in the 1970s and 1980s served to inhibit much of the movement towards community based development. And the state used this as a pretext for a strong military presence accompanied by a policy of “pacification” in the countryside. Still, the region of La Costa Grande managed to move towards more community control of the forested regions in spite of an extreme centralization of authority and the social deterioration created by state-supported and drug-related violence.

The Costa Grande case study represents the struggle to control an environment that is unsupportive at the state level, and that is politically and economically evolving at the national level. It represents a struggle where “the defense of resources were linked to the appropriation of production” (Merino 2000 p.22). The ability of the Costa Grande communities to coalesce towards a common goal of reclaiming control of the forest through the CCFCG (1986) in that turbulent environment is remarkable. The UEFHG, later formed to facilitate sustainable development of community forestry, continues to be one of the most productive and lucrative management operations in the state.

Unique Struggles, Same Goals

The pace and characteristics of change in each of the case studies vary as much as the communities themselves, determined as much by the community dynamics as by the role of the greater state institutions and policy, but each represents a distinct local environment in which the move towards collaborative management of the forest is the goal. The QR experience is illustrative of the benefits of sustained state and NGO involvement in the collaborative management process; San Miguel Ocatlan in Oaxaca is illustrative of the re-conceptualization of community precipitated by decentralization and shifting power structures; and Guerrero’s Costa Grande experience in the process of regaining control of the land is illustrative of the resilience and adaptability of communities in an unsupportive policy environment and a damaged social landscape. All three areas have developed during a period of extreme political, economic, and social structural change in Mexico, and continue to evolve as Mexico’s political, economic, and civil institutions develop. Their movements, successes and failures, have all been directly influenced by the greater state institutions under which they have developed, and their struggles in turn have helped to shape the evolving environmental policy of Mexico at the national level.

Figure six revisits the data from all three case studies presented, and a fourth column is presented which details common trends for that factor across the case studies. Important attributes of collaborative or co-management regimes as introduced by Kellert, Ostrom, and others, are also included. The analysis suggests that many of the factors considered essential in forming the foundation for collaborative governance of environmental regimes are present in the studied areas.

Community and State Attributes Across Cases

Figure 6

Factors	Quintana Roo	Oaxaca	Guerrero	Commonalities and Key Factors in Collaborative or Co-management
Community Dynamics				
Inter-community interaction and social capital	<ul style="list-style-type: none"> Early composition of southern QR primarily mestizo colonists from neighboring states. Early opposition to the parastatal logging concession brought many of the ejidos together towards a common goal of increased community control of forestry management and operations. These same communities in 1987 formed civil society organizations among ejidos that that included a technical directorate and professionally trained Mexican Forestry personnel. Substantial in-migration to the state and the return of many university educated community members 	<ul style="list-style-type: none"> Economic differentiation and ethnic differences create strong cleavages in the community. Power and influence centered in the main town of San Miguel Ocotlan (SMO) where primary language is Spanish and inhabitants are mestizo, or mixed descent. With the establishment of community forestry in 1980 community inequities were exacerbated between SMO and the outlying communities with the brunt of forestry benefits going to the main town. Forest elite seen as corrupt and self-serving. Participation of outlying communities in assembly meetings is negligible until late 1990s when for the first time, members were elected to positions of authority in the community council and more transparent accountability mechanisms were introduced. 	<ul style="list-style-type: none"> Community interaction moderate until the movement opposing Fovigro gains strength. Then a sustained pattern of organization, information sharing, and communication among communities ensues. <i>Coalition of Forest Communities of the Costa Grande</i> (CCFCG) is formed in 1986 and is made up of a group of ejidos brought together in opposition to the management and harvesting of timber without their active participation. <i>Union of Forest Ejidos and Agro Forestry "Hermenegildo Galeana"</i> (UEFAHG) formed to encourage and help organize community forestry within the ejidos. 	<p>Community interaction, organization, and the development of social capital are vital in all three cases and appear to be one of the more compelling attributes determining community organization and the drive towards collaborative or co-management. The cases illustrate that early oppositional movements have evolved into cooperative, community and inter-community institutions.</p> <ul style="list-style-type: none"> The distribution and allocation of socioeconomic benefits and resources is diffuse among community members (Kellert). The community has developed - over time - norms of trust and reciprocity that are a foundation for the growth of social capital (Ostrom). Stakeholders use "collective choice rules that fall between the extremes of unanimity or control by a few" (Ostrom). Stakeholders must have access to accurate information about the condition of the resource and an understanding of the benefits and costs of maintaining the resource (Ostrom).
Leadership and participation	<ul style="list-style-type: none"> Community leaders work with the state and federal authorities and NGOs to form the Sociedad de Productores Forestales Ejidales de Quintana Roo (SPFEQR). 	<ul style="list-style-type: none"> Local leader elicited support of the official peasant union and the Agrarian Reform Agency to break free from the parastatal concession in 1980. Local leaders from the outlying villages organize opposition to SMO corruption and dominance of forestry management, increasing participation in political processes of the Community Assembly. 	<ul style="list-style-type: none"> Leaders of community councils of different ejidos agree to work together and oppose continued concession to the parastatal company Forestal Vicente Guerrero (Fovigro) 	<p>Individual and group leadership at the ejido and community level, in all three cases, is essential in the initial organization of opposition to policy, and then to facilitate community involvement and direction in co-management.</p>
Resilience and conception of the commons	<ul style="list-style-type: none"> The communities created new and innovative common pool resource management regimes at the local and state levels in a rapidly developing political and legal environment. 	<ul style="list-style-type: none"> Recognition of the long-term value of the forest. Timber smuggling seen as theft against the community. 	<ul style="list-style-type: none"> Drug related cultivation and activity becomes pervasive in the Costa Grande in the 1970s and 1980s. The lucrative short-term gain of the drug trade as opposed to the long-term investment necessary in forestry. Social cleavages and government neglect foster a "zero-sum" view of the commons. 	<p>Conception of the commons varies among the cases, but through greater participation and involvement in the drive towards collaborative or co-management, the sustainable use is seen as desirable. Short-term economic necessity remains a strong influence on the way sustainable development of the commons is perceived.</p> <ul style="list-style-type: none"> Users and stakeholders are dependent on the resource in some way or another for their livelihood (Ostrom).
Commons Experience				
Co-management Experience	<ul style="list-style-type: none"> Aggregated experience in the context of Mexico's <i>ejido</i> system Since 1983, formal involvement in the industrial production of timber for commercial markets through formally organized community enterprises The Coordinating Committee for Peasant Forest Organizations of Quintana Roo (COCAFQRO) is formed in 1999 and is comprised of the five major community forest organizations in QR. 	<ul style="list-style-type: none"> Aggregated experience in the context of Mexico's <i>ejido</i> system. From 1958 until the mid 1970s, the community received substantial benefits from state concession in terms of consistent employment and improvements in infrastructure, but they were alienated from real participation in forestry management. Reform in the 1970s allowed communities to form and manage their own timber enterprises under the condition that they seek help from professional forestry services. Government agrarian and well-connected private interests effectively controlled all aspects of technical management until 1980, when community forestry programs were initiated. 	<ul style="list-style-type: none"> Aggregated experience in the context of Mexico's <i>ejido</i> system. From the late 1970s until 1989, parastatal-logging firms controlled the management and exploitation of the state's forested areas. Although the 1986 forest law opens up the service provision portion of management, ejidos are not able to attain full ownership of forest services; this remains with the Department of Agriculture and Hydraulic Resources (SARH), one of the federal agencies that in 1994 would become part of SEMARNAT. <i>Union of Forest Ejidos and Agro Forestry "Hermenegildo Galeana"</i> (UEFAHG), a coalition of ejidos in La Costa Grande that was established to encourage and help organize community forestry within the member ejidos. 	<p>The <i>ejido</i> system in all three cases provided a solid foundation of organizational and social capital. Prior experience in resource management important in all three cases, even if the involvement in the actual planning and management was minimal. State concessions provided an observable example of a forest management regime. In all three cases, the weaknesses of the concessions' management strategy provided a focal point for early opposition to the continuation of the concessions, paving the way for greater community involvement and definition of co-management regime.</p> <ul style="list-style-type: none"> The consideration, incorporation, and production of traditional and modern ecological knowledge in managing natural resources (Kellert).

State Interaction				
Level and Nature of Interaction	<ul style="list-style-type: none"> • Early state concessions to parastatal logging firms ended in 1982 due to community opposition and management failure. • State involvement relatively positive, increasing substantially in 1983 with the creation of the Acuerdo Mexico-Alemania (AMA), involving state and federal agencies and the German <i>Agency for Technological Cooperation</i> (GTZ). • Interaction with NGOs and government foresters and technical advisors provided the communities with expertise that would eventually allow them to take on many of the technical aspects of management 	<ul style="list-style-type: none"> • Reform within the agrarian and forestry departments of the Mexican government in the 1970s, aimed at persistent forest degradation and social unrest. • Federal Agrarian Reform agency assists communities to end parastatal concession in 1980. 	<ul style="list-style-type: none"> • Interaction with state and federal authorities extensive but not positive; drug cultivation used as a pretext to increase military presence in the 1970s. • Relationship marked by highly authoritarian and centralized state governance structures. • Management of forests much more tightly controlled than in other areas under study. • Involvement of state environmental extensionists to help organize ejido communities. 	State interaction and involvement varies greatly among the three cases from neglect to active involvement and support, but the interaction itself, and the familiarization of the communities with state processes appears to have been beneficial.
Funding	<ul style="list-style-type: none"> • Funding from both the federal government and the German government was strong beginning in 1983. • Limited funding also provided in recent years by organizations such as The MacArthur Foundation, Inter-American Foundation, and the World Wide Fund for Nature. • Subsidies for agriculture still greater than those for forestry or conservation. 	<ul style="list-style-type: none"> • Limited government funding to communities, but with the advent of community forestry in 1980, profits increased by some 600 percent (Klooster 2000), although the distribution of benefits was initially confined to the main town of SMO. 	<ul style="list-style-type: none"> • Government funding for forestry dissipated with the end of the Fovigro concession in 1989 but has increased in recent years. • Funding absent in the countryside as state revenue spent on resort areas on the coast. 	<p>Ejido structure and governance mechanisms established by law over 70 years and adhered to by communities. Greater levels of funding have proven to be beneficial, in that greater transfers of technical skills and technologies are possible.</p> <p>Monetary incentives or subsidies for conservation, however, are still not on a par with subsidies for agricultural production. It remains to be seen if in the long-term, this leads to greater conversion of forestlands to agricultural use.</p> <ul style="list-style-type: none"> • Stakeholders are able to implement accurate and low-cost monitoring and sanctioning arrangements (Ostrom).
Political “Winds”				
Decentralization (federal and state) ¹⁹	<ul style="list-style-type: none"> • Rule making and enforcement authority divided among state and federal government agencies. • Decentralization of federal government begins under Salinas (1988-1994) but is institutionalized under Zedillo’s “New Federalism” (1994-2000) 	<ul style="list-style-type: none"> • Decentralization of federal government begins under Salinas (1988-1994) but is institutionalized under Zedillo’s “New Federalism” (1994-2000) • Reform within the agrarian and forestry departments of the Mexican government in the 1970s, aimed at persistent forest degradation and social unrest • Decentralization of management authority to the community of San Miguel Ocatlan in 1980 	<ul style="list-style-type: none"> • Decentralization of federal government begins under Salinas (1988-1994) but is institutionalized under Zedillo’s “New Federalism” (1994-2000) • Decentralization of forest services and federal to state government does not occur with the same pace as other communities under study 	<p>In all three cases, decentralization of authority to the state and local levels, along with greater economic and political developments, has created a more accessible, transparent, and accountable environment for negotiation and contestation at the local, state, and federal level.</p> <p>Furthermore, more horizontally organized structures of political support have accompanied the devolution of authority from federal to state governments.</p> <ul style="list-style-type: none"> • The distribution of power and status, particularly among local peoples, including authority devolved from central and state governments to local peoples and institutions; as well as participation in decision-making, sharing of control and/or democratization greatly enhances the success of collaborative or co-management regimes (Kellert).
Legal/Constitutional Revision (federal) ²⁰	<ul style="list-style-type: none"> • In 1988 Mexico passes first environmental law requiring notifications of management activities and environmental impact assessments. • In 1992 article twenty-seven of the Mexican constitution is amended to allow ejidatarios to take title of their land, use it as collateral for loans, or sell it. • 1992 forest law substantially deregulates the forest sector and is subsequently blamed for an increase in clandestine logging in many forest communities. • 1997 forest law re-regulates various aspects of forest management and establishes new restrictions on the harvesting of timber. 			
Economic Restructuring / Liberalization (federal)	<ul style="list-style-type: none"> • Mexico joins the GATT in 1986 and NAFTA in 1992. • Democratization and decentralization efforts under the Zedillo administration are dubbed the “New Federalism.” • Social and civic groups work increasingly outside party organizations. • Growing opposition parties, and an increasingly independent congress • Policy content and contestation increasingly engaged in by congress, social groups, partisan affiliates. • Executive-congressional, and inter-party negotiations more frequent. 			

¹⁹ Describes decentralization at both the Federal and State level.

²⁰ Describes changes at the national level but implies policy effect at the state level as well.

Chapter 6: Conclusions and Further Research

Mexico is a nation in transition unlike any other in Latin America. The nation's enigmatic history and institutions have made it difficult to classify by political theorists for decades. It has combined a rigid – often authoritarian – and highly centralized system of governance with some relatively progressive, if not politically driven, social policies. The ejido system of common property is an example of this. Over the last twenty years, Mexico has embarked on a path of political and economic decentralization and liberalization, its policies increasingly influenced by international agreements on trade, investment and the environment, and its proximity to the United States.

Collaborative or co-management of natural resource regimes holds great promise in terms of bringing community and government together towards more accountable and home-grown institutions that nurture sustainable and informed management of common pool resources and broader environmental management. Planned and controlled devolution of authority from state to local – in terms of political and economic decision-making – is a crucial step in empowering local communities, as is transparent and rigorous state involvement in the processes that guide natural resource management. Mexico's political and social development over the last twenty years, and its existing common property regimes such as the ejido, create a ripe environment for deeper institutional change at the community level, and thus for more environmentally sustainable policy at the national level.

Although the laws governing common property in Mexico have evolved, and the institutional environment in which the ejidos have operated has changed, those communities involved in natural resource management have proven to be remarkably resilient and innovative in an ambiguous and often antagonistic environment. The case studies examined illustrate this in several ways. Communities have shown the desire – and have been motivated – to move towards more collaborative management of forested lands. While the nature and composition of community is important in gauging receptiveness to collaborative or co-management of the forests or other environmental institutions, 'community' itself is dynamic and evolving constantly, both reflecting and influencing greater state institutional development.

Mexico's continuing evolution as a state provides fertile ground for research regarding common property, community, and political and economic liberalization. A deeper examination of the communities presented in this study, with more quantitative methods regarding land-use change and economic policy, could provide helpful insights as to the challenges facing many developing world communities as their states undergo democratization and economic liberalization.

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²¹ Permission to cite paper required, and given by author on October 21, 2002 via email.

Appendix A: Glossary of Terms and Acronyms

AMA:	Acuerdo Mexico/Alemania (the Mexican-German bilateral agreement)
Campesino:	Someone who lives off the land - a small farmer or peasant.
CCFCG:	Coalition of Forest Communities of the Costa Grande, Guerrero
COPLADES:	Development Planning Committees
CEDH:	Comision Nacional de Derechos Humanos (National Human Rights Commission)
ENGO:	Environmental Non-governmental Organization
Ejido:	An area of land under a specific collective land tenure or the community of people with collective land rights and settlement where they live.
Ejidatarios:	Heads of household with shared land rights in an ejido.
FAPATUX:	Tuxtepec Paper Company operating under a concession in the state of Oaxaca
Fovigro:	Forestal Vicente Guerrero (Parastatal logging company in the state of Guerrero which operated until 1989)
GTZ:	Deutsche Gesellschaft fur Technische Zusammenarbeit (German Technical Assistance Agency) Operated in southern QR as part of the AMA until 1998
INEGI:	Instituto Nacional de Estadistica, Geografia e Informatica (National Institute for Statistics, Geography and Information)
MIQRO:	Maderas Industrializadas de Quintana Roo, S.A. de C.V.
NAFTA:	North American Free Trade Agreement
NACEC:	The North American Commission for Environmental Cooperation
NGO:	Non-governmental Organization
OECD:	Organization for Economic Cooperation and Development
PAN:	Partido de Accion Nacional
PEMEX:	Petroleros Mexicanos
PPF:	Plan Piloto Forestal
PRI:	Partido Revolucionario Institucional
PROCAMPO:	Agricultural subsidy intended to be compensation for the negative effects of the North American Free Trade Agreement (NAFTA) for Mexico's poorest farmers (Bray 2000).
SARH:	Department of Agriculture and Hydraulic Resources (In 1994 became part of SEMARNAT)
SEMARNAT:	Secretaria de Medio Ambiente y Recursos Naturales (The Federal Natural Resources ministry created in 1994 and whose authority expanded in 2000)
SPFEQR:	Sociedad de Productores Forestales Ejidales de Quintana Roo
UEFAHG:	Union of Forest Ejidos and Agro Forestry "Hermenegildo Galeana" in La Costa Grande, Oaxaca.
UNDB:	United Nations Development Bank

Appendix B: Significant Dates in Federal Mexican Land Reform

- **1910** – Most concessions to foreign companies canceled, most timber industries are expropriated. Forestlands begin to be transferred to ejidos and comunidades as a result of the new land tenure policies.
- **1926** - New forestry law passed by Congress introduces stricter conservation regulations.
- **1934-1940** – Administration of Lazaro Cardenas during which large-scale expropriations of land and industry take place.
- **1942** - Forest law extends more control of forests to comunidades and ejidos. Large tracts of private forestlands are expropriated and the acquisition of forestlands by the private sector is prohibited.
- **1986** - New forestry law approved that promotes the development of stronger and more organized community forestry enterprises by concession of forest technical services to second-level community forestry organizations, and facilitates the forming of inter-community organizations. Establishes strict environmental protection regulations of forestry activities. The state, however, continues to regulate almost every activity of the sector.
- **1986** - Mexico joins the General Agreement on Trade and Tariffs (GATT).
- **1988** – Mexico passes first environmental law which incorporates regulatory measures for several forestry activities including:
 - General environmental impact assessments of specific regions or representative ecosystems and the requirement of environmental impact assessments for all forest management activities in tropical forests or in protected areas.
 - Notifications of management activities in temperate forests required.
 - Specific environmental protection norms required.(Segura 2000)
- **1992** – Mexico joins the North American Free Trade Agreement (NAFTA)
- **1992** – 1992 Constitutional Reform to Article 27 of the Constitution approved by Congress, which includes fundamental changes in land rights, allowing land under communal property to be sold. The reform is accompanied by radical reforms to the agrarian, forestry, and water use laws, and seeks to create a market for land that never existed before. Key elements include:
 - End to government redistribution of land and ends expropriation of improved privately owned land.
 - Presidentially appointed, decentralized and autonomous Superior Agrarian Tribunals established to settle disputes over land rights.
 - Individual ejidatarios may obtain certificates of land title and no longer are required to work their parcels personally.
 - Ejidatarios with title may legally sell, rent, sharecrop or mortgage their land as collateral.
 - Common lands may also be sold for commercial development if a majority of ejidatarios so decide. Ejidatarios who opt not to sell or rent their parcels may enter into joint ventures with outside investors or form associates among themselves.
 - Ejidatarios can sign long-term production contracts with outsiders.
 - The reforms open the ejido sector to foreign direct investment (FDI), and allow the formation of production associations with foreign private investors.(Cornelius and Myhre 1998, in Thoms 2000)
- **1992** – New forest law deregulates the forest sector, attempting to promote plantation development. Deregulates forest technical services almost entirely to the market.
- **1994** – Creation of environmental “super-agency,” *Secretariat of Environment, Natural Resources, and Fisheries* (SEMARNAP), which in 2000 becomes the *Secretariat of Environment and Natural Resources* (SEMARNAT).
- **1997** – Forest law tightens restrictions on the harvesting of timber. Re-regulates various aspects of forest management, in order to halt a rise in clandestine logging. Accompanied by two new administrative programs, PRODEPLAN, which subsidizes plantation development, and PRODEFOR, that subsidizes community forest management (Bray 2000).

Appendix C: International Pressures and Opportunities

Mexico's signing of the General Agreement on Tariffs and Trade (GATT) in 1986 and then NAFTA in 1992 compelled much of the economic change in the country, and to no small degree, has enhanced its stature as a member of the international community. International relations and globalization, free of the constraints constructed over fifty years of the Cold War, have created new conditions for the emergence of public discourse that transcends state borders (Patomäki 2000). The proliferation of "nodes of access" and the technologies necessary for high-speed communication and information sharing are affording the average citizen - of the industrialized nations, with numbers increasing exponentially in the developing world as well - limited access to the airwaves, *and* the "information highway." This has led many theorists to suggest that we have witnessed the birth of the global or transnational citizen.

With information technologies such as the Internet, language translation software, and global social movements ranging from human rights to environmental activism, the concept of the global citizen necessarily changes the way that we must conceive culture and community. For this reason, relationships between community and the state with regard to management of the commons must reflect this increasing interconnectivity of "interests," as they interact in a more democratic and decentralized institutional environment. Bonnie McCay posits that just as there are communities of place and communities of interest, a powerful new type of "management community" has gained prominence of late. She describes the "epistemic" management community as:

"organized around challenges of knowledge and science, and the application of science to policy, communities develop that involve scientists, industry members, government officials, NGOs, media personnel, and more, negotiating toward, if not entirely creating, shared visions of a future and goals for action...[with] government agencies as key actors" (McCay 1999, p.3).

Many challenge the global citizen concept on the grounds that citizenship loses its precise meaning in traditional international relations theory "when divorced from territoriality, sovereignty, and shared nationality" (Linklater, p.35). But international relations theory has undergone a dramatic shift since the end of the Cold War, with market access and economic growth becoming the predominant concern of the nation state. Furthermore, communication technologies, digitization, and the free market democracy now prevalent as the form of governance compress time, space, and societal nuances in a way that cause the "differences between national cultures to become increasingly smaller...supplanted by the difference of transnational sub-cultures" (Holtbrügge p. 316), where common interests and objectives are fluid across national boundaries. The implications of this shift on national environmental policies are profound and have special significance in Mexico because of its increasing ties to the United States and European markets, and the increasingly competitive nature of international trade and investment.

Vita

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Interests:

Collaborative efforts between public and private sector; sustainable environmental policy and governance; international relations and cultural study; guitar; backcountry hiking and camping; reading; historical research; and travel.

Education:

- 05/2003 Master in Public and International Affairs, Virginia Tech, Blacksburg, VA.
Collaborative Management and Policy.
- 12/1995 Bachelor of Science in Foreign Service, Georgetown University, Washington, DC. *Concentration: International Politics*

Professional Experience:

- 10/01-- **U.S. Consulate General:** *Consular Associate*, Guadalajara, Mexico.
Human rights and environmental reporting officer for four states in consular district; laser visa officer.
- 11/99-08/00 **AT&T Broadband:** *Software Licensing Project Manager*, Denver, CO.
Business process reengineering; project management; database design and maintenance; e-marketing strategy and implementation; internal auditing.
- 10/96-06/99 **Litton-Tasc:** *Member of the Technical Staff*, Arlington, VA.
Public relations; information management; systems analysis and requirements; proposal writing.
- 01/99-04/99 **US Peace Corps/Crisis Corps:** *Disaster Relief Volunteer*, Honduras, CA
Humanitarian relief; disaster assistance; project management; team leader for three municipality projects in areas affected by Hurricane Mitch.
- 02/90-06/92 **US Peace Corps:** *Technical Education Volunteer*, Honduras, CA.
Extensive fundraising; grant proposals and applications; project development and implementation; consensus building; teaching; newsletter publication; area workshop organization; seminars in small business practices.
- 1988-1990 **Garrett & Taylor Builders:** *Founder and Co-Owner*, Charlottesville, VA.
Small business management; marketing; personnel management; customer and client relations.

Additional Skills and Experience:

- Languages:** Spanish (Fluent), reading knowledge of French and Italian.
- Tech Skills:** Skilled in Macintosh and Windows environments; Microsoft Office; Access; Adobe Photoshop; database administration and design; website design.
- Awards:** Special Achievement Award, TASC - 1998; Community Development Awards in Cofradía, Honduras - 1990-1992, Potrerillos, Honduras, 1999; U.S. Department of State Extra Mile Award, Guadalajara, Mexico - 2002.
- Travel:** Denmark, El Salvador; England; France; Germany, Guatemala; Honduras; Mexico; and Spain.