

Talking the Walk to Sustainable Development:  
Public Sphere Deliberation and Sustainable Development  
Policy Outcomes in Mexico

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Melissa Beth-Lankow Birch

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Dissertation Committee

Prof. William Moomaw, chair  
Prof. Adil Najam  
Prof. Ann Helwege  
Prof. Kent Portney

## Melissa B.L. Birch

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### EDUCATION:

- 2002-2011 **Ph.D. candidate in International Relations**  
Fletcher School of Law and Diplomacy, Tufts University, Medford, MA  
*Fields of Study:* International Environment and Resource Policy;  
Development Economics; International Political Economy  
*Award:* Robert B. Stewart Prize (Outstanding First Year Student)
- 2000-2001 **M.A. in International Relations and Environmental Policy**  
Boston University, Boston, MA  
*Thesis:* Integration of Sustainable Development into Government Policies, Programs and Institutions in Brazil: A Genuine Paradigm Shift?
- 1994-1997 **B.A. in French**  
Gustavus Adolphus College, St. Peter, MN  
*Awards:* National Merit Scholar; Summa cum Laude
- 1996 **Study Abroad**  
Institut d'Études Européennes and Université de Nantes, Nantes, France

### EXPERIENCE:

- 2002-2010 **Pre-doctoral Fellow**  
Center for International Environment and Resource Policy, Fletcher School, Tufts University, Medford, MA  
*Research topics:* Economics of the nitrogen cycle; public policies on nitrogen
- 2003-2008 **Research Assistant**  
Global Development and Environment Institute, Tufts University, Medford, MA  
*Research topics:* Trade, development, and environment; foreign direct investment in Latin America; poverty in Latin America
- 2005-2007 **Resident Director**  
Blakeley Hall, Fletcher School, Tufts University, Medford, MA  
*Description:* Responsible for the overall operation of the dormitory, including administrative aspects and the personal needs of student residents.
- 2005 **Lecturer**  
Boston University, Boston, MA  
*Description:* Taught undergraduate course on Environmentally Sustainable Development (jointly listed under Departments of International Relations and of Geography and Environment).
- 2004 **Teaching Assistant**

Steven Block, Fletcher School, Tufts University, Medford, MA  
*Description:* Taught review sessions and held office hours for graduate course in Development Economics

- 2001-2002    **Research Assistant**  
Stockholm Environment Institute – Boston Center, Boston, MA  
*Research topics:* Sustainable development and civil society in Latin America; energy in developing countries; climate change mitigation in North and East Africa
- 1999-2000    **Environmental Educator (K – adult)**  
Deep Portage Conservation Reserve, Hackensack, MN
- 1998-1999    **Crew Member**  
Minnesota Conservation Corps, Norris Camp, MN
- 1997-1998    **Teacher (5<sup>th</sup> grade)**  
Colegio Norteamericano, Monterrey, Mexico

#### **LANGUAGES:**

**English:** native speaker

**Spanish and French:** advanced professional proficiency (reading, writing, and speaking)

**Portuguese:** advanced professional proficiency (reading)

#### **PUBLICATIONS:**

Birch, M. B. L., B. M. Gramig, W. Moomaw, O. C. Doering III, and C. J. Reeling (2011) “Why Metrics Matter: Evaluating Policy Choices for Reactive Nitrogen in the Chesapeake Bay Watershed.” *Environmental Science and Technology*, 45: 168-174.

Helwege, A. and M. B. L. Birch (2009) “Declining Poverty in Latin America? A Critical Analysis of New Estimates by International Institutions” In *Measuring Poverty: A Global Perspective*, Icfai University Press.

Gallagher, K. P. and M. B. L. Birch. (2006, 2009) “Do Investment Agreements Attract Investment? Evidence from Latin America.” *Journal of World Investment and Trade*, December 2006. Reprinted in *The Effect of BITs and DTTs on FDI Flows*, Oxford University Press, 2009.

Moomaw, W. and M. Birch (2005) “Cascading Costs: An Economic Nitrogen Cycle” *Science in China Ser. C Life Sciences* 48 Special Issue, pp 678-696.

Guzman, J. and M. Birch (2002) “Meso America” in *Civic Entrepreneurship*. Islamabad: Gandhara Academy Press, for UNEP, SEI-B, and RING.

Hurtado, J., G. Marquez, L.S. Velasquez, and M. Birch (2002) “Colombia” in *Civic Entrepreneurship*. Islamabad: Gandhara Academy Press, for UNEP, SEI-B, and RING.

## Abstract

This dissertation investigates the relationship between elements of deliberative democracy and the sustainable development implications of coastal land use policies in Mexico. It seeks to answer the following question: *how do the dynamics of public sphere deliberation and participatory transmission mechanisms affect the content of enacted land-use related policies?* An examination of the current laws regulating participation in environmental and land use policymaking in Mexico reveals that there are multiple avenues for public participation in policymaking at the federal, state, and municipal levels.

The first of three cases – the planning and development of Cancun – is examined using secondary sources. It was characterized by a lack of public deliberation and participation. This was associated with poor environmental and social outcomes.

In the second case, discourses are analyzed in the urban development plan for the town of Puerto Morelos. Public sphere discourses are examined by means of an analysis of newspaper articles from two regional newspapers based in Cancun. It is shown that public participation generated ideas for the urban development plan that were beneficial to sustainable development, but these ideas were not incorporated into the final policy, as public officials failed to take the outcomes of participation into account.

In the third case, a series of policies regulating mangrove ecosystem protection is examined. Public sphere discourses are analyzed in the form of

newspaper articles from two major daily Mexico City newspapers. Government documents associated with the policies are also analyzed. It is found that public participation was associated with greater protection for mangrove ecosystems.

The results of the case studies suggest that greater participation – particularly more deliberative participation – leads to policies that are more likely to integrate social and environmental concerns, to make use of local knowledge, to address the concerns of diverse social groups, and to have stronger environmental provision, to the benefit of sustainable development.

## List of Acronyms

ABJ	Administration of Benito Juarez
CCDS	Consultative Councils for Sustainable Development
Cemda	Mexican Center for Environmental Law
Coespo	State Population Council
Fonatur	National Fund for Tourism Development
Gema	Ecological Group of the Mayab
IMPLAN	Municipal Institute for Urban Planning [of Benito Juarez]
INEGI	National Institute of Statistical and Geographic Information
Infratur	National Trust Fund for Tourist Infrastructure
LGVS	General Wildlife Law
LEEPA	Law of Ecological Balance and Environmental Protection [of Quintana Roo]
LGEEPA	General Law of Ecological Balance and Environmental Protection
NGO	Non-Governmental Organization
NLS	Nichupte Lagoon System
NOM	Official Mexican Norm
PAN	National Action Party
PDU	Urban Development Plan [or Program]
POEL	Local Program of Ecological Zoning
POET	Program of Ecological Zoning of Territory

PND	National Development Plan
PRD	Party of the Democratic Revolution
PRI	Institutional Revolutionary Party
PT	Workers Party
PVEM	Ecological Green Party of Mexico
Profepa	Federal Attorney for the Protection of the Environment
Sectur	Secretariat of Tourism
Semarnat	Secretariat of Environment and Natural Resources
UN	United Nations
UNAM	National Autonomous University of Mexico
UNCED	United Nations Conference on Environment and Development

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## Chapter 1: Introduction

In numerous international conferences and agreements over the past two decades, the international community has identified the achievement of sustainable development as critical to human wellbeing now and in the future. Sustainable development can be conceived of as economic and social development achieved in a manner that is environmentally sustainable into the indefinite future. While technical challenges have received some attention, so too have institutional issues, particularly those relating to governance. Among governments, intergovernmental organizations, and non-governmental organizations of various types, strengthening governance has been proposed and promoted as a means of facilitating development and improving environmental quality.

However, what is meant by “governance” and perspectives on how it should be improved vary broadly among political actors and organizations. While most tend to agree that efficiency, transparency, and accountability are important, sometimes the focus is on the legal framework, other times it is on representative democracy, while in still other cases the term “governance” is shorthand for balanced fiscal policies. Finally, the governance agenda has, in some cases, taken on the goals and rhetoric of empowerment and public participation.

Public participation is certainly one of the cornerstones of international sustainable development practice. According to Section III of Agenda 21, for example, “[o]ne of the fundamental prerequisites for the achievement of sustainable

development is broad public participation in decision-making.”<sup>1</sup> This linkage of participation to sustainability was not new: in the early 1970s, early environmental laws were among the first legal instruments of any type to mandate participation in the policymaking process in the United States and elsewhere. However, more research is needed to demonstrate the link between participation and sustainable development and to identify forms of participation that are more conducive to sustainable development.

This work seeks to fill a part of that gap, focusing on Mexico, striving to answer the following question: *how do the dynamics of public sphere deliberation and participatory transmission mechanisms affect the content of enacted land-use related policies?* Deliberation and participation are hypothesized to lead to policies that integrate both social and environmental concerns, incorporate the concerns of diverse social groups and incorporate local knowledge. With the availability of accurate information, these should lead to policies that incorporate more scientific knowledge and include stronger social and environmental provisions.

The dissertation examines public debate and participation leading to policies relating to land use in Mexico. It focuses on land development decisions in coastal areas, particularly the area along the coast of the state of Quintana Roo, from Cancun south. It also includes a study of national policies relating to mangrove destruction.

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<sup>1</sup> United Nations Conference on Environment and Development. *Agenda 21*. (Rio de Janeiro: UNCED, 1992).

There is a lot at stake environmentally in Mexico. Mexico is one of the world's five leading biologically "megadiverse" countries.<sup>2</sup> It is home to a wide variety of dry and humid as well as marine ecosystems. From agriculture, to tourism, to forestry, to fisheries, these ecosystems form the basis for the social and economic development of large segments of Mexico's population. Whether it is the provisioning services of the ecosystems or the services of water regulation and natural disaster mitigation, these ecosystems provide services that make their sustainable development essential.

Throughout the 1980s and 1990s, there was a process of democratization in Mexico that included the establishment of requirements for public participation in land use planning, environmental policy, the formulation and modification of regulations, and other areas. Public comment periods, consultative organs, and public meetings have all become part of the national and local political landscapes.

Citizen consultation is an integral part of the elaboration of national and state development plans. Public comment periods and opportunities for civil society participation in land use planning are now required by national and state laws, both for the "ecological zoning" established by environmental laws, which regulates land use in rural and protected areas, as well as for the urban development plans that provide the zoning for centers of population. The type of participation, who participates, and the results of that participation will be the subject of the case studies. As a result, the Mexican situation provides an opportunity to study the

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<sup>2</sup> *Country Profile – Mexico*. Accessed November 30, 2010; available from <http://www.cbd.int/countries/?country=mx>.

impact of deliberation and public participation in policymaking in the area of sustainable development of the country's ecosystems.

In this study, land use policies are selected because land use change has direct effect on a variety of ecosystem services, from biodiversity to natural disaster mitigation. Land use change is a leading cause of the loss of biodiversity, especially in coastal wetlands.<sup>3</sup> Land is also the basis for economic development in ways from agriculture to tourism. It is where people live and work, and where ecosystems reside, thus making it an ideal example of the challenges of sustainable development.

Coastal areas provide an important and consistent context for examining how development decisions are made and the role that public deliberation plays in that process. Nearly 30% of the Mexican population lives in coastal zones (within 100 km of the coast).<sup>4</sup> Land use patterns in these areas is particularly important due to the role of natural ecosystems – such as mangroves – in attenuating the effects of natural disasters like hurricanes. Coastal areas are also of particular importance due to their biodiversity. Mangroves serve as spawning grounds or nurseries to many commercial fish species. Coral reefs are among the most biodiverse ecosystems in the world and are affected by what occurs in the terrestrial portion of the coastal zone. Forests in coastal areas also house tremendous biodiversity and serve as sources of timber and other forest products. The value of ecosystem services for

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<sup>3</sup> Secretaría de Medio Ambiente y Recursos Naturales del Gobierno de México. *Cuarto Informe Nacional de México al Convenio sobre Diversidad Biológica (CDB)* (Mexico, DF: Semarnat, 2009).

<sup>4</sup> M. L. Martínez et al., "The coasts of our world: Ecological, economic and social importance," *Ecological Economics* 63 (2007): 254–272.

natural coastal ecosystems in Mexico estimated at \$56 billion.<sup>5</sup> This figure includes such services as disturbance regulation, nutrient cycling, habitat/refugia, food production, recreation, and cultural services. The ecosystem services concept provides a key link between the environmental aspects of sustainable development and the social and economic aspects.

Tourism development increasingly threatens the health of coastal ecosystems around the world. Mauritius, Mozambique, Senegal, South Africa, and Costa Rica are a few of the places in the developing world that have seen rapid coastal tourism development, with accompanying environmental impacts. Land use decisions in these areas are critical to the sustainable development of the coastal region.

Since the early 1970s, beginning with Cancun, Mexico has encouraged sand and sun tourism in various locations along its coasts as a way to generate foreign exchange and employment. Most recently, the current administration has prioritized tourism development: in 2007 President Calderon proposed that his be the six-year term of tourism<sup>6</sup> Then, in 2009, Congress passed a new General Tourism Law that reinvigorated the Secretariat of Tourism (Sectur) and the National Fund for Tourism Development (Fonatur) and provided for the touristic zoning of the territory<sup>7</sup> Such zoning could potentially conflict with the ecological zoning provided for by national environmental laws. These several factors form the background for this dissertation.

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<sup>5</sup> Martínez et al. "The coasts of our world"

<sup>6</sup> A. Jiménez, "¿El sexenio del turismo?" *El Universal*, March 11, 2007.

<sup>7</sup> R. Alonso, and H. Niño de Haro, "Calderón promulga nueva ley de turismo," *El Universal*, June 17, 2009.

The organization of the dissertation is as follows. Chapter 2 undertakes an exploration of some of the democratic theory that is useful in understanding the types of participation in later chapters. In particular, deliberative democracy promises to enhance decisionmaking on sustainable development issues. Deliberative democracy is characterized by public reasoning in an open setting, with equality of opportunity to participate, and a link of that reasoning to the exercise of power. The chapter introduces the conceptualization of deliberation as the exchange of discourses, or narratives, in government and the public sphere. Deliberation involves groups and individuals valuing other discourses and letting reason and the common good trump narrow self interest.

The benefits of deliberation are posited as follows: increased sharing of information and overcoming bounded rationality, enhancing communication across worldviews, improving distributive justice, and increasing the legitimacy of decisions. Finally, the chapter concludes with the methodology for the case studies, including a schematic of the relevant variables.

Chapter 3 provides a brief overview of democratization in Mexico. The presidential election in 2000 ended a 70-year rule by the Institutional Revolutionary Party, or PRI. The transition was more than just the alternation of power at the presidential level in 2000. Changes occurred in the balance of power between the executive and legislative branches, with the latter seeing a significant strengthening. However, accountability of legislators to their constituencies remains problematic, in part because of a ban on consecutive reelection.

In the realm of legislation, several laws instituted new requirements for non-electoral participation by citizens, including the National Planning Law and environmental laws. The Human Settlements Law, which governs land use within densely populated areas, also mandated public participation in the formulation of Urban Development Plans (PDUs), which lay out the zoning for towns and cities. In all of these cases, the actual link between participation and policymaking depends on the commitment of government entities to take the content of the participation into account. The laws do not specify particular mandatory mechanisms for the incorporation of the participation content into the policies under consideration.

Chapter 4 traces the birth and development of Cancun as an Integrally Planned Center under the direction of the National Fund for Tourism Development (Fonatur). The planning process for Cancun was highly centralized and non-participatory. It entailed the construction of a resort city from the ground up. The resort has been an economic success, but the city of Cancun suffers from significant social and environmental problems, including the proliferation of irregular settlements, the failure of the municipality to provide piped water and sewage services, violence, and groundwater pollution stemming from the improper disposal of wastewater.

In chapter 5, discourses relating to land use and environment are analyzed in articles from two major regional newspapers. Four major discourses are identified: the Growth Imperative; Growth without Services; Government Failure to Regulate Development, and the Promise of Planning. The public sphere is not characterized

overall by deliberation with its public reasoning and respect for other positions, but rather by highly divisive debates.

Chapter 6 examines the case of Puerto Morelos, a small town just to the south of Cancun. Puerto Morelos recently updated its Urban Development Plan (PDU), which includes the zoning of the urban area. The creation of the PDU involved significant public participation, but the policy outcome did not reflect the inputs from the public participation.

Chapter 7 shifts from local governance to national governance (with local implications). The subject is the evolution of mangrove protection beginning with an official Mexican regulation published by the Secretariat of the Environment and Natural Resources that prohibited destruction of mangroves, continuing with the subsequent weakening of that regulation, and culminating in the passage of legislation protecting mangroves, which was signed by President Felipe Calderon.

Chapter 8 lays out each of the cases and compares the policy results with the predicted characteristics of policies involving public participation, particularly deliberation. This analysis finds that, indeed, more debate and greater participation is associated with stronger environmental policies, more attention to the concerns of diverse social groups, integration of social and environmental concerns, and the incorporation of local knowledge. The chapter ends with some concluding thoughts.



## Chapter 2: Sustainable Development and Democracy: Concepts and Evidence

### *The Governance Challenges of Sustainable Development*

The World Commission on Environment and Development, in *Our Common Future*, gave what has come to be the classic definition of sustainable development:

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs”.<sup>8</sup>

Similarly, Article 1 of the *Rio Declaration* states that “Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature”.<sup>9</sup>

As can be seen from these formulations (as well as a host of others), two pairs of key concepts have emerged as constituting sustainable development: environmental sustainability and development. Furthermore, if development is broken down into its economic and social components (as it often is), we discover the three pillars of sustainable development that appear so often in academic and policy writings on the subject: economic, social, and environmental.

Simple definitions of sustainable development are inevitably inadequate in the face of the need to formulate particular policies for sustainable development.

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<sup>8</sup> World Commission on Environment and Development, *Our Common Future* (New York: Oxford University Press, 1987).

<sup>9</sup> United Nations Conference on Environment and Development, *Rio Declaration on Environment and Development*. (Rio de Janeiro: UNCED, 1992).

The international community has therefore created a number of documents that lay out what sustainable development entails. One of these is the 2002 *Plan of Implementation of the World Summit on Sustainable Development*, which has sections focusing on issues relating to land use and poverty (the policy areas that will be the focus of this dissertation): sections II (Poverty eradication), III (Changing unsustainable patterns of consumption and production), and IV (Protecting and managing the natural resource base of economic and social development), as well as sections relating to implementation: X (Means of implementation) and XI (Institutional framework for sustainable development). The *Plan of Implementation* draws from many earlier international documents and processes, including the *Rio Declaration* and *Agenda 21* from UNCED, the Biodiversity Convention, the Convention on Desertification, the UN Forum on Forests, and the Millennium Development Goals, among others. It was agreed to by nations participating in the World Summit on Sustainable Development and therefore reflects some degree of international consensus on what sustainable development involves.

As can be seen throughout the sustainable development literature, issues relating to sustainable development share a number of characteristics that make governance for sustainable development particularly challenging:

- Complexity;
- Time horizons that are long (both intergenerational and intragenerational) and often mismatched for costs and benefits, causes and effects;
- Extension across multiple scales: ecologically, economically, and politically across local, state, national, and international jurisdictions;

- The existence of numerous (and often conflicting) worldviews;
- Pervasive uncertainty; and
- The close relationship between environmental quality and nearly every aspect of how people live and work.

Any attempt to address governance for sustainable development must thus take into consideration these characteristics.

### *Institutions, Governance, and Democracy*

Extensive academic and policy literatures in both economics and political science have highlighted the importance of institutions – including institutions for managing social conflict – in addressing economic and environmental challenges. Although scholars have adopted a variety of definitions for the term “institutions,” one reasonable way to conceptualize it is in three tiers: (1) organizations; (2) formal rules; and (3) informal rules and customs.<sup>10</sup>

Thinking about institutions for development has intersected, to some degree, with thinking on democracy and development. In the immediate postwar period, economic development was largely perceived as a technical problem, in which citizen participation was only rarely even mentioned. In the 1960s, this began to change, as participation came to be viewed as a means to improve project performance, and in the 1980s and 1990s, the focus began to broaden – at least in some circles – to participation as an objective of development: empowerment came

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<sup>10</sup> D. C. North, *Institutions, Institutional Change and Economic Performance* (New York: Cambridge University Press, 1990); D. Rodrik, *Institutions for High-Quality Growth: What They Are and How to Acquire Them*. (Cambridge, MA: National Bureau of Economic Research, 2000); P. Evans, *Beyond 'Institutional Monocropping': Institutions, Capabilities, and Deliberative Development* (New York: Russel Sage Foundation, 2002).

to be viewed as a worthy goal in itself.<sup>11</sup> Among many economists and even some political scientists, this new emphasis on empowerment represented a significant departure from some previous (and contemporaneous) theory, which argued that democracy would follow economic development and, in some cases, that democracy could actually inhibit economic development if it allowed excessive permeation of the state by societal actors.<sup>12</sup>

This departure – while far from universal – reflects both increases in our empirical knowledge of how economic development occurs and an evolving conceptualization of “development” to include factors other than economic growth. Amartya Sen, in his 1999 book, *Development as Freedom*, argues that democracy benefits development, most simply because it provides incentives for political officials to respond to the needs of citizens. His argument goes deeper than this however: “Political rights, including freedom of expression and discussion, are not only pivotal in inducing social responses to economic needs, they are also central to the conceptualization of economic needs themselves.”<sup>13</sup> To put this in the language of participation, citizens’ participation in their local or national political milieus not only improves government’s performance, it also enriches citizens’ own understanding of their world and its relationship to their own lives. Thus economic

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<sup>11</sup> United Nations Development Program, *Human Development Report 1993: People's Participation* (New York: UNDP, 1993); United Nations Development Program, *Human Development Report 2002: Deepening Democracy in a Fragmented World* (New York: UNDP, 2002).

<sup>12</sup> S. Haggard, *Pathways from the Periphery: The Politics of Growth in the Newly Industrializing Countries*, (Ithaca: Cornell University Press, 1990).

<sup>13</sup> A. Sen, *Development as Freedom* (Cambridge, UK: Cambridge University Press, 1999).

development becomes part of a larger whole that encompasses and depends on social and political development.

### **Democracy and Environment**

Perspectives on democracy and environment have undergone transformations similar to those undergone by perspectives on democracy and development. In the early 1970s, there was a strong theoretical current that maintained that environmental protection was incompatible with liberal democracy, and that as population and resource scarcity increased, a sort of eco-Leviathan would be required to restrain human beings' propensity to consume resources and procreate. Two key authors in this tradition are Hardin, and Ophuls, who asserts, "In a crowded world where only the most exquisite care will prevent the collapse of the technological society on which we all depend, the grip of planning and social control will of necessity become more and more complete."<sup>14</sup> He argues that

we seem no readier to choose the simple, virtuous life now than we have been in the past. Nevertheless, if we wish to avoid either a crash into the ecological ceiling or a tyrannical Leviathan, we must choose it. There is no other way to defeat the gathering forces of scarcity.<sup>15</sup>

Since then, however, environmental theory and empirical studies have increasingly asserted the benefits of democratic institutions, a movement reinforced by the disastrous environmental performance of a host of authoritarian regimes. Case studies have largely focused on national and sub-national cases in developed

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<sup>14</sup> G. Hardin, "The Tragedy of the Commons," *Science*, 162 (1968): 1243-1248; W. Ophuls, "The Scarcity Society," *Harper's Magazine*, April 1974: 47-52, 51.

<sup>15</sup> Ophuls, "The Scarcity Society, 52

countries.<sup>16</sup> Less work has been done on democracy and environment in the developing world.

Two works – by Neumayer and by Reyes Mendy – have examined the democracy and environment question using cross-national quantitative analysis of environmental commitment, finding a significant positive relationship between democracy and environment. Neumayer uses such measures of democracy as a combined index of civil liberties and political rights from Freedom House data, the World Bank's Voice and Accountability indicator, and others. A third work, by Li and Reuveny, found that democracy was associated with higher rates of deforestation and lower rates of land degradation, suggesting that the relationship between democracy and environment may be more complicated.<sup>17</sup> The task of the next section will be to examine in more detail a particular form of democracy that may offer some promise of improving governance for sustainable development: deliberative democracy.

### **Deliberative Democracy: Characteristics**

While theorists continue to dispute exactly what types of processes, institutions, and interactions should be considered to be legitimate incarnations of “deliberative” democracy, there are several elements that are common to all. Joshua

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<sup>16</sup> D. Press, *Democratic Dilemmas in the Age of Ecology: Trees and Toxics in the American West* (Durham: Duke University Press, 1994); R. A. Payne, "Freedom and the Environment," *Journal of Democracy* 6, no. 3 (1995): 41-55; M. Mason, *Environmental Democracy* (New York: St. Martin's Press, 1999).

<sup>17</sup> E. Neumayer, "Do Democracies Exhibit Stronger International Environmental Commitment? A Cross-Country Analysis," *Journal of Peace Research*, 39, no. 2 (2002): 139-164; F. Reyes Mendy, "Exploring the Green Promises of Deliberative Democracy: A Multi-Country Analysis" (PhD. diss., Fletcher School of Law and Diplomacy, 2003); Q. Li and R. Reuveny, "The Effects of Liberalism on the Terrestrial Environment," *Conflict Management and Peace Science*, 24, no. 3 (2007): 219-238.

Cohen provides a useful definition that encapsulates many of these elements.

According to Cohen, deliberative democracy is a

framework of social and institutional arrangements that (1) facilitate free reasoning among equal citizens by providing, for example, favorable conditions for expression, association, and participation, while ensuring that citizens are treated as free and equal in that discussion; and (2) tie the authorization to exercise public power – and the exercise itself – to such public reasoning...<sup>18</sup>

Another useful conceptualization of deliberation is provided by Dryzek:

The only condition for authentic deliberation is then the requirement that communication induce reflection upon preferences in a non-coercive fashion. This requirement in turn rules out domination via the exercise of power, manipulation, indoctrination, propaganda, deception, expressions of mere self-interest, threats (of the sort that characterize bargaining), and attempts to impose ideological conformity.<sup>19</sup>

Together, these two statements capture many of the key characteristics that would make a particular setting deliberative: a process of public reasoning in which preferences can be changed; openness of the deliberative setting; equality of opportunity to participate; and a link between the deliberation and the exercise of power.

**Public Reasoning** – First, the process should be one of public reasoning, in which citizens must provide justification for the policies they seek to enact (the concept of reciprocity)<sup>20</sup> and in which they are open to changing their preferences. While the concept of reciprocity is common to many theories of democracy, including liberal democracy, deliberative democracy accords it a more central role.

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<sup>18</sup> J. Cohen, "Democracy and Liberty," in *Deliberative Democracy*, ed. J. Elster (Cambridge: Cambridge University Press, 1998).

<sup>19</sup> J. Dryzek, *Deliberative Democracy and Beyond: Liberals, Critics, Contestations* (Oxford: Oxford University Press, 2000).

<sup>20</sup> The reciprocity principle: "To justify imposing their will on you, your fellow citizens must give reasons that are comprehensible to you" Gutmann, A. and D. F. Thompson, *Why deliberative democracy?* (Princeton: Princeton University Press, 2004).

The concept of preference change is much less common and, in fact, constitutes one of the most significant ways in which deliberative democracy differs from many other theories of democracy (including liberal democracy). It also parallels Sen's perspective that participation in democracy shapes participants' "conceptualization" of their needs.<sup>21</sup>

***Openness of the Setting*** – The second characteristic of effective deliberation is the openness of the deliberative setting (Cohen's "favorable conditions"). This includes such basic civil and political rights as non-discrimination and freedom of expression and assembly. Without these fundamental conditions, deliberation is difficult or impossible. This characteristic is one that deliberative democracy shares with most other theories of democracy.

***Equality of Opportunity*** – Third, there should be an equality of opportunity to participate (Cohen's "equal citizens"). For most deliberative democrats, this is a more stringent requirement than the simple legal equality required by much of liberal democratic theory.<sup>22</sup> Knight and Johnson, for example, speak of "equal opportunity of access to political influence" where "[i]nfluence is more than mere voting" and requires both procedural and substantive equality. As noted by

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<sup>21</sup> D. Miller, "Deliberative Democracy and Social Choice," *Political Studies*, 40 (1992): 54-67; J. Cohen, *Democracy and Liberty*; S. Stokes, "Pathologies of Deliberation," in *Deliberative Democracy*, ed. J. Elster (Cambridge, Cambridge University Press, 1998); A. Sen, *Development as Freedom*; J. Dryzek, *Deliberative Democracy and Beyond*; A. Gutmann and D. Thompson, "Deliberative democracy beyond process," *Journal of Political Philosophy*, 10, no. 2 (2002): 153-174.

<sup>22</sup> J. Habermas, *Beyond Facts and Norms: Contributions to a Discourse Theory of Law and Democracy* (Cambridge: Polity, 1996); J. Bohman, "Deliberative Democracy and Effective Social Freedom: Capabilities, Resources, and Opportunities," in *Deliberative Democracy: Essays on Reason and Politics*, eds. J. Bohman and W. Rehg (Cambridge, MA: The MIT Press, 1997).



difference (agonistic) democrats, both procedural and substantive equality become both particularly important and particularly challenging in the context of diversity, especially where social diversity – of social position, of perspective, of material resources, of knowledge base – is accompanied by social inequality.<sup>23</sup>

Some deliberative democrats consider some minimum level of equality of access to material resources to be a prerequisite for true participation (though the actual level of resources considered essential varies among theorists), or, in a related vein, that the asymmetrical distribution of resources is prevented from having an adverse impact on participation in deliberation.<sup>24</sup> Others, such as Bohman, raise the point that non-material resources also affect the ability to make use of their material uses for participation. He offers as a metric the ability of individuals or groups to initiate deliberation on their concerns.<sup>25</sup>

Thus, although deliberative democrats frequently disagree about the nature, measurement, and means of ensuring equality of opportunity in deliberation, most agree that the problem is a central one in theory and practice alike. Participatory mechanisms such as public meetings can provide opportunities for deliberation by diverse social groups, but the design of the mechanism is critical to the actual opportunity for different groups to participate and influence political outcomes. When and where meetings are held, for example, can have a very significant impact

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<sup>23</sup> S. Benhabib, ed. *Democracy and Difference: Contesting the Boundaries of the Political* (Princeton, NJ: Princeton University Press, 1996); Knight, J. and J. Johnson, "What Sort of Equality Does Deliberative Democracy Require?" in *Deliberative Democracy: Essays on Reason and Politics*, eds. J. Bohman and W. Rehg (Cambridge, MA: The MIT Press, 1997); Dryzek, *Deliberative Democracy and Beyond*.

<sup>24</sup> Knight and Johnson, "What Sort of Equality"; Stokes, "Pathologies of Deliberation"

<sup>25</sup> Bohman, "Deliberative Democracy"

on the ability of marginalized groups to participate. Similarly, the ready availability of information on the subject being deliberated on is essential if groups are to be able to articulate and support their positions, as well as to understand opposing positions.

***Link with the Exercise of Power*** – Cohen’s definition of deliberative democracy argues that there must be a link between deliberation and the exercise of public power, with a particular focus on institutional arrangements. Another conceptualization of this link is offered by Habermas, who states that the communicative power of deliberation “can have an effect on the political system insofar as it assumes responsibility for the pool of reasons from which administrative decisions must draw their rationalizations” and he also suggests that institutions can be designed to enhance the impact of this communicative power.<sup>26</sup> In both cases, it is clear that if deliberation occurs but has no impact on policy, it is merely deliberation, not deliberative democracy. There must be some mechanisms for transmitting post-deliberation preferences to policymaking.

### **Deliberative Democracy, Ideas, and Discourses**

From strains of sociology, anthropology, and linguistics to certain works focusing on economic development, a variety of academic literatures has sought to elucidate the relationship between culture and ideas on the one hand and politics, economics, and society on the other. Drawing, in particular, from the literature issuing from sociological institutionalism, it is argued that culture and ideas matter because they provide us with the mental maps that we use to interpret the events

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<sup>26</sup> Habermas, *Beyond Facts and Norms*

and conditions in the world around them. They also shape the domains of imaginable possibilities that bound our actions and decisions (individually and as societies).

A useful way to conceptualize these imaginable possibilities and their impact on political outcomes is through the analysis of discourses. This dissertation will use Dryzek's definition of discourse:

A discourse is a shared way of apprehending the world. Embedded in language, it enables those who subscribe to it to interpret bits of information and put them together into coherent stories or accounts. Each discourse rests on assumptions, judgments, and contentions that provide the basic terms for analysis, debates, agreements, and disagreements, in the environmental area no less than elsewhere.<sup>27</sup>

The concept provides a link to both institutions and deliberative democracy: discourses provide the basis for many of the informal rules and customs that constitute the third tier of institutions discussed above, while democratic deliberation can be conceptualized as the exchange of discourses in government and the public sphere. I will make use of this conceptualization in my methodology.

Similarly the first and second tiers of institutions – organizations and formal rules – can facilitate processes of deliberation at various levels in ways ranging from the permission or even facilitation of an open public sphere and governance processes on the one hand, to the creation of explicitly deliberative forums, on the other. Thus deliberation, as a process, occurs in the context of these three tiers of institutions, all three of which shape the opportunities for and impediments to free and equal deliberation throughout the public and policymaking spheres.

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<sup>27</sup> J. S. Dryzek, *The Politics of the Earth: Environmental Discourses* (New York: Oxford University Press, 1997).

From a practical perspective, institutions can be designed specifically to promote deliberation (e.g., the deliberative democratic innovations that will be described in the next section); others are explicitly designed to maintain an open public sphere (e.g., civil and political liberties); while still others may provide a nurturing environment for associations and networks that may indirectly aid deliberation (e.g., laws that facilitate the formation of certain types of non-governmental organizations or exempt them from taxation).

### **What Does Deliberative Democracy Look Like?**

Given these characteristics of deliberative democracy, how do we know what deliberative democracy looks like in practice? In this context, it is particularly important to examine the relationship between deliberative democracy and liberal democratic theory, the primary philosophical foundation of many existing democratic systems. Majority rule, combined with the protection of individuals' abilities to pursue their interests, are the fundamental goals of liberal democracy. In general, individuals' true interests are assumed to be known to the individuals in advance, so aggregative procedures adequately capture these interests. Representative democracy is the institutional form of choice for most liberal democrats, although J.S. Mill, unlike many other liberal democrats, also viewed participatory democratic processes as being useful, but on a limited scale.<sup>28</sup>

Deliberative democracy, without rejecting many of the insights and institutions of liberal democratic theory, seeks to move beyond the simple

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<sup>28</sup> J. S. Mill, *On Liberty* (New York: W. W. Norton & Company, Inc, 1975 [1859]); F. Cunningham, *Theories of Democracy: A Critical Introduction* (London and New York: Routledge, 2002).

aggregation of individuals' pre-determined preferences to a thicker conceptualization of democracy in which reasoned debate can alter preferences and voting is complemented by other, non-aggregative forms of preference transmission, such as public comment periods and deliberative forums on topics ranging from education to policing to public budgeting.

Most deliberative democrats now view deliberative democratic processes as a complement to representative democratic institutions: pure deliberative democracy, like pure direct democracy, is not practical in the large, complex societies that characterize today's world. In some cases, as noted above, representative institutions are seen as the primary location for deliberation, while for others, deliberation in the public sphere constitutes an essential counterweight to state institutions and to dominant ideologies and interests.<sup>29</sup> Even in this view, however, strong representative institutions are essential for good governance; they are simply not the only (or even the most important) area for deliberation. Similarly, many of the conditions valued by liberal democracy – such as freedom of expression – are also fundamental conditions for deliberative democracy.

Deliberative democracy is intuitively appealing as an embodiment of what many might consider to be the democratic ideal. Nonetheless, deliberation places high demands on individuals' time, resources, and reasoning skills.<sup>30</sup> This necessarily raises the question of whether such a vision can, in fact, be implemented on widespread basis. Hardin, for instance, raises the point that "typical citizens do not master the facts they would need to know if they were to vote their interests

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<sup>29</sup> Dryzek, *Deliberative Democracy and Beyond*

<sup>30</sup> Miller, "Deliberative Democracy and Social Choice"; Bohman, "Deliberative Democracy"

intelligently.”<sup>31</sup> If citizens are unwilling to invest the time required to do even this, why should deliberative democrats believe that they will be willing to invest the time required for deliberation?

Theorists have addressed this question in two major ways. First, some deliberative democrats conclude that what is most important is the *ability* of people to participate in deliberation, rather than in their actual participation. Enhancing equality of opportunity for participation is often a central focus in this context. Yet deliberation, to fulfill the claims that have been made about its benefits, must necessarily involve at least a certain level and diversity of actual participation.

The second way that theorists have approached this dilemma is by limiting what should be considered the proper location for deliberation. In its most limited form, deliberation can be seen as something that should occur only in government institutions. A somewhat broader notion is the view that government should convene deliberative forums that include general citizens. In its most inclusive form, deliberative democracy is seen to include all of the above, as well as deliberation in the public sphere.<sup>32</sup>

This dissertation’s use of the term deliberative democracy will be in line with the most inclusive view, for reasons that will be described in later sections. However, it is important to note that ensuring broad participation in reasoned debate is not a small challenge, particularly given that citizens are often busy, unreasonable, and (particularly when it comes to complex or technical issues)

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<sup>31</sup> R. Hardin, “Street-level Epistemology and Democratic Participation,” in *Debating Deliberative Democracy*, eds. J. S. Fishkin and P. Laslett (Malden, MA: Blackwell Publishing, 2003).

<sup>32</sup> Habermas, *Beyond Facts and Norms*; Dryzek, *Deliberative Democracy and Beyond*

unknowledgeable or misled by powerful interests. As such, while this deep and broadly inclusive vision of deliberative democracy is embraced here, it is with the recognition that a utopia of universally deliberative citizens is highly unlikely. Rather, this dissertation begins with the assumption a government can augment its representative institutions with elements of deliberation and can foster a public sphere in which interactions better approximate deliberation.

In practice, there are institutional innovations that can capture many of the benefits of deliberation by ensuring the representation of multiple groups and competing discourses, while at the same time not demanding the participation of all or even a majority of citizens. In this vein, a growing case study literature focuses on actual experiments in deliberative processes that have become increasingly popular in many countries, most frequently (though not exclusively) at the local level. A comprehensive overview of such experiments is beyond the scope of this chapter, but a few examples include “community beat meetings” in Chicago, participatory budgeting in Porto Alegre, Brazil (now implemented in many other cities in Brazil and elsewhere), and Habitat Conservation Plans under the US Endangered Species Act.<sup>33</sup>

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<sup>33</sup> N. Çagatay et al., *Budgets if People Mattered: Democratizing Macroeconomic Policies* (New York: UNDP, 2000); C. Sabel, A. Fung, and B. Karkannan, eds. *Beyond Backyard Environmentalism* (Boston: Beacon Press, 2000); A. Fung, “Deliberative Democracy, Chicago-Style: Grass-roots Governance in Policing and Public Education,” in *Deepening Democracy in Empowered Participatory Governance*, eds. A. Fung and E. O. Wright (London: Verso, 2003); C. W. Thomas, “Habitat Conservation Planning,” in *Deepening Democracy in Empowered Participatory Governance*, eds. A. Fung and E. O. Wright (London: Verso, 2003); G. Baiocchi, *Militants and citizens : the politics of participatory democracy in Porto Alegre* (Stanford, Calif.: Stanford University Press, 2005).

Similarly, deliberation in the public sphere may not necessarily mean deliberation by all citizens, all of the time. Rather, as Habermas states, “It must be shown that political morality is exacted only in small increments.”<sup>34</sup> Deliberation, as a process in which participants are amenable to changing their views as a result of persuasion, does not exist exclusively in intentionally deliberative forums. Rather, it also coexists to varying degrees with other processes (such as bargaining, manipulation, and aggregation) in a variety of other settings.

Such diffuse deliberation has been touched on only occasionally in the deliberative democracy literature. More frequently, it has been addressed (although indirectly) by the literatures on social capital and associationalism, which offer insights on how such incremental demands on political morality might be made. For instance, a civil society with many diverse associations and networks of associations may make public sphere deliberation a more manageable endeavor for citizens by facilitating debate and collective action.<sup>35</sup>

The literature on social capital has insights to provide on this issue. An ample literature, there are several key theorists. Putnam is the most widely cited. He defines social capital as “the features of social organization, such as networks, norms and social trust that facilitate coordination and cooperation for mutual

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<sup>34</sup> Habermas, *Beyond Facts and Norms*

<sup>35</sup> J. Habermas, “Popular Sovereignty as Procedure,” in *Deliberative Democracy: Essays on Reason and Politics*, eds. J. Bohman and W. Rehg (Cambridge, MA: The MIT Press, 1997); Dryzek, *Deliberative Democracy and Beyond*; M. E. Warren, *Democracy and Association*. (Princeton, NJ: Princeton University Press, 2001); F. Cunningham, *Theories of Democracy: A Critical Introduction* (London and New York: Routledge, 2002).



benefit.”<sup>36</sup> Such elements of social organization are purported to facilitate conflict resolution, collective action in the face of challenges to the community, and adaptability. In contrast, Bourdieu draws attention to the inequalities in social networks – and therefore power – among different people, suggesting that social capital is not the uniformly beneficial collective good that others have emphasized.<sup>37</sup>

There are two major implications of social capital research for deliberative democracy. First, a community with high levels of social capital (e.g. organizations and networks) may be better equipped to engage in community deliberation as more participants will be drawn in and social trust will be higher (enabling an environment in which views can be expressed freely and with the possibility of preference change). Second, and in contrast, social capital, if unevenly distributed among actors, may lead to inequalities in deliberation, thus leading to domination by those actors who have larger and denser networks. Which effects are dominant in any given situation is an empirical question.

### **Deliberative Democracy and Sustainable Development**

But what are the advantages of adopting deliberative democratic processes and institutions relative to other forms of democracy? According to contributors to Elster’s edited volume, *Deliberative Democracy*, deliberation can be beneficial to the extent that it:

- Reveals private information

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<sup>36</sup> R. Putnam, “Bowling Alone: America’s declining social capital,” *Journal of Democracy*, 6, no. 1 (1995):65-78, 67.

<sup>37</sup> L. White, “Connection Matters: Exploring the Implications of Social Capital and Social Networks for Social Policy,” *Systems Research and Behavioral Science*, 19 (2002): 255-269.

- Lessens or overcomes the impact of bounded rationality<sup>38</sup>
- Forces or induces a particular mode of justifying demands
- Legitimizes the ultimate choice
- Is desirable for its own sake
- Makes for Pareto-superior decisions
- Makes for better decisions in terms of distributive justice
- Makes for a larger consensus
- Improves the moral or intellectual qualities of the participants.<sup>39</sup>

Earlier, a number of characteristics of sustainable development issues that make them especially difficult governance challenges were identified. Deliberative democracy, if the claims of its proponents are accurate, offers the potential to better meet these challenges. There are four major areas where this is likely to be the case:

First, the complexity, time horizons, and multiple scales make the problems of incomplete knowledge and bounded rationality particularly acute. As already noted, deliberative democratic theory and the limited empirical evidence that is available suggests that deliberative processes would increase the sharing of information (both private and scientific) and help overcome bounded rationality through a simple increase in the number of people thinking critically about a given problem and through the effects of brainstorming, in which participants in the deliberative process are able to build on each others' ideas. Deliberative democracy offers opportunities not just to share and adjust goals, but to amalgamate individuals' different experiences to achieve a richer collective knowledge.<sup>40</sup> In the case of sustainable development, there is a need to bring in knowledge from a

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<sup>38</sup> Bounded rationality – limitations of human minds and of the mental maps upon which they operate that prevent people from making decisions based on comprehensive and rational understandings of complex systems.

<sup>39</sup> J. Elster, "Introduction," in *Deliberative Democracy*, ed. J. Elster (Cambridge: Cambridge University Press, 1998); see also chapters in the same volume by Sunstein, Gambetta, Fearon, Cohen, and Johnson.

<sup>40</sup> C. Sneddon, R. B. Howarth, and R. B. Norgaard, "Sustainable development in a post-Brundtland world," *Ecological Economics*, 57 (2006): 253-268.

variety of social, economic, and environmental perspectives in order to craft a solution that balances these concerns and is sustainable.

Of particular interest in this regard is the elicitation of local knowledge as an input to decisionmaking. According to Fischer, “ordinary local knowledge refers to knowledge pertaining to a local context or setting, including empirical knowledge of specific characteristics, circumstances, events, and relationships, as well as the normative understandings of their meaning.”<sup>41</sup> This knowledge may be in the area of the environmental characteristics of a location, management techniques, context-specific needs and assets, or other topics. The incorporation of such knowledge, while not guaranteeing a sustainable outcome to decisionmaking, can contribute to a more nuanced and socially informed understanding of the sustainable development challenges under discussion.<sup>42</sup>

A second area in which deliberative democracy promises better results is in enhancing communication among people with different worldviews, a common situation when it comes to sustainable development issues. The requirement that policy positions be justified reasonably to other participants (the reciprocity principle) is a key way that theory predicts communication will be enhanced. The reciprocity principle is also hypothesized to reduce (though clearly not eliminate) the impact of self-interest on policy advocacy: it is argued by deliberative

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<sup>41</sup> F. Fischer, *Citizens, Experts, and the Environment: The Politics of Local Knowledge* (Durham: Duke University Press, 2000), 194.

<sup>42</sup> D. J. Klooster, “Toward Adaptive Community Forest Management: Integrating Local Forest Knowledge with Scientific Forestry,” *Economic Geography*, 78, no. 1 (2002): 43-70; C. J. Shepherd, “Mobilizing Local Knowledge and Asserting Culture: The Cultural Politics of In Situ Conservation of Agricultural Biodiversity,” *Current Anthropology*, 51, no. 5 (2010): 629-654; B. Orlove and S. Caton, “Water Sustainability: Anthropological Approaches and Prospects,” *Annual Review of Anthropology*, 39 (2010): 401-415.

democratic theorists that promoting a policy position based purely on self-interest is more difficult when it must be justified in public deliberation. This same process facilitates the inclusion of arguments that give voice to the voiceless: natural ecosystems and future generations. A land developer, for example, would need provide arguments that the common benefits of converting coastal ecosystems to condominiums outweigh the public benefits of maintaining the ecosystem, something unnecessary when deals are made behind closed doors.

A third argument for deliberative democracy – improving distributive justice – is derived from the requirement of equality of opportunity for participation and from the reciprocity principle. Since distributive justice is a key aspect of all three pillars of sustainable development – both in social and economic development and the distribution of environmental goods and bads – the case for deliberative democracy is strengthened. A decision-making process that deals with water quality, for example, is more likely to address the water and sanitation needs of low-income residents if those residents are participants in the process.

Finally, strengthening the legitimacy of the resultant decisions – while sometimes considered a secondary benefit in the theoretical literature on deliberative democracy – is essential for effectively addressing sustainable development challenges. It may, in fact, be considered by the sustainable development literature to be the most important reason for broad public participation. In particular, the close ties between sustainability and the ways in which people live and work necessitate the active cooperation of all segments of society to ensure the resolution of sustainable development problems. Legitimacy

may emerge from the process of building the collective knowledge base in a form of joint fact-finding or from the debate itself.

### *Local vs. National Deliberation*

Deliberation and participation are often considered to be inherently local activities. Indeed, local governance is often an ideal location for deliberation, due to the greater accessibility of local governance institutions, the importance of local knowledge in the crafting of efficient policies, and the greater potential for actors with relatively fewer resources to influence policies. More broadly, local decisionmaking are expected to yield more sustainable outcomes, if local inhabitants are responsive to the ecological feedback to their actions and participate in decisionmaking. Dryzek thus recommends radical decentralization as a social choice solution to ecological dilemmas.<sup>43</sup>

Nevertheless, deliberation and participation may also be critical at the national level, since radical decentralization has not occurred on a broad scale. The importance of participation by multiple groups in policymaking and in debate in the national public sphere is not diminished in expanding the location of deliberation to the national level: national policies would also benefit from a richer collective knowledge, enhanced communication, improved distributive justice, and greater legitimacy of the resultant policy. Deliberation at the national level may take place in explicitly deliberative forums and participatory councils convened by the national

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<sup>43</sup> J. S. Dryzek, *Rational Ecology: Environment and Political Economy* (New York: Basil Blackwell, 1987).

government, or it may occur in the public sphere, finding a place in the media, for example.

### *Conceptual Model: Mapping Out the Variables*

The purpose of this dissertation is to test the effectiveness of deliberation, and of public participation more broadly, in promoting policies consistent with sustainable development. The methodology is based on a basic conceptual model involving five major components: (1) a public sphere; (2) mechanisms that transmit preferences from the public sphere to government policymaking; (3) the government policymaking sphere; (4) policy implementation; and (5) the sustainable development context (see Figure 1). Deliberation, as the process in which discourses are contested, occurs in multiple locations. Opportunities for deliberation are shaped by institutions (organizations, formal rules, and informal rules and customs).

The *public sphere* is the primary area for deliberation in society. In general, when deliberation occurs, its results likely depend on the content and strength of initial individual preferences and the quality of deliberation, which, in turn, depend on the structural characteristics of the participatory setting, the openness of the public sphere, the degree of equality of opportunity for participation, and the availability of information on relevant issues. Deliberation in the public sphere is a central independent variable in this dissertation. It will be assessed using a survey of newspaper articles.

### Basic Conceptual Model: Flows of Influence, Resources, and Information

**PUBLIC SPHERE**

Post-deliberation preferences

Quality of deliberation

Content of deliberation

Initial preferences

**TRANSMISSION MECHANISMS**

**GOVERNMENT**

Government policymaking

Implementation capacity

Policy implementation

**SUSTAINABLE DEVELOPMENT CONTEXT**

Domestic SD context: economic, social, environmental

External factors: markets, debt, aid, discourses

**Dependent Variable:**

- Government policies (outcomes of policymaking)

**Independent Variables:**

- Public sphere deliberation quality and content
- Transmission mechanisms
- Sustainable development context
- External constraints and opportunities
- Government policymaking institutions

*Government policymaking* is another area for deliberation, as well as an area for representation. The actual importance of both deliberation and representation depends on institutional characteristics, the level of corruption, and other constraints (e.g. world economic conditions, debt, etc.). The output of government policymaking is the dependent variable.

*Implementation* depends on a lack of corruption, adequate funding, bureaucratic efficiency, and public cooperation. In some cases, if implementing agencies are given substantial latitude in how to implement policies, some limited deliberation may also occur here.

Lastly, the *sustainable development context* is a function of pre-existing conditions and the impacts of policies. It includes conditions relating to all three sustainable development dimensions: economic, social, and environmental. These conditions form the context in which all other deliberation and policymaking take place and therefore also represent essential independent variables.

#### *Research Question and Hypotheses*

##### **Research Question:**

- How do the dynamics of public sphere deliberation and participatory transmission mechanisms affect the content of enacted land-use related policies?

##### **Hypotheses:**

- More active deliberation in the public sphere and more participatory transmission mechanisms should lead to policies that are more innovative, rather than simple translations of policies from the United States and elsewhere or adaptations of traditional policy strategies from other sectors.

Such policies should:

- Integrate both social and environmental concerns
- Incorporate the concerns of diverse social groups



- Incorporate local knowledge
- Where accurate information on the issues under debate (and their significance) is readily available, more active deliberation in the public sphere and more participatory transmission mechanisms should lead to policies that:
  - Incorporate more scientific knowledge
  - Include stronger social and environmental provisions

### *Case Selection*

The Yucatan peninsula of Mexico was selected based on the high level of interest shown in land use planning there, providing ample opportunities to examine the different processes leading to land use decisions. An initial list of potential cases was assembled that included development plans from seven municipalities and two protected areas in Quintana Roo and Campeche states, as well as two national laws with significant implications for coastal areas in the region, including the Mangrove Law and the General Tourism Law. From this pool three cases were selected to provide a diversity of processes leading to the policy outcomes.

The first case is the overall pattern of land development planning for the city of Cancun from its founding in the early 1970s. The processes in this case were non-deliberative and non-participatory. The second case is the updating of the Urban Development Plan of the town of Puerto Morelos, just south of Cancun. The process was participatory and, to a certain degree, deliberative. Finally, the third case

examines the evolution of mangrove regulation in Mexico, a process involving technocrats, the private sector, and a lively debate in the public sphere.

### *Analyzing the Variables*

#### **Independent Variables**

Independent variables include public sphere deliberation quality and content, transmission mechanisms (both deliberative and non-deliberative), the sustainable development context (such as the poverty rate or the relevant ecosystems and their services), external constraints and opportunities (such as trade imbalances), and the characteristics of government policymaking institutions (such as their structure and linkages to private sector and other groups).

Central to the assessment of the independent variables is the newspaper survey. The goal of the systematic gathering of data from newspapers is to create a representative picture of each of the discourses on the relevant topics (land use in Quintana Roo and mangrove protection). This must be done with great caution, since the media is neither omniscient nor unbiased. Many studies of media coverage have demonstrated that even when there is a free press, media coverage of issues and events are biased and incomplete. Various factors have been suggested for this problem: the bias of reporters and editors; the physical limits on the amount and sophistication of news that can be reported; the ownership structure of the media industry; the need to compete for viewers through coverage choices; the concentration of journalists in some geographical and topical areas (and not others); issue interest cycles; and the time constraints that affect journalists' choices

of stories and sources. While the print media are believed to be slightly less vulnerable to some of these pressures (due to more space to provide more diverse, lengthy, and sophisticated coverage), they are by no means immune.<sup>44</sup>

As such, the use of newspaper survey data must seek to minimize or, in some cases, take advantage of the bias that occurs. One way to accomplish this is by using multiple newspapers during the same time period. Two separate newspapers will be used in each case for which a newspaper survey is carried out.

As noted above, the newspaper survey will be the primary source of information on discourses and the actors that promote them. The coverage (or lack of coverage) of particular actors and discourses is an indicator of the ability of those actors to initiate deliberation in the public sphere. This ability has been suggested by Bohman to be a central indicator of the equality to participate in deliberation. The diversity of discourses and actors represented in the media therefore constitutes a strong indicator of the quality and equality of deliberation in the public sphere.

The characterizations of discourses will make use of the discourse characteristics described by Dryzek in *The Politics of the Earth: Environmental Discourses*. Discourse characteristics include:

- Basic entities recognized
- Assumptions about natural relationships (e.g. competition, cooperation)

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<sup>44</sup> J. Barranco and D. Wisler, "Validity and Systematicity of Newspaper Data in Event Analysis," *European Sociological Review*, 15 (1999): 301-322; J. Earl et al., "The Use of Newspaper Data in the Study of Collective Action," *Annual Review of Sociology*, 30 (2004): 65-80. J. Parkinson, "Rickety Bridges: Using the Media in Deliberative Democracy." *British Journal of Political Science*, 36 (2006): 175-183.

- Agents and their motives; and
- Key metaphors and other rhetorical devices.<sup>45</sup>

In addition to providing information about discourses, newspapers are a source of information on informal transmission mechanisms. The most important mechanism likely to be covered in newspapers is protest. However, newspapers may also be a useful source of information on corruption, another transmission mechanism that is likely to be poorly tracked in government documents. Finally, the newspaper survey will be critical for tracking events and identifying elements of the sustainable development context.

In the case of Cancun's development (chapter 4), a historical newspaper survey is not included due to the lack of newspaper availability. In this case, secondary sources will be used to assess the degree of public participation in development planning, and the resulting development patterns.

### **Dependent Variable**

The dependent variable in the study is the policy outcome in each case – whether the policy favors sustainability or not (see below). In the case of Cancun, it is the overall pattern of development policies. In the case of Puerto Morelos, it is the Urban Development Plan. In the case of mangrove protection it is the series of national policies regulating mangrove destruction. Details about the policies in question are found in government documents.

For the purposes of this dissertation, policy evaluations will be based on what the international community has agreed to be its central sustainable

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<sup>45</sup> Dryzek, *The Politics of the Earth*

development goals. While there are many international declarations and agreements addressing sustainable development, the relevant one here is the 2002 *Plan of Implementation of the World Summit on Sustainable Development*. While it covers many issues, the *Plan of Implementation* focuses on two major goals: poverty eradication and protecting and managing the resource base. The conceptualization of poverty in the *Plan of Implementation* (particularly part II) is a multidimensional one, including aspects relating to income, nutrition, access to water and energy, empowerment, cultural well-being, and others.

Evaluation of the contribution of a particular policy to the development aspect of sustainable development would therefore be based on the policy's impact on various measures of human wellbeing, including life expectancy, nutrition, housing quality, etc. Policies relating to land use that enhance one or more of these measures (through healthy human settlements, for example) would therefore be considered to be supportive of the development aspect of sustainable development.

On the environmental side, part IV of the *Plan of Implementation* addresses the overarching goal of "Protecting and managing the natural resource base of economic and social development". As with poverty, this goal is actually an ensemble of many separate but interconnected goals relating to various aspects of the natural environment and human dependence on that environment. Goals that are particularly relevant to the focus of this dissertation – coastal land use – include the conservation and sustainable use of biodiversity, sustainable forest management, reducing vulnerability of human populations to natural hazards, and

the maintenance of freshwater and coastal resources (which depend on healthy watersheds).

### *Testing the Hypotheses*

The research will attempt to establish a possible relationship between deliberation and participation on the one hand, and sustainable development policies, on the other. A positive relationship between deliberation and participation and sustainable development policies would be supported by:

- Particular discourses in the public sphere also appearing in policymaking documents (either the policies themselves or in the statements and debates emanating from government);
- The appearance of particular discourses in the public sphere preceding their appearance in the policymaking sphere;
- References in policymakers' debates to public sphere discourses or deliberation;
- An association between public participation and policies supporting sustainable development; and
- Particulars of the empirical story that fit the deliberative democratic hypotheses better than alternative explanations.

Evidence will be gathered on each of these points. In this way, this dissertation will test the importance of public sphere deliberation and public participation in policymaking for sustainable development. Theory would predict

that they would be important, but that has not been adequately tested, particularly in the developing world.

### Chapter 3: Institutionalizing Democracy and Participation in Mexico

The present chapter will lay the groundwork necessary for the policy studies by providing an overview of relevant aspects of the country's democratic transition, to be followed by an accounting of the various participatory mechanisms mandated by federal and state law in the areas of general development planning (which forms the basis for programs of the public administration), human settlements, environment, and tourism, the matters of most significance to land use in Quintana Roo.

#### *The Democratic Transition*

The transition of the Mexican state from one-party rule to an electoral democracy was a gradual process that occurred through multiple electoral reforms beginning in the late 1980s and continuing through the 1990s, accompanied by the rise of viable opposition parties. The first challenges to the dominance of the PRI (Institutional Revolutionary Party) occurred at the state and municipal levels. It was not until 1997 that the PRI lost its majority in the Chamber of Deputies, Mexico's lower house of Congress, resulting in the first divided government in Mexico since the PRI's predecessor party consolidated power over 70 years ago. This increased opportunities for alternative discourses to be articulated and integrated into policies, which had previously been inhibited by the dominance and party discipline of the PRI.

The first alternation of power in the presidency occurred in 2000, with the election of Vicente Fox of the conservative PAN (National Action Party) and the



immediate acknowledgement of that victory by then President Ernesto Zedillo. The 2006 election of PAN candidate Felipe Calderón to the presidency was not as smooth, with the opposition candidate Andrés Manuel Lopez Obrador of the PRD (Party of the Democratic Revolution) claiming electoral fraud. This is significant for two reasons: first, it constitutes a possible failure and loss of legitimacy in the democratic system. Second, at least according to his supporters, Lopez Obrador might have been more open to popular engagement than his opponent from the PAN party.

Overall, Mexico's transition occurred without an abrupt break in the system of government: it was the outcome of a series of constitutional amendments rather than major changes to the constitutional powers of the various branches of government. Nevertheless, there have been significant institutional changes throughout the process of democratization.

### *Federal Institutions*

#### **The Executive**

Under the PRI's long rule, the presidency was the dominant policymaking institution. The president, who could not (and still cannot) be reelected, acted within the constraints imposed by the need to satisfy corporatist groups – such as labor, peasant, and business groups – which formed the power base for the ruling PRI party, and through which benefits from government flowed. The president was not only the chief executive, he was the chief legislator as well, proposing the majority of legislation, which was then passed by the Congress. These powers were

not, however, the result of a strong constitutional authority, but rather the result of a combination of three factors: control of both the presidency and the Congress by a single party; a high level of party discipline; and the president's position as head of the party.<sup>46</sup>

In fact, the constitutional powers of the president – those exercised by the president under divided democratic government – are weak relative to those exercised by the presidents of most other Latin American countries. Since democratization, the president has ceased to be the primary source of legislation but is instead a much more reactive force in the federal government: the most significant of the President's powers with respect to the Legislature is the veto power. During the second half of the Fox administration, after having lost the 2003 midterm elections, the Fox administration was responsible for less than 4% of bills enacted by Congress.<sup>47</sup>

In addition to the President himself, the Executive branch also encompasses the various Secretariats that implement the laws published by the president and the day to day operations of the various government programs. The federal government entities of greatest concern to this study are Semarnat (Secretariat of Environment

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<sup>46</sup> B. Nacif, "Congress Proposes and the President Disposes: The New Relationship between the Executive and Legislative Branches in Mexico," in *Mexican Governance: From Single-Party Rule to Divided Government*, eds. A. B. Peschard-Sverdrup and S. R. Rioff (Washington, DC: The CSIS Press, 2005); F. Lehoucq et al., "Policymaking in Mexico Under One-Party Hegemony and Divided Government," in *Policymaking in Latin America: How Politics Shapes Policies*, eds. E. Stein and M. Tommasi (Washington, DC and Cambridge, MA: Inter-American Development Bank and David Rockefeller Center for Latin American Studies, 2008); J. Weldon, "Political Sources of Presidentialismo in Mexico," in *Presidentialism and Democracy in Latin America*, eds. S. Mainwaring and M. S. Shugart (New York: Cambridge University Press, 1997).

<sup>47</sup> Nacif, "Congress Proposes"; Lehoucq et al., "Policymaking in Mexico"

and Natural Resources), Sector (Secretariat of Tourism), and Fonatur (National Fund for the Development of Tourism). Both the priorities and responsiveness – or lack thereof – of the president filter all the way through the executive branch: if the president is not responsive to environmental discourses, for example, he will appoint a Secretary of Environment who is also not responsive, as in fact occurred under President Fox. Similar situations occur in other secretariats as well.

Citizen participation relating to the president's powers are primarily electoral, although direct citizen participation in the formulation of the National Development Plan and various government programs is also mandated by the Constitution and some sectoral laws. Some of these provide opportunities for public deliberation, although the actual incorporation of the outcomes of deliberation into policies is often not mandated. In addition, equality of opportunity to participate is deeply problematic at the federal level, where large economic players have preferential access to decisionmakers. Nevertheless, in some cases, public participation and public sphere debate seem to have some impact on policymaking, as will be seen in later chapters.

### **Congress and Political Parties**

The big institutional winner in the transition to democratic governance was the Congress, which was transformed from a rubber stamp for presidential initiatives to a truly independent legislative body. The Mexican Congress consists of two houses, the Senate and the Chamber of Deputies. There are 128 Senators elected through a combination of majority voting and proportional representation. The Chamber of Deputies consists of 500 members, with 300 members elected from

single districts, while the remaining 200 are elected by proportional representation from party lists. A ban on consecutive re-election means that at any given time the experience level in the legislature is quite low. It also means that since legislators cannot stand for re-election, they have little incentive to represent their constituents.<sup>48</sup> Rather they have an incentive to pass legislation that benefits those most likely to ensure a continued career after their term expires, which is not always the people they were elected to represent.

The condition of “divided government,” in which the president’s party does not hold a majority in Congress, has brought new dynamics to the legislative process. While Nacif argues that the continued passage of the same approximate volume of legislation under divided government as under one-party government proves that divided government has not produced gridlock, others argue that the legislation passed has been of less significance, demonstrating that gridlock exists and prevents the passage of major reforms.<sup>49</sup>

Laws may be proposed by the legislators, the president, governors, and state legislatures. They are then referred to committees, where they either die or they are approved and the committee report is sent to the plenary for a vote. Since legislation must pass through committees prior to votes in plenary sessions, committees act as significant gatekeepers in the Mexican Congress, for legislation relating to sustainable development as much as any other subject. Many legislative initiatives

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<sup>48</sup> L. Rubio, “Democratic Politics in Mexico: New Complexities,” in *Mexico Under Fox*, eds. L. Rubio and S. Kaufman Purcell (Boulder: Lynne Rienner Publishers, 2005).

<sup>49</sup> Ibid.; D. Dresser, “Mexico: Dysfunctional Democracy,” in *Constructing Democratic Governance in Latin America*, 3rd ed., eds. J. I. Dominguez and M. Shifter (Baltimore: The Johns Hopkins University Press, 2008).

die in committee, a result of the simple failure of the committee to take up the initiative. Other pieces receive a negative vote in committee, in which case they are also terminated. Only those pieces of legislation that receive a positive recommendation from their respective committee proceed to a plenary vote. For example, between September 2006 and August 2009, 119 initiatives were referred to the Commission on Environment and Natural Resources of the Chamber of Deputies. 17 received positive reports, 28 received negative reports, and the remainder had no action at all taken on them by the committee.<sup>50</sup>

Despite their critical role, committees are weakened by a lack of specialization (due to multiple committee assignments), the ability of legislative faction leaders to remove committee members at their discretion, the ability of the plenary to amend committee reports, and the lack of experience stemming from the ban on consecutive reelection of legislators.<sup>51</sup> The effectiveness and efficiency of committees is thus not as high as they might be, given other conditions. Nevertheless, the Congress as a whole is in a much more effective legislative body than it was prior to democratization.

In plenary sessions, votes are usually along party lines, since party discipline is quite high. There are currently three major political parties. The National Action Party (PAN) is more conservative on distributional issues than are the PRI or the PRD, while the PRI is slightly more conservative on moral issues. The PRD makes social redistribution the cornerstone of the party. The PRI is particularly associated

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<sup>50</sup> Cámara de Diputados del H. Congreso de la Unión. *Base de datos de iniciativas, LX Legislatura* (accessed January 10, 2011); available from [http://gaceta.diputados.gob.mx/SIL/Iniciativas/60/gp60\\_b\\_QTurnado.php3](http://gaceta.diputados.gob.mx/SIL/Iniciativas/60/gp60_b_QTurnado.php3).

<sup>51</sup> Lehoucq et al., "Policymaking in Mexico"

with rural districts, the PAN is particularly associated with the relatively wealthy north of the country, while the PRD is more popular among those in the poorer south. In some ways, the party system better resembles a pair of two-party systems: PRI-PAN in the north, and PRI-PRD in the south. In order to make a significant showing electorally, both PAN and the PRD have had to frame their messages in such a way as to capture much more than their traditional bases.<sup>52</sup> There are also a number of minor parties, the most relevant to this study being the PVEM (the Ecological Green Party of Mexico), which has taken a very active role in proposing legislation for sustainable development, with an impact in this area belied by its relatively small number of elected officials.

**Table 3-1: Party Composition of the Chamber of Deputies, 2009**

Party	Deputies
PRI	237
PAN	143
PRD	71
PVEM	21
PT	13
Convergencia	6
Nueva Alianza	9

The division of legislative seats among the various parties demonstrates the need to form coalitions in order to pass legislation. This is the case even in the setting of the daily agenda of the plenary: party bloc leaders submit the proposed agenda to the directorate of the chamber, thus requiring the agreement of at least two of three major party bloc leaders.<sup>53</sup>

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<sup>52</sup> J. L. Klesner, "Electoral Competition and the New Party System in Mexico," *Latin American Politics & Society*, 47, no. 2 (2005): 103-142; Dresser, "Mexico: Dysfunctional Democracy"

<sup>53</sup> E. Alemán, "Policy Gatekeepers in Latin American Legislatures," *Latin American Politics & Society*, 48, no. 3 (2006): 125-155.

The size of a party's representation and its affiliation with the executive are not necessarily the best indicators of the party's effectiveness. Since 1997, the share of legislation initiated by opposition parties has been disproportionate to their representation. The PRD in particular has been able to define the political agenda beyond what would be expected from a party its size, particularly by challenging the other two major parties on their "neoliberal agenda".<sup>54</sup>

A major criticism of the party system in Mexico (and indeed throughout Latin America) is that the parties are not representative of their constituents, who are in fact quite disillusioned with the party system, with 51% of the population rejecting the proposition that political parties are necessary for the good for the country.<sup>55</sup> Similarly, a Latinobarometro study in 2004 suggested that Mexicans have little confidence in their political parties and that the political parties are not generally viewed as representing the people. This disillusionment with political parties is common in countries throughout Latin America.<sup>56</sup>

### **The Judiciary**

The judicial system in Mexico consists of a Supreme Court of Justice as well as an Electoral Tribunal, Collegiate and Unitary Circuit Tribunals, and District Courts (Constitution Article 94).<sup>57</sup> As a result of reforms since 1994 the Supreme Court has been transformed into a Constitutional Court. The court has taken on a stronger role in settling disputes among political actors but not a particularly strong role in

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<sup>54</sup> Lehoucq et al., "Policymaking in Mexico"; Rubio, "Democratic Politics"

<sup>55</sup> Dresser, "Mexico: Dysfunctional Democracy"

<sup>56</sup> United Nations Development Program, *Democracy in Latin America: Towards a Citizens' Democracy* (New York: United Nations Development Program, 2004).

<sup>57</sup> Gobierno de México. *Constitución Política de los Estados Unidos Mexicanos*. (México, DF: GdM, 1917, 2009).

protecting individual rights.<sup>58</sup> One example of a constitutional controversy taken on by the Supreme Court of Justice is a case in which an area of coastal land in Tulum (a town south of Cancun) is claimed both by the federal government in the person of Semarnat as a national park and by private owners with the support of state and municipal governments. The outcome of the case (not yet resolved as of this writing) will have significant impacts on environmental quality in the area in question.

While divided government may have created gridlock in the legislative arena, Ríos-Figueroa suggests that the fragmentation of power that characterizes the new situation has actually improved judicial performance by loosening constraints on members of the judiciary, thus creating a more independent judiciary. Beer, in a study of state judiciaries in Mexico, also found that political competition supported a more independent judiciary.<sup>59</sup> Such a judiciary is likely to benefit sustainable development, particularly in a context like that of Mexico, where many of the necessary laws are in place but there is a failure to implement and enforce them.

There is one type of judicial case that is particularly relevant to this study: *amparo* suits. *Amparo* can be translated as “shelter” and *amparo* suits are a relatively common type of case that have long been a part of the judicial landscape in Mexico. These suits can be brought by any individual or group who feels that an action of government is illegal or wrongly applied in a particular case. This provides one avenue for disputing decisions and actions contrary to sustainable

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<sup>58</sup> M. Schor, "An Essay on the Emergence of Constitutional Courts: The Cases of Mexico and Colombia," *Indiana Journal of Global Legal Studies*, 16, no. 1 (2009): 173-194.

<sup>59</sup> J. Ríos-Figueroa, "Fragmentation of Power and the Emergence of an Effective Judiciary in Mexico, 1994–2002," *Latin American Politics & Society*, 49, no. 1 (2007): 31-57.



development. However the costs of bringing an *amparo* suit can be prohibitive for many citizens.

An important limitation of *amparo* suits is that the rulings apply only to the plaintiffs in a case: they do not have broader significance or serve as precedents for future cases. Only if there are five similar *amparo* cases with the same decision do they have broader significance, and there is currently no institution for tracking and correlating such cases. There are three main criticisms of the Mexican *amparo*:

- The judgments have been blamed for producing inequities in applicable laws.
- Remedies for cases involving unconstitutional acts benefit only individuals who have higher incomes because of the expense that *amparo* proceedings entail.
- It makes no sense to preserve legislation whose constitutionality has already been questioned <sup>60</sup>

Nevertheless, the *amparo* remains an option for disputing government actions, as will be seen in the case of Puerto Morelos, where it was used (albeit unsuccessfully) to dispute an environmentally and socially irresponsible urban development plan.

### *State and Municipal Institutions*

Like the federal government, state governments are divided into Executive, Legislative, and Judicial powers. State governors are elected through direct elections according to the state's electoral laws and can serve terms of no longer than six years. (In the case of Quintana Roo, the gubernatorial term is six years). With the

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<sup>60</sup> J. R. Cossio, "The Judicial Branch of the Mexican Federation," in *Mexican Governance: From Single-Party Rule to Divided Government*, eds. A. B. Peschard-Sverdrup and S. R. Rioff (Washington, DC: The CSIS Press, 2005).

transition to democracy and the strengthening of federalism, governors have seen their power increased, particularly as a result of dramatically increased funding from the federal government – subnational governments are responsible for over a third of public sector spending.<sup>61</sup>

Legislators are elected directly, and the number of legislators is proportional to the number of inhabitants of electoral districts. The legislature of Quintana Roo is dominated by the PRI party (14 deputies), followed by PAN (4 deputies), PVEM (3 deputies) and one each from PRD, Nueva Alianza, Partido de Trabajo, and one independent. Echoing the national level work already discussed, Solt suggests that the pluralism of parties in state legislatures is particularly important in the degree of institutionalization of those legislatures – the degree to which the legislature is freed from either a rubber stamp for the executive (in cases where the executive and the legislature are held by the same party) and simple gridlock (where the executive and legislature are held by different parties).<sup>62</sup> According to this work, one would expect the legislature of Quintana Roo to play a weaker role relative to the executive, given that the PRI holds both the executive and a majority in the state legislature.

The basic unit of governance in Mexico is the municipality, which is governed by a municipal president and council, both elected directly, with no possibility of

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<sup>61</sup> Lehoucq et al., "Policymaking in Mexico"; Rubio, "Democratic Politics"; R. Hernández-Rodríguez, "The Renovation of Old Institutions: State Governors and the Political Transition in Mexico," *Latin American Politics and Society*, 45, no. 4 (2003): 97-127.

<sup>62</sup> F. Solt, "Electoral Competition, Legislative Pluralism, and Institutional Development: Evidence from Mexico's States," *Latin American Research Review* 39, no. 1 (2004):155-167.

immediate reelection. The municipality is the fundamental authority with respect to zoning and land use planning (Article 115 of the Constitution).

According to Quintana Roo's Constitution, municipal governments are to be made up of a President, and Attorney-General, and either 15 or 9 town councilors, depending on the size of the municipality.<sup>63</sup> Party list election of town councillors means that the individual councillors are frequently not known to the population at large and may also be weak in relation to the municipal president. Quintana Roo has nine municipalities. The most intense land development pressures are in the tourism dominated municipalities: Benito Juárez (Cancun; Puerto Morelos), Solidaridad (Playa del Carmen), Tulum, and Cozumel.

#### *Mechanisms for Non-Electoral Participation*

While Mexico is first and foremost an electoral democracy, the legal framework does call for other forms of public participation. As embodied in Mexican legislation, "participation" really has two general forms. The first is participation in the planning and decision-making process. This can be deliberative and contributes to a more democratic management of sustainable development issues. The second is the participation of groups in the execution of government laws and programs. This form of participation is democratic only insofar as there are significant opportunities for groups to democratically influence the implementation of policies. It does not include participation in the formulation of policies, a critical step. This study will focus primarily on the first form of participation.

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<sup>63</sup> Gobierno del Estado de Quintana Roo, *Constitución Política del Estado de Quintana Roo*, (Chetumal, Quintana Roo: Gobierno del Estado de Quintana Roo, 1975, 2009).

Before proceeding to an accounting of the participatory mechanisms available, an important caveat is necessary: just because there is a participatory mechanism, it does not mean that the participation has a significant link to actual policymaking. It is an opportunity that is only as effective as policymakers permit it to be. For example, in one case described by Rubio, a referendum was called on a major transportation project in the Federal District. The referendum process did not include any significant sharing of information on costs of the project or its pros or cons. In addition, early in the process the head of government announced that he would not abide by the results of the referendum anyway.<sup>64</sup>

As in the past, an insulated political class continues to monopolize decision making while remaining unaccountable for its actions given the absence of legislative or governmental reelection. Mexico's democracy is indeed competitive, but it is also frequently unaccountable, routinely paralyzed, increasingly expensive, and far removed from the concerns of its citizens."<sup>65</sup>

In a study of social capital and political participation in Latin America, Klesner found that associational volunteerism (in a variety of organization types) is positively related to political participation. He suggests that these other types of organizations – which have expanded dramatically in the past 20 years, may form the basis for mobilization in settings other than those traditionally organized by the PRI.<sup>66</sup> In contrast, it has been argued that other – particularly neoliberal – reforms and the way in which they have been carried out have actually reduced public participation by the poor by increasing the costs of political mobilization (by

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<sup>64</sup> Rubio, "Democratic Politics"

<sup>65</sup> Dresser, "Mexico: Dysfunctional Democracy"

<sup>66</sup> J. L. Klesner, "Social Capital and Political Participation in Latin America: Evidence from Argentina, Chile, Mexico, and Peru," *Latin American Research Review*, 42, no. 2 (2007): 1-32.

dispensing with the former avenues of participation), although Lawson rejects similar arguments.<sup>67</sup>

Cleary uses data from Mexico's 2,400 municipalities to test whether electoral sanctions of unresponsive politicians or citizen participation are more important for improving government performance and responsiveness. He finds that an active and participatory citizenry has a much greater impact on municipal governments' responsiveness to municipal needs. However, Guillen Lopez finds that in general participatory processes are peripheral to the operation of the municipal government. They are becoming more common but are generally not "high intensity" experiences where citizens are actively involved in the formulation of policies.<sup>68</sup>

Keeping this debate in mind, we proceed to the participatory mechanisms available for citizens and groups to try to influence the content of public policy, their strengths and their limits.

### **General Policy Planning**

Article 26 of the Constitution provides for the creation of a system of democratic planning, with the participation of diverse sectors of society, including the formulation of a National Development Plan (PND), which is to form the basis for executive branch policies and programs. The 2007 PND has five guiding axes:

1. Rule of Law and security

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<sup>67</sup> C. A. Holzner, "The Poverty of Democracy: Neoliberal Reforms and Political Participation of the Poor in Mexico," *Latin American Politics & Society*, 49, no. 2 (2007): 87-122; C. Lawson, "Mexico's Neoliberal Democracy and Its Critics," *Latin American Politics & Society*, 46, no. 3 (2004): 115-129.

<sup>68</sup> T. Guillén López, "Democracia Representativa y Participativa en los Municipios de México: Procesos en Tensión," in *Democracia y Ciudadanía: Participación Ciudadana y Deliberación Pública en Gobiernos Locales Mexicanos*, eds. A. Selee and L. Santín del Río (Washington, DC: Woodrow Wilson International Center for Scholars, 2006).

2. Competitive and job-generating economy
3. Equality of opportunities
4. Environmental sustainability
5. Effective democracy and responsible external policy

Each axis contains objectives and strategies for implementing the objectives in government policies and programs.

The national Planning Law, originally promulgated in 1983, was reformed in 2003 to provide for greater participation in the creation of the PND and in the programs that are to be based on this plan. The Ministry of the Treasury and Public Credit is responsible for drawing up the PND in consultation with social groups and indigenous people (Articles 1, 14, and 16). Among the groups to participate in permanent consultative organs are workers, *campesinos*, academic and professional organizations, business organizations, and other social groups. Indigenous groups are also to be consulted with respect to plans and actions that may affect them (Article 20).

According to the *National Development Plan 2007-2012*, the number of people participating in the National System for Democratic Planning for the 2007 PND was 131,918, or just over 0.1% of Mexico's population. The largest number of participants were involved in 205 Popular Consultation Forums, which were carried out by various federal government entities. In addition, discussions were held with legislators and political party officials, who submitted 41 proposals for the Plan. The

process also included workshops with specialists and contributions from citizens via an internet page, telephone calls, postal mail, and electronic mail.<sup>69</sup>

As at the national level, the Political Constitution of Quintana Roo (*Constitución Política del Estado de Quintana Roo*) calls for the formation of a system of democratic planning (Article 9).<sup>70</sup> As such, public participation was also incorporated into the *State Development Plan for Quintana Roo, 2005-2011*. The Plan officially took into account the input from a Citizen Consultative Forum with 954 participants from the public, private, and social sectors, and the resulting document was approved by 25 subcommittees and 469 representatives of social organizations, the private sector, professional organizations, and the three levels of government.<sup>71</sup>

It is unclear from the documents how representative these participatory processes were. Also unclear is the degree to which the national and state development plans actually reflected the views expressed by participants. Finally, there is the question of how big a role these documents actually play in guiding the more tangible policies at the national and state levels respectively. It is not proposed to provide a comprehensive analysis of these questions here. Rather, it is to point out that while participation is called for, there are several potential barriers to that participation actually having an impact on policies.

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<sup>69</sup> Presidencia de la República, Estados Unidos Mexicanos, *Plan Nacional de Desarrollo, 2007-2012* (Mexico, DF: Gobierno de México, 2007).

<sup>70</sup> Gobierno del Estado de Quintana Roo, *Constitución Política del Estado de Quintana Roo* (Chetumal, Quintana Roo: Gobierno del Estado de Quintana Roo, 1975, 2009).

<sup>71</sup> Gobierno del Estado de Quintana Roo, *Plan Estatal de Desarrollo, 2005-2011* (Chetumal, Quintana Roo: Gobierno del Estado de Quintana Roo, 2005).

## **Human Settlements**

There are two major land zoning regimes in Mexico: the PDU and the POET. The POET is the Ecological Zoning of Territory and has its origin in environmental laws. It will be discussed in the next section. The PDU is the Urban Development Plan (or Program) and has its origin in the national Constitution (Art. 115), the General Law of Human Settlements, Article 155 of Quintana Roo's Constitution, and Quintana Roo's Human Settlements Law.

The General Law of Human Settlements – a national law promulgated in 1993 and then reformed in 1994 – calls for public participation in the preparation of the National Urban Development Plan. At the local level, the same law calls for public hearings and other forms of public participation in the preparation of PDUs. However, the specifics of that participation are not laid out in the General Law. Rather, it is in the state's Human Settlements Law that the details are found.

Articles 15 and 16 of the state law address the formation and responsibilities of Municipal Committees for Urban Development and Housing. Such committees have the responsibility to provide opinions during the formulation of municipal programs of urban development and housing, and “to propose urban development programs that respond to the necessities and aspirations of the community” among other things. Municipal committees are composed of members of the municipal government and, at the discretion of the municipal president, representatives of various unions, academic institutions, professional organizations, and non-governmental organizations. The fact that participation is at the discretion of the



municipal president suggests that the composition may be biased according to the ideology of the municipal president.

Article 27 details the process for the formulation and approval of PDUs:

1. The relevant municipal administrative unit – in the case of Cancun, the Municipal Institute for Urban Development Planning (IMPLAN) – prepares a draft PDU, then publishes it widely in local newspapers, convoking interested parties to provide their opinion. The draft PDU is also remitted to the Municipal Committee for Urban Development and Housing.
2. There is then a process of public hearings and the presentation of written comments on the draft plan.
3. Based on the comments received, the administrative unit formulates a definitive plan, which must be approved by the Municipal Council (Cabildo del Ayuntamiento).
4. The resulting PDU is then published in the Official Periodical and in newspapers of major circulation in the area.

In addition to the specific process described here, the Human Settlements Law also contains a chapter on social participation (Articles 74-78). These articles refer to the forms of participation already described, in addition to participation in the implementation and enforcement of Urban Development Programs.

There are thus extensive opportunities for public participation built into the PDU process. However, there is no obligation on the part of the municipal government to actually abide by the results of the participatory process, a critical

weakness of these participatory mechanisms. The Puerto Morelos case in chapter 5 is an example of a situation in which the PDU process involved significant public participation that was then ignored in the final document.

## **Environment**

### **General Requirements**

The General Law of Ecological Balance and Environmental Protection (LGEEPA) was first published in 1988 and reformed on multiple occasions since then, most recently in 2010. The majority of provisions relating to public participation were part of the 1996 reform. This law calls for participation in numerous articles throughout. Article 18 establishes that the

Federal Government will promote the participation of the various social groups in the formulation of the programs that have as an object the preservation and restoration of ecological balance and the protection of the environment, according to that established in this Law and other applicable laws.<sup>72</sup>

Similarly Articles 157-158 reiterate the importance of societal participation in the formation of environmental policy and state that the Federal government is obligated to promote the participation of society in the planning, execution, evaluation and enforcement of policies relating to environment and natural resources.

The state equivalent of the LGEEPA is the LEEPA, the *Ley de Equilibrio Ecológico y la Protección del Ambiente del Estado de Quintana Roo*. Article 13 of the LEEPA provides the participatory foundation for the law:

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<sup>72</sup> Gobierno de México, *Ley General del Equilibrio Ecológico y la Protección al Ambiente* (Mexico, DF: Gobierno de México, 1988, 2010).

The Government of the State will promote the participation of the various social groups in the elaboration of programs that have as their object the preservation and restoration of ecological balance and the protection of the environment, as established in this law and other applicable laws.<sup>73</sup>

Once again, as with the development plans, the actual implementation of the participation requirements gives rise to the questions of who participates, whether their views are actually represented in the relevant policy, and whether they are then reflected in government actions.

### *Ecological Zoning*

Of particular interest for this study are Articles 20 BIS and 20 BIS 5 of LGEEPA. These articles establish the public participation bases for Ecological Zoning: the POET and its local version, the POEL. These programs are relatively recent and the state of Quintana Roo has been a leader in their preparation. They establish land use designations for areas based on ecological characteristics and public participation. Conditions taken into consideration include physical, biotic, and socioeconomic attributes of the territory, as well as an analysis of environmental conditions (Article 20 BIS 4).

POELs apply directly to land outside centers of population (which are covered by PDUs). While LGEEPA establishes that PDUs and POELs have jurisdiction over different areas (urban and rural), Article 20 BIS 5 IV introduces some ambiguity by stating that PDUs and POELs are to incorporate corresponding provisions in the regulation of human settlements. In either case, however, public participation is called for in the formulation of these plans.

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<sup>73</sup> Gobierno del Estado de Quintana Roo, *Ley de Equilibrio Ecológico y la Protección del Ambiente del Estado de Quintana Roo (LEEPA)* (Chetumal, Quintana Roo: Gobierno del Estado de Quintana Roo, 2001).

When drawing up POETs and POELs, state and local laws are to

establish mechanisms that guarantee the participation of individual parties, social and business organizations and other interested parties. Said mechanisms will include, at a minimum, procedures for diffusion of information and public consultations on the respective programs [as well as participation in the] execution, enforcement, and evaluation [of the programs].<sup>74</sup>

According to the state law LEEPA, the process for creating a POET or POEL is as follows: a draft is prepared by the relevant governmental authority. It is then published in summarized form in two major local papers. A process of citizen consultation ensues, at the end of which the POET or POEL is published in the Official Periodical of the Government of the State.<sup>75</sup>

The inclusion of the content of public participation does not always proceed smoothly. In the case of the Cozumel POEL, a technical committee composed of industry, civil society, and government representatives prepared the draft POEL. It was a highly contested process, but compromise was reached in the end. However, the version of the POEL that was made available for public comment was altered by the state Secretariat for Urban Development and Environment in ways that benefitted developers. In addition, the public comment period began on a Friday night and closed the following Tuesday, a period much too short for any meaningful analysis of such a complicated document. Thus in this case the required participation was undermined by the government officials in favor of large tourism developers.<sup>76</sup>

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<sup>74</sup> Gobierno de México, *LGEEPA*, Article 20 BIS 5 VII

<sup>75</sup> Gobierno del Estado de Quintana Roo, *LEEPA*, Article 22

<sup>76</sup> A. Serrano, Interview, Cancun, 2009.

### *Participation in Special Geographical Areas*

Protected areas are subject to management plans that, where a POET is available, abide by the POET. The primary purpose of the management plans is the conservation of natural ecosystems. However, the management plans in turn have their own participation requirements. In many cases these participation measures call for participation in the management of the reserve rather than in the decision-making process. Particular groups to be included in the participation are inhabitants, property owners, local governments, indigenous peoples, and other social organizations, both public and private. The purpose of this participation is to ensure the integrated development of communities inside of the protected areas, as well as the protection of the ecosystems and their biodiversity (LGEEPA, Articles 47 and 66). In the case of the Sian Ka'an Biosphere Reserve in Quintana Roo, this participation includes cooperation of the managing authorities with the local fishermen's cooperative to help control the territory, as well as sustainable agriculture, and education and capacity building programs.<sup>77</sup>

Two other examples of areas in which public participation in the management of ecosystems and natural resources is called for are in cases where there are rapid processes of desertification or land degradation, and in the preservation of habitat for the preservation and sustainable use of wild flora and fauna.<sup>78</sup>

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<sup>77</sup> F. Ursua Guerrero, Interview, Cancun, 2009.

<sup>78</sup> Gobierno de México, *LGEEPA*, LGEEPA, Articles 78 BIS and 79

### *Other Participatory Venues*

Within Semarnat (the national Secretariat of the Environment and Natural Resources), one form of participation is that proposed Official Norms relating to the environment undergo a public comment period. Institutionalized opportunities to participate at the national level include several committees with public representation, as well as a much vaunted set of forums for public participation are the Consultative Councils for Sustainable Development (CCDS), which are conceived to be the primary organs by which Semarnat consults with civil society. CCDSs have the role of advising Semarnat, formulating recommendations, evaluating policies, analyzing and providing opinions on particular cases, and coordinating with other participatory forums nationally and internationally.<sup>79</sup> It should be noted that, as of this writing, the CCDS website had not been updated in over two years.<sup>80</sup>

As in the United States, environmental protection is a policy area that has promoted public participation in advance of most policy areas. In some cases, there has been a clear improvement in the participatory opportunities presented, while in others the implementation has been less evident.

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<sup>79</sup> Secretaría de Medio Ambiente y Recursos Naturales (Semarnat). *Mecanismos de Participación* (accessed September 28, 2009); available from <http://www.Semarnat.gob.mx/participacionsocial/mecanismosdeparticipacion/Paginas/inicio.aspx>; Gobierno de México, "Acuerdo Mediante el Cual Se Crean el Consejo Consultivo Nacional, Seis Consejos Consultivos Regionales y Treinta y Dos Consejos Consultivos Nucleo para el Desarrollo Sustentable," *Diario Oficial de la Federación*, March 14, 2008.

<sup>80</sup> Secretaría de Medio Ambiente y Recursos Naturales (Semarnat). *Consejos Consultivos para el Desarrollo Sustentable* (accessed April 1, 2011); available from <http://ccds.semarnat.gob.mx/>.

## Tourism

In certain areas of the country, tourism development plays a significant, even dominant role in the use of land. It is thus important to consider the level of participation called for by laws and programs addressing tourism in the country. In June 2009, a major (and controversial) law was published: the General Tourism Law. Here we will examine the provisions of law relevant to public participation in policymaking.

The General Tourism Law provides for little public participation in tourism planning and development, including the new Touristic Zoning, which is a mapping of land uses parallel to that of the Ecological Zoning. It remains to be seen how the Touristic Zoning will be balanced with the Ecological Zoning. There is one reference to participation in the formulation of Touristic Zoning, calling for the promotion of participation by business and social groups, academic and research institutions, and other interested parties (Article 25). No details are provided stipulating the form of such participation. Other references to participation refer to participation in implementation rather than in decision-making (e.g. Article 4). The Ministry of Tourism (Sectur) has no forum for public participation equivalent to the Consultative Councils for Sustainable Development.<sup>81</sup> There is thus participation of the tourism industry in ecological zoning and other environmental forums, but no evidence that the reverse is true: those representing the environment do not have a seat at the table in processes initiated by the tourism sector.

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<sup>81</sup> Presidencia de los Estados Unidos Mexicanos, *Reglamento Interior de la Secretaría de Turismo* (Mexico, DF: Presidencia de los Estados Unidos Mexicanos, June 15, 2001, last reformed November 14, 2008).

The state of Quintana Roo also has a Tourism Law, which addresses various aspects of tourism planning, service provision, and capacity building. Articles 10-14 describe the content and development of the State Tourism Plan. There is no public consultation. Article 12 does require that the opinion of the Consultative Tourism Councils be taken into account. Articles 23-25 of the same law describe the Consultative Tourism Councils. There is no reference to the membership of the councils, with the exception of “members representative of the sector”. There is no reference to public participation or democratic processes anywhere in the law.<sup>82</sup>

Unlike the environmental laws, tourism promotion has very little to do with public participation, despite the dominant role that it plays in the economy and the ecology in some areas. Thus any deliberation on the ecological impacts of tourism development must take place in specifically environmental forums, such as the creation of the POEL, in other land use planning debates, such as the updating of urban development plans (PDUs), or in general development planning, such as the state development plan.

### *Information Availability*

#### **Transparency Laws and Information Sources**

In order for public participation to most effectively contribute to government policymaking, it should be *informed* participation. If the public does not have access to Environmental Impact Assessments for large tourism projects, for example, they will be unable to accurately evaluate the sustainable development implications of

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<sup>82</sup> Gobierno del Estado de Quintana Roo, *Ley de Turismo del Estado de Quintana Roo* (Chetumal, Quintana Roo: Gobierno del Estado de Quintana Roo, December 21, 1998).



the project and then express their views in forums for public participation or other manners of making their voices heard. The availability of information is therefore a critical piece of public participation. Article 6 of the *Constitution* guarantees the right to government information:

For the exercise of the right of access to information, the Federation, the States, and the Federal District, in the scope of their respective competencies, will be governed by the following principles and bases: I. All information in the possession of any federal, state, and municipal authority, entity, organ, and organism, is public and can only be reserved temporarily for reasons of public interest according to the terms fixed by law. In the interpretation of this right the principle of maximum publicity should prevail.... III. Every person, without necessity of proving any interest or justifying its use, will have free access to public information... IV. Mechanisms for access to information and procedures of timely review will be established...

The legislative embodiment of this article is the *Federal Law of Transparency and Access to Public Governmental Information*, first passed in 2002 and reformed in 2006.

Legal experts regard the Mexican law as well-designed. It includes specific and limited exemptions, deadlines for government response, penalties for non-compliance, and an independent body that can definitively decide appeals against decisions to deny access. The law rests on the principle of disclosure; it defines all government information as public, and expressly directs government agencies to favor a principle of access over secrecy. In a novel clause, the law creates a special category for crimes against humanity or gross human rights violations, expressly prohibiting the government from withholding such information under any circumstances, including under the rationale of protecting national security. Any person can request government information under the law, regardless of their place of citizenship.<sup>83</sup>

States also have their own versions of this law. In Quintana Roo, Article 21 of the state constitution contains rights similar to those conferred by the national constitution. Federal agencies, states, and municipalities all have “transparency”

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<sup>83</sup> J. Gill, and S. Hughes, “Bureaucratic Compliance with Mexico's New Access to Information Law,” *Critical Studies in Media Communication*, 22, no. 2 (2005): 121-137, 122.

units that respond to information requests that are submitted typically in person, by mail, or via the internet.<sup>84</sup> Implementation of the law is not always without flaws, due to a long-standing culture of secrecy, but the law is an improvement over the conditions dominant prior to its passage.<sup>85</sup>

In many cases, reports, regulations or other information is available online, on the websites of the relevant government entity. In addition, the National Institute of Statistical and Geographic Information (INEGI) has extensive data – from national to local – on a large number of topics, such as social and demographic conditions, the economy, science and technology, and the environment (INEGI 2009).

Sectoral laws and programs have their own transparency and other informational access requirements. In the case of environment, at the federal level, LGEEPA declares a right to environmental information, as does Quintana Roo's LEEPA. Article 159 BIS through 159 BIS 6 are the articles of LGEEPA that address such issues. The environmental authority has the obligation to create a National System of Environmental and Natural Resource Information (SNIARN), including natural resource inventories; air, water, and soil quality monitoring data; information on ecological zoning, and other information relevant to environmental programs. Semarnat is also to gather relevant reports and other documents and include them in SNIARN. The SNIARN has been implemented, and includes four categories of information: a Statistical Database, a Digital Geographic Space, a

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<sup>84</sup> In the course of the research for this dissertation, I made use of state and municipal transparency units to request information relating to land use in Quintana Roo. The process was simple and relatively quick, and I was usually successful in obtaining the desired information.

<sup>85</sup> Gill and Hughes, "Bureaucratic Compliance"

National System of Environmental Indicators, and a Reports and Publications page.<sup>86</sup>

Other informational requirements established by LGEEPA include a biennial report on the state of the environment and environmental protection in the country; the publishing of all administrative and legal changes in a *Gaceta*, which will also include other documents of interest relating to environment in Mexico; and the right of all persons to request (and be granted access to) environmental information in the possession of Semarnat, the states, the Federal District, and municipalities. Authorities have the right to refuse to grant access to information under certain conditions, but the environmental authority should respond to information requests in writing in a timely fashion.

Overall, despite some variation in implementation and topical coverage, there has been substantial progress in the availability of government-held information throughout the process of democratization.

#### **The State of the Media in Mexico**

Article 7 of the Constitution guarantees the liberty of expression. Nevertheless, under the PRI's long reign, the media functioned in a climate in which there was censorship, typically informal – for example by phone – and irregular.

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<sup>86</sup> Secretaría de Medio Ambiente y Recursos Naturales (Semarnat), *Sistema Nacional de Información Ambiental y Recursos Naturales* (accessed September 29, 2009); available from <http://www.Semarnat.gob.mx/informacionambiental/Pages/index-sniarn.aspx>.

Large advertising fees from the government, combined with state distribution of newsprint, meant that media outlets exercised extensive self-censorship.<sup>87</sup>

Another consequence of the policies pursued by the PRI is the tremendous concentration of the media, particularly of television, which is a source of information for 80% of the population. A single company – Televisa – dominated 90% of the television market. Televisa's president openly supported the PRI.

Under democratic rule, there are two main television networks – Televisa and TV Azteca. In the 2000 election, coverage of the candidates was found to vary between the two television networks, with Televisa more supportive of Labastida, the PRI candidate, TV Azteca more supportive of Fox, and both less supportive of the PRD candidate, Cárdenas. This difference in coverage was found to have an impact on voter preferences.<sup>88</sup> Another study of television coverage of the 2000 elections found that among provincial stations, while private ownership contributed somewhat to more balanced coverage, "crony capitalism" and expected future business concessions had a significant impact on coverage, thus suggesting that it will require more than just a change in ownership structure to ensure balanced political coverage.<sup>89</sup>

In contrast to the television market, radio and print media are both less significant as sources of information for the population (20% of Mexicans get

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<sup>87</sup> Lehoucq et al., "Policymaking in Mexico"; Sarmiento, S., "The Role of the Media in Mexico's Political Transition," in *Mexican Governance: From Single-Party Rule to Divided Government*, ed. A. B. Peschard-Sverdrup and S. R. Rioff (Washington, DC: The CSIS Press, 2005).

<sup>88</sup> Sarmiento, "The Role of Media"; C. Lawson and J. A. McCann, "Television News, Mexico's 2000 Elections and Media Effects in Emerging Democracy," *British Journal of Political Science*, 35 (2004): 1-30.

<sup>89</sup> S. Hughes and C. Lawson, "Propaganda and Crony Capitalism: Partisan Bias in Mexican Television News," *Latin American Research Review*, 29, no. 3 (2004): 81-105.

information from radio, and 18% from print media) and far less concentrated.

Mexico City alone has over 60 radio broadcasters and more than 20 daily newspapers. The competition in the radio and print media mean that much broader spectrum of opinions is aired than in the highly concentrated television market.<sup>90</sup> This means that there are greater opportunities for alternative discourses relating to sustainable development to be articulated, and greater opportunity for public deliberation in the public sphere, although exposure to those discourses may be somewhat limited by the relatively small radio audiences and readership of print media.

Among newspapers, three of the most important dailies are *Reforma*, *El Universal*, and *La Jornada*. While there are no truly national papers, these are the three Mexico City papers that are most likely to be found in cities elsewhere in the country. *Reforma*, with a circulation of 140,000 in 2003, has a market segment that tends to be among wealthier Mexicans. *El Universal* also has a circulation of around 140,000, but with a more mixed target audience. Finally, the left-leaning *La Jornada* has a circulation of around 60,000.<sup>91</sup>

There has been a substantial professionalization of news outlets over the past decade, but the quality of reporting still suffers from some serious shortcomings:

- A lack of fact-checking departments;
- A lack of substantive knowledge of subjects being covered;

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<sup>90</sup> Sarmiento, "The Role of Media"

<sup>91</sup> Ibid.

- A tendency to consider the statements of politicians news in themselves;
- An adherence to clear political positions; and
- The failure of news organizations to provide adequate resources for high quality coverage.<sup>92</sup>

These shortcomings are even more pronounced in local news outlets with smaller budgets and fewer staff. Nevertheless, as will be seen in the next chapters, newspapers often do carry informative reporting on social, political, and environmental issues, sometimes from multiple perspectives.

### *Conclusion*

Democratization has brought changes to representative structures in Mexico. The legislative branch is stronger, at the expense of the executive. The judiciary is more professional, more independent, and more constitutionally oriented. The power of governors has risen with the strengthening of federalism. However, while members of Congress and other government officials are no longer as beholden to the president, they are still not accountable to voters.

The language of public participation has been adopted in many (though not all) laws and regulations, with environmental institutions leading the way. Nevertheless, consultation does not guarantee influence, and the actual impact of participation is dependent on the degree to which existing power structures take public participation seriously. Another issue that is critical is *who* participates. As

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<sup>92</sup> Ibid.; S. Waisbord, "Press and the public sphere in contemporary Latin America," presented at the Harvard-World Bank Workshop, May 29-31, 2008.

will be seen in the case studies, there is rarely mass mobilization around land use planning. Rather, it is the organizations that already exist that choose (or are chosen) to participate. Often these are the higher income and better educated members of society. Thus how these participatory mechanisms are implemented is critical to ensure that voices are heard and taken into account.

## Chapter 4: The Cancun Story

### *Tourism Poles*

The name of Cancun has been said to mean in Mayan, variously, “a place full of snakes,” a “pot of gold,” and a “golden serpent”.<sup>93</sup> Despite its name, Cancun’s development had little to do with the Mayan roots of the location. From its beginnings in the late 1960s and early 1970s its intended identity has been to be a sand and sun tourist destination on a par with developed country destinations.

Prior to the development of Cancun, tourism in the region was limited to a small number of visitors to Cozumel and Isla Mujeres. With the construction of Cancun, tourism increased rapidly by many orders of magnitude, and the state of Quintana Roo transitioned from a rural to an urban state over the course of just two decades.<sup>94</sup>

The tourism development policy was a response to macroeconomic and other conditions during the late 1960s, but the concept of “growth poles” was one with roots in the theory of the 1950s. The purpose of the poles was to stimulate regional growth, with benefits for the national economy. In the case of Mexico, the tourism poles – Cancun, Los Cabos, Loreto, Bahias de Huatulco, and Ixtapa – were first conceived in the Central Bank, primarily for the benefits to the national

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<sup>93</sup> M. Merino, J. Sorensen, et al.. “The Fate of the Nichupte Lagoon System in the Planning of Cancun, Mexico as an International Tourism Center,” in *The Management of Coastal Lagoons and Enclosed Bays*, eds. J. Sorensen, F. Gable and F. Bandarin. (New York: American Society of Civil Engineers, 1993).

<sup>94</sup> E.J. Torres Maldonado, “El Caribe mexicano hacia el siglo XXI,” in *Diacrónica del Caribe Mexicano: Una Historia de Quintana Roo y Cancún*, ed. E. J. Torres Maldonado, (Mexico DF:, Universidad Autónoma Metropolitana, 2000).



economy – an export push in an era of import-substitution industrialization – to alleviate chronic trade and fiscal deficits. In 1965 the peso was overvalued by 18.7 percent against the dollar, and a trade deficit begun in 1955 continued through 1982, averaging three percent of GDP by the 1960s.<sup>95</sup>

Secondary goals included the economic development in a very poor region of the country, and the encouragement of rural-urban migration to an area that was at that time did not suffer from the overcrowding present in the major Mexican cities. According to Clancy, the chronic presence of such economic and social pressures, but with the absence of a clear crisis, left the Mexican government a variety of policy options. The nature of their response was a consequence of the situation, but also of the cultural norms prevailing among government policymakers:

Mexican state actors have exhibited an almost religious belief in a 'modernizing rationality' going back at least as far as Porfirio Diaz in the late 1800s. This includes a reliance on learned expertise for solving a wide range of problems. Therefore, policy and sets of policies reflect and are derived from those orientations.<sup>96</sup>

Concurrent with this concept of modernizing rationality was an emphasis on state-directed development, which, having been employed extensively in import-substitution industry would be relied on for the development of the export-oriented tourism poles. In the case of tourism poles, the relevant state institutions had the expertise and orientation to carry out the economic development of the poles, although there was a striking lack of expertise in and prioritization of social, ecological, and cultural concerns: planners of the new poles were drawn largely

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<sup>95</sup> M. Lozano Cortés and A. Ramírez Loría, "El impacto de las políticas de planificación regional en el desarrollo del Caribe mexicano," *Teoría y Praxis*, 3 (2007): 43-52; M. Clancy, *Exporting Paradise: Tourism and Development in Mexico* (New York: Pergamon, 2001).

<sup>96</sup> Clancy, *Exporting Paradise*.

from the central bank and architects.<sup>97</sup> The plans confronted little opposition from sectoral elites, which did not see mass beach tourism as direct competition and, in fact, some considered it to be beneficial to the sector as a whole. Mexican tourism up to that point had been primarily in the form of cultural and border tourism, rather than sand and sun tourism.<sup>98</sup>

Finally, a set of international conditions made the development of mass tourism a viable alternative for Mexico. Globally, international tourist arrivals doubled between 1950 and 1960, the product of economic prosperity and improved air travel technology and availability. This did not go unnoticed among developing country governments, where tourism came to be viewed as beneficial to balance of payments, government revenue, and employment. It was considered more stable than traditional primary product exports. This view was supported by developed country governments and intergovernmental organizations like the World Bank and Inter-American Development Bank.

#### *Planners within the Federal Government*

The planning process was the top-down technocratic creation of a particular set of institutions within the federal government. Selection of the site for the new resort city of Cancun occurred mainly through a combination of a flyover, market analysis (particularly the market for US tourists), and computerized studies of weather patterns. Given the focus on sun and sand tourism (determined to be the most in demand by foreign tourists) the barrier island in the north of the Territory

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<sup>97</sup> Torres Maldonado, "El Caribe mexicano"; Clancy, *Exporting Paradise*.

<sup>98</sup> Clancy, *Exporting Paradise*.

of Quintana Roo, with its beautiful white sand beaches, was an obvious selection for the development of a tourist paradise. The island itself was occupied by about 500 fishermen, small-scale coconut producers, and subsistence farmers.

The initiation of the Cancun project came in the wake of a state commitment to build up the country's tourist industry. In 1968, the central bank released its plans for building Mexico's tourist industry. The plans were the work of 46 bankers, attorneys, architects, and urban planners. The bank team, followed by other state entities, saw planning as a way to avoid the negative aspects that hampered the resort town of Acapulco: pollution, hyperinflation, land speculation, and unzoned growth of shantytowns near resort areas.

In order to carry out these plans, there was a series of institutional changes. In May 1969, the National Trust Fund for Tourist Infrastructure (Infratur) was created to develop Cancun and the other four tourism poles. In 1974, another tourism agency, Fogatur, and Infratur were merged into a new entity – Fonatur – and the Department of Tourism was raised to a cabinet-level ministry (Sectur). Other, pre-existing tourism organizations, such National Board of Tourism, were largely ignored in the process of development of Cancun, as has been Sectur. Sectur and Fonatur have differed significantly in their source of staff: Sectur has drawn primarily from political circles, while Fonatur has drawn from the central bank, finance ministries, and the private sector.<sup>99</sup>

Fonatur also has had a high degree of autonomy relative to Sectur and other government entities, due to its independent sources of finance: funding from the

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<sup>99</sup> Clancy, *Exporting Paradise*

IDB and World Bank, profits from sale of improved properties, and revenues from its role as a bank. Like Infratur before it, Fonatur was given the responsibility for the development of the new tourism pole. It had the following powers and responsibilities:

- Land expropriation;
- Resettlement of local inhabitants;
- Urban planning;
- Construction of infrastructure;
- Promotion to private investors; and
- Subsidization and guarantee of loans to the private sector.

Zoning and other planning tools were all contained in the Master Plan for Comprehensive Development, “a document that planned for the scientific, capitalistic, rationalized, largely state-run development of a city over the next quarter century”.<sup>100</sup> In fact, over the course of the first 20 years of the city, there were four master plans from Fonatur: 1971, 1982, 1985, and 1988. As will be seen below each plan increased the size and density of development in Cancun.<sup>101</sup>

The planners of Cancun envisioned a city in which prevailed a sense of order and segregation of workers from visitors. The main resort area, or hotel zone, is located on Cancun Island, a “7”-shaped barrier island now linked to the mainland at each end. This hotel zone was designed to cater to high-income foreign tourists. Across the Nichupte Lagoon System, workers live in the city on the mainland.

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<sup>100</sup> G. Murray, "Constructing paradise: The impacts of big tourism in the Mexican coastal zone," *Coastal Management* 35, no. 2-3 (2007): 339-355.

<sup>101</sup> Merino et al., “The Fate of the Nichupte Lagoon System”

Initially, the resort was planned to focus entirely on sun and sand tourism, with no hotels even on the lagoon side of the hotel zone. As Cancun expanded, so did the types of attractions available to the tourist.

The city, as initially envisioned, was estimated to require approximately 7,000 hectares of firm land, which came under Infratur's jurisdiction in 1970. 2,000 of these were already federal property (mostly lagoon and wetlands). Cancun Island was privately owned and was purchased by the government, as were an additional 4,700 hectares around the lagoon system. As a result, Infratur had jurisdiction over 25 km of ocean and lagoon shore.<sup>102</sup>

Clancy provides a comprehensive overview of the state's role of tourism development in Mexico. Initial funding for the Cancun project was provided by the federal government and the Inter-American Development Bank (IDB). The first IDB loan – \$21 million – was provided in 1971 to finance the basic infrastructure that would be necessary to attract the private investment that would flow into the region. The Cancun loan was IDB's first loan destined for tourism. It constituted just under half of the projected cost of \$47.1 million.<sup>103</sup> The IDB made two more loans for the development of Cancun during the 1970s: a 1976 credit of \$20 million for the resort's second stage of construction, and, in 1978, a \$30 million loan to expand hotel facilities. The banks, which favored funding large projects in general, viewed the tourism poles as opportunities for the country to generate foreign exchange and

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<sup>102</sup> Ibid.

<sup>103</sup> Shortly after the IDB's first Cancun loan, the World Bank made *its* first tourism loan, for the construction of Ixtapa.

economic growth, necessary not only for the development of the country as a whole but also to service the country's growing external debt problem.<sup>104</sup>

During the period 1972-1981, construction focused on basic urban infrastructure and service provision, the international airport, roads and communication, a golf course, a central market, and hotel rooms. The Master Plan called for 3,250 rooms; 5,225 were built during this period. For the construction of the golf course, parts of the lagoon system were dredged and the fill used to construct an island that blocked the Bojorquez Lagoon from the rest of the lagoon system. Finally, Cancun City, the worker city on the mainland, was constructed.<sup>105</sup>

In addition to the construction of infrastructure, the federal government took the lead in hotel construction. It bought the hotel chain Nacional Hotelera from its private owners in 1973. At the time of purchase, the chain consisted of only seven hotels (1,100 rooms) and several restaurants. The chain was critical in the development of the new tourism poles, where its "Presidente" hotels were among the first to open. When it was re-privatized to four Mexican families in 1985, the chain had 28 hotels. Similarly, Fonatur developed all-inclusive resorts – these were considered necessary in a setting where restaurants and other services were few, as was the case in early Cancun. For example, Fonatur entered into a franchising agreement with Club Med, not just for Cancun, but also for Ixtapa and Huatulco.

Fonatur also provided extensive preferential credit for the construction of

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<sup>104</sup> Torres Maldonado, "El Caribe mexicano"; M. Clancy, "Mexican Tourism: Export Growth and Structural Change since 1970," *Latin American Research Review* 36 no. 1 (2001): 128-150.

<sup>105</sup> Merino et al., "The Fate of the Nichupte Lagoon System"; Torres Maldonado, "El Caribe mexicano"; Clancy, "Mexican Tourism"

hotels by private investors, particularly in the new poles – \$1.5 billion during the first ten years. Luxury hotels for foreigners were particularly targeted, most of which were linked with international chains or, in a few cases, large Mexican businesses. Some limited credit was also provided for the construction of other tourism facilities, such as restaurants and bars.<sup>106</sup> Torres Maldonado ventures an estimate of 5 to 1 as the ratio of private to public investment in the Cancun project, with 60% coming from national business groups, 35% from foreign sources, and the remaining 15% coming from local and regional sources.<sup>107</sup> The vast majority of investment capital thus came from outside the region.

The attraction of foreign hotel chains was critical. In order to attract tourists to a hitherto unknown site in a developing country, hotels needed access to international booking and to the name-recognition and trust associated with well-known international chains. This was recognized by the Mexican government – in the 1970s, while generally creating greater restrictions in foreign investment, a law loosened restrictions on investment in coastal hotels. Nevertheless, investment by international chains was slow, and often occurred through franchising and other non-equity arrangements. In many cases, the equity investment was undertaken by Mexican investors, increasingly by large conglomerates, powerful interests in the Mexican political system. As this occurred, state development strategies have increasingly favored capital-intensive developments, as ownership and control of the hotel industry have become increasingly centralized.

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<sup>106</sup> Clancy, "Mexican Tourism"; Clancy, *Exporting Paradise*; Wilson, "Economic and Social Impacts"

<sup>107</sup> Torres Maldonado, "El Caribe mexicano"

In the case of air travel, the development of Cancun and the other tourism poles benefited from state ownership interests in the airlines. As in the case of the role of Nacional Hotelera in hotels, Aeromexico and Mexicana offered service to Cancun before any of the international airlines were willing to risk opening service to the resort city. Thus the state once again assumed the first investment risks. While there has been substantial privatization and entrance into the Cancun market, Mexican firms maintain a strong presence.<sup>108</sup>

During the 1980s, in contrast to most economic activities in Mexico, tourism continued to expand rapidly in Cancun, with its integration into the foreign market buffering it from the woes of the domestic economy. Through a combination of local and national governmental decisions, building restrictions were relaxed, airfare to the region was reduced, and the city's appeal began to shift from a wealthy class of foreigners to middle and even sometimes lower income tourists. At the same time, there was a diversification of offerings, with trips to Mayan ruins, shopping, watersports, and other activities taking on a greater importance. Finally, another important development during the 1980s was the formation of a class of local businessmen who would help shape the development of Cancun and the Riviera Maya.<sup>109</sup>

From 1982 to 1990, 15,700 rooms were planned and 17,470 were built in Cancun. It should be noted that during this time, a total of 22,122 were built in Quintana Roo as a whole, representing the beginnings of the boom to the south of Cancun, in what would become the Riviera Maya. Hotel growth in Cancun focused on

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<sup>108</sup> Clancy, "Mexican Tourism"; Clancy, *Exporting Paradise*

<sup>109</sup> Torres Maldonado, "El Caribe mexicano"; Clancy, "Mexican Tourism"



the hotel zone, but also included the construction of some hotels in the center of the city. Room densities that were programmed to be 110-130 rooms per hectare were often exceeded. Initially, height restrictions were imposed on hotel developments, but these were progressively loosened.<sup>110</sup>

Increases in the numbers and area of hotel and condominium rooms are found in the 1971, 1982, and 1988 Master Plans. In addition, the number of homes programmed for stage 3 of the city's development increased radically from the 1971 to 1988 plans, from 2,000 to almost 15,000. The changes in the types and intensity of development in Cancun have been attributed to the replacement of the original team of planners, architects, and engineers by businessmen with a focus on expansion.<sup>111</sup>

Finally, other changes to the city's profile during this time include the addition of health services, social assistance, housing credits for workers, middle schools, large commercial centers, and cinemas. Employment in services in Quintana Roo increased from 34 percent in 1980 to 58 percent in 1990 .

In addition to the planned development of the city and resort of Cancun, the project envisioned that regional agriculture would be improved and linked to the tourism industry as a supplier of fresh food for the hotels and restaurants. For this effort, the government provided ejidos with credit and aid to improve production, a local agricultural school, and agrarian experiments. However, these efforts were quite limited and did not produce the promised results. In addition to the failure to commit adequate resources to the integration of tourism and rural production,

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<sup>110</sup> Merino et al., "The Fate of the Nichupte Lagoon System"

<sup>111</sup> Ibid.

other factors contributing to the lack of backward linkages from tourism include food preferences on the part of tourists, high costs of local production relative to the costs of purchasing food from suppliers in Mexico City and elsewhere, and concerns about sanitation, among others.<sup>112</sup>

### *Governance*

Given the nature of the state involvement, the tourist bureaucracy served as the primary government authority, particularly during the first phase of construction. Cancun's first mayor had been the director of Fonatur's community development office. However, control of Cancun's development extended to the president's office.

The Cancun Project was negotiated politically among leaders, elitist, and centralist. The negotiation was a "top down" process, from top to bottom, in the structures of federal and regional power, financed in its origin with international and federal funds. The final decision was taken by the federal government, through the president of Mexico, following the written and unwritten rules of the Mexican political system.<sup>113</sup>

Locally, there was dissent with respect to the new project:

State action in planning and providing infrastructure for the planned resorts did not occur without costs or controversy. The sites chosen for tourism development were populated, and little evidence exists of gathering input from local residents. Reports of forced relocation and even violence were not unusual in Cancun. Conflicts between the state and local populations were common at other planned poles also.<sup>114</sup>

The political planning and administration of Cancun was thus the antithesis of public deliberation and participation. The results of the centralized and top-down

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<sup>112</sup> R. Torres, "Linkages between tourism and agriculture in Mexico," *Annals of Tourism Research* 30 no. 3 (2003): 546-566; Lozano Cortés and Ramírez Loría, "El impacto de las políticas"

<sup>113</sup> Torres Maldonado, "El Caribe mexicano"

<sup>114</sup> Clancy, "Mexican Tourism"

planning process were mixed: Cancun thus far has been an economic success, but the social and environmental costs have been high.

### *Social Problems*

When the workers' area – Cancun City – was planned, the Mexican population was assumed to be middle class, failing to take into account that many of the construction and then service workers would, in fact, be poor. In addition, the population influx that occurred with the construction and tourism industries was dramatically underestimated and “irregular” settlements sprang up around Cancun. These settlements are in various states of legal standing, service provision, and housing quality. The issue of service provision – particularly water and sewerage – will be discussed in the next section.

The rate of construction and the accompanying population influxes exceeded the ability of the government to provide housing and services, leading to social and environmental stress. “Today Sectur and Fonatur officials openly admit they overbuilt Cancun.... Indeed many environmental and social problems may be becoming particularly serious”.<sup>115</sup> It should be noted that while overbuilding may be acknowledged, it has not halted the continued expansion of tourist infrastructure in Cancun and the concurrent inflows of migrants. Table 4-1 shows the origin of migrants to Quintana Roo.

It should be noted that these figures reflect only migration from other states in Mexico. They do not include migration within Quintana Roo – for example, to

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<sup>115</sup> Clancy, *Exporting Paradise*

coastal areas from the agricultural interior – which has been substantial. The high rates of migration to Cancun and other growth poles suggests that the goal of diverting migration away from Mexico City and other large cities has been successful.<sup>116</sup>

**Table 4-1: Migrants in Quintana Roo, by State of Origin, 2000-2004**

State	Percent of Migrants
Veracruz	18.2%
Yucatan	17.4%
Tabasco	16.7%
Mexico City	13.6%
Chiapas	9.9%
<i>Source: Universidad La Salle Cancun 2005</i>	

To characterize migrants to Benito Juarez (the municipality containing Cancun), 65.8% of recent migrants are women. 36% of migrants in Benito Juarez are between the ages of 23 and 30, followed by 31 to 40 year olds at 24% and 18 to 22 year olds with 20.1%. 59% of migrants changed residence to get a better job; 19% moved to reunite the family; the remainder moved for a variety of other reasons. In Benito Juarez, among recent migrants, 57.1% are employed in temporary positions. As for monthly income, 59% of recent migrants earn less than \$4500 pesos (US\$375) per month, while an additional 18% earn between \$4500 and \$6500 (US\$540) per month.<sup>117</sup>

### **Service Provision**

In their excellent study on water and sewerage services in Cancun, Dominguez and Garcia de Fuentes divide the city into five zones, based on historical

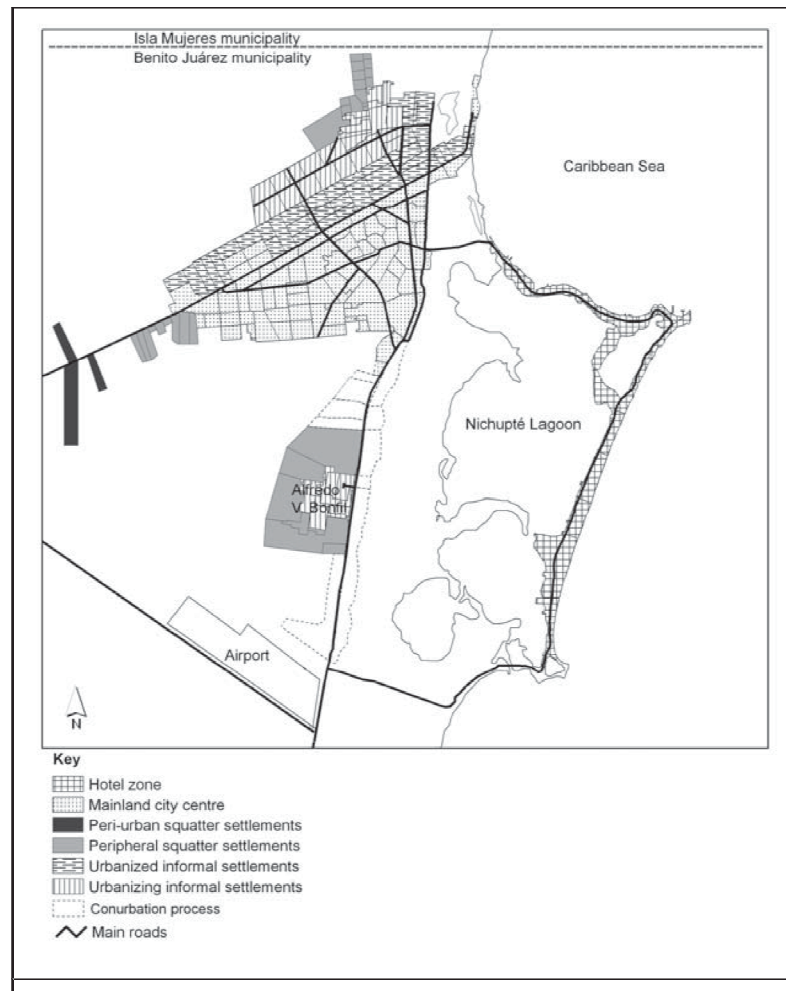
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<sup>116</sup> Wilson, "Economic and Social Impacts"

<sup>117</sup> Universidad La Salle Cancun, *Análisis de los Flujos Migratorios y Evaluación del Impacto Económico y Social de la Migración en la Zona Norte del Estado* (Cancun: Universidad La Salle Cancun, 2005).

settlement patterns and 2003 service provision. In order from greatest to least service provision these are the hotel zone, city center, urbanized informal settlements, urbanizing informal settlements, peripheral squatter settlements, and peri-urban squatter settlements. Figure 4-1, from that study, shows the various zones.

**Figure 4-1: Zones of Cancun, 2003**



The hotel zone has the continuous water supply and wastewater treatment required for a resort area on a par with those in developed countries. The other city areas with piped water – mainland city center, and urbanized and urbanizing

informal settlements – are subject to frequent service interruptions. All of these areas have suffered from tariff increases since privatization. They include 89 percent of the population. In the peripheral and peri-urban squatter settlements (three percent of the population), residents have access to a minimum “lifeline” supply of water delivered by tanker truck. Additional water is available for purchase – at ten times the price of urban water supply, and with lower sanitary standards due to the use of tanker trucks.

Similar inequalities exist in the provision of sewerage services and wastewater treatment. The hotel zone has full sewerage coverage and wastewater treatment that meets federal norms. The mainland city center has wastewater treatment that frequently does not meet minimum standards required by federal norms, discharging polluted wastewater into water bodies.

**Table 4-2: Characteristics of the Zones of Cancun, 2003**

	Area	Population	Water Consumption	Sewage Sludge Production
	%	%	%	%
<b>Hotel zone</b>	10.7	8	21.0	29.7
<b>City center</b>	45.9	36	38.3	27.5
<b>Urbanized informal settlements</b>	12.7	32	24.0	24.4
<b>Urbanizing informal settlements</b>	13.3	21	15.9	16.2
<b>Peripheral squatter settlements</b>	14.7	1	0.2	0.5
<b>Peri-urban squatter settlements</b>	3.1	2	0.6	1.7
<b>Total</b>	100	100	100	100
<i>Source: Dominguez A. and Garcia de Fuentes 2007</i>				

Urbanized informal settlements have a sewerage infrastructure that has been constructed. However, many residents are not actually connected to the infrastructure because of the costs of connection, which varies according to the

housing and septic arrangements of each household. In order to improve connection, the municipal or other level of government would either need to subsidize connections or mandate connection without subsidies (inevitably a politically unpopular solution). Untreated sewage from these areas pollutes groundwater, the sea, and lagoons. While an impact on the sun and sand tourism industry has not yet been measured, it remains a large concern for the future.

The remaining zones – urbanizing informal settlements, peripheral squatter settlements, and peri-urban squatter settlements – lack sewerage connections altogether. Wastes are disposed of in leaky septic systems, pits, or open air. Together, these areas include nearly one fourth of the population of Cancun. Despite the relatively small populations and waste quantities involved, the peri-urban squatter settlements are of particular concern because they are located in the same area as the wells from which is drawn the urban water supply. The possibility of contamination is high. If it occurred, Cancun would need to improve the treatment of its drinking water.<sup>118</sup>

The precariousness of employment and low standard of living of many of the workers in Cancun contrasts with the opulence of the tourist developments. At the same time, many of the benefits of tourism and some service provision now accrue to the private sector, while the public sector is responsible for many of the costs.<sup>119</sup> One author writes, “The polemical touristic development has generated islands of

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<sup>118</sup> M. Domínguez Aguilar, and A. García De Fuentes, "Goals in Cancún, Mexico at the beginning of the twenty-first century: Barriers to achieving the water and sanitation-related Millennium Development Goals." *Environment and Urbanization*, 19 (2007).

<sup>119</sup> S. M. Arnaiz Burne, "Desarrollo Turístico y Medio Ambiente en el Caribe Continental Occidental." *Estudios y Perspectivas en Turismo*, 5 (1996): 147-163.

riches, surrounded by seas and woods of poverty”.<sup>120</sup> The centralized non-democratic development model has not done well by the poorer sectors of society.

### **Violence**

An “experienced poverty” measure put forth by Rojas incorporates elements of well being, including the health, economic, job, family, friendship, self, and community domains of life, thus providing a broader conception of development than the income measures described above.<sup>121</sup> While data on most of these domains of life are not available for Quintana Roo specifically, there is a measure that arguably captures the overall balance of these various domains at the bottom of the experienced poverty spectrum: the suicide rate. People commit suicide when, for whatever reason, they feel that their well-being is very low.

The suicide rate is the subject of great attention by local media. An annual suicide count is kept by several of the papers, and individual suicides are well documented, often complete with graphic photos of the deceased. Suicide is referred to as an epidemic: the suicide rate is higher in Quintana Roo than anywhere else in Mexico. In Quintana Roo, the suicide rate is nearly 17 per 100,000 population. This figure is almost four times the national average and more than double the rates in neighboring Yucatan and Campeche states.<sup>122</sup>

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<sup>120</sup> Torres Maldonado, “El Caribe mexicano”

<sup>121</sup> M. Rojas, “Experienced Poverty and Income Poverty in Mexico: A Subjective Well-Being Approach,” *World Development*, 36 no. 6 (2008): 1078-1093.

<sup>122</sup> Instituto Nacional de Estadística y Geografía (INEGI), “Población total por entidad federativa según sexo, 2000 y 2005” (accessed July 3, 2009); available from <http://www.inegi.org.mx/est/contenidos/espanol/rutinas/ept.asp?t=mpob02&c=3179>; Instituto Nacional de Estadística y Geografía (INEGI), “Suicidios registrados por entidad federativa y sexo según medio empleado, 2007” (accessed July 3, 2009); available from



The suicide rate is thus one indicator that all is not well with respect to development in Quintana Roo. Articles attribute the high suicide rates to a variety of factors including poverty, inequality, and personal issues like mental health and family problems. The problem appears to be particularly widespread in the lower income brackets and among migrants, though official statistics are not available to confirm this. It has been hypothesized that the poor living conditions in low income settlements combine with the social dislocation caused by high migration rates and high perceived inequality between living conditions on the margin and those in the wealthy tourist zones in which many of the poor work to cause the high rate of suicide.<sup>123</sup>

In addition to suicide, Quintana Roo is among the top states at in violence against women. Homocides against women nationally are 2.5 per thousand inhabitants, while in Quintana Roo the rate is 4.7 per thousand inhabitants.<sup>124</sup> Considerable concern about violence appears in the newspaper, in particular concerns that it will damage the appeal of Cancun to tourists. Its overall homicide rate, however, is significantly lower than the national average.<sup>125</sup>

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<http://www.inegi.org.mx/est/contenidos/espanol/rutinas/ept.asp?t=mvio39&s=est&c=14308>.

<sup>123</sup> "Reforzarán los programas preventivos contra suicidio." *Novedades de Quintana Roo*, January 9, 2008; M.A. Salinas, "Índice Suicida: Qué pasa en Q.Roo," *La Verdad de Quintana Roo*, June 17, 2008.

<sup>124</sup> A. d. J. Jimenez Martiniz, and A. P. Sosa Ferreira, *Cocktail Cancun: Reflexiones sobre los impactos sociales del turismo en la comunidad local* (Cancun: Departamento de Turismo Sustentable y Gestion Hotelera, Universidad del Caribe, n.d.).

<sup>125</sup> Instituto Nacional de Estadística y Geografía (INEGI), "Homicidios por sexo y entidad federativa, 2004 a 2009" (accessed April 7, 2011); available from <http://www.inegi.org.mx/Sistemas/temasV2/Default.aspx?s=est&c=17484>.

### *Environmental Problems*

Cancun suffers from a variety of serious environmental problems: pollution and modification of the Nichupte Lagoon System (NLS) – including mangrove destruction – beach erosion, and pollution of the water table.

In the case of the NLS, sources of nutrients, pesticides, and oils are both point and non-point, such as street wash, fertilizers from golf courses and other landscaping, and periodic flows of raw sewage. Other impacts include removal of seagrasses as a result of dredging, and other damages to mangroves and seagrasses from activities in the lagoon.<sup>126</sup> Wastewater entering the NLS has dramatically increased nitrogen loading in the NLS.<sup>127</sup> The result has been a significant degradation of the NLS: “Filling, dredging, the direct discharge of pollutants, and additional restrictions in the circulation have turned part of the Lagoon system from an attractive jewel to a eutrophic soup, accentuated with floating and submerged mats of macroalgae”.<sup>128</sup>

Beach loss is another problem confronting Cancun (and the Riviera Maya). As of 1991, Cancun Island showed a reduction of the sand dune system to 16% of the area in 1969, with the largest reduction occurring with Hurricane Gilbert in 1988.<sup>129</sup> Gilbert worsened a slower paced problem of sand loss resulting from alteration of the beach profile through occupation by hotels and other structures, as well as the

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<sup>126</sup> Merino et al., “The Fate of the Nichupte Lagoon System”; Arnaiz Burne, “Desarrollo Turístico y Medio Ambiente”

<sup>127</sup> T.J.B. Carruthers, B. I. van Tussenbroek, et al., “Influence of submarine springs and wastewater on nutrient dynamics of Caribbean seagrass meadows,” *Estuarine, Coastal and Shelf Science*, 64 (2005): 191-199.

<sup>128</sup> Merino et al., “The Fate of the Nichupte Lagoon System”

<sup>129</sup> Ibid.

destruction of half of the mangroves in the area. Hurricanes Ivan and Wilma worsened the situation, and sand nourishment was completed in 2006, and then again in 2009-2010 when severe beach loss occurred again. The reconstruction of beaches in 2009-2010 was quite controversial, both because of the source of the sand (Cozumel) and because there was no plan in place to prevent the subsequent erosion of the new sand. The land development characteristics are the major reason for that erosion, due to construction on and destruction of the dune system and the loss of mangroves that helped retain sand. Sea level rise due to climate change is also a concern with respect to beach erosion in the future.

Perhaps the most critical environmental problem facing Cancun – and indeed the Riviera Maya as well – is the pollution of the water table. As already noted the proliferation of irregular settlements has led to a situation in which there is a very large number of homes that lack any collection and treatment of sewage and other wastes. Instead, organic matter and other wastes percolate through the highly porous limestone to the shallow water table. This poses not only health threats to the local population, but also a threat to the tourism industry, in that the wastes eventually make their way to the beaches. This is expected to result in beach closings in the future.<sup>130</sup>

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<sup>130</sup> E. Granel Castro and L. Gález Hita, "Deterioro de la Calidad de Agua Subterránea por el Desarrollo Poblacional: Cancún, Q. Roo," *Ingeniería Revista Académica*, 6, no. 3 (2002): 41-53; L. Sarmiento, "Amenaza falta de drenaje al turismo," *Novedades de Quintana Roo*, July 29, 2007, 1.

### *Democracy and Development in Cancun*

Cancun's social and environmental problems are largely the consequence of the development model of rapid tourism expansion drawing more people to settle in the area than can be provided with waste treatment and other services given existing municipal resources and priorities. A more deliberative, participatory, and democratic process of planning and budgeting would likely result in a more sustainable outcome. Poorer residents of Cancun were not consulted in the various plans, nor do their priorities have an impact on budgetary priorities of the municipality. Concerns about potable water and sewerage connections are thus secondary to the elites' priority of expansion of the tourism economy.

The development of social capital among more disadvantaged groups have been limited by the rapid rates of in-migration and the lack of a cohesive society. In contrast, among the business and governing classes, there is a much greater degree of networking, which is even facilitated by events specifically designed for that end. The unequal distribution of social capital has thus not facilitated a more deliberative setting in Cancun throughout its development.

To consider the hypotheses of this dissertation in light of the policies that have governed Cancun's development, local knowledge about local needs was not incorporated into policies: the planning process was highly centralized with little input from local residents. There was a lack of integration of social and environmental policies, as economic concerns dominated and both social and environmental policies received little attention. Scientific knowledge about the

environment was not used in designing policies. Finally, environmental measures were weak, as would be predicted by theory.

It is important to consider whether some or all of these problems would be addressed by an effective liberal democracy as well or better than deliberative democracy. This is a hypothetical question that cannot be answered definitively. However, there are several considerations that can be examined. An effective, non-corrupt liberal democracy might be expected to improve sustainable development outcomes by reducing the influence of developers in decision-making, by addressing need for the current governmental institutions to maintain and enforce existing zoning and environmental laws, and by increasing consideration of environmental and social issues to the degree that they are pushed by representatives' central constituencies.

Nevertheless, mechanisms for deliberative participation have several advantages over liberal democracy. First, liberal democracy lacks mechanisms that facilitate input from marginalized groups, a central concern of deliberative democracy and a major problem in Cancun. Second, liberal democracy does not facilitate brainstorming and collective problem-solving to deal with the complex issues associated with Cancun's land development policies. Third, representatives potentially elected on the basis of other issues, in liberal democracy, make decisions having to do with sustainability without expertise in the area and without significant input from the citizens who would be affected. Deliberative democracy opens a space for that expertise and input to come to the fore. Environmental and social expertise and concerns were markedly absent both during the period

dominated by central planning of the tourism pole and during the more recent period of democracy dominated by developers (and during which there continues to be some influence of planning by the federal government). Participatory – particularly deliberative – transmission mechanisms are the most effective way to gather nuanced input from the citizenry.

## Chapter 5: Public Sphere Debates in Quintana Roo: Newspaper Survey

To better understand what is being debated in Quintana Roo's public sphere, which might provide insights into these events and those in the next chapter (on the urban development plan of Puerto Morelos), an analysis of local newspaper articles was conducted. For the purposes of this analysis, 70 articles from 2006 to 2008 were examined. The articles were from two newspapers published in Cancun: *Novedades de Quintana Roo* and *Periódico Quequi*. They were selected from a larger pool of approximately 350 articles on land use and environment more generally. Criteria for selection included direct relevance to land use issues, length, and representativeness of the actors and issues in the larger pool of articles.

Each article was analyzed in terms of the actors represented, whether particular actors were able to frame the message of the article, and whether actors were presented in a sympathetic or unsympathetic light. In addition, the discourses advanced by actors were analyzed according to the method employed by Dryzek, including the identification of entities recognized by the discourse (e.g. ecosystems, population, capitalism), agents (e.g. business owners, government entities, migrants), and relationships (e.g. competition between development and environment, collusion between government and business).

Four principal discourses were identified that are directly relevant to land use in Quintana Roo: (1) the growth imperative, (2) government failure to regulate development, (3) growth without services, and (4) the promise of planning.

### *The Growth Imperative*

In this discourse, the growth of investment and jobs, tourists and revenues, is imperative. Other entities recognized include capitalism, hotel rooms, and tourism markets. Land exists as an economic investment, the basis for the construction of hotels, condominiums, golf courses, and commercial plazas.

The primary agents of the growth imperative discourse are the investors. They are the ones that drive economic growth and bring jobs and revenues to the community. During of a series of meetings involving Spanish investors, President Calderon and the Spanish prime minister, the municipal president of Benito Juarez, Francisco Alor Quezada, remarked that the event was “extraordinary” in that it signified increased Iberian investment in Cancun, to the benefit of the residents of Benito Juarez.<sup>131</sup> Similarly, the municipal government with oversight of Tulum argued that the zoning of the Tulum National Park to permit low density developments would be to the benefit of the community of Tulum (this despite acknowledging that developments in Sian Ka’an have not benefited local communities there).<sup>132</sup>

As can be seen from the above examples, government agencies also figure into this discourse, either as supportive of economic growth or inimical to it. The role a particular government agency plays in the discourse depends on the position it takes on any given development. Overzealous enforcement of environmental regulations will earn Semarnat or Profepa (the enforcement arm of the

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<sup>131</sup> H. Aguilera, "Prevén 10 mil cuartos más para la zona norte de Q. Roo," *Novedades de Quintana Roo*, July 17, 2007, 9.

<sup>132</sup> A. Valdez, "Sugieran analizar la densificación en Tulum," *Novedades de Quintana Roo*, September 21, 2006, 2.



environmental bureaucracy) demonization in this discourse, while their acquiescence to developments will earn a positive reference.

For example, in July 2008, Profepa closed several hotels in Tulum for not having the required environmental permits. A member of the federal Chamber of Deputies, Eduardo Espinosa Abuxapqui, promised to propose a measure shielding hotel owners from such actions in the next legislative session, saying that the “federal government with these intimidating actions sows uncertainty and insecurity among hotel owners who will prefer to invest in other tourism destinations”.<sup>133</sup>

Working families appear in this discourse as the beneficiaries of investment and as the victims of environmental regulation that limits investments. In referring to the President of the Association of Hotels of Tulum on the occasion of the hotel closings, one article stated that “He considered that the most serious is the direct effect on close to 500 families of workers who at the closing of the hotels are left without a source of income, without counting the damage to an undetermined quantity of indirect jobs.”<sup>134</sup> Jobs are an important theme in this discourse; for instance one article emphasized that “[a]t the end of this year [2007], with the planned opening of up to 4,000 new rooms, the hotel industry would generate around 16,000 new employment positions in the Riviera Maya”<sup>135</sup>

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<sup>133</sup> U. Romero, "Afirma Abuxapqui que presentará iniciativa para 'blindar' a hoteleros," *Novedades de Quintana Roo*, July 13, 2008, 14.

<sup>134</sup> L. Sarmiento, "Ahuyenta al turismo acción de la Profepa," *Novedades de Quintana Roo*, July 13, 2008; 14.

<sup>135</sup> V. Carrera, "Crean hoteleros alrededor de 16 mil nuevos empleos," *Periódico Quequi*, July 7, 2007, 27.

There is thus a strong relationship posited between investment growth and jobs (though this breaks down somewhat in the case of investment in condominiums), and benefits to the community. Other relationships in the discourse are between business and government, which can be either cooperative or conflictive. The relationship between the economy and nature is one of subordination.

Absent from the discourse are considerations of potential limits to investment and tourism growth. Absent also are some of the negative effects of growth that are brought out in the other discourses. This is a business and economy-oriented discourse, without reference to social or environmental factors.

The discourse is advanced primarily by municipal and federal bureaucrats with a role relating to economic development, by elected officials, and by businessmen, particularly investors and hotel owners. According to Dryzek's categorizations, this discourse is a form of industrialism, in which the natural environment appears only as resources for feeding economic growth.

#### *Government Failure to Regulate Development*

In opposition to the growth imperative discourse there is a discourse espoused primarily by environmental organizations (particularly Cemda – the Mexican Center for Environmental Law – and Gema – the Ecological Group of the Mayab), members of the PVEM (Green Party), and some journalists. This discourse focuses on the failure of the government to regulate development in an effective way, particularly in its environmental impacts. Entities identified by this discourse

include natural resources and land as ecosystems (rather than as simply a surface to develop, as in the growth imperative discourse). Particular attention is granted to mangrove, lagoon, and reef ecosystems, although other forested and marine systems also merit attention in this discourse.

In addition to natural systems, the government failure discourse focuses on the law. The formulation of land use regulations – in the form of urban development plans (PDUs) and ecological zoning (POETs) – is important, and, to an even greater extent, the enforcement of existing zoning and other laws and regulations is absolutely central to this discourse. In terms of human systems, capitalism and an imperfect democracy are recognized in this discourse.

Agency in this discourse is typically attributed to corrupt and ineffectual bureaucrats and politicians, greedy and short-sighted investors, and responsible citizen groups. Members of the population more broadly are occasionally recognized. The primary story told in this discourse is that the failure of the government to regulate development and enforce environmental laws leads to environmental destruction by developers. This includes municipal councils authorizing zoning changes that conflict with ecological zoning or allow a much greater density of construction than originally zoned; the approval of questionable projects by the division of Semarnat responsible for environmental impact assessment and environmentally permitting; and the failure to enforce laws by Profepa.

For example, in a 2008 environmental seminar, representatives of Cemda and other environmentalists argued that while Quintana Roo is a leader in the

formulation of ecological zoning programs, these programs are not respected by municipal councils, which make changes to the zoning that benefit only the governments in power. The land use change associated with Bay View Grand's Grand Island project is cited as an example of a situation in which the ecological zoning program was violated.<sup>136</sup>

Relationships embodied in the government failure discourse include the conflict between environment and current forms of development and collusion between government and investors:

"In Quintana Roo definitively there doesn't exist sustainable development, no one is interested because it is clear there is a voraciousness on the part of investors who only hope to obtain economic benefits at the cost of natural resources," criticized the president of the Ecological Group of the Mayab (Gema), Araceli Dominguez Rodriguez. In fact, for the activist today the problem is much more complex because the authorities themselves are in collusion with the investors for the authorization of projects that are not environmentally viable.<sup>137</sup>

Articulating similar sentiments is Cemda:

Patricio Martin Sanchez, director of Cemda ... affirmed that as the government entity charged with watching over and protecting natural resources, Profepa has left much to be desired and is surpassed not only at the local level but also national, due to lack of resources to carry out inspections and detect irregularities of the developers. Added to this, he emphasized that the conduct of the head of the entity at the national level, Ignacio Loyola Vera, has been "servile and gentle" in the face of the businessmen and developers.<sup>138</sup>

In addition to the failure to enforce existing laws, Cemda has indicated that the system of penalties is flawed:

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<sup>136</sup> L. Sarmiento, "Preocupa violación de leyes ambientales." *Novedades de Quintana Roo*, July 23, 2008, 15; M. Conde Olivares, "Se erige Grand Island sobre desacatos," *Periódico Quequi*, April 13, 2007, 4.

<sup>137</sup> G. Martínez, "No aplica en Q. Roo el desarrollo sustentable," *Novedades de Quintana Roo*, April 24, 2006, 3.

<sup>138</sup> G. Martínez, "En riesgo el medio ambiente por incapacidad de Profepa," *Novedades de Quintana Roo*, July 26, 2006, 15.

The system of protection of the environment in the country is defective and does not adequately account for the negative activity that is occurring in this area, in addition to which the fines for illicit activities that are committed by developers that invest above all in Quintana Roo, are very low compared with the gains that their development generates<sup>139</sup>

The failure of government to regulate development for the protection of natural resources has, according to proponents of this discourse, consequences for the future economic and social well-being of the destination, since tourism depends to a large degree on the local environment: if the mangroves are all gone, the beaches polluted, and the coral reef damaged, tourists will not be interested in Cancun and the Riviera Maya as a destination anymore.

The solution to these problems is, primarily, that the government needs to work better, with less corruption and more commitment to maintaining environmental quality. There is a role also for environmental groups and citizens in planning and watchdogging development in the region.<sup>140</sup> This discourse is a variation on Dryzek's problem-solving discourses, including elements of administrative rationalism (in the focus on the functioning of the government entities) and democratic pragmatism (in the emphasis on citizen participation, although that participation tends to be a few organized groups rather than broad-based participation).

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<sup>139</sup> A. Valdez, "Defectuoso sistema de protección al ambiente," *Novedades de Quintana Roo*, September 10, 2006, 2.

<sup>140</sup> M. Conde Olivares, "Grand Island, gran fraude: Patricio Martin," *Periódico Quequi*, April 18, 2007, 12.

## *Growth without Services*

Like the government failure discourse, the growth without services discourse focuses on the shortcomings of the government in dealing with land use in the region. However, this discourse focuses on the rapid population growth in irregular settlements, which leads to environmental and social problems, which can affect tourism. For example, "The director of Ecology of Benito Juarez, Reyna Gil Hernandez ... recognized that in the case of Cancun the dynamic growth of the population that occurred as a consequence of the tourism development overtook the authorities."<sup>141</sup>

Entities recognized by the discourse include population (as a single entity), ecosystems, and land with the dual role as a settlement area and as an aquifer recharge zone. The central environmental problem posited by this discourse is the pollution of the aquifer by the residents of irregular (illegal) settlements:

More than 60 thousand people live in more than 30 irregular settlements in which due to their condition as areas that are not regularized by the federal, state, and local governments, suffer from the lack of streets, potable water, electricity, sewer, health and educational services, among others. It concerns zones in which the population lives practically in the middle of the jungle, in houses made out of cardboard, plastic, and wood, whose biological necessities are met in open air or in pits that are not constructed to avoid filtration to the aquifers.<sup>142</sup>

Other articles link this pollution of the aquifer to degradation of natural ecosystems on which tourism depends.<sup>143</sup> With respect to the poor irregular settlements, it is not only environmental impacts that are associated with the "belts

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<sup>141</sup> G. Martínez, "No aplica en Q. Roo el desarrollo sustentable," *Novedades de Quintana Roo*, April 24, 2006, 3.

<sup>142</sup> G. Martínez, "Crece la pobreza a la sombra del éxito en Cancún," *Novedades de Quintana Roo*, July 28, 2008, 10.

<sup>143</sup> Sarmiento, "Amenaza falta de drenaje"

of misery” as they are known. Criminality and insecurity are also problems that arise in areas of rapid in-migration, although these are not yet seen as serious threats to the touristic attraction of the resort.<sup>144</sup>

Agents in this discourse include survival-oriented migrants and ineffectual government entities. The critical relationships in the discourse are the linking of population growth and human suffering, and the conflict between population and environment, with service provision as an intervening variable.

In an article entitled “Collapse of Cancun feared for lack of services” the major problem is said to be in the urban and residential areas of Cancun, areas that have grown faster than the ability of the municipality to provide services. Nevertheless, some concern is expressed over continued building in the hotel zone and the pressure that puts on the services there. This echoes the concerns of environmentalists and existing hotel owners over the “overdensification” of Cancun stemming from the continued construction of hotels, condominiums, villas, and amenities in the area, with environmental and urban image impacts.<sup>145</sup>

With the exception of Coespo (the State Population Council), the solution of discouraging in-migration is not suggested as a solution to the problems in the irregular settlements. Rather, the solution advanced is the regularization of land tenancy in the areas and the provision of services to the residents. No suggestions are made as to how this will be paid for. Sedesol (the federal Secretariat for Social

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<sup>144</sup> S. Caamal, "Avizoran en Q. Roo incremento de cinturones de miseria," *Novedades de Quintana Roo*, July 12, 2008, 5.

<sup>145</sup> M. J. Castillo, "Temen colapso de Cancún por falta de servicios," *Novedades de Quintana Roo*, April 15, 2007, 13; G. Martínez, "Pide el Cemda frenar la depredación," *Novedades de Quintana Roo*, April 3, 2007, 13; J. M. Estudillo, "Con 'Cero Tolerancia' pone fin Cabildo y GSM a ilegalidades del 'The'," *Novedades de Quintana Roo*, October 13, 2008, 6.

Development), the Director of Ecology of Benito Juarez (Cancun's municipality), the Ecology Commission of the Municipal Council, and environmentalists have all been proponents of this discourse. Individuals and groups vary in their confidence that the government will be able to provide the necessary services.

Like Dryzek's "Survivalism" discourse, there is a focus here on limits and on the impact of population growth on the environment. However, the solutions proposed are reformist rather than radical.

### *The Promise of Planning*

The last discourse is one that has a long history in Quintana Roo, given the origins of Cancun, and is sometimes paired with the other discourses. It is the argument or sometimes assumption that planning is the solution to the need to resolve the conflicts between environment and development. It has grown out of the earlier (but still present) discourse of planning for economic development that was fundamental in the founding and initial construction of Cancun.

The central entity recognized by this discourse is the plan, which is the optimistic solution to both irregular settlements and tourism development dilemmas. There are several varieties, including the urban development plan, the economic development plan, and the ecological zoning plan, for example. Land is recognized sometimes as a natural resource to be zoned for appropriate use, sometimes as property (also to be zoned). Other entities recognized are population (to be distributed geographically), government (as planner and implementer), and investors (to be subject to and supported by the plan).



Agents in this discourse include enlightened technocratic planners, enlightened citizen planners, and a competent government for implementing plans. Relationships in the ideal are conceived as cooperative, with government, investors, and citizens creating plans to support environment and growth.

The development of a large residential complex on the southern side of Cancun is one example of a case where this discourse appears:

The president of CNEC [National Chamber of Consultancy Firms] in Quintana Roo, Gerard Gomez Nieto, affirmed that the advantage that the development of the "South Complex" of Cancun has is its planning, since this will permit the authorities to design mechanisms to compensate for damages to natural resources.<sup>146</sup>

Other cases are the emphasis placed on ecological zoning by NGOs and the call by Congress for the municipality to zone for the protection of the natural and cultural legacy of the region.<sup>147</sup>

The discourse is one of sustainability, in which economic and population growth coexist with environmental protection, with the conflicts between them resolved in the process of planning. This discourse is particularly embodied in the ecological zoning plans called for in national environmental legislation and carried out in many areas of Quintana Roo.

### *Deliberation in the Public Sphere*

The debates in the public sphere, as embodied in newspaper articles, are highly polarized, with business on one side, environmentalists on another, and

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<sup>146</sup> G. Martínez, "Evitarán impactos en el 'Complejo Sur'," *Novedades de Quintana Roo*, July 11, 2006, 6.

<sup>147</sup> F. Cortés, "Entra al Congreso de la Unión el programa director de Tulum," *Novedades de Quintana Roo*, July 13, 2006, 3.

different parts of government aligning themselves with one side or the other, at least in their discourses. There is little give and take to the debates, little compromise.

The ecological zoning processes were intended to open up the debate and bring about compromise and creative solutions. However, to a large degree, the same polarization has simply been brought into those debates as well. Nevertheless, the public participation requirements of the ecological zoning and urban development plans have encouraged greater airing of the different sides of the issues, which could form the basis of a more deliberative public sphere in the future.

A more deliberative public sphere would require greater inclusiveness in the actors participating (currently a relatively narrow spectrum of society) a reduction in the dominance of economic power, and increased integrity and competence in government, to permit environmentalists to move beyond the government failure discourse into something that would enable them to engage with other actors on more proactive and constructive grounds. The commonality of elements of the planning discourse could provide a starting point for such a dialogue across societal actors.

In Cancun, there has been a failure of governance, as demonstrated in this and the previous chapter. The top down approach to planning that dominated during its formative years and continues to apply today despite institutional changes requiring greater participation. It has favored an urban development strategy in which the hotel and condominium sectors expand at the expense of the environment, and in which rapid population inflows have led to irregular

settlements that threaten not only the forests they are built in, but also the quality of ground water. This then threatens the beaches that are all important to the tourism industry.

As policymaking has been dominated by the Growth Imperative discourse, a more vibrant public sphere and the greater transmission of alternative discourses to the policymaking sphere would likely facilitate the transition to a more sustainable pattern of land use and development. The sustainability element of the Promise of Planning discourse could be particularly useful if it were incorporated into mainstream decisionmaking. Likewise, if the Government Failure to Regulate Development discourse penetrated the state and produced real reform, sustainable development would see substantial benefits. However, The Growth Imperative discourse is espoused by powerful interests in the region. Greater societal voicing of alternative discourses is a necessary counterweight to shift discourses within the policymaking sphere.

## Chapter 6: The Puerto Morelos Urban Development Plan

The town of Puerto Morelos is located just to the south of Cancun, in the same municipality (Benito Juárez). Originally a Mayan port, by the early 20<sup>th</sup> century it served as a port for the export of forest and agricultural products such as chicle, wood, vanilla, cedar, and tobacco. When Cancun was developed in the 1970s, Puerto Morelos was a poor fishing village. The 1990s saw the beginnings of in-migration. By 2000, the percentage of Puerto Morelos residents born outside Quintana Roo was 70%, and there was rapid demographic growth, particularly in the jungle areas of the town, giving rise to the Colonia Zetina Gasca. The Colonia Zetina Gasca – located two kilometers from the coast – held 43% of the population of Puerto Morelos in 1990, and by 2007 held 83% of the population. The remainder of the population is located in and around the coastal areas of the town.

While Puerto Morelos has seen significant population growth in recent years, it is a relatively quiet place that has not experienced the extremely rapid expansion seen in Cancun and Playa del Carmen. In 2006, it had 8,694 residents. The town is home to a research center of the National Autonomous University of Mexico (UNAM). Off shore is a marine protected area with some of the most important coral reefs in the region.<sup>148</sup> The community is described as being a relatively cohesive one and is likely home to a higher degree of social capital than the population of Cancun as a whole, although once again that social capital is greater among the higher

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<sup>148</sup> Ayuntamiento de Benito Juárez, *Actualización del Programa de Desarrollo Urbano del Centro de Población de Puerto Morelos, Municipio de Benito Juárez, Quintana Roo 2008 – 2023* (Benito Juárez: Ayuntamiento de Benito Juárez, 2009)

income residents of the town (including those in the research and education fields) than among the poorer recent migrants.

From 2006 to 2009 Implan (the Municipal Institute for Urban Development Planning) of Benito Juárez undertook the updating of the town's Urban Development Program (PDU), as provided for by Article 115 of the Mexican Constitution. In accordance with requirements laid out in the General Law of Human Settlements and in state and local laws and regulations, this planning process included multiple opportunities for direct public participation, in addition to the general discussions that occurred in the public sphere regarding land use, population growth, tourism development, and environment (described in chapter 5). There were thus several direct transmission mechanisms from the public sphere to the policymaking sphere.

The new Puerto Morelos PDU was published in May 2009 after a long and contentious process of formulation. This chapter will examine the inputs to the PDU and the resulting document, focusing on the discourses present and the decisions made.

The PDU document is divided into four chapters:

Chapter I: Level of Antecedents

Chapter II: Normative Level

Chapter III: Strategic Level

Chapter IV: Programmatic Level<sup>149</sup>

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<sup>149</sup> Ayuntamiento de Benito Juárez, *Actualización del Programa*

For the purpose of the analysis of discourses, the focus of this section will be on the first two chapters, which contain the PDU's analysis of the situation in Puerto Morelos, the results of the participatory workshops held in the summer of 2007, and the PDU authors' perceptions of the important elements from federal, state, and municipal plans and programs relating to urban development. The document thus provides insights on the discourses expressed in the participatory workshops (a link from the public sphere to policy) and the discourses transmitted from higher levels of government, as well as the primary discourses expressed in the body of the PDU itself. Chapters III and IV of the document contain the specifics of the zoning, timelines, and governmental responsibility and will not be included in this analysis, as they contribute little to the understanding of the discourses in the plan.

#### *Input from National, State, and Local Plans*

Chapter II of the PDU includes summaries of the relevant points from a variety of national, state, and local plans and programs. It is important to note that the following discourses are not necessarily the discourses presented in the documents described, but rather the discourses as interpreted in the Puerto Morelos PDU. Twelve plans and programs are described, including six at the national level, three at the state level, one at the subregional level, and two at the municipal level. These plans and programs are meant to provide a base for the urban development planning of the municipality.

The national plans and programs include the following:

- National Development Plan 2007-2012;

- National Program of Urban Development and Territorial Regulation 2000-2006;
- Organic Law of the Federal Public Administration;
- National Program for the Protection of the Environment and Natural Resources 2001-2006;
- Housing Sectoral Program, 2001-2006; and
- Tourism Development Program, 2006-2012<sup>150</sup>

Several of these plans and program summaries specifically articulate the perspective that development and environment are compatible, even mutually supportive. The National Development Plan, by definition the broadest of the national programs and plans, is also one in which environmental sustainability is most strongly stated, with one of the axes of development mentioned in the Puerto Morelos PDU being “Environmental Sustainability.”

Based on the summaries in the Puerto Morelos PDU, the National Development Plan and the Organic Law of the Federal Public Administration are the two federal documents described that have most completely integrated the international discourses of sustainable development, with extensive references to the environment, natural resources, ecosystems, and sustainability. The section on the National Program for Urban Development and Territorial Regulation does not mention environmental or sustainability issues of any kind, nor does the Housing Sectoral Program. At one point, the section on the Tourism Development Program

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<sup>150</sup> Ibid.

mentions sustainable tourism development and integral territorial regulation, but this is not a major theme.

Among state documents described, the *State Development Plan 2005-2011* includes references to sustainable development, an ecological culture, and respect for the natural surroundings. The section on the *Strategic Plan for the Integral Development of Quintana Roo, 2025*, however, does not include environmental issues, and indeed states that “In the case of the Cancun-Riviera Maya Corridor, the Plan proposes the specialization in mass sun and beach tourism, but complemented with segments that are very important for their potential: Theme parks and adventure tourism, nautical ladders, and golf courses.”<sup>151</sup> Puerto Morelos is included in this corridor.

Similarly, the section on the *State Urban Development Program of the State of Quintana Roo, 2001* does not mention environment or sustainability.<sup>152</sup> Furthermore, and importantly from the perspective of the Puerto Morelos PDU, the town is one of several that is targeted for a Stimulus Policy, in which growth is to be stimulated and the town adjusted to fulfill a new function. As will be seen below, this is precisely what the Puerto Morelos PDU plans for.

The *Municipal Development Plan, 2005-2008*, according to the PDU, includes extensive references to environmental protection, and compatibility among urban growth, economic activity, and preservation of the environment. In addition, the

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<sup>151</sup> Ibid., 147

<sup>152</sup> Ibid. The State Urban Development Program itself does include a brief section on environmental problems but this did not carry over into the Puerto Morelos document. Gobierno del Estado de Quintana Roo, Secretaría de Desarrollo Urbano y Medio Ambiente, *Programa Estatal de Desarrollo Urbano* (Chetumal: Gobierno de Quintana Roo, 2001).



*Local Ecological Zoning Program* (POEL) of Benito Juarez describes the ecosystems in the municipality, as well as the environmental problems that need to be addressed, which include explosive demographic growth and backlogs in providing services; reduction of natural areas; and pollution of soil and water. These plans are meant to provide a basis for environmentally sustainable patterns of urban development.<sup>153</sup>

#### *Participatory Process for the Puerto Morelos PDU*

Provisions in national, state, and municipal laws and regulations call for the inclusion of public participation in the process of developing or updating a PDU. In the case of Puerto Morelos, this included community meetings, participatory workshops, a public consultation, and a public hearing. In addition, residents of Puerto Morelos participated in at least two public protests against the proposed revisions to the PDU. Each of these is described below.

#### **Community Meetings**

A series of 18 meetings was held to discuss issues concerning the development of the PDU. These were attended by environmentalists, business people, representatives of the ejido, and other concerned individuals. Sometimes the meetings were attended by as few as ten people, while other meetings were attended by more. One individual who attended the majority of the meetings observed that there was never any real agenda for the meetings, which generally consisted of brainstorming ideas for the PDU and prioritizing needs. Population

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<sup>153</sup> Ayuntamiento de Benito Juarez, *Actualización del Programa*

increases were discussed, but not on technical grounds. There was little carryover from one meeting to the next, with each meeting typically repeating the same problems as the meeting before.<sup>154</sup>

In some cases there were complaints as the meetings were attended by people from Cancun, rather than just people from Puerto Morelos. It was felt that the urban development planning should be carried out by those residing in the area, rather than by those from Cancun.<sup>155</sup>

### **Participatory Workshops**

In addition to the 18 meetings described above, three workshops were held June 6 and 28 and July 19 of 2007. Unlike the previous meetings, these were documented in the PDU itself, as well as in the newspaper, which portrayed the June 6 meeting as having been one of cooperation among all stakeholders, from environmentalists to municipal officials.<sup>156</sup> One of the outputs of the participatory workshops was the development of a mission statement:

To be a Port with its own history and identity, model of integral, balanced development, with low density and excellent services. With diverse productive activities with low environmental impact, where the community participates in the conservation and sustainable use of the natural and cultural resources. It favors natural protected areas, green spaces, public spaces, pedestrians and cyclists; and in which the inhabitants can enjoy a high quality of life.<sup>157</sup>

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<sup>154</sup> G. Velazquez Oliman, Interview, Puerto Morelos, 2009.

<sup>155</sup> Ibid.

<sup>156</sup> A. Aguilar, "Abundan promesas para Puerto Morelos," *Quequi*, June 7, 2007, 7; L. Sarmiento, "Inician actualización del plan urbano de Puerto Morelos," *Novedades de Quintana Roo*, June 7, 2007, 7.

<sup>157</sup> Ayuntamiento de Benito Juárez, *Actualización del Programa*, 109

It is doubtful that the authors of this mission statement – the participants in the workshops – were envisioning the stratospheric increases in population and tourist establishments anticipated in the analysis elsewhere in the document.

In addition to the mission statement, the PDU contains four tables addressing Tourism; Environment; Urban Development and Roads; and Social, Cultural and Economic Aspects. For each of these topics, participants in the workshops identified Puerto Morelos's strengths and weakness, the opportunities and threats presented, and objectives and strategies for the development of the community.

With respect to the tourism table, the story told is one in which the community seeks the development of an ecotourism and alternative tourism destination that is compatible with environmental conservation and that benefits the community. Key themes that emerge are the development of ferries, cruises, handicrafts, hotels (not with all-inclusive packages, which minimize positive spillovers to the local economy), education, and capacity building. The tourism development strategy builds off the town's image as a slow peaceful city, the color of the sea and the beaches, as well as the cenotes, jungle, and marine park with its world-class reef system. It is a discourse in which community, tourism, and nature all move forward together.<sup>158</sup> It differs from the Growth Imperative discourse in its emphasis on environmental conservation and in its more multifaceted nature.

The environment table tells a slightly different story: Puerto Morelos has a rich natural foundation that could be the source of touristic development but that is threatened by obsolete urban plans, a lack of regulation compliance, a lack of

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<sup>158</sup> Ibid., 110

management planning, a lack of environmental education of the community and settlement in flood-prone areas. The town needs land zoning based on the POET, water treatment systems, public information on proposed projects, strengthening of enforcement, new natural protected areas, valuing of natural resources, an environmental fund, and involvement of research centers. While this table also recognizes the important ecological assets of the town, participants placed a greater emphasis on government programs, planning, and enforcement.<sup>159</sup> A significant thread in this table thus reflects the “Government Failure to Regulate Development” discourse identified in the newspaper survey.

The third table – urban development and roads – is notable for its concern over population growth. A “high rate of population growth” is considered to be a weakness of the community, while “population increases due to local employment offerings” is listed as a threat. Similarly, one objective is to construct health centers with a capacity for serving 30,000 inhabitants, a far cry from the 170,000 inhabitants planned by other sections of the PDU (see below). There is also a strong environmental current to this table, with objectives of “improving the communication between the port and the colonia, favoring the hydrological flows between ecosystems”, as well as to “reestablish hydrological flows where they have been blocked by highways and roads,” the need to address the problem of solid waste disposal, waste water treatment, and the development of renewable energy sources. This story is one of government failure to provide urban services, the threat of population growth, and the need to create an urban environment that is

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<sup>159</sup> Ibid., 111

pleasant, environmentally sustainable, and that provides the services needed by the population.<sup>160</sup> It is clearly consistent with the Growth without Services discourse described in chapter 5.

Finally, the fourth table addresses social, cultural and economic aspects of urban development in Puerto Morelos. Possibly because it addresses diverse topics, this table does not present a single coherent discourse. There is a discourse that values the people and the culture of Puerto Morelos as assets that can and should be developed further, both socially and economically. Another focuses on failures of governance, both within Puerto Morelos and in its relations with the municipality and the federal government.

Participants considered the revision of the urban development plan to be essential. They noted low population density and the existence of territorial reserves as strengths of Puerto Morelos, but they also noted that it was fortunate that the PDU was being revised, in time to correct errors and bring about a planned development based on existing potentials. Heading up the list of objectives for urban development in Puerto Morelos is the attraction of viable and sustainable investors. “Non-compatible economic investment” was listed as a threat to Puerto Morelos, though what exactly this consisted of was not specified. The objectives and strategies sections proceeded to provide a vision of what compatible economic investment might look like. Cultural identity-related strategies, economic diversification, alternative tourism and cruise tourism, support for micro and medium sized businesses, support for agricultural production and fishing, and

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<sup>160</sup> Ibid., 112

support for the industrial park (with non-polluting industrial projects) all found their place in this list.<sup>161</sup>

The input from the participatory workshops thus had several characteristics. First, it reflected the public sphere discourses, particularly Growth without Services and Government Failure to Regulate Development. Second, the development proposed by the Puerto Morelos residents is a diversified one, including much more than simply more hotel rooms and visitors at any cost. Third, there is a pervasive respect for the environment, demonstrated in three out of the four tables produced in the participatory workshops.

#### **Public Hearings and Protests**

Later in the process, a public consultation and a public hearing were held in which, first, the consultant who prepared a significant portion of the document explained its contents and, second, Puerto Morelos residents had the opportunity to express their concerns. These were held in early March 2008. Concerns were expressed about building in flood-prone areas, mangrove protection, and the provision of services to a rapidly growing population.<sup>162</sup>

Also in March 2008, a protest against the PDU was held, drawing approximately 200 people. Another protest was held in January 2009, when the PDU was approved by the Municipal Council. Attending the protests were current residents of Puerto Morelos, local businessmen (such as dive shop owners), experts

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<sup>161</sup> Ibid., 113

<sup>162</sup> Noticaribe, "Discuten PDU para Puerto Morelos," *Noticaribe*, March 4, 2008; Noticias Cancún, "Realizan audiencia pública en Puerto Morelos, sobre programa de desarrollo urbano," *Noticias Cancún*, March 10, 2008.

in various scientific disciplines, and environmentalists.<sup>163</sup> The protests reflected the frustration of the protesters with the failure to take into account the input from the various participatory processes and the problems there identified. The PDU was seen as a real estate deal rather than an urban plan. Of the analyzed newspaper articles from the period leading up to the approval of the PDU, most were framed according to the arguments of the dissenting residents of Puerto Morelos, emphasizing the dangers of flooding and damage to ecosystems.<sup>164</sup>

In between the public hearing and the approval of the PDU, some modifications were made to the PDU draft, touted by municipal officials as responding to the concerns of the residents of Puerto Morelos. These will be described in the next section, which provides an overview of the contents of the PDU, organized according to the discourses present in the document.

#### *Major Discourses in the Puerto Morelos PDU*

Chapter I of the PDU document addresses the following topics: History and geography of the area, laws governing the preparation of the PDU, climate, hydrology, vegetation, geology, population, employment and economy, housing, land tenancy, current land uses in the town, urban facilities, transportation, industry and urban services, urban hazards (flooding, solid wastes, and beach pollution), roles of municipal entities in the administration of urban development, aptitudes of land for

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<sup>163</sup> El Universal, "Rechazan en Puerto Morelos PDDU," *Noticaribe*, March 10, 2008; A. Rusca Alvarado, "Aprueban Plan de Desarrollo Urbano de Puerto Morelos," *Diario de Yucatan*, January 23, 2009.

<sup>164</sup> Nine articles from a variety of national and regional newspapers specifically addressed the PDU process; this is in addition to the more general articles analyzed in the last chapter, which provide an overview of the dominant discourses in the region.

urban development, projected population and tourism growth, projected need for land and urban facilities, and the aforementioned results of the three participatory workshops.

Excluding this last, there are three major discourses present in the PDU document: Development vs. Environment, Growth without Services, and the Growth Imperative.

#### **Development vs. Environment**

This discourse appears in section 1.6.1.5: "Vegetation: Description of the Wetland System." As suggested by the title, this section examines the mangrove system and the damage to it by human actions. Unlike other discourses that posit the potential compatibility between environment and development, this discourse specifically refers to the conflict between environment and development: "The conflict of interests between environmental conservation and economic and social development, and the loss of the value as a resource are problems with their roots in the degradation of the mangrove ecosystem."<sup>165</sup>

The Environment vs. Development discourse uses scientific description as its base, and has an ontology that encompasses the concepts of interdependence, biodiversity, ecosystems, individual species, and the landscape as a resource. Land is viewed as a set of interconnected ecosystems fragmented by human constructions.

Human activities (including migration) are the cause of the degradation, and government is at best ineffective and at worst complicit in the processes resulting in the degradation of the mangrove system, reflecting some of the elements of the

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<sup>165</sup> Ibid., 46



“Government Failure to Regulate Development” discourse identified in the newspaper survey. In addition, this discourse divides the population into two groups: those who are conscious of the mangrove situation and want to remedy it, and those who are not conscious and/or concerned about it:

The problem is perceived from distinct points of view. Part of the population has had their awareness raised with respect to the degradation of mangrove and support whatever measure guarantees its protection and conservation; however, another part of the population lacks this awareness and considers other necessities of a higher priority.<sup>166</sup>

The result is the destruction of the environment: "It is estimated that, maintaining current conditions, the process of degradation will lead to the total destruction of the southern half of the wetland in the short and medium term, and the possible destruction of the rest of the wetland in the long term."<sup>167</sup> In the Puerto Morelos PDU, this discourse is limited to the section on wetlands.

### **Growth without Services**

The dominant discourse for the first 115 pages of the PDU is neatly summarized as follows:

A constant and recurring cycle in the development of touristic populations in Quintana Roo is the following: the touristic development begins with the construction of hotel rooms; this generates job opportunities to which respond workers from all parts of the country; these migrants demand land to settle on and support to construct their homes. Then they demand basic public services: water, electricity, drainage, roads, public lighting. Within a short time, the installation of basic facilities is required: schools, health centers, sporting and cultural facilities.<sup>168</sup>

Key concepts in the ontology of this discourse are therefore development, migration, and service provision. Government is portrayed as a critical but not

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<sup>166</sup> Ibid., 46

<sup>167</sup> Ibid., 41

<sup>168</sup> Ibid., 5

infallible force for development. Its strengths are in its ability to generate rapid economic growth. Its failure is in its inability to provide adequate housing, sanitation, storm sewers, potable water, electricity, schools, and health services to all of the people who came to work in the tourist powerhouses of Cancun and Playa del Carmen: "The origin of the problem was simple: migration grew more rapidly than the city."<sup>169</sup>

Absent from this discourse is a vision of the future. There are no conclusions drawn with respect to what Puerto Morelos should look like, aside from needing services provided. It is a retrospective discourse.

### **The Growth Imperative**

Like the "Growth without Services" discourse, "The Growth Imperative" finds growth inevitable. Unlike the other discourses, however, this discourse is a forward looking grand plan for the future of the town of Puerto Morelos, a plan in which this town of 8,700 is to increase to 170,000 people over the course of 15 years. Growth is the goal. This discourse is found in sections 1.11.3 – 1.11.7 and forms the basis for the zoning of Puerto Morelos. It is a natural extension of the Growth Imperative discourse found in the newspaper analyses.

Growth means growth of tourism: "From its origins, Quintana Roo has shown its touristic vocation: the beauty of its coasts has made it favorable for the motor of growth of the state to be the creation of hotel infrastructure and tourist services."<sup>170</sup> Economic development is therefore measured in the number of tourists, the number

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<sup>169</sup> Ibid., 1

<sup>170</sup> Ibid., 4

of hotel rooms, and the average income for the region. It is also portrayed in more anecdotal ways:

When touristic growth in the region began in the 1970s, Puerto Morelos was at that time in reality a village of fishermen with limited economic development. It's not that there was nothing to fish: shellfish and lobster were abundant. The problem is that there was no one to buy them: when the first workers came to the zone, the fishermen offered lobster tails at 2 pesos each – the minimum wage was 30 pesos a day – and considered that they had made a good bargain.<sup>171</sup>

The ontology of this discourse includes concepts such as hotel rooms, visitors, population, and hectares of land for urban development. Noticeably absent are any references to ecosystems, the environment, or sustainable development. Given its importance for the population and land use estimates used in the zoning section of the PDU, it is worthwhile to follow the logic of this discourse in some detail, a logic laid out in a series of tables. The tables are shown below, translated but otherwise unaltered. The sources of the data in these tables are a set of studies by Fonatur and studies carried out in the context of the potential expansion of airports in the region. The titles and publication information of the studies are not given.

The first table of interest to this study is one in which the number of potential visitors to Cancun and the Riviera Maya is estimated. From this, the number of hotel rooms that would be needed by these potential visitors is estimated.

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<sup>171</sup> Ibid., 32

**Table 6-1: Potential visitors and rooms required**

Year	Potential visitors	Rooms required
2010	7,815,840	76,648
2011	8,200,410	80,039
2012	8,589,505	83,182
2013	8,983,441	86,326
2014	9,382,524	88,519
2015	9,787,042	90,713
2018	11,017,872	96,648
2023	12,606,000	105,050
2025	13,236,000	110,300
<i>Source: ABJ 2009, 117</i>		

The distribution of these rooms among four development zones was then determined: Isla Mujeres, Cancun, Puerto Morelos, and Riviera Maya.

**Table 6-2: Distribution of hotel rooms**

Year	Cancun	Isla Mujeres	Riviera Maya	Puerto Morelos	Total
2010	30,742	3,295	36,111	6,500	76,648
2015	32,255	7,246	42,478	8,734	90,713
2020	34,799	8,759	45,243	11,657	100,458
2025	37,441	10,271	48,008	14,580	110,300
<i>Source: ABJ 2009, 117</i>					

“In this manner, it is established that Puerto Morelos will have in the next years around 12,600 additional hotel rooms, with which it would arrive at a level of 14.5 thousand rooms in total.”<sup>172</sup>

The next step is to determine what population is likely to be achieved as a result of the construction of these additional hotel rooms. To do this, Cancun is used as an example. The number of inhabitants of Cancun in 2005 is divided by the number of hotel rooms, giving an estimate of 19.85 inhabitants per room.

**Table 6-3: Rooms and inhabitants in Cancun (2005)**

Inhabitants	Hotel rooms	Inhab/Rm
572,973	28,861	19.85
<i>Source: ABJ 2009, 98</i>		

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<sup>172</sup> Ibid., 117

This estimate is then adjusted downward, considering that the current ratio of inhabitants to hotel rooms in Puerto Morelos is only four to one. In a calculation not explained, the ratio is adjusted to 11 inhabitants per room for Puerto Morelos. From this ratio, it is estimated that since the number of hotel rooms in Puerto Morelos will increase from 1,941 in 2006 to 15,154 rooms in 2025, the population will increase from 8,695 people to 166,691 people.

**Table 6-4: Probable Alternative Estimation of population and hotel rooms for 2025**

	2006	2025	Difference
Rooms			
+ Cancun	28,861	37,441	8,580
+ Puerto Morelos	1,941	15,154	12,639
Inhabitants			
+ Cancun	589,116	748,820	159,704
+ Puerto Morelos	8,695	166,691	157,996
Inhabitants / room			
+ Cancun	20	20	
+ Puerto Morelos	4	11	
<i>Source: ABJ 2009, 100</i>			

It is at this point that changes were made to the document between March 2008 and January 2009. The previous iteration of the PDU document estimated that 15.64 people would move to Puerto Morelos for each hotel room constructed, and that the population would grow to 228,031 inhabitants. This scenario was also included in the new document as a “High Alternative.” However, the lower numbers were the ones reported in the media. It should be noted that the number of hotel rooms to be constructed was actually increased in the later version of the PDU. Since the employment provided by tourism development is the primary determinant of migration patterns in the region, the changes made here to the PDU do not truly represent responsiveness to the concerns of the residents of Puerto Morelos.

A population density of 30 inhabitants per hectare is then used to calculate the number of additional hectares the town of Puerto Morelos will need to absorb the almost 160,000 people expected to move there by 2025, arriving at an estimate of 4,740 ha. This is another place that a change was made, from a density of 40 inhabitants per hectare to 30 inhabitants per hectare.

**Table 6-5: Probable Alternative**

Total additional population (inhabitants)	Population density (inhab / ha)	Additional hectares
157,996	30	4,740
<i>Source: ABJ 2009, 101</i>		

In other words, the zoning plan for Puerto Morelos is based on the following: there is a certain number of potential visitors to the Mexican Caribbean coast. They will need a certain number of hotel rooms. The government has allocated a certain number of those hotel rooms to Puerto Morelos. The construction of those hotel rooms will lead to a certain number of people moving to Puerto Morelos. Those people will need a certain number of hectares of land to live and work on.

Of the total hectares projected for Puerto Morelos (5,714.02 ha), 3,350.20 ha are to be designated for residential and touristic development, 1,946.96 ha are set aside for the mangrove conservation required by Article 60 TER of the General Wildlife Law, 44.11 ha are to be used for urban facilities, and 372.75 ha are to go for primary roads.<sup>173</sup>

The conclusions of the forecast are provided below.

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<sup>173</sup> Ibid.

The scenarios proposed for the population center of Puerto Morelos aspire to propel Regional Development, support ecotourism, knowledge of the culture, and care of the environment.

During the next 15 years it is projected that:

- The total population of the center of population will be around 170 thousand inhabitants, with a decreasing average annual rate of growth that goes from 20% to 15%.
- The urban growth will be especially influenced by the increase in the attraction of touristic investments and the increase, in a significant way, of ecotourism, tied to a policy for its attraction.
- During this period it will be necessary to construct 43 thousand urban homes to satisfy the projected demand.
- Potable water services must increase to 1,290 lps [liters per second], and the increase in drainage service must be 967 lps.
- The supply of electric energy must increase to 209 mva.<sup>174</sup>

The number of housing units was not adjusted between the 2008 and 2009 versions of the PDU, whereas the projected need for services was adjusted downward. One participant in the PDU process described the proposed expansion of housing and services as “a wish list for Santa Claus” with no indication of how this expansion would be funded.<sup>175</sup> Certainly it must be questioned how this expansion will be accomplished given that Puerto Morelos still lacks a sewer system of any type and extensive areas of Cancun also still lack essential services. The optimism expressed in the plan is reflective of the Promise of Planning discourse identified in Cancun case and newspaper analyses.

### **Impact of Participation**

According to several participants in the process, the meetings and workshops had little or no impact on the PDU as it was eventually constituted. Local input was not relevant: the state relies on tourism and the views of the local population are secondary to the drive to increase tourism in the region. While there was some

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<sup>174</sup> Ibid., 114

<sup>175</sup> Velazquez Oliman, Interview

emphasis on diversification of the economy, it was defined primarily in terms of the type of tourism. In contrast to Cancun, the zoning for Puerto Morelos is for smaller – though numerous – hotels.

From an environmental perspective, the individuals concerned were of the opinion that business interests were making use of the death of sections of mangroves (resulting from Hurricane Wilma and from disruptions of the hydrological flows by road development) to justify the conversion of mangrove wetlands to other land uses. In addition, the PDU provides for the construction of an additional road through the mangroves, though construction on the proposed road has not begun.<sup>176</sup>

The failure of the PDU to account for the flooding of areas zoned for development during hydrological events is attributed to a contradiction in maps of the zone, where the data are do not correspond with the actual extent of flooding in the region, which is corroborated by a video taken by opponents of the new PDU's zoning.<sup>177</sup>

When the PDU was approved, a local environmental group filed an amparo lawsuit on the grounds that the required process for development of the PDU was not followed properly. For instance, while the PDU was published in the newspaper, the font was so small that it was impossible to read, particularly tables and figures. In the absence of a supporting paper from UNAM (attributed by some participants

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<sup>176</sup> Anon., Interview, Puerto Morelos, 2009.

<sup>177</sup> Ibid.



to a lack of willingness to get involved in a social conflict), the court dismissed the amparo case.<sup>178</sup>

### *Conclusion*

Like ecosystems that are intertwined at all levels, so too are the interrelations among people. In both cases, the drawing of boundaries – geographic and political – is always to some degree artificial. Theorists and practitioners of sustainable development have struggled with the question of how to incorporate the needs and voices of future generations. A similar dilemma is presented by the geographic or demographic delineation of decision-making in a democratic state.

Many in Puerto Morelos had a vision of the future of their community that was very different from that embodied in the town's urban development plan. Nevertheless the Constitution allocates the power to formulate urban development plans to the municipality, not to the individual town, and Puerto Morelos is in the same municipality as Cancun, putting it at a distinct disadvantage in determining its own fate.

Like the question of intergenerational equity, the case of Puerto Morelos also presents a dilemma of "who counts". Is it only the current residents of the town that should have a say in its future? Certainly they are not the only people with a stake in the town's future. Even if one sets aside the business interests that will benefit from the new zoning of the town, there is the question of all the people who are likely to

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<sup>178</sup> Ibid.; Velazquez Oliman, Interview;

migrate from the rural zones to take advantage of the new jobs that will be generated by the economic development of the coastal zone.

At the same time, environmental sustainability is a complicating factor. The record of tourism development in the region has been poor in terms of environmental damages. It seems clear that environmental sustainability is threatened by the massive influx of population foreseen by the urban development plan. The probable failure of the municipality to provide adequate water, sewer, and solid waste management infrastructure presents grave threats to the groundwater, terrestrial, and reef ecosystems. Similarly, there exist pressures on mangrove ecosystems (particularly fragmentation) and on forest ecosystems (through colonization). These environmental risks threaten not only the poorest and most vulnerable members of the population, they also threaten the foundations on which the tourism economy is built.

Finally, there is the question of the economic benefits of coastal development for the regional and national economy. Tourism is the source of large amounts of revenue, particularly foreign exchange. As also discussed however, the spillovers into other parts of the economy are relatively small, and the economic benefits tend to be concentrated in the hands of the large international and national companies that construct and run the large hotels that predominate in the region. While the urban development plan of Puerto Morelos calls for less dense development than that found in Cancun, and for the development of “ecotourism” it is unclear what this will actually mean in practice.

In sum, a public sphere discourse (the Growth Imperative) that does not appear in the results of the public participation and is rejected by a large number of Puerto Morelos residents is the discourse that dominates the Puerto Morelos PDU. The commitment of the municipal government and its business allies to a particular pattern of development trumped the views of the residents who participated in the various phases of formulation of the PDU. The result is a plan that does not take into account the fragility of the local environment and the vulnerability of that environment to damages that result from rapid demographic growth and tourism development. The participatory process that was to a certain degree a deliberative one was carried out but ultimately did not actually connect with the exercise of decisionmaking power.

Liberal democracy as presently constituted in Mexico and in the Benito Juarez municipality in particular failed to pass a socially and environmentally sustainable PDU. Perhaps this can be attributed to flaws in the representative system, to the permeability of the local government to large economic interests. However, the fact remains that it was a deliberative, participatory process that yielded the most sustainable suggestions for the PDU.

Thus while the output of the participatory process was congruent with the characteristics predicted for a deliberative setting – diversity of interests represented, use of local knowledge, integration of social and environmental concerns, and stronger environmental provisions – these characteristics did not carry over into the final document.

## Chapter 7: Federal Mangrove Regulation

The importance of mangrove ecosystems to sustainable development is established repeatedly in chapter 17 of Agenda 21. It is also one of the most critical and contentious issues in coastal land use in Mexico. Mexico has one of the most stringent laws on the books with respect to mangroves: their destruction or hydrological disruption is banned by a 2007 amendment to the General Wildlife Law (LGVS). While enforcement of the law remains a challenge, the process by which this law came about is worth exploring.

The process in question stretched over many years and involved expert administrators, political appointees, private investors and civil society organizations, and the institutions of representative democracy. Corruption was part of the story, as was public sphere debate. It began with the formulation of a regulation in the Secretariat of Environment and Natural Resources (Semarnat).

### *Official Mexican Norm 022*

The issue of mangrove protection arose in the policy sphere during the 1990s. Seven years of work by researchers culminated on April 10, 2003 in a regulation called “NOM 022-Semarnat-2003 Which establishes the specifications for the preservation, conservation, sustainable use and restoration of coastal wetlands in mangrove zones”. The institutions participating in the development of the regulation included almost exclusively environmental agencies and universities. Representatives from other sectors were not included. While the regulation

underwent two public comment periods, it is perceived to have been developed by experts.<sup>179</sup>

NOM 022 provides an extensive list of the ecological characteristics of and services provided by mangrove ecosystems. It then proceeds with a detailed accounting of the many ways that it is not permitted to damage or destroy mangrove ecosystems, beginning with the following: "The mangrove must be preserved as a vegetative community."

As a result of NOM 022, several coastal developments were rejected by Semarnat, including, for example, the expansion of the Manzanillo port. However, on February 23, 2004, Ricardo Juárez, director general of Environmental Impact and Risk in Semarnat, approved a project promoted by Fonatur, Costa Cancun, a project developed by Golf and Resorts. The Master Plan for the Tourism Development of Cancun had called for a third stage that would diversify the offering of the tourism center beyond the original sun and beach focus. In 1994, an evaluation was conducted of possible complementary market segments, and it was decided that golf would be the theme of the third stage. Studies and promotions were carried out between 1995 and 2001. A relationship was established with Golf & Resorts in 2002, and the process of planning and permitting began. The project included a professional 36 hole golf course, a club house, a beach club, and an area for residential, hotel, and commercial construction. Ricardo Juárez justified the project approval saying that "only with tourism projects like these can the conservation and

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<sup>179</sup> A. Enciso L., "Fox deja a México con uno de los mayores índices de degradación ambiental del mundo," *La Jornada*, November 28, 2006.

rescue of natural zones be assured, due to the scarce resources of the secretariat to carry out these works.”<sup>180</sup>

The land use designation of the 377 hectares – including significant areas of mangroves – on the site was conservation with high ecological restrictions on tourism activities. The approval of the project by Semarnat made possible the destruction of large areas of mangroves. Environmentalists viewed this approval as being based on an excessively liberal interpretation of NOM 022. In addition, environmental organizations such as Cemda and Defenders of Wildlife Mexico argued that the approval of the project violated

- Article 4 of the Constitution (which guarantees to citizens the right to an environment adequate for their development and wellbeing);
- Article 8 of the Constitution;
- Principle 10 of the United Nations Declaration on Environment and Development;
- Agenda 21;
- The Ecological Zoning Plan of the Cancun-Tulum Corridor;
- Articles 34 and 35 of the General Law of Ecological Balance and Protection of the Environment; and
- Regulation of the Law on Environmental Impact Evaluation.<sup>181</sup>

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<sup>180</sup> A. Enciso L., "Legitimó Semarnat la destrucción de manglares," *La Jornada*, December 16, 2004; J. A. Zuñiga and V. Cardoso, "Vendió Fonatur a Golf and Resorts el terreno a precio 24 veces inferior," *La Jornada*, December 18, 2004.

<sup>181</sup> El Universal. "Impugnan permiso a proyecto turístico," *El Universal*, March 19, 2004, A. Enciso L., "Funcionario federal autorizó de forma ilegal proyecto en Cancún: ecologistas," *La Jornada*, March 19, 2004; A. Fernandez and A. Lopez, "Antes que Wilma, el turismo arrasó con defensas naturales de Cancún," *La Jornada*, November 19, 2005.

The zoning of the property for Costa Cancun was modified on March 29, 2004, from its previous "Forest" designation. According to PVEM Senator Emilia Patricia Gómez Bravo, This zoning change violated environmental regulations, which specified that the competency for zoning changes that affect mangroves is federal, not municipal.<sup>182</sup>

On May 7, 2004, Semarnat modified NOM 022 to permit the destruction of mangroves with the payment of monetary compensation. In 2006, this compensation was only 10,000 pesos per hectare destroyed. Under this modified regulation, the land use designation of the mangrove area in the Costa Cancun project could be changed to permit development of the site.<sup>183</sup>

The Secretary of the Environment at that time was Alberto Cárdenas.

What happened with Alberto Cárdenas was that 'there was a clearly political turn to Semarnat, since with Ernesto Zedillo and the first years of Vicente Fox, there were conspicuously technical people, because those that headed the area had national and international recognition. With the change one saw the zero interest of the president in environmental subjects and the orientation of the agency toward PAN, that is, turned toward the private sector', says Gustavo Alanís, of the Mexican Center of Environmental Law (Cemda).<sup>184</sup>

According to Greenpeace Mexico, in September 2003 Alberto Cárdenas made a commitment to the major tourism investors in Mexico to remove bureaucratic obstacles to their projects (a commitment reiterated June 3, 2004 in Zacatecas). Greenpeace Mexico attributed the subsequent modification of NOM 022 to this pro-

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<sup>182</sup> A. Becerril and V. Ballinas, "Demandan senadores a la Permanente indagar venta de predio a Golf & Resorts," *La Jornada*, December 15, 2004.

<sup>183</sup> A. Fernandez and A. Lopez, "Antes que Wilma, el turismo arrasó con defensas naturales de Cancún," *La Jornada*, November 19, 2005; A. Enciso L., "Tibias acciones de la Semarnat para proteger manglares, revela estudio," *La Jornada*, July 10, 2006.

<sup>184</sup> A. Enciso L., "El peor problema ecológico del país es Alberto Cárdenas, dicen ambientalistas," *La Jornada*, June 7, 2005.

investment orientation of the Secretary of the Environment. Similarly, an article in *La Jornada* stated that NOM 022 was modified by Semarnat to permit \$500 million of investments.<sup>185</sup> Chief among these was Costa Cancun.

The importance of Costa Cancun in the modification of the NOM 022 is suggested by an e-mail from the Aurelio Ahumada, the corporate director of Grupo Eco Red, to project investors, which stated that “we have successfully concluded the modification of norma 022... Semarnat took as a basis the proposals and technical and legal solutions that we gave to the plan of Costa Cancun... the modification means much greater juridical certainty for the project authorized and of course for the investment required.”<sup>186</sup>

As with the approval of Costa Cancun in February of the same year, the modification of NOM 022 was criticized for not complying with laws and regulations. The federal laws of Administrative Procedure, and of Transparency and Access to Public Governmental Information and its regulation were violated because a draft was not presented and published. The Federal Law on Measurement and Standardization was violated for not carry out the procedures prescribed for modifying an Official Mexican Norm. The modification was, however, approved by

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<sup>185</sup> A. Enciso L., "Legitimó Semarnat la destrucción de manglares," *La Jornada*, December 16, 2004; Greenpeace Mexico, *Greenpeace otorga antidiploma a legisladores que apoyaron destrucción de manglares*, August 18, 2004 (accessed February 1, 2008); available from <http://www.greenpeace.org/mexico/news/greenpeace-otorga-antidiploma>; A. Enciso L., "El peor problema ecológico del país es Alberto Cárdenas, dicen ambientalistas," *La Jornada*, June 7, 2005.

<sup>186</sup> Enciso L., "Legitimó Semarnat"



Commission Three of Congress, as required, for which members of the commission received mangrove leaves and “anti-diplomas” from Greenpeace Mexico.<sup>187</sup>

The story of Costa Cancun does not end with the modification of NOM 022. On October 28, 2004, the first stone in the development was placed by President Fox, reflecting the high priority placed on the project at the presidential level. Interestingly, construction on the project began even before the purchase of the land was completed, which occurred on November 10, 2004. The details of that purchase were to be the subject of great controversy locally and nationally.

The property in question is located within five minutes of the Cancun airport, in the highly desirable Hotel Zone. It had service hook-ups at the base of the property. The tax valuation of the property was 1,750 pesos per square meter and the actual commercial value was much higher due to the nature and location of the property. In spite of this however, Fonatur set a purchase price for Golf and Resorts at 71 pesos per square meter. On November 9 2004, the day before the sale actually took place, a statement from the land registry affirmed that the valuation by Fonatur was correct. To place this in perspective, in the colonia of Alfredo Bonfil, an area of great poverty, property at that time sold for 150-450 pesos per square meter, for the construction of small wood or cement block homes with no services available.<sup>188</sup>

In response to the national outcry that occurred when the details of the sale were made public, John McCarthy, the head of Fonatur, made a variety of arguments,

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<sup>187</sup> J. Balboa, Dan diplomas a legisladores que contribuyen a destruir manglares," *La Jornada*, August 19, 2004.

<sup>188</sup> J. M. Correa, "Investigan a Fonatur por venta de predio en Quintana Roo," *El Universal*, December 19, 2004; E. Mendez and R. Garduño, "McCarthy, a disposición de la ASF para que revise anomalías en Cancún," *La Jornada*, January 20, 2005.

ranging from that parastatals have the right to dispose of property as they see fit, to the argument that the price of the property was based on a valuation by Nacional Financiera, part of the federal government's development bank. In this valuation, 40% of the land was considered to have no economic value – the area in mangroves. This land was essentially given to Golf and Resorts. It should be noted that the construction of Costa Cancun (this portion now known as "Riviera Cancun") involved significant deforestation of the mangroves.<sup>189</sup>

The sale caused outrage. One priista senator, Eduardo Ovando Martínez, was quoted as saying that

Cancun no longer requires the treatment of times past, when land was given at convenient prices to investors so that they bring their capital; that can be done now in other parts of the country, not in Quintana Roo, where there is already a tourist development. For this reason we don't believe that it was a legal operation that Fonatur agreed to with Golf & Resorts.<sup>190</sup>

Ovando Martinez was just one legislator to comment on the sale – members of all political parties disapproved. McCarthy was called on to explain the sale to legislators in January 2005, and then to Regional Supervisory entity of the Secretariat of Public Function.<sup>191</sup> Other sources suggest that the sale of Costa Cancun was not an isolated incident, that the state sale of coastal property at dramatically

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<sup>189</sup> M. Cuellar, "Fonatur: 40% del terreno entregado a Golf & Resorts, sin valor económico," *La Jornada*, December 14, 2004; Mendez and Garduño, "McCarthy, a disposición"

<sup>190</sup> A. Becerril, "Pedirá el Senado la comparecencia de Elizondo y McCarthy por el caso Cancún," *La Jornada*, December 16, 2004.

<sup>191</sup> Correa, "Investigan a Fonatur"; R. Garduño and E. Mendez "En Cancún hubo arreglos inconfesables: legisladores," *La Jornada*, December 15, 2004; R. Garduño and E. Mendez "Comparecerá John McCarthy ante la Comisión Permanente," *La Jornada*, January 13, 2005.

underpriced rates has occurred elsewhere in the country, such as in many areas of Baja California Sur.<sup>192</sup>

Returning to the specific issue of NOM 022, in October 2006, Semarnat sought to force a strengthening of NOM 022, requiring touristic developers to protect nearly 95% of mangroves in their area of operation, although this draft too was criticized by environmentalists for providing loopholes for developers. In contrast, representatives of the tourism industry – Grupo Quintana Roo and the National Tourism Business Council (CNET) – boycotted later sessions of the NOM 022 working group with the argument that the draft regulation was too restrictive. In the end, efforts were blocked in the courts by Amdetur (Mexican Association of Touristic Developers), which argued that an official Mexican norm cannot be modified within its first five years unless there is an emergency. According to representatives of environmental groups, the process pursued by Semarnat in seeking a change in NOM 022 demonstrated a lack of commitment to actually achieving a more stringent regulation.<sup>193</sup>

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<sup>192</sup> J. L. Espinosa, "Turismo, un peligro para mar de Cortés," *El Universal*, October 17, 2005; C. Fernández-Vega, "MEXICO SA: Malestar de ciudadanos de BCS contra gobernantes perredistas," *La Jornada*, August 12, 2005; N. Gómez Quintero and E. Villanueva, "Depredan las costa de BCS los desarrollos turísticos," *El Universal*, August 28, 2005.

<sup>193</sup> A. Enciso L., "Pretende Semarnat imponer norma de manglares en favor de hoteleros: ONG," *La Jornada*, August 16, 2006; C. Gomez Mena, "Semarnat interpone recurso para revertir fallo sobre manglares," *La Jornada*, October 23, 2006; C. Gomez Mena, "Gana la IP batalla a Semarnat en litigio sobre los manglares," *La Jornada*, October 18, 2006; M. Posada García, "Tendrá que esperar el cambio a la norma sobre manglares: Semarnat," *La Jornada*, October 19, 2006; A. Enciso L., "ONG: la norma de manglares beneficia sólo a particulares," *La Jornada*, August 25, 2006; A. Enciso L., "Exigen empresarios libertad para explotar los manglares," *La Jornada*, September 7, 2006.

### *Amending the General Wildlife Law*

It is at this point that we leave the area of regulation and enter the realm of legislation, with the progression of a modification to the General Wildlife Law (LGVS) through the Senate and the Chamber of Deputies. A proposal to amend the LGVS to protect mangroves was first introduced in the Senate, September 30, 2004, only three months after the modification to NOM 022 was confirmed by Legislative Commission Three. It was introduced by Sen. Gloria Lavara Mejía, of the Ecological Green Party of Mexico (PVEM) and as per standard legislative rules, was turned over to the Commissions of Environment, Natural Resources, and Fisheries, and First Legislative Studies.

The bill emerged from the Senate commissions on December 13, 2005 with a favorable recommendation. The plenary vote was 47 to 42 in favor. The measure was supported by members of the PRI, PRD, and PVEM, and opposed by PAN senators along strict party lines. The bill was then referred to the Chamber of Deputies, where it was turned over to the Commission of Environment and Natural Resources. Just over a year later, on December 21, 2006, The Commission returned the bill to the plenary of the Chamber of Deputies, where the vote was 382 in favor, and 3 abstentions. As the voting implies, the measure was supported by deputies of all three major parties. The bill became law on February 1, 2007, when the new president, Felipe Calderon, published it in the *Diario Oficial de la Federación*.<sup>194</sup>

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<sup>194</sup> Cámara de Diputados del H. Congreso de la Unión, *Proceso Legislativo: DECRETO por el que se adiciona un artículo 60 TER; y se adiciona un segundo párrafo al artículo 99; todos ellos de la Ley General de Vida Silvestre* (Mexico, DF: Cámara de Diputados del H. Congreso de la Unión, 2007).

### *Discourses in the Public Sphere*

The original formulation of NOM 022 was said to have been written by “experts”, suggesting that the 2003 regulation was not the result of a highly politicized process, but rather a science-based process.<sup>195</sup>

Public sphere discourses prior to NOM 022, as found in national newspaper articles from 1999-2003, included a relatively small number of articles referring primarily to mangroves, primarily in Quintana Roo and Nayarit. There is no evidence of a concerted effort by national NGOs to push mangrove conservation. Rather the articles tended to focus on tourism developers who destroyed mangroves without the proper permits or in violation of the protected status of particular areas. Government environmental entities were sometimes portrayed as protecting the environment, sometimes supporting the developers in destroying the mangrove areas. The lack of a large number of articles in national newspapers supports the conclusion that the initial creation of NOM 022 was the work of “enlightened technocrats” rather than the result of a broad-based process of deliberation.

However, the impacts on investment led to a politicization of the NOM. The following discourse analysis of newspaper articles for this case will therefore cover the period January 2004 – February 2007, or from the period leading up to the modification of NOM 022 through the publication of the LGVS Amendment by President Calderon. 79 articles from two leading daily papers - *La Jornada* and *El Universal* – are included for this time period.

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<sup>195</sup> Gomez Mena, "Gana la IP"

Environmental NGOs – particularly national NGOs – were able to gain very significant recognition in the national press on the mangrove issue. Greenpeace Mexico, CEMDA, and to a lesser extent Defenders of Wildlife and other organizations appeared in nearly half of the mangrove articles, and in most of these articles the issue was framed in the manner promoted by the NGO(s). The dominance of NGO references and discourses was particularly strong in the leftist *La Jornada* but was also present to a more limited degree in *El Universal*. In contrast with the treatment of NGOs, only two of the mangrove articles were framed specifically in the manner promoted by private investors in the tourism industry, and eleven according to diverse government agencies, including Semarnat, Sectur, Fonatur, and national legislators.

The discourses promoted by the NGOs frequently paired corruption with environmental destruction, sometimes in a general sense and sometimes in the context of particular cases, including Costa Cancun and several developments in Baja California Sur, among others. References to both Semarnat and Fonatur were overwhelmingly negative, as the government's ability or willingness to protect the environment was questioned or, more frequently, denied altogether.

"For Iván Restrepo [occasional columnist for *La Jornada*] this situation in BCS [Baja California Sur] is 'a demonstration of the divorce between what the authorities say and what they do.' He lamented that in regions of the country where these 'irregularities' occur, 'people don't have within reach the mechanism of official complaint, since it is there that the authorities arrive so late that when they proceed what they end up doing is to excuse the errors imposing fines and with this they believe they resolve the damage. There is only to remit the payment of the fine and nature, fauna and flora are gone with the wind.'"<sup>196</sup>

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<sup>196</sup> N. Martínez, "Lamentan imposición del poder económico," *El Universal*, August 29, 2005.

In only a few articles – not framed by NGOs – did government entities receive positive treatment.

This was true also of private investors in the tourism industry. Sometimes portrayed as outsiders taking over and destroying a Mexican environmental paradise, they are nearly always seen as engaging in illegal activities or, at the very least, working contrary to the well-being of the Mexican environment.

“[Environmentalists] noted that they are not against tourism, ‘but rather cases like this one that are an example of the illegalities and falsehoods that the majority of developers commit. On the basis of deceits and promises they assure the population that they will see themselves benefited, when they just seek to privatize public beaches and pillage all of the natural surroundings. Enough, we cannot permit this kind of developments,’ affirmed Alejandro Olivera, coordinator of the Greenpeace’s Oceans campaign.”<sup>197</sup>

Only passing reference is made to the population in general in the mangrove articles. The debate that occurs through the articles pits investment against environment. In some cases the importance of mangroves is simply taken for granted. In others, environmentalists make the argument in favor of the continued existence of mangroves.

Mangroves, indicated Cecilia Chapa, coordinator of Greenpeace’s Oceans campaign, are one of the most important ecosystems in our country, since they act as barriers against the erosion of the coastline and protect the population from hurricanes and storms, in addition to serving as a water filter and purifiers. Chapa estimated at some 14 billion 850 million dollars per year the environmental services that mangroves offer to the fisheries of Mexico. She noted that data published by Nature demonstrate that the destruction of the mangroves in the Mexican Caribbean is seriously affecting fisheries production and the integrity of the reefs that attract thousands of tourists each year.<sup>198</sup>

In still others, it is the journalists themselves who make the argument:

“Mangroves help to maintain a large part of the estuarine and marine food web and

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<sup>197</sup> La Jornada, "Amenaza proyecto Paraíso del Mar con dejar sin agua a La Paz," *La Jornada*, November 14, 2006.

<sup>198</sup> J. Balboa, "Dan diplomas a legisladores que contribuyen a destruir manglares," *La Jornada*, August 19, 2004.

even fishing depends directly on the existence of mangroves and its capacity to produce organic nutrients and to serve as nurseries.”<sup>199</sup> In the articles where arguments in favor of mangroves are put forth, it is in the terms just described: practical and scientific. Impassioned appeals for preserving “Nature” are extremely rare. Rather, mangroves’ benefits to humans predominate. In particular, their importance for fisheries is described, as well as their ability to act as a barrier against hurricanes, an argument made more frequently after Cancun was struck by Hurricane Wilma in 2005. The debate is thus framed not as humans versus nature, but rather powerful actors versus fishermen and coastal residents.

For the most part, discourses adopted by private investors do not deny the importance of mangroves. Rather, they either do not speak directly to the issue of mangrove deforestation (instead adopting language emphasizing the need not to interfere with investment) or they argue that a balance needs to be struck between conservation and development, and that over-regulation would destroy the tourism industry. The president of the Mexican Association of Hotels and Motels, Jesús Nader Marcos, “indicated that the rejection [of the proposed revisions to NOM 022 in 2006] was not due to the rise in costs that the conservation of mangroves would entail, but rather that one could not have tourism developments”.<sup>200</sup>

Similarly, Fonatur head John McCarthy “declared that Fonatur does not downplay the importance of mangroves, and admitted that it is necessary to regulate on the subject, but ... that ‘a strict regulation would paralyze tourism

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<sup>199</sup> E. Ávila Pérez, "Detectan graves daños en laguna de Pajaritos," *El Universal*, January 27, 2005.

<sup>200</sup> Posada García, "Tendrá que esperar"



development, which has happened in some countries. Because of this it is essential to take care not to overregulate and kill the hen with the golden eggs.”<sup>201</sup>

Representatives of Semarnat typically argued for the compatibility of tourism investment and mangrove protection, at the same time asserting their role in environmental protection,

[The Subsecretary of Policy Planning of the Secretariat of Environment and Natural Resources, Fernando Tudela] noted that “it’s not a question of sacrificing the mangrove but rather of respecting the fundamental function that it fulfills. One cannot establish a percentage to preserve, because there are some that must be conserved one hundred percent, and others that, with a guarantee of extensive replacement, can be lost to have a great social benefit.”<sup>202</sup>

One notable aspect of the public sphere debate during the 2004-2007 period was that, aside from increasing references to hurricanes, there were no significant changes to the discourses in the public sphere as reflected in the newspaper articles.

### **The Legislative Process**

Documentation of the legislative process that led to the passage of the LGVS amendment includes the initial initiative and explanation of motives presented by on behalf of the parliamentary group of the PVEM, the recommendation made by the Senate commissions to which it had been turned over for study, the minutes from the plenary debate in the Senate, the recommendation made by the commissions in the Chamber of Deputies, and the minutes from the debate in the Chamber of Deputies (although this last was virtually non-existent).

Sen. Gloria Lavara Mejía’s initiative and explanation of motives catalogue many of the benefits provided by mangroves. Regulation of the flows of water, high ecosystem productivity, habitat for a multitude of species, maintenance of water

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<sup>201</sup> Ibid.

<sup>202</sup> Ibid.

quality, and cultural values all find a place in the document. Absent are references to storm and erosion protection. Like some of the newspaper articles, there are repeated references to the monetary value of the functions carried out by mangroves, though the term “services” is not used.<sup>203</sup>

These are followed by an accounting of the area and rate of loss of mangrove ecosystems in Mexico, as well as the causes, foremost among them port development and tourism infrastructure.

The last portion of the document addresses the fate of NOM 022 and expresses much the same outrage found in NGO quotes in the press:

Without a doubt, these numbers indicate to us the urgency of promoting the protection and conservation of this worthy ecosystem. However, far from fulfilling the commitment to keep Mexico up to date and at the vanguard on this subject, the environmental authority has responded to the interests and pressures of the tourism and communications sectors.

Since the beginning of this year, both sectors strongly pressured the Secretariat of Environment and Natural Resources to eliminate the “legal obstacles” that impede the development of port and tourism infrastructure. Even more, they accused that in spite of not having technical and legal basis it was holding back investment of approximately 500 million dollars. Under the increasing pressure, Semarnat decided that the law would no longer be in the service of nature and carried out modifications to the Official Mexican Norm NOM-022-ECOL-2003.

This irrational and unethical action opened the possibility of destroying coastal wetlands and leads us to question, what technical bases, in addition to those already mentioned here, do those sectors need in order to understand that it is imperative and urgent to protect and conserve the few hectares of mangroves that remain in the country? <sup>204</sup>

The December 13, 2005 Senate commissions’ report to the plenary recommended that the initiative be approved. It cites the many administrative measures that had already been taken to preserve mangroves and then argues that these measures have been ineffective, with port and tourism infrastructure construction again leading the list of causes of mangrove deforestation. The report

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<sup>203</sup> Senado de México, *Iniciativa con proyecto de decreto que reforma la Ley General de Vida Silvestre*, LIX Legislatura, September 30, 2004.

<sup>204</sup> Ibid., 3

provides a briefer list of the benefits provided by mangroves, but includes protection of the coast from storms and erosion, and uses the term environmental services.<sup>205</sup>

During the debate following the presentation of the commissions' report, Sen. Victor Manuel Torres Herrera of the PAN spoke against the initiative:

In the Parliamentary Group of the National Action Party, we share some of the concepts expressed in the explanation of motives of the proposal under comment.

However, we consider it very serious to approve a reform in the terms in which it is presented, simply because it holds back economic development, scientific research, the development of plant health projects, and puts obstacles in the way of projects of hydraulic engineering, above all when the mangrove zone extends into urban areas or adjacent to Mexican ports.<sup>206</sup>

The PAN parliamentary group thus reflected the concerns expressed by the tourism industry in the public sphere. The remainder of the debate, however, focused not on these key issues of economic development and infrastructure construction, but rather on the wording of the initiative, possible contradictions, and whether or not it would actually be in the best interests of mangrove ecosystems. To address these concerns, an alternative phrasing was proposed and accepted. Sen. Emilia Patricia Gomez Bravo spoke in favor of the initiative, arguing that mangroves are in clear decline and warrant the same protection as other endangered species. As noted above, the initiative was approved in the voting that followed.<sup>207</sup>

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<sup>205</sup> Senado de México, *Dictamen de las Comisiones Unidas de Medio Ambiente, Recursos Naturales y Pesca; y de Estudios Legislativos, Primera, con proyecto de decreto que adiciona un artículo 60 TER, y adiciona un segundo párrafo al artículo 99 de la Ley General de Vida Silvestre*, LIX Legislatura, December 13, 2005.

<sup>206</sup> Senado de México, *Minuta, Dictamen de las Comisiones Unidas de Medio Ambiente, Recursos Naturales y Pesca; y de Estudios Legislativos, Primera, con proyecto de decreto que adiciona un artículo 60 TER, y adiciona un segundo párrafo al artículo 99 de la Ley General de Vida Silvestre*, LIX Legislatura, December 13, 2005.

<sup>207</sup> Cámara de Diputados del H. Congreso de la Unión, *Proceso Legislativo*

In the Chamber of Deputies, the Commission on Environment and Natural Resources provided an extensive justification for its recommendation that the plenary approve the measure. The report emphasized the global importance of Mexico's mangroves, their contribution to habitat, water filtration, culture, and protection from hurricanes and tsunamis. Again, economic estimates were included for some of these functions. Estimates of mangrove coverage and loss were followed by examples of attempts to protect them, including under the Ramsar Convention. These efforts were deemed insufficient, and the commission recommended passage of the proposed decree. This occurred with no debate and the support of all three parties.<sup>208</sup>

### *Conclusion*

NOM 022 was written by experts and passed through two public consultation periods. There was no evidence that the process of developing NOM 022 was initiated by a strong movement in the public sphere, nor that it was debated in the public sphere to any significant degree, despite the opportunity provided by the public consultation periods. The regulation can therefore be considered to be the product of an administrative rationalism that has long been characteristic of many sectors of the Mexican state.

The weakness and permeability of that state to private interests was revealed in the modification of NOM 022 that occurred in 2004, when the required public participation mechanisms were omitted from the process by the leadership of

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<sup>208</sup> Ibid.

Semarnat, leading to changes favoring the tourism industry over mangrove protection.

The LGVS amendment was proposed as a direct response to the weakening of NOM 022, and while it itself failed to capture the attention of the newspapers while it was in Congress, the time it spent there was one of increasing attention to the mangrove issue in the public sphere, pushed largely by the national environmental NGOs. The votes in favor of the LGVS amendment suggest that legislators were responsive to the pressure building in the public sphere, particularly in the case of the Chamber of Deputies, where all three major parties supported the measure.

While the process of debating and passing the mangrove law was to all appearances a quite democratic process, the debate in the public sphere cannot be considered to embody deliberative democracy. The number of participants was quite small, limited essentially to environmental NGOs, tourism investors, and government entities. While mangroves' benefits for fisheries were frequently invoked, fishermen's voices were not heard directly. Nor were the voices of local populations working in the tourism sector, nor those vulnerable to natural disasters that mangroves might protect. Furthermore, there was no evidence of attempts at creative problem solving or of changes in perceived interests on the part of any of the participants to the debate. When the law emerged from Congress, and coastal governors and Sectur became publicly involved, the sharp divisions and immobility of positions remained. This case is thus more of an example of liberal democracy at work than deliberative democracy.

The availability and clarity of scientific information played an important role in the mangrove story from the beginning: it was stated at length as justification for NOM 022, it was referred to briefly but consistently by NGOs in the media, and it was marshaled in the arguments for the LGVS amendment. Those opposing stringent mangrove protection did not have scientific information supporting their position, and were thus limited to criticizing its impact on investment and economic development.

This case thus exemplifies a process in which scientific information led both the initial policy process and the subsequent civil society movement, and formed the basis for the strong environmental law that ultimately ensued. The sharp divides among stakeholders in the public debate were not eased in any deliberative process, and the law reflects the all or nothing approach of prohibition, similar to traditional approaches to endangered species, treating the entire ecosystem as endangered. The effectiveness of the law will depend on the willingness and ability of the environmental authorities to enforce it.

## Chapter 8: Deliberation, Participation, and Sustainable Development in Coastal Mexico

This dissertation has sought to test the importance of public deliberation and participation in policymaking for outcomes related to land use in Mexico. It has focused on coastal areas, where some of the strongest pressures on land use occur as countries seek to diversify their exports and expand employment through tourism. Three cases were examined: the planning and development of Cancun (based on secondary sources), the Puerto Morelos Urban Development Plan, and the Mangrove Law, which used newspaper surveys combined with analysis of government documents.

Mexican laws mandate public participation in a variety of policymaking settings. Most important from the perspective of this dissertation, they mandate participation in the formulation of Urban Development Plans (PDUs) and Ecological Zoning Programs (POET/POELs). It is not mandated in the process of formulating Touristic Zoning Programs, opening to question what the impact of that portion of the new tourism law will be. If the touristic zoning has a significant impact on land use regulation, it would be a setback in terms of the inclusion of participatory measures in land use planning. Finally, public participation is required in the creation or modification of Official Mexican Norms (such as NOM 022 in the mangrove case).

It should be noted that these participation requirements do not specify what the impact of that participation must be. It is required only that the output of the

participatory processes be an input into the policymaking process – one of many inputs. So while regulations might require public comment periods, public hearings, citizens' councils or other participatory mechanisms, the connection to the exercise of power is frequently absent.

In the first case examined for this dissertation, that of Cancun, a large portion of the development pre-dates the participation requirements. Hence, a very non-participatory development process took place. The process was led by technocrats and then by businessmen within Fonatur, the National Fund for Tourism Development. Public participation was non-existent although there was some public opposition at the local level. Local views and knowledge were not taken into account in the planning process.

The process as it was carried out led to highly unsustainable land uses. Beach erosion, pollution of the water table, and eutrophication of the Nichupte Lagoon System are three significant impacts of the development patterns in Cancun over the past 40 years. Ecosystem services such as nutrient cycling, water purification and provision, biodiversity, and defense against natural disasters are all affected adversely by the patterns of land development in Cancun. In addition to environmental shortcomings in Cancun, development was not designed to benefit diverse social groups, with investors the group of most concern.

To take one example discussed in the dissertation, one can only imagine that a process that involved participation by the residents of the city would have resulted in the construction of sewerage systems being a higher priority, thus avoiding some of the most significant environmental problems now confronting the



city. Participation by a broader spectrum of specialists would have also benefited the environmental outcomes of the city's development. Destruction of the fragile dune ecosystems might have averted had their importance been articulated in the policymaking process, but only if there was a link between participation of the specialists and the decisions actually made. However, social and environmental goals were not articulated explicitly; there was no reason for participation either by the public or by environmental specialists in pursuing the narrowly defined economic goals.

Cancun was developed in a way that was dependent on large capital, and characterized by the close relationship between government and the developers, supported by international development banks for financing. National, state, and municipal officials have maintained and cultivated extensive links with current and prospective investors in the tourism industry in the region. The state governor and municipal presidents court investors at conventions and in specially arranged meetings. In addition, the municipality receives revenue from tourism developments. In contrast, they have a limited connection to citizens. All these have had implications for the development of Puerto Morelos. There are all the ingredients in place for public input to be disregarded, which is what occurred in the case of the Puerto Morelos Urban Development Plan.

But what was the content of that public input? Did it indeed incorporate more diverse concerns? Did it promote environmental sustainability? Did it incorporate local knowledge? In short, did it fulfill the hypothesized characteristics of policies that result from a deliberative process? Table 8-1 summarizes the

characteristics of the development of Cancun, the output of the legally mandated public participation in Puerto Morelos, the final Puerto Morelos PDU, and the Mangrove Law with respect to the characteristics hypothesized for policies in which there is significant deliberation. The Puerto Morelos case is divided into the output of the participatory process and the final document because the former demonstrates the outcome of a deliberative process while the other is the final outcome of the government policymaking institutions.

The participatory workshops for the Puerto Morelos PDU were more deliberative than the debate that occurred in the public sphere more broadly and much more so than that which took place during the process of planning the development of Cancun. This is evident in the outputs of the workshops, which had all the characteristics that would be predicted by theory for the product of a deliberative process: environmental and social concerns were integrated with each other in a number of places; the interests of diverse social groups were represented; local knowledge was called upon; scientific knowledge was cited in several places; and the environmental content of the proposals was relatively strong.

In contrast, in the final Puerto Morelos PDU social and environmental concerns are dealt with separately – the links between them are not explored, with the exception of a discussion of a potential recycling project. There is no attention to the diverse groups residing in the area, local knowledge does not serve as a foundation for development planning, and the scientific knowledge contained in the PDU does not contribute to the zoning and density decisions actually made there.

Table 8-1: Comparison of Policy Characteristics

<b>Policy Characteristic</b>	<b>Cancun Development</b>	<b>Results of Puerto Morelos Public Workshops</b>	<b>Final Puerto Morelos Urban Development Plan</b>	<b>LGVS 60Ter: Mangrove Protection Law</b>
Integrate social and environmental concerns	Environmental concerns virtually ignored until recent past. Social concerns received limited attention. Primary focus was on economic criteria.	The Tourism and Urban Development and Roads tables included a number of environmental concerns considered to be relevant to the economic and social development of the town, including conservation of the marine park and restoring the hydrological flows between ecosystems. The Environment table included an objective to address urban backwardness.	Presents environmental and social concerns as independent of each other. Zoning does not reflect an integration of social and environmental concerns.	Government discourses emphasize social benefits of mangroves. Law is a strictly environmental one.
Address concerns of diverse social groups	Belated attention to underprivileged areas, particularly irregular settlements; focus on investors.	Tables include measures directed toward the wellbeing of multiple groups, including micro-enterprises, residents of disadvantaged areas, and agricultural producers, among others.	Calls for construction of infrastructure for population as a whole but does not address any groups in particular.	Government discourses invoke mangrove benefits for fishermen and coastal residents. Law does not specifically address the concerns of diverse social groups.
Incorporate local knowledge	Knowledge was very centralized.	Objectives based on local assessments of needs and opportunities.	Zoning based on region-wide studies of future tourism potential.	Government discourses make use of national and international knowledge.
Incorporate scientific knowledge	Included knowledge of international markets, but little environmental scientific knowledge	References to ecosystems and hydrological flows; ecological significance as criterion for protected areas.	Document includes extensive scientific knowledge, but that knowledge is not used in determining the zoning.	Government discourses make use of scientific knowledge of services provided by mangroves and rates of loss.
Include stronger environmental provisions	Weak environmental protection	Multiple environmental objectives, including the use of POET to define zoning densities.	Weak environmental aspect; zoning based on economic criteria.	Strong environmental law.

Overall, in stark contrast to the input from the participatory workshops, the PDU is weak in its protection of the environment, if not outright detrimental to ecosystems including forest, mangrove, and reef. It is a threat to groundwater if the municipality is unable or unwilling to invest in adequate sewerage systems. The public participation transmission mechanism was undermined and over-ruled by a municipal planning board and municipal administration that favored rapid expansion of the tourism economy and the population base, due to their close connections to the tourism industry and the interest of the municipality in receiving the additional revenue associated with growing tourism developments.

The national case dealing with mangrove protection was similar to the other cases in that there were strong vested interests arguing against stricter environmental protection, but the outcome of the case was entirely different. Mangrove protect began with a strong regulation designed by “experts” in the environmental bureaucracy. It became politicized when the tourism industry successfully pushed for its weakening. With the politicization of mangrove protection, it became the subject of significant newspaper coverage, particularly involving national environmental groups. The Mangrove Law (LGVS 60Ter) reflects the concerns articulated in that coverage, and the debate in the Congress over the law also articulated the discourses present in the newspaper coverage, suggesting that the debate in the public sphere had an impact, though it was not entirely deliberative in the sense that it was a highly polarized debate with relatively few interests represented. Civil society played a role that was more traditional for a

liberal democracy in that it affected the actions of elected representatives through the pressure of interest groups rather than through any reasoned deliberation.

The result is a strong environmental law, one without social components (though the discourses promoting the law focused on the benefits of mangroves for humans), that does not address the concerns of particular social groups, and that is based heavily on scientific knowledge. Thus the law has some characteristics associated with an active public sphere, and others that are not, as might be expected from the nature of the participation, which was not deliberative and therefore less likely to show the characteristics described above. The law was however quite stringent and represents the success of the environmental groups in articulating their message in a way that appealed to lawmakers, to the degree that the lawmakers were willing to vote against a prominent industry, albeit one more powerful locally than nationally.

Thus in Cancun we see a non-participatory process of development planning leading to environmentally and socially unsustainable patterns of development. In Puerto Morelos, an extensive process of public participation, with deliberative elements, led to a set of environmentally and socially sustainable recommendations, which, however, were not followed in the final PDU document. Finally, in the mangrove case, substantial public sphere debate was associated with the passage of a law mandating strong environmental protection.

### *Implications for Coastal Development in Mexico*

Based on what was learned from the cases in this dissertation, some suggestions are offered here as to what would be necessary for sustainable coastal development in Mexico.

First, truly participatory processes that would elicit locally specific development strategies for each region would be advantageous. The Puerto Morelos case suggests that local participation – particularly deliberative participation – is indeed conducive to sustainable development. It led to development strategies that were locally appropriate, beneficial to diverse groups, and took into account the natural environment (although, as noted above, these recommendations were ignored in the final document). The Cancun case suggested that the reverse is also true: non-participatory development processes are not beneficial for environmental quality or equitable development. The implementation of the participatory requirements provided for in legislation and the assurance that participatory output actually is incorporated into the final policy would be beneficial to sustainable development in coastal areas.

Second, there would need to be put in place zoning and other land regulations that protect hydrological flows, dune systems, and natural areas. According to some activists, the Ecological Zoning Programs (POET/POEL) provide a basis for accomplishing this as they take into account the natural vocation of the land in their zoning. However, the more recent POET/POELs exclude centers of population from their purview. The creation of comprehensive POET/POELs and their application throughout the region would benefit the protection of natural

ecosystems. This is provided that the greater weight placed on them does not result in the same kinds of manipulation that currently occurs with the creation of PDUs. The requirement that the product of public participation be included in the zoning would be one safeguard for the process, together with participatory processes that encourage the participation of diverse sectors of society.

Whether in the form of PDU or POET/POEL, the zoning would need to place limits on the tourism development of the coastal area. If this is not done, there will continue to be rapid influxes of population to take the jobs created. The municipalities have shown themselves to be incapable of managing for social development and environmental protection in the context of rapid population growth. The existence of numerous irregular settlements, the failure to provide services, and the social disintegration in the poorer areas of Cancun and Playa del Carmen are indicative of that failure. This would require a willingness to stand up to the strong tourism lobby in favor of a more moderate development strategy.

A slower rate of in-migration would make more feasible a commitment on the part of municipal governments to invest the resources in providing wastewater treatment services to all of their residents. Such services are necessary not only for the quality of life of the residents, but also to prevent pollution of water table and, consequently, the beaches and ocean on which the economic wellbeing of the coastal zone depends.

The environmental authorities are also important partners in any strategy for sustainable coastal development. Semarnat would need to show a greater willingness to decline projects whose environmental impact assessments show

them to have unacceptably high impacts. In some cases, developments have not gone through the required environmental impact assessment process. However, in other cases Semarnat has approved projects with impacts that are excessive by any measure. Political will to protect the environment must begin with the President and the Secretary of the Environment and Natural Resources and reach down into those making decisions about individual projects in coastal areas.

Finally, for its part, Profepa would need to have the resources and political will to consistently close down hotels and other developments that do not have the proper permits or do not abide by the limits placed on them by their permits. Equally importantly, the penalties imposed on violators need to be large enough to actually discourage the illegal behavior, which is not currently the case.

#### *Implications for Mexican Democracy*

The cases in this dissertation lead to some insights and conclusions with respect for the state of democracy in Mexico. First, the responsiveness of Congress and the Presidency to the public pressure on the mangrove case suggests that at the national level, where the tourism industry is one of many industries, these bodies will oppose the stated interests of at least the tourism industry in favor of legislation that is socially desired and scientifically sound. In other words, state capture by economic interests is by no means complete.

Second, stakes are higher at the state and municipal levels, where the presence of a large industry dominates local politics to a greater degree than it does at the national level. Mangrove protection on a sweeping scale, for example, would



not have happened at the state or municipal level, due to the dominance of the tourism industry. In fact, an overwhelming majority of coastal state governors signed a petition to President Calderon not to publish the mangrove law. In cases with similar conditions, where localities are dependent on large industries with great political clout, decentralization can lead to adverse environmental and social consequences.

Third, at least in Quintana Roo, participation requirements do not translate into policy impact. In the case of the Urban Development Plan, participation was ignored. In the case of POET/POELs, participation has had more of an effect, but the policies are marginalized. Even in the case of POET/POELs, there have been allegations of changes made by government officials to the output of the participatory process. In order for participation to have real impact, there would either need to be a weakening of the impact of dominant economic interests on the process, or the laws mandating participation would need to be amended to specify how the outputs of the participatory process will be incorporated into policies.

Fourth, established procedures and participation requirements are sometimes ignored altogether, as in the case of the modification of NOM 022 to permit the destruction of mangroves. This suggests that rule of law is not yet consolidated in Mexico, a fact supported also by the permitting by Semarnat of projects that are in violation of environmental regulations.

Finally, based on the newspaper surveys and accounts of the Puerto Morelos participatory process, poorer groups in Mexico are, in fact, quite marginalized. The ability of the poor to participate in public debate is highly limited, as is their ability

to participate in the public participation mechanisms mandated by law. It is likely that the lack of a combination of material and non-material resources are responsible for the failure of the poor to participate. Social capital is highly unevenly distributed in these coastal communities, with established wealthy groups and (to a certain degree) academic and environmental groups more closely networked than the poorer segments of society, particularly given the looseness of the fabric of society caused by the high rates of migration. Any groups that may exist are virtually invisible to the media. Social capital theory would predict that greater networking within and between these communities would enhance their ability and willingness to participate in the decisions affecting them, where those opportunities are present.

### *Concluding Thoughts*

International declarations and deliberative democratic theory both suggest that greater participation – particularly deliberative participation – on the part of the public will lead to more sustainable policies. This is because deliberative participation has the potential to enhance information sharing and overcome bounded rationality, improve communication among people with different worldviews, contribute to distributive justice, and increase the legitimacy of the resulting policy decisions.

This dissertation has explored that assertion in the context of coastal land use in Mexico: through the absence of participation in Cancun's development, through the disregarded participation in Puerto Morelos, and through the rising

public discourses and limited participation in the case of the national Mangrove Law. These cases suggest that public participation does in fact make a difference when it comes to policies for sustainable development, and that the more deliberative it is the more integrated and knowledge-based the policy will be. This can provide guidance for policymakers when considering what types of participatory mechanisms to establish.

However, the age-old problem still exists that some people's voices are heard more readily than others, through connections between large economic interests and government officials. Strengthening the impact of transparent and open participatory mechanisms, together with measures that empower marginalized groups to participate would be necessary to combat that problem. It is also essential to reduce the influence of corruption.

Deliberative participation is not a cure-all. There will still be occasions when participants opt for less sustainable policies. However, as these cases have demonstrated, it can be a counterweight to economic interests and a force for socially and environmentally sustainable policies, when it is not overpowered by large business interests or other less sustainable forces. Evidence from this study suggests that greater public debate and participation, particularly deliberation, benefits sustainable development by increasing the integration of social and environmental concerns, the incorporation of the concerns of diverse social groups, the incorporation of local and scientific knowledge, and the inclusion of stronger social and environmental provisions.

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