LOCAL PARTICIPATION, AND
THE STRUCTURES OF POLITICAL AND BUREAUCRATIC
WATER MANAGEMENT
IN TIJUANA, MEXICO

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ABSTRACT

Clean water and adequate sanitation are crucial for community development and a reduction of waterborne diseases. Despite this certainty, a viable process for achieving this goal has yet to be formulated. This public health and development problem is not from a lack of hydraulic or biomedical knowledge. Rather, the failure to provide community services and infrastructure is rooted in the dynamic interplay between a hyper formalized public sector bureaucracy and the informal practices of political parties and patron-client relationships.

Using qualitative, semi-structured interviews and participant observation, this study undertakes a narrative analysis of three communities and their interactions with political parties and the public sector in Tijuana, Mexico. Bureaucratic incapacity prevents the effective management of water and sanitation planning, programs, and infrastructure development. A sociological analysis of organizations is applied to the policy subsystem involving the persistent prevalence of waterborne diseases. Faced with an unresponsive and inefficient public sector, community groups direct their local development efforts towards political parties and the strategic use of clientelist relationships in order to procure health care services and community infrastructure. The role of community participation, as a means toward local empowerment and political co-option is examined. This study also highlights the need for further research in the areas of public accountability, public vs. private water management, and the role of participation in community development.
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TABLE OF CONTENTS

CHAPTER 1: CONTEXT AND CONCEPTS ............................................. 1
  FACTORS ASSOCIATED WITH THE PREVALENCE OF WATERBORNE DISEASE ... 2
  TIJUANA AND THE EPIDEMIOLOGICAL TRANSITION ........................................... 5
  POLITICAL CONTEXT ......................................................................................... 7
  THEORETICAL CONCEPTS ............................................................................... 18
    Policy Systems and Narrative Analysis ............................................................. 19
    Institutional Capacity ..................................................................................... 21
    Participation .................................................................................................. 23
  THESIS OUTLINE .............................................................................................. 27

CHAPTER 2: METHODOLOGY ................................................................. 29
  DEVELOPING A RESEARCH QUESTION AND METHODOLOGY ...................... 30
  FIELDWORK AND ALTERATIONS ....................................................................... 33
  KEY INFORMANTS AND MULTIPLE METHODS ................................................. 37
  RESPONDENTS .................................................................................................. 41
  INTERVIEW PRACTICES ...................................................................................... 43
  ANALYSIS .......................................................................................................... 46

CHAPTER 3: BUREAUCRATIC INCAPACITY ............................................... 49
  SOCIAL THEORIES OF BUREAUCRACY ............................................................... 50
    Institutional Integration .................................................................................. 51
    Integration between Institutions ..................................................................... 60
    Formal Community-Institutional Requirements ............................................ 65
    Formal Client-Bureaucratic Relations ............................................................ 70
    Dynamics of Formal Job Classification .......................................................... 75
    Informal Social Rituals .................................................................................... 81
    Public Disclosure ............................................................................................. 83
    Bureaucratic Planning and Prediction ............................................................. 87
  CONCLUSION ...................................................................................................... 94

CHAPTER 4: COMMUNITY PARTICIPATION: BETWEEN LOCAL EMPOWERMENT AND POLITICAL CONSTRAINT ......................... 98
  CLIENTELISM ..................................................................................................... 100
    Structures of Political Patronage ................................................................... 101
    Community Recruitment .................................................................................. 110
    Patron-Client Services .................................................................................... 115
    Patron Benefits ............................................................................................... 121
Chapter 1

Introduction: Context and Concepts

Little debate exists surrounding the importance of adequate supplies of clean water and sanitation systems for human health. However, current water supply and management practices are causing a “crisis” to the environment and to human health (Cosgrove & Rijsberman, 2000; deVilliers, 1999; World Health Organization, 1992). The provision of water and sanitation systems has a positive effect on community development by reducing the prevalence of waterborne disease. Yet the provision of these public resources are framed by social, economic, political, and institutional factors that constrain their general distribution.

Using a case study from Tijuana in Mexico's state of Baja California, this study explores some of the factors responsible for the slow progress in providing water and sanitation, and the resulting health benefits, to urban communities in developing countries. In this introduction, I outline certain of the factors associated with the persistent prevalence of waterborne disease and the social, economic, and political background to this policy problem. In addition, this introduction defines the broader theoretical concepts of policy systems, narrative policy analysis, institutional capacity, and participation that have contributed to the development of research questions as well as their subsequent measurement. The later discussion on policy systems and the narrative policy analysis highlights the theoretical approaches that have structured much of the analysis within this study. The sections on institutional capacity and participation explore how these terms are used in the context of international development and are an
introduction to the themes of Chapters 3 and 4. At the end of this chapter, I provide a brief outline of the succeeding chapters in this study.

Factors Associated with the Prevalence of Waterborne Disease

The World Health Organization states that “quality and availability of water supply, sanitation, and health care services are perhaps the most important” factors to the health of people living in developing countries (1992: 10). The poor infrastructure development has resulted in the issue of water and wastewater contamination to be one of the largest public health concerns in the developing world. More than 1 billion people throughout the world lack access to clean drinking water, while over 3 billion live without hygienic sanitation systems (Cosgrove & Rijsberman, 2000). The diseases that are transmitted through waterborne or water-washed pathogens are cholera, typhoid, diarrheas, dysentries, amoebiasis, hepatitis A, polio myelitis, and intestinal worms. Diseases transmitted through water-washed pathways are trachoma, skin infections, leprosy, scabies, and louseborne typhus.

Not all of these diseases are prevalent in Tijuana. In 1995, gastro-intestinal diseases, after respiratory infections, were the second leading cause of mortality in Tijuana (IMPLAN, 1995). Meanwhile amoebiasis, hepatitis A, and skin infections are also important public health issues (Ilena¹, INEQI, 1999). Although cholera is still labeled as a significant public health concern by federal health policies and the Baja California State Ministry of Public Health, Tijuana has never reported any cases of this disease (Francisco). Leprosy and typhoid are similarly not a public health concern in Tijuana and therefore not relevant to this study.
The World Health Organization states that the development of water and sanitation infrastructure should be the first priority of a municipality (WHO, 1992). Diseases that are transmitted through unclean water and water contaminated by unsuitable disposal of wastewater are readily preventable with the requisite interventions. Plainly, for a reduction in mortality, morbidity, and infant mortality, under-developed communities need to be connected to water and sanitation systems (White, 1993; WHO, 1992).

The subsequent reductions in waterborne diseases from access to clean water and sanitation systems are supported by previous research in Africa. For example, study in Lusaka, conducted by the WHO for one year, traced the incidence of disease before and after a community received piped water. Researchers found a 37% reduction of typhoid after the households had domestic water system (WHO, 1992). That WHO report did not describe if the piped water supply alone caused the reduction in morbidity or whether other factors were at play. Nor did that report distinguish whether the improved community health was the result of increased quantities of domestic water or if the benefits emanated from access to treated water. The WHO did state, however, that a person consume 250 L of water a day for drinking and hygienic functions. Yet, the Lusaka study did not indicate if the community inhabitants were able to consume increased quantities of water to improve their health status. Even if the water had not been treated, access to water supplies that originate further from local groundwater sources and potential contamination, untreated wastewater disposal must have played an important role in the dramatic reduction of waterborne diseases in Lusaka. It follows that although typhoid is not a disease common in Tijuana, the Lusaka study does demonstrate

\[1\] For a listing of all Informant Sources, Their Role, and Number of Interviews see Appendix B.
that community connection to municipal water supplies is an integral step towards reducing rates of preventable waterborne diseases.

White (1993) provides a more thorough discussion on the relationship between water and sanitation infrastructure development and human health. In terms of human health, a distinction exists between quantity and quality of water. In rural areas, the quantity of water is a more important issue to human health, while in urban settings, water quality and the treatment of waste water loom as more significant health issues (White, 1993). White (1993) also argues that a clean supply of domestic water is the most important consideration in bringing down infant mortality rates in developing countries. This element involves a combination of factors: access to an adequate supply of water as well as water treatment. If water treatment is not done in conjunction with improved water supply, then the extension of infrastructure can encourage the spread of disease (White, 1993).

Data are available showing that the lack of water and sanitation infrastructure throughout communities in Tijuana poses a serious public health concern. Thus, ground water in Tijuana has been found to be contaminated by fecal coliforms and enterococcus, the presence of which indicates sewage contamination and human fecal matter in the water (Brown & Lopez, 1996; Metzner, 1989). Fecal contamination from untreated sewage discharges is particularly high during the dry, summer season when rainwater cannot dilute the human waste in the groundwater. Meanwhile, the concentrations of bacterial contamination are much less severe during the wet season (Brown & Lopez, 1996).
Communities that do not have tap water must rely upon groundwater or private water trucks for their drinking supply. The Ministry of Public Health (del Real Mora, et al., 1997) labels these under-developed communities as “High Risk.” These High-Risk communities have heavy burdens of waterborne diseases due to the levels of contamination found in the Tijuana groundwater. This groundwater contamination facilitates the spread of waterborne diseases among communities that rely upon untreated water for domestic drinking and hygienic functions (Ilena, del Real Mora, et al., 1997).

**Tijuana and The Epidemiological Transition**

The Epidemiological Transition theorizes that advances in socio-economic levels and improvements in associated factors such as housing, clean water, sanitation, and education also cause a reduction of infectious and parasitic diseases. The Epidemiological Transition is predicated upon a model outlining the developmental phases that countries pass through based on social, economic, and demographic factors. These phases are related to distinct stages of development, each characterized by separate patterns of disease. The presumption is that developed countries have already passed through the stages of infectious and parasitic diseases and are currently in the stage of chronic and degenerative illnesses.

Yet, this strict dichotomy between “developed” and “undeveloped” has become a less meaningful framework to the contemporary context of many developing countries throughout the world (Frenk, et al., 1989). As an example to highlight the argument against the current applicability of the traditional conceptualization of the epidemiological transition, Frenk, Bobadilla, Sepulveda, and Lopez-Cervantes (1989)
categorize Mexico as "Middle Income Country" characterized by an "epidemiological polarization." This polarization highlights that a portion of Mexican society has already completed much of the socio-economic transition integral to the health status of the industrialized, developed countries. In this construction, the elite stratum of Mexican society predominantly suffers from chronic and degenerative diseases, specifically heart disease, diabetes, and vehicle accidents (Frenk, et al., 1989). In contrast, a portion of Mexico's population is still suffering from infectious and parasitic diseases such as diarrhea and enteritis diseases, influenza, pneumonia, and childhood diseases, the diseases that are typical of undeveloped countries (Frenk, et al., 1989). In 1980, 29% of mortality rates were classified as chronic and degenerative diseases, while 17% of the mortality rates were due to infectious and parasitic diseases (Frenk, et al., 1989).

Mexico's polarized health status results from the broadly divergent pace of development between Mexico's social classes. Some of the factors that are associated with the persistent prevalence of infectious and parasitic diseases in Mexico include poor living conditions (water, sanitation, housing, etc.), geographical location (i.e., rural vs. urban residence), inadequate health insurance, marginal occupation, low income level, political incorporation or disenfranchisement, and institutional accessibility (Frenk, et al., 1989).

Tijuana has had a dramatic urban growth rate. In 1990, the city's population was estimated to be 2.4 million (Castro-Ruiz, 1997). Most of this growth has come in the later part of the 20th century, as Tijuana has steadily experienced a five to fourteen percent annual growth rate between 1940 to 1990 (Castro-Ruiz, 1997). Against the backdrop of this explosive growth, the city has been consistently behind in the
development of water and sanitation infrastructure to meet the ever-growing population and infrastructure needs. At the same time, the municipal water management institution has been persistently plagued by problems such as debt, technical incapacity, and obsolete and inefficient water management systems. Furthermore, the absence of reliable and systematic data collection on the water system impedes the ability of the city to effectively plan the development of future systems (Castro-Ruiz, 1997). Thus, this lack of control over the growth of Tijuana, combined with the institutional incapacity of the public water agencies, has led to unequal access to municipal water and sanitation infrastructure.

The division between the “haves and the have-nots” in Tijuana is further exacerbated by the city’s distinct topography. Tijuana is located in an arid region with topography of canyons, gorges, and hills. This geography is important to state, as the topography historically has made it difficult for the new urban areas to install water and sanitation systems, a problem made worse by an absence of municipal planning and coordination of new settlements. This variable of topography has made it difficult for some communities in Tijuana to gain water and sanitation infrastructure (Ganster, 2000); however, the three field-sites from this study were not subject to this physical limitation.

Political Context

For most of Mexico’s history as a democratic republic since the 1930s, the Institutional Revolutionary Party (PRI) has dominated federal, state, and municipal politics. According to Oxhorn (1995), Mexico’s stratified form of development, between the “haves and the have-nots”, is the result of a lack of sustained political opposition or
adversarial interest groups. The domination of the PRI in the state has resulted in the concentration of benefits from modernization and development in the hands of an elite population, further able to fortify its privileged social, economic, and political situation by creating and maintaining close relationships to people with authority over the distribution of goods and services in the society. Urban elites have a very short connection to the federal power base in Mexico City. Rural and agricultural elites who often live in urban centers, particularly Mexico City, the federal district, are closely linked to the urban business elite (Oxhorn, 1995). These personal relationships and interconnections further concentrate power and authority over resources within the hands of a few (Oxhorn, 1995). Although most of Mexico's politicians and many wealthy businessmen are concentrated in Mexico City, urban elites in other cities are able to maintain control over their regional centers by preserving relationships to the ruling party in the Federal District (Carlos & Anderson, 1981). In maintaining these connections, the elite population effectively controls local politics and becomes able to shape public policy according to its own personal or class agendas (Carlos & Anderson, 1981).

Historically, Mexico has a corporatist structure, where peasant, labor, popular, and military groups were incorporated in the political structure as officially recognized interest groups. The corporatist structure is predicated upon governmental regulations and coordination of interest groups. Formalized negotiations between governmentally recognized actors contribute to the development of national policy (Oxhorn, 1995; Kaufman, 1977). Thus, in the example of Mexico, the development of the country and the needs of the people, formally expressed through the federally sanctioned interest groups, fell under the authority of the Institutional Revolutionary Party (PRI).
‘Concessions’, such as health care and the development of community infrastructure, are only granted under extreme pressure, dispersed usually in minute quantities, and are sometimes used to control working-class demands and mobilization (Oxhorn, 1995). In this climate of political elitism, the PRI party has ensured its repeated reelection and authoritarian control over the government for over 70 years.

Despite the PRI’s dominant political control, Mexico still has had a history of opposition parties. Under the PRI authoritarian regime, opposition parties have been considered acceptable at the local level, especially when these local groups did not challenge the dominance of the national PRI party (Rodriguez & Ward, 1995). The most successful party among the opposition groups has been the right-wing National Action Party (PAN) that has been able to steadily maintain its national opposition status since the 1930s. Support for the PAN party has been particularly strong among conservative businessmen and Mexico’s upper-middle class who have enabled it to remain a viable alternative to the PRI (Rodriguez & Ward, 1995). Despite this continued endorsement, until the late 1980s, PAN had never threatened the PRI’s dominance in either federal or state elections.

Threats to PRI dominance initially emerged in the form of voter support for opposition parties. This negative reaction was against PRI policies, the 1980s Mexican debt crisis, and the severe economic restructuring imposed by the United States and the International Monetary Fund (Grindle, 1996). Mexico’s announcement in 1982, that the government was bankrupt and would be unable to pay back its international loans, combined with an overall decline in foreign lending, caused the Mexican debt crisis. The foreign community, not wanting Mexico’s economy to collapse, imposed a strict
structural adjustment package on the country (Barry, 1992). The key features of the structural adjustment package were the devaluation of the peso, a reduction in government expenditure (involving cuts to health, education, social security services, and basic physical infrastructure), and privatization of state-controlled firms (Grindle, 1996; Beneria, 1992). These austerity measures reduced the ability of the federal government to continue to provide public services and infrastructure necessary to promote development and its corporatist links. As a result, the debt crisis caused a dramatic decline in Mexico’s standards of living, with rising unemployment, reduced access to social services, price increases, and a halt to the construction of basic public infrastructure such as roads, electricity, as well as water and sanitation systems (Beneria, 1992).

There are two very contrasting views regarding the impact of the debt crisis on the health of Mexico’s population. Beneria (1992) contends that the debt crisis and structural adjustment package intensified the inequalities between the rich and poor. The increased income gap came from cuts in government expenditures, wage reductions, decreases in food consumption, and diminished health and education standards (Beneria, 1992). These cuts had a negative effect on standards of living. In contrast, Grindle (1996) argues that the budget cutbacks did not result in a corresponding rise in health risks, as the delivery of health care services became more focused on diseases and public health problems that had a large impact on mortality and morbidity rates. In conjunction to the budget cutbacks, federal funds were internally reallocated to support primary health care programs largely at the expense of urban hospitals (Grindle, 1996).
Whether or not the health status of Mexico's population declined during the 1980s, popular dissatisfaction still coalesced against the PRI party and its political support of the structural adjustment package. In response to this popular dissatisfaction with the PRI party and government, the PRI party began an internal ideological struggle over issues of party democracy and decentralization of governmental power (Rodriguez & Ward, 1995). Both the de la Madrid (1982-1988) and Salinas (1988-1994) administrations had to grapple with basic questions on what should be the role of the state and the structure of the government to best proceed towards economic development (Grindle, 1996). PRI political elites in Mexico City became divided on whether federal power should be decentralized over areas such as health and infrastructure. Further tensions arose over attempts to use traditional PRI strategies of clientelist and corporatist political inclusion or whether the party ought to reform towards increased democratization (Grindle, 1996).

These internal party debates resulted in a fragmenting of the federal PRI party. In 1988 Cardenas, a former PRI party member, supported by a faction of former PRI politicians, rapidly assembled the Revolutionary Democratic Party (PRD) party to run in opposition to the PRI in the 1988 federal election. Under a murky cloud of accusations of electoral fraud, the PRI party won the election and anointed Salinas as the president for the next sexenio. Under Cardenas, however, the PRD came dangerously close to winning the presidential election and under accusations of fraud doubts still exist regarding which party actually won the election (Scoffield, 1999; Rodriguez & Ward, 1995).

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2 *Sexenio* is the Spanish word used to describe a Mexican president's six-year term in office.
The division of the PRI party and the near-win of the PRD party bolstered the significance of Mexican opposition parties (Rodriguez & Ward, 1995). Grindle (1996) argues that the 1988 electoral results were based on widespread reaction against the PRI party rather than any real political support for either the PAN or PRD parties. In 1988, however, opposition parties were also successful on the state level for the first time. Specifically, Baja California elected a PAN governor and became the first state to elect a non-PRI government to power. As a result of the 1988 elections, opposition parties are increasingly being considered as a viable alternative to the traditional pattern of reelecting a PRI government.

Since the scare from the marginal victory in the 1988 federal elections, much of the PRI’s efforts have been directed towards isolating and discrediting the PRD party (Rodriguez & Ward, 1995). The PRI’s efforts to discredit the PRD have been assisted by consistent PRD internal divisions over party platform positions, organizational structure, and strategy for achieving political power (Grindle, 1996). As a result of both the PRI party’s efforts and the internal divisions of the PRD party, the efforts of the federal and local PRD candidates have been unsuccessful and the party has since lost much of its political power and influence.

After 1988, the PRI party also made a concerted effort to respond to the new activism in Mexico’s civil society, to control it, and to reassert traditional structures of political interaction (Rodriguez & Ward, 1995). In 1990 the PRI party changed the rules for political affiliation with the party. That is, political affiliation changed from the narrow definition of solely recognizing corporatist interest groups to accepting the
affiliation of individuals and local groups who joined the party and provided representation for regional organization in the party.

The official legitimization of neighborhood associations reveals the changing nature of corporatism in Mexico. Official recognition is no longer strictly through mass labor associations, but may also be granted to organized groups that establish connection with the political parties and the government. This structural change provides the context for the emerging importance of neighborhood associations in Mexico and is particularly significant as the context of this thesis (see Chapter 4).

Meanwhile, the PAN party has been allowed to flourish as the popular political rival to the PRI party (Rodriguez & Ward, 1995). The rise in the PAN party is evident in its steady hold on Baja California’s state and municipal elections and in its 1992 rise to power in the states of Guanajuato and Chihuahua. In the 2000 presidential race the federal PAN party is again flexing its political muscle and challenging the PRI in a close race (PBS Newshour, 2000). Nonetheless, the continued success of the PAN and PRD opposition parties is in doubt as they do not appear to have the extensive networks required for national electoral mobilization (Grindle, 1996). Some observers, such as Rubin (1990) and Scoffield (1999), interpret the increased presence of opposition parties as a movement towards greater democracy and civic participation. The growth and popularity of opposition parties are further being heralded as a swing towards greater democracy in Mexico.

The political context of Tijuana is very important as for example, the political wrangling between parties, local-political affiliation, and civic participation, come to play
(see Chapter 4). I now turn to a discussion of the context of Mexico’s changing public sector.

Three public agencies – the Ministry of Public Health, the State Water Commission, and the State Commission of Public Services of Tijuana (hereafter referred to as CESPT) – grapple with the policy problem of waterborne disease in Tijuana. One of the central goals of these institutions is the prevention of waterborne diseases. Such goal specificity “directs the decision making, influences the formal structure, specifies the tasks, and guides the allocation of resources” within these public institutions (Hoy & Miskel, 1996, p. 27).

The Mexican health care system has traditionally been oriented around the centralized management of urban hospitals and biomedical health care. Following the wave of international interest in primary health care, during the 1980s, Mexico began to reorient itself to more preventative and primary health care, rather than a system primarily consisting of biomedical health care and urban hospitals. These policy changes were partially realized through more extensive coverage of the population by public health care insurance and the creation of the Solidarity Health Care Program.

In 1979, all non-governmental formal sector workers and agricultural laborers came to be covered by public health care insurance through the newly initiated federal IMSS program. State Employees (the military, civil servants, and petroleum employees) are covered by health insurance through the Health and Social Security Institute for State Employees (IMSSSTE) (Grindle, 1996). Through IMSS and IMSSSTE, Mexico have public health programs in place, however these insurance programs do not provide universal coverage. Neither the IMSS nor IMSSSTE insurance programs cover self-
employed or unemployed Mexicans. Furthermore, IMSS only covers formal sector workers and their legal spouses. Common law marriages, and the children produced from such arrangements, are not covered by the public health care insurance.

In 1986, the Ministry of Public Health initiated the “IMSS-Solidarity Program” in response to the growing popular dissatisfaction with the PRI government and the lowering standards of living from the debt crisis. The IMSS Solidarity Program was dedicated to the provision of primary health care and public health infrastructure (potable water and sewage systems) to rural and other under-serviced areas. The program emphasized local participation, immunization, mid-wifery, health education programs, and basic curative health services. Health care bureaucrats under de la Madrid’s government centrally coordinated the Solidarity Program from Mexico City. Some authors have criticized this health care initiative as micro-management (Zakus, 1998), while others have viewed the program as innovative in its circumvention of the bloated and traditional health care bureaucracy (Grindle, 1996). The one aspect that is agreed upon however, is that the Solidarity Program failed to address the problem of bureaucratic mismanagement and poor ministerial performance (Grindle, 1996).

The push for health care decentralization of some financial and managerial authority from federal to state responsibility began in 1982. By 1986, some 14 states had assumed control over health care. Baja California initially resisted this effort as the move towards decentralization began during the debt crisis while state budgets had little ability to cope with the devolution of new health care responsibilities. Baja California, along with many other Mexican states, rejected the federal government’s proposal to take on additional responsibility for health care (Grindle, 1996). States no longer have this
option, however, and finally in 1998, the Ministry of Public Health became decentralized to state control in Baja California and throughout the rest of Mexico.

In the 1997 Public Health Report of Baja California, the Ministry of Public Health outlines four official “Lines of Action” to address waterborne disease (del Real Mora, et al. 1997). These lines of action are particularly focused on “high-risk” areas, meaning communities without piped water or sanitation, and that are located near agricultural areas which use a considerable amount of manure. The goals are 1) to monitor the environmental health in these high risk zones, 2) to test the sources of water supply throughout the city, 3) to expand health care services throughout the city, and 4) to promote health and education in the high-risk areas (del Real Mora, et. al. 1997).

Within the Ministry of Public Health, the departments focusing on aspects related to waterborne disease are Environmental Health, Epidemiology, and Health Education. The Department of Environmental Health is designed to address the connection between the quality of potable water and public use. As Francisco, the Director of Environmental Health states, his Department “is responsible (to ensure) that water gets in a good condition to people’s homes.” The Department of Epidemiology lies within the Ministry of Public Health and Ilena, my informant from Epidemiology, claims that disease surveillance is her department’s only duty. A final connection of the policy issue of water and health is lodged in the Department of Health Education. Esmerelda, the program director of Health Education, identifies preventative medicine as the goal of her department. In this capacity, the outreach education programs specifically address the prevention of waterborne diseases emphasizing the actions that individuals should take to prevent and treat these illnesses within their family (Esmerelda).
The State Water Commission is in charge of the development of water and sanitation infrastructure in Baja California. This public agency was legally created in 1991, but only began officially operating in 1999. It was developed to meet the states' growing infrastructure needs and to fill the political vacuum from the decentralization of these services from federal to state responsibility (Filipe; Shirk, 1999).

In 1983, under the administration of President de la Madrid, municipal governments were given authority over management, financing, and planning of most urban services including the provision of potable water and sewage systems (Castro-Ruiz, 1997). The State Commission of Public Services Tijuana (CESPT) is responsible for water and sanitation services in the city. CESPT has five general responsibilities: 1) operation and maintenance of the potable water and sewage systems; 2) administration of the services among the clients; 3) billing and collection; 4) development and expansion of public systems, either directly or through private contractors; and 5) development of other activities that either directly or indirectly promote the attainment of the previous goals (Castro-Ruiz, 1997).

Although these are public institutions, they are not autonomous agencies from the clientelist demands of state and municipal governments. Research into the influence of clientelism on community development in Mexico is not new. Stemming from the historical dominance of the PRI party throughout Mexico, most research into patron-client relationships has been in the form of case studies that describe and analyze the PRI's authoritarianism and the use of clientelism to secure continued political dominance (Bennett, 1995; Rodriguez & Ward, 1995). Because opposition government (in this context the label of "opposition party" is synonymous of non-PRI party) is a rare,
growing phenomenon in Mexico, research into the arenas of politics, health care, and community participation and development has not yet addressed the contemporary political forces of clientelism and opposition parties and governments in Mexico.

Tijuana provides a unique example of clientelism because the opposition PAN party is in power, while the PRI party is relegated to opposition status. Furthermore, all three national parties, the PRI, PAN, and PRD, use political patron-client relationships in very diverse manners depending upon their level of power, control over resources and services, and relationships with community groups. With the current context of Mexican politics, health care, and stratified development in mind, the next section provides an outline of the theoretical concepts used to understand local participation, and the structures of political and bureaucratic water management in Tijuana.

Theoretical Concepts

In this section, I explore the concepts of Policy Systems, Narrative Analysis, Institutional Capacity, and Participation. These concepts provide a theoretical framework that structures the ideas and analysis within this study. Policy systems and narrative analysis are the general approach used throughout the course of this work. In this section, I provide an introduction to the notion of institutional capacity and explain how it is relevant to international development. Chapter 3 is more specifically devoted to an analysis of the Institutional Incapacity within Tijuana's public sector dealing with waterborne diseases. The notion of local participation and development is much valued, although little understood. In this section, I outline why participation is valued as well as some of the problems associated with participation, local mobilization, and development.
This concept is a particularly important theme for Chapter 4, and my analysis of community mobilization and the structures of clientelism in Tijuana. In the Concluding chapter, I directly revisit the notions of Institutional Capacity and Participation to summarize how the evidence in Chapters 3 and 4 comment upon these theoretical issues and direct attention where future research is needed.

Policy Systems and Narrative Analysis

A policy subsystem involves "those actors from a variety of public and private organizations who are actively concerned with a policy problem or issue" (Sabatier, 1987, p. 652). Thus the policy system becomes a most useful unit of analysis rather than strictly relying upon one governmental institution to understand the dynamics of a public policy issue. Sabatier (1987) comments that a policy subsystem has relatively stable parameters surrounding a core issue, such as the distribution of natural resources, the values and social structure of the issue, and the basic rules surrounding the issue. With such a frame, attention can be also paid to external events that have an impact on a policy subsystem, such as changes in socio-economic conditions, the government, and policy impacts from other subsystems (Sabatier, 1987). These parameters and external events are mediated through the subsystem's constraints and resources that in turn influence the beliefs, resources, strategies, decisions, and impacts of a policy subsystem.

In conjunction with an analysis of the stakeholders of the policy subsystem involving the persistent prevalence of waterborne diseases in Tijuana, this study also applies a narrative approach throughout its analysis. This is done through the construction of a metanarrative which gathers together many stories in order to
“defamiliarize and decontextualize” the claims to knowledge and representation that are taken as a given. Metanarratives are “an agreed-upon story or way of making sense of an issue that makes it more amenable to policy interventions” (Garvin & Eyles, 1997, p. 48). Stories (value-laden arguments consisting of premises and conclusions), counter-stories (tales that dispute or contradict the dominant claims), and non-stories (the inherent assumptions within an issue) of the formal and informal practices of informants and the institutions in which they belong, are used to expand the perspective of the analyst regarding the policy problem. The goal of the narrative analysis is to analyze the juxtaposition of these stories, counter-stories, and non-stories, in order to reduce the complexity and uncertainty of a policy issue (Roe, 1994). “Complexity is when we do not know how things are related” or “issues that are characterized by internal intricacy and/or its interdependence with other policy issues” (Roe, 1994, p.2). Uncertainty in a policy narrative emerges when the “factual merits are generally in doubt or disputed” (Roe, 1994, p. 10). At such times, policy “facts” are often presented in the form of scientific evidence and numbers. Harrison (1991) observed that scientific evidence is often used to support a particular position within a political system rather than having the information objectively determined by the public policy. Yet, as this thesis ponders in more depth in Chapter 3, the actually political process that determines which scientific evidence should be collected can also create certainty on a limited and not necessarily relevant set of issues. Thus, the use of a narrative policy and the construction of a metanarrative are important because they do not diminish the uncertainty inherent in a policy problem, but rather seek to highlight the assumptions, policy gaps, and socially constructed nature of knowledge.
Institutional Capacity

During the 1950s and 1960s, international development agencies focused on building public institutions in developing countries (Walt & Gilson, 1994; Goldsmith, 1992). This phase of development, called “Institutional Building,” was designed to create formal organizations that carried out public functions within developing countries. Institutions were thought to bring stability and persistence in developing countries and to enable development and progress to occur (Moore, 1994; Goldsmith, 1992). Public institutions were designed to carry out routine functions and perform assigned tasks willingly, competently, and efficiently (Grindle, 1996). Within these development projects, the institutions themselves were the primary focus, rather than the tasks that these organizations were designed to address.

The focus on institutions and development has now changed and many development experts are now beginning to examine the capacity of institutions to carry out their public function (Grindle, 1996, 1997: Moore, 1994; Goldsmith, 1992). Public institutions in many developing countries are not fulfilling their public responsibilities and bringing about the desired state of progress. In fact, the criticism against public institutions is so high, that some authors claim that governments and public institutions have hindered rather than promoted development (Hilderbrand & Grindle, 1997).

Simultaneous with this criticism of public institutions in developing countries, persistent questions have arisen regarding the role of the state. Academics and professionals involved in the development discourse are increasingly questioning the assumption that public sector institutions are the best site for capacity-building initiatives (Hilderbrand & Grindle, 1997). General consensus, however, states that it is important
for a government to ensure basic social and economic services (Grindle, 1996). These services included protecting and promoting public health and providing basic infrastructure to support community social and economic development. Naturally enough, the process in which a government carries out these basic responsibilities varies across countries and in time. Despite this variation there is a need to understand the role of the government, the administrative capacity of public bureaucracies, and why “progress” is not occurring in developing countries.

In terms of institutional development, several terms are often used interchangeably. Institutional building sometimes refers to the development of an entirely new public institution, the transfer of physical or financial resources or major policy change (Moore, 1994; Goldsmith, 1992). In contrast, institutional strengthening refers to the improvements made to a pre-existing institution. This reform is done by supporting improvements in the effectiveness of public organizations by altering their structure, management, and institutional procedures (Moore, 1994).

Grindle uses the terms 'institutional building' and 'institutional strengthening' interchangeably and adds the notion of “capacity” strengthening or building. Capacity building is generally the process through which a public institution is strengthened. The term capacity infers a qualitative and quantitative measurement of the ability of an institution to perform appropriate tasks that effectively fulfill the function of the public bureaucracy (Hilderbrand & Grindle, 1997; Moore, 1994). Institutional capacity building can refer to both the internal functioning of a single institution, as well as the ability of a network of institutions within a policy subsystem, to integrate activities and effectively undertake assigned tasks (Hilderbrand & Grindle, 1997).
Yet, institutional building is one part of the term “capacity building” (Moore, 1994). Capacity building can refer to improvements made to the human resource section of institutions, such as improvements made to staff motivations, more competitive recruitment, and requirements of professional membership (thereby ensuring technical training, professional norms, an autonomous professional organization that regulates the behavior of its members) (Moore, 1994). This thesis focuses more specifically on what Moore (1994) classifies as the “demand” approach to capacity building in public sector institutions. In the demand approach, emphasis is placed on the evaluation of the institutional structure, conceptual framework of task assignments, and ability of the personnel to carry out their assigned tasks. In particular, this approach has evolved from contemporary management and organizational theory while also addressing the political system of the public institution (Moore, 1994).

**Participation**

Local participation is extremely valued in the rhetoric of community development advanced by multilateral and bilateral agencies, non-governmental organizations, and federal, state, and municipal government of developing countries. Despite this almost universal acclaim of the significance of local participation in development efforts, all of these actors have very problematic relationships with the reality of local mobilization.

Participation involves the mobilization of local people. Participation describes people who join together, volunteer or work in health-related activities and institutions, in order to actively shape their own community services. Community mobilization is associated with a large number of potential benefits including empowerment, improved
assessment of local needs, more responsive community organizations, and improvements in health status (Zakus, 1998). The World Health Organization defines participation as projects that should not be “for” the people, but “with” the people (WHO, 1992: 15). Participation in development is also considered to be a “means helping people to assert control over factors which affect their health” (Epp, 1986). Similarly, Perkins, Brown, and Taylor (1996: 86) claim that civic participation “fosters self-efficacy as residents work collectively to solve community problems.” Participation is thus associated with the notion of empowerment, that people learn to help themselves rather than passively relying upon the government or international agencies for community development.

Wright (1997) noted that little understanding exists on how participation is achieved in developing countries. Although multilateral agencies, such as the WHO herald the role of local participation in primary health care, how and why individuals become active agents is not extensively reckoned within the agency’s policies (WHO, 1992). Academics involved in international development, have been equally negligent and have not attended to the strategies and activities associated with the process of development and local participation (Wright, 1997).

Nevertheless other academics have explored factors that are associated with community participation in other contexts than local mobilization in the developing world. Perkins, Brown, and Taylor (1996) did a study to determine which factors were positively and negatively associated with local participation in community organizations in New York City, Baltimore, and Salt Lake City. This study found that income, home ownership, minority status, and residential stability were positively associated with participation (Perkins, Brown, & Taylor, 1996). Perkins, Brown, and Taylor (1996) cite
that local economic investment and the material benefits of protecting this investment are important reasons for participating in grassroots community organizations. Crime and fear were negatively associated with local participation, while territoriality and physical incivilities demonstrated variable association with participation in community associations (Perkins, Brown, & Taylor, 1996). This article is important for although it is reflective of social mobilization in the United States; it does identify associative factors that could contribute to local participation in developing countries and particularly in Tijuana. Although, this chapter examines community mobilization in the United States, it particularly considers the factors that cause community mobilization. Hence, in conjunction with Wright’s claim that the factors that cause community mobilization are not understood in developing countries, it is important to bring the literature from other geographical locations to understand if and how mobilization may be relevant to the development discourse.

Rahnema (1988) contends that community participation within development projects has been defined as a moral imperative directed towards a specific objective. It was recognized long ago that development projects that actively engaged local people had a much greater chance at succeeding than projects that ignored the local culture and imposed a foreign institutional framework (Rahnema, 1988). To NGOs and other multilateral development agencies, local participation became a desirable goal in their developmental efforts. Yet because community participation had attained a moral label, any criticisms against the manipulation of people to participate, became erased from the term’s official definition.
Given different levels and types of participation, not all forms of participation in community projects automatically lead to local empowerment. Community development projects may reinforce local dependency upon the donor or a patron if the recipient does not participate in a meaningful way in terms of planning and implementation (Wright, 1997). If local participation is only oriented around short-term projects, this does not necessarily translate into sustainable improvements and local self-reliance (Wright, 1997). Bennett (1995) similarly identified short-term goals as an important factor in community participation and development in Mexico. Instead of relating short-term goals to community self-reliance, Bennett (1995) argued that this form of mobilization failed to challenge the dominant social structure that was ultimately responsible for the undeveloped quality of the communities. In terms of the broader social structure, Perkins (1995) found that community associations in the United States were more interested in focusing on particular laws or policies that could be seen to have a direct impact on the quality of community life. Similar to Bennett’s findings in Mexico, the community associations within Perkins’ study in the U.S. were not interested in challenging the power-sharing framework between the local level and the state and federal decision making bodies (Perkins, 1995).

Particularly in developing countries, there continues to be a need to understand why community inhabitants begin to mobilize into local associations. Because local participation is endowed with such high expectations in the development community, whether community participation leads to local empowerment and self-sufficiency for local development needs to be assessed, particularly as social and political structures might also value local participation and local associations for reasons other than altruism.
and community development. Therefore, analysis on participation and community development should consider questions such as: Why is local participation valued? Who values participation? Is participation encouraged to facilitate local empowerment and development? Or is participation and community mobilization encouraged to support a political group? Are all forms of local participation equally valued? Or are some types of local mobilization, particularly within societal or political frameworks more highly regarded than others forms of participation? Does local participation challenge the dominant cultural structure of exclusion of peripheral groups from public services and resources?. All of these questions are relevant to any treatment of the role of participation with regards to community development. These questions are appraised in Chapter 4 and in turn will be explicitly revisited in my conclusion.

Thesis Outline

Chapter 2 is devoted to an exploration of the methodology employed to produce this thesis. Specifically, this chapter relates the development of a research question and methodology, fieldwork and on-site research alterations, the use and selection of key informants, qualitative interviews and participant observations, and some of the limitations of my fieldwork and subsequent analysis.

Chapter 3 is an evaluation of the institutional capacity of public sector agencies responsible for preventing and reacting to the prevalence of waterborne diseases in Tijuana. I examine the formal and informal roles and procedures of public bureaucracies. Narratives from civil servants in CESPT (responsible for municipal water and sanitation), the State Water Commission (in charge of the development of hydraulic infrastructure)
and the Ministry of Public Health are used to explore the social practices of public institutions. Using counter-stories from the community level, I consider the ability of public programs and institutions to provide services and resources effectively to newly urbanized communities and to enable community development, rather than hindering and perpetuating the heavy burden of disease experience throughout under-serviced areas of Tijuana.

In Chapter 4, I discuss the relationships between community participation in neighborhood associations and non-governmental organizations to the overarching political structure of clientelism. Specifically, this chapter examines local needs assessments and strategies for community development. Narratives from informants within the Tijuana’s three municipal political parties, PAN, PRI, and PRD, are examined to understand how these parties create a framework that determines the shape of community development.

Chapter 5 presents a summation of the research findings as well as a discussion of some unresolved questions on changes in community development strategies, institutional transparency and public accountability, and public versus private water management.
Chapter 2

Methodology

Qualitative research is a valuable means of gaining access to, understanding of, and explanation for the social world (Eyles, 1988, p.1). Through the informants’ and the researcher’s combined efforts, the social world becomes interpreted and ordered to reconstruct and represent the informants’ manner of acting and knowing. As one method of achieving the goal of cultural understanding, qualitative research places a primary value on the informants’ words, narratives, and meanings as related to the researcher. Yet, however informal or unstructured these qualitative interviews may be, the informants’ overall narrative or metanarrative is always situated within the context of a researcher’s theoretical interests, cultural interpretations, and analytical restructuring of reality. The researcher usually leaves the community of study, and an ethnography is produced that suitably represents the realities of the researcher’s experience in the field, the informants’ stories, and the processes through which these re-constructions of reality are re-created.

During July and August 1999, I traveled to Tijuana, Mexico with the purpose of conducting qualitative research on perceptions of health with particular reference to water-borne diseases, community activism, and the informal and structural means of community development. Before I went to Tijuana, I was well aware, both practically and theoretically, that fieldwork is often a messy experience, based on a period of extended stress, continual self-reflection, hurried decisions, and a patchwork of quick solutions to the problems that seem to inevitably arise. As much as I had tried to prepare
in the months before my travels through research and local contacts, my fieldwork experience in Tijuana did not disappoint my muddled expectations.

In the months following my return to Canada, I ordered, categorized, analyzed, and wrote about my interpretations from my fieldwork experience and the theories that framed and expanded upon my understandings. Although I have tried to be honest to the words of my informants who accepted me into their lives, I have still exerted power by manipulating and ordering their narratives for my own research purposes. At no time was I simply a removed and passive bystander. I am very connected to the questions that I chose to ask. Also, most likely, questions lurk that I did not think to ask, and was unable to ask. I have also chopped and pasted, scribbled and erased, thought and asked for advice. But something has emerged from a lot of reading, a few conversations, and many hours in front of my word processor. In order to establish credibility, what follows in this methodological chapter is a description of my fieldwork procedures and analytical interpretation. This chapter is an ordered re-creation of the events, reasoning, and rationalizations leading up to the creation of this thesis. It is also an application of the principles used to evaluate qualitative research in context of my fieldwork and this thesis on community health and development in the urban periphery of Tijuana, Mexico.

**Developing a Research Question and Methodology**

Originally, my research question focused on the means through which communities in Tijuana, Mexico seek to reduce their water-borne diseases through medical services, and water and sanitation infrastructure. This question emerged from the recognition that the installation of water and sanitation infrastructure is a basic
preventative measure against water-borne diseases (WHO, 1992). Local participation is another way that has been identified as a successful method through which communities actively engage to solve their identified needs (WHO, 1992). With these ideas as the core framework, I wanted my research to examine the factors and motivations for community participation, to identify how community activists identified their needs, and to map how these priorities were acted-upon through the governmental and political systems that had control of, and were responsible, for the distribution of these resources.

Tijuana, Mexico was selected as the location for my fieldwork through the convergence of professional contacts and research experience of Dr. Mike Risk and Dr. Mike Jerrett. On my behalf, Professor Risk contacted a friend and colleague who worked at the Autonomous University of Baja California (UABC). This friend of Dr. Risk put me in contact with Dr. Marco Antonio Mendoza Estralla, a medical professor at UABC in Tijuana with an interest in preventative health education. In February, Dr. Mendoza Estralla agreed to be my contact in Tijuana and throughout the spring of 1999 we began to establish a relationship through our emailed communications and phone conversations. Through Dr. Jerrett, I made contact with David Walker, currently a graduate student in Geography and Latin American Studies at State University San Diego. David and his wife Maggie later agreed to rent me an apartment in Tijuana, thereafter introducing me to Libia Bernal, a friend of theirs who became my translator and guide.

To prepare for my research and summer fieldwork, from January through May, I carried out literature searches on the themes of primary health care, community participation, corporatism, and clientelism (see Chapters 1 and 4). With Dr. Eyles's direction, the theories of corporatism and clientelism quickly emerged in the literature as
the prevailing formal and informal structural parameters through which many marginalized communities in Mexico gain access to municipal, state, and federal resources and infrastructure. Health care had recently been decentralized to the state level in Mexico, and water and sanitation was designated under the authority of the municipal government. These theories, involving the control, provision, and access to resources, emerged as the framework through which I explored why communities were not getting the basic services that they needed to reduce the community burden of disease. This is not to say that the research interviews were not conducted with specific questions in mind. Rather, the interviews were theoretically driven by the research questions that I wanted to explore, as well as the literature review that had already been conducted (Gilchrist, 1992).

Qualitative research methods, using semi-structured and in-depth interviews, were selected as the best means to answer my research questions. A checklist of questions was developed and used as the framework to probe informants about their positions and understandings. This checklist was then emailed to Dr. Mendoza Estralla, for his comments and advice on the practicality and relevance of my emerging research proposal within the context of Tijuana, Mexico. According to Baxter and Eyles (1997, p. 506), as interpretive geographers, we are in the "reality reconstruction business, attempting to develop representations and constructions to describe the representations and constructions that take place within the social world." Thus for my own research, in-depth interviews were needed to gain access to the locally constructed meanings of health and community, needs, priorities, and responsibilities. As I aimed to conduct my research in a foreign culture, qualitative research methods were especially useful to learn
about the local understandings and courses of actions that are very different from my own world view. In-depth interviews allowed the informants to communicate their concerns freely at their own pace and in their own words.

Fieldwork and Alterations

In late June, with Dr. Mendoza Estralla’s encouragement and Dr. Eyles’ support, I left for my fieldwork in Tijuana. My fieldwork schedule was tight and the timeframe of two months acted as a constraining factor on my research. In early July, Dr. Mendoza Estralla guided me through the 4 communities that he thought would be appropriate for my research. These communities were Mariano Matamoros Sur, La Morita 1, La Morita 2, and Villa. These communities are all located in the same district of Tijuana called La Presa. Dr. Mendoza Estralla selected the communities in La Presa based on their impoverished socio-economic characteristics and because he thought that this was the area of the city with the greatest need due to their disproportionately heavy burden of waterborne disease compared to other areas of the city.

I quickly realized, however, that I needed to alter Dr. Mendoza Estralla’s selection of fieldsites. The original research design called for a comparison between communities with water infrastructure against those that were not yet connected to the municipal water system. Yet, all four of the communities that Dr. Mendoza Estralla had selected already had water infrastructure.
Location of Field sites in Tijuana, Mexico.
I selected Terrazas Del Valle to fill this gap for comparison based for two reasons. First, it was near to the other communities, but unlike the other communities it did not have water or sanitation infrastructure. The second reason came from a casual conversation that I had with a woman named Maria who lived in Mariano Matamoros Sur (field-site 1) but yearned to someday live in Terrazas Del Valle. When I spoke with Maria, her infant daughter was currently suffering from diarrhea and her son had a skin rash. She attributed both illnesses to the poor quality of the tap water and the unhygienic sewage infrastructure. Maria knew that Terrazas Del Valle did not have piped water or a sewage system and that the absence of these public services would negatively affect her children’s health. Yet, the reason that she wished to someday live in Terrazas Del Valle was that without the added infrastructure (and therefore lower costs), she hoped that her family could afford to own a house rather than continue to rent in Mariano Matamoros Sur. Maria’s story and reasoning forced me to reflect on the nature of my research bias: that the inhabitants of these marginalized communities wanted water and sanitation infrastructure because it is so intimately connected to their lives and their family’s health. For these two reasons, of research design and from Maria’s compelling counter-story, I included Terrazas Del Valle in my research.

Further, knowing that I only had limited time in the field, I reduced the number of communities by excluding La Morita 2 and Villa from the structure of comparison. This enabled me to better focus my time and strive for greater depth of local understanding rather than undertaking a superficial comparison.
Table 1 arrays the basis of my community comparison and the controlled characteristics of connection to the municipal water and sanitation system.

**Table 1: Research Communities and Level of Infrastructure Development**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Mariano Matamoros Sur</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>La Morita 1</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>Terrazas Del Valle</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

I chose not to control for the length of time that a community had been settled because it was not a primary question in my research design. Mariano Matamoros Sur is the oldest community of the three. It was settled through an organized land invasion 15 years ago. Mariano Matamoros Sur also has the largest population and the highest level of social and public services among the three communities under comparison. La Morita is the second oldest community of the three having been settled in 1993. La Morita originated through the planned relocation of flood victims to a less risky location. The community of Terrazas Del Valle is three years old. It has the lowest level of community services and infrastructure and according to some sources (disputes concerning the numerical representations of Terrazas Del Valle appear in the analytical chapters), it has the smallest population in terms of the three communities.

The next factor that I thought would be controlled for in the research design had to do with the presence of a health care clinic in each community. My pre-fieldwork assumption was that all the research sites would have a primary health care clinic. This proved to be incorrect as only Mariano Matamoros Sur had two full-time, year-round health care clinics. My assumption was based on reading Mexican federal goals, one of which was to increase access to primary health care in local areas through the Solidaridad
program since the 1980s (Sherraden & Wallace, 1992). As this law was specifically designed to provide basic primary health care to impoverished and marginalized communities, I had assumed that the communities that I planned to research would be beneficiaries of this law. My pre-fieldwork communication with Dr. Mendoza Estralla had also led me to expect that this was the case. The realization that La Morita and Terrazas Del Valle did not have a permanent clinic caused me to shift my research question to include how the community groups value and prioritize their attempts to attain medical services in conjunction with their actions and methods of gaining water and sanitation infrastructure. The lack of permanent health care services in two of the three communities under attention, gets to the heart of my research question concerning why these communities are under-serviced despite the heavy social and political pressures and policies that are specifically aimed to provide these much-needed services.

Key Informants and Multiple Methods

Purposeful sampling was used to obtain key informants. This research adopted Gilchrist’s (1992, p.74) definition of key informants “as individuals who are able to teach the researcher.” All of the respondents coincided with this part of Gilchrist’s definition—their ability to teach me something about their lives. However, Gilchrist (1992. p.75) also defines key informants as “individuals who are willing to share their knowledge and skills with the researcher and who have access to perspectives or observations denied the researcher.” This definition of key informant describes most but not all my informants. Not all of my informants were equally willing to discuss their role with public sector institutions. By contrast, Trembley (1982, p. 98) emphasizes the ability of a key
informant to transmit "a relatively complete ethnographical description of the social and cultural patterns of their group." This definition is relevant to this research, because Trembley does not limit his definition of a key informant only to those people who "willingly" relate their knowledge. The knowledge, perceptions, and attitudes of both willing and unwilling key informants were extremely relevant to my analysis of the bureaucratic social structure in Tijuana. The basis for informant selection, and some of the problems of accessibility, are related below.

Respondents at the community level were selected based upon their knowledge and participation in community organizations and politically active groups. I sampled informants who held a variety of positions in the community such as doctors, clinic directors, health educators, pharmacists, political activists, teachers, and non-governmental organization workers. Primary health care workers were selected for their knowledge concerning the types of preventative and reactive medical services that were available in the communities, the health education programs that were provided, as well as how and why these programs and services were being used. I interviewed those responsible for community relations and development from each of the three municipal political parties. These data provided a comparison across the political groups based on their relative positions of power and influence within the municipal and state system, and how this affected their modes of community interaction and proposed means of community development and assistance. Because delivery of water and sanitation services was a municipal responsibility, and the infrastructure to provide these services was in the charge of the state government, I selected respondents from the State Water
Commission and the Municipal Department of Public Services. Appendix A outlines the questions in my checklist.

Introductions to community public health officials in Mariano Matamoros Sur and the officials in charge of municipal health education programs were initially made through Dr. Mendoza Estralla. During each interview, I asked all my informants whom they thought was active in their community and whom they had interacted with in the Ministry of Public Health or in the municipal political parties. In terms of the political parties, informants were gained through snowball sampling and also by approaching the municipal political offices and asking to speak to the person in charge of community relations. To obtain new respondents, I asked each political representative to name people from the communities that they recognized as a community leader. I tried to be careful to ensure that I was not missing potential informants or community activists by only finding informants through the political parties. To prevent a selection bias by only relying on the political groups to provide names of “community activists,” I also approached several community inhabitants not connected with these groups to gain their opinion on who was actively interested in community development. This also meant that I did not restrict my community informants to characterize only political activism as a means of civic participation. Most informants were willing to speak to me about their opinions and experiences, particularly at the community level and among the political parties.

Where I had difficulty in finding informants or where potential respondents were reluctant to speak to me was in the Ministry of Public Health and Municipal Department of Public Services. To gain access to these official respondents, I tried to use
introductions from previous respondents to talk to someone from the public sector administration. The respondents from these departments who were interviewed were an epidemiologist, a public health water quality specialist, a health education program director, the director of municipal water and sanitation evaluation and control, and an engineer and director of new water and sanitation infrastructure development projects.

These difficulties of gaining access to public information and officials made it necessary to supplement the interviews with participant observation. The emphasis within my role as participant observer altered throughout the course of my fieldwork. Predominantly, I would categorize my activities as “observer-as-participant” (Eyles, 1988, p.9). It was always clear to the informants that I was in Mexico specifically to conduct research, emerging easily from my identity as a white, non-Spanish speaking, person. In the initial introductions I always defined myself as a Canadian Master’s student. My identity as “Canadian” helped me escape any hostility that informants might possess towards Americans, and my title as “Master’s student” already having a Bachelor’s degree, provided me with an official title that helped me gain access to political and bureaucratic officials.

The very means by which I established contact with my official informants and how they responded to me, with hostility or only through written responses, is inseparable from my theoretical analysis and can only be understood through my participation and interaction within the Mexican system of politics and bureaucracy. The experiences through my participant observation while trying to gain access to informants within the governmental system were so problematic that they are now delineated
through the analysis on the role of bureaucracies in the post-fieldwork phase of my research.

Although I encountered informants with a guarded and sometimes hostile reaction to my petition for an interview, these respondents can still be recognized as “key informants.” These respondents were still able to provide me with their insights into their behavior and attitudes to me in context of their official roles. That these informants, as public officials were so hostile to inquiries about the health and development of the communities in La Presa, and so removed from the realities of the management of their public health, is a significant factor. It may be a further factor why my field-sites lag behind the rest of the city in terms of development and elevated rates of gastro-intestinal diseases. The responses are also further analytically elaborated in Chapter 3 in regard to the public sector bureaucracy.

My research methods of in-depth interviews and participant observation were complemented by the collection of documents for analysis. While in Tijuana, I monitored the local media to see if issues pertaining to health, community development, water and sanitation were mentioned. This approach proved to be beneficial as the State Water Commission was actively promoting its new water and sanitation development project in both the Spanish and English newspapers of Tijuana and San Diego and also in the local Tijuana television news. I also conducted a document interpretation of government reports given to me by some of my informants in the political parties and governmental offices.

Respondents
In total I interviewed 30 respondents, 13 women and 17 men. Table 2 lists the identities of my informants based on their official roles, localities, and genders. Table 2 does not include the community inhabitants with whom I spoke in an effort to become more acquainted with the communities, their inhabitants, and their social, medical, and political services. This categorization of roles does not reveal the multiple tasks that many of these informants have assumed throughout the course of their lives and in the context of our interviews. For example, in Table 2, one of the respondents is currently labeled as a community informant. This man could also be categorized in terms of his role as a community political activist, as the coordinator of a local level NGO, and as the director of a primary health care clinic. These variations in roles and will be further addressed in the proceeding analytical chapters.

Table 2: Respondents’ Roles and Gender

<table>
<thead>
<tr>
<th>Respondents: Role</th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Informants</td>
<td>9</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Informants from the Municipal Political Parties</td>
<td>2</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Municipal Public Health Officials</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Private Water Dealers (Municipal and Community)</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Public Water and Sanitation Officials (Municipal, State, and International)</td>
<td>-</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Municipal Community Development Experts</td>
<td>-</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Totals</td>
<td>13</td>
<td>17</td>
<td>30</td>
</tr>
</tbody>
</table>

New informants were selected until a series of reoccurring themes emerged (Baxter, 1997). Once redundancy emerged from the narratives of multiple informants, I quit trying to interview new informants from the same organization or with similar perspectives. Sample size was also limited by several constraints such as time, finance, and access to informants. When I left Tijuana, there were still a few more potential
informants whom I wish I could have interviewed. Others were ostensibly nervous about being interviewed by a foreigner and speaking critically about the government. For instance, two potential informants who had been community activists during the original land invasion and settlement of one of the colonias refused to speak to me. Since the original land grab, these community organizers had obtained jobs in the government as civil servants. Their new roles as civil servants within the governmental administration apparently made them reluctant to share their stories and experiences as community activists in opposition to the government’s policies of community support. They indicated that their narratives might be perceived as criticism of governmental policies and that this could jeopardize their current employment. Thus, the informants who were willing to speak to me and how they spoke to me are determined within the very corporatist socio-political context reinforcing the theoretical stance of this thesis. Although the informants who did agree to speak to me were not worried about any potential ramifications from speaking to me, several did express a desire for anonymity. Accordingly, all my informants’ names have been changed to preserve their anonymity. In the ensuing text, I cite these pseudonymous sources (e.g. Ricardo). It should be understood that all these individuals’ comments were made in 1999.

**Interview practices**

Most of my interviews were conducted in Spanish through my translator Libia Bernal. Libia is a Tijuana native, of Mexican and Chinese ancestry and is fully fluent in English and Spanish. Libia had recently graduated from UABC with a degree in Chemistry focusing specifically on wastewater treatment. Her major undergraduate
project was completed in conjunction with students from State University of San Diego where she had researched Tijuana’s and San Diego’s combined wastewater treatment facilities and procedures. This was of great assistance to my own research as she was already knowledgeable of Tijuana’s water and sanitation facilities, as well as being fluent in the technical language pertaining to water and sanitation.

Interviews were not taped, because of predicted technical and financial constraints involving translation. Hence, there are not direct quotes from sources, except with unique sentences where I had the informant particularly define his or her meaning. Instead of taping, both Libia and I took notes during each interview. Immediately after each interview we would comb through and compare these to make sure that I had not missed anything and that I had fully understood and correctly interpreted the informant’s narrative. If there were any discrepancies between our understandings of the informants’ responses, these discrepancies would be noted for future reference to double check in subsequent interviews with the same informant. Later in the day, I would go over the interviews on my own, to think about the informant’s responses in context of the interview and in context of the broader story beginning to emerge. I would then generate a new list of questions that emerged from these discussions and reflections. This new checklist of questions would include issues that I felt needed further clarification in reference to new knowledge, or in contrast in the narratives of the other informants. These questions and concerns would then be asked in a second interview conducted with most of the informants. A list of informants, their roles, and the number of interview is outlined in Appendix B.
As Tijuana is a border city to the United States, some of my respondents could speak English. Most of the informants within the government could understand some English. None were fluent, however, and all of these civil servants preferred to conduct their interviews in Spanish. Nonetheless, their knowledge of English still contributed to the dynamics of the interviews. For example, on a few occasions when Libia happened to translate something incorrectly, a few informants with English abilities would interrupt in Spanish and make sure that she would interpret their narrative more accurately. In reverse, although I only claim basic Spanish language abilities, I was still able through my limited understanding and reading of body language to monitor the course and translation of the interview. I also conducted five interviews in English by myself. These English interviews were all conducted with American and Mexican NGO workers in the communities.

Thus the interviews — which usually lasted between one and two hours — emerge as a story with negotiated meanings between the respondent, Libia, and myself. These interviews were thus a “joint construction of reality” (Agar, 1980, as cited in Gilchrist, 1992). Each person contributed a perspective; as the informant spoke, his or her words and story would be mediated through the cultural understanding Libia and then translated to me. From this, I would then extract and interpret the answers and frame the dialogue through my questions (Gilchrist, 1992).

Another unexpected problem came from the Spanish verb “callar,” meaning to “shut-up.” In the present tense, calla, the tense that orders people to “shut-up” has the same pronunciation as my first name “Kaya.” This was an immediate problem that I had to face, due to the surprised and offended reaction that I initially received when I
introduced myself. After a bit, I learned to introduce myself as “Kaya with a K like kilo”. This introductory approach worked because it immediately explained that I was not trying to be offensive, and that I also knew the ironic implications, as a qualitative interviewer, of the Spanish meaning of my name. Preliminary formalities were usually quickly soothed over and my informants would usually end up laughing at the explanation of my name. I used this humanizing play on the pronunciation of my name and its Spanish meaning to relax my informants, to break the tension from being interviewed, and to establish rapport with my new informants.

**Analysis**

My characterization of the interviews as emergent from a combined construction of meaning is not meant to undermine the significance and power of my role as researcher, interpreter, and author of this thesis. For as Van Maanen (1988, p.74) states, “ethnography is the representation of culture, the act of the desktop, not of fieldwork.” In agreement with this quote, the information and perspectives that I obtained while in Tijuana have since been shaped, resequenced, and reworked through my analysis to make the story that it is today.

My interview notes and participant observations were typed into a computer and transformed into a coherent form. Irrelevant digressions such as casual chit-chat made to establish interview rapport was edited away during this process. The interviews were generally categorized according to their context of Community, Political Group, Public Health, and Water and Sanitation Services. I then examined the texts in terms of my predetermined checklist of themes and compared across the categorization of interviews.
Themes evolved from comparing and contrasting issues that seemed to have comments and observations from several interviews. I also went back to my former literature review on these issues to understand how the evidence from the Tijuana interviews related to or disagreed with previous theory. From this analysis of the interview, the original themes of corporatism and clientelism were seen to play a dynamic role in each community’s quests for services and infrastructure, as well as in the political parties’ engagement with the public. Not least, I had several interviews with civil servants that did not fit into these pre-determined categorizations. I therefore concentrated on the counter-stories in my field data, transcripts, personal observations and experiences that could not be encompassed within the original themes.

Many of my interviews also contained contradictions between the informants’ description of, and understanding of, their constructed “reality” of community development. Much of the raw data that needed to be understood and re-focused came from my participant observation within the bureaucratic structure of public sector institutions. In as much as the role of civil servants needed to be better understood, social theories pertaining to bureaucracies were selected as the means to view and understand my fieldwork experience and the theoretically unresolved data that I had collected. As the contradictions in research are “just as illuminating as [the] similarities” (Eyles, 1988, p.13), these large discrepancies between the narratives of the community informants and the stories from the bureaucrats, have since emerged from my data as a significant finding for analysis. As frustrating as these disparate narratives and contradictory stories on community development were during my period of fieldwork, they do reveal crucial factors that act as obstacles to water and sanitation development to the isolated
communities of La Presa, Tijuana. Thus these discrepancies and information gaps are not a failure in research technique or lack of validation of information; instead this information has become an interesting and unexpected finding that pertains to my original research goals. What follows this chapter is the analytical presentation of my fieldwork data ordered in context of my theoretical framework. Chapter 3 is also a program evaluation of the institutional policy subsystem that is supposed to deal with public health and waterborne diseases.
Chapter 3

Bureaucratic Incapacity

This chapter examines the role of public institutions in facilitating or constraining community development in developing countries. Lately it has become recognized that bureaucracies may be counter-productive in administrating public services. Rigid structures prevent flexibility in addressing unique situations, while informal rituals and partisan political intervention interfere with an equitable distribution of goods and services. Public bureaucracies are a necessity in large cities, to coordinate complex problems such as providing basic health and infrastructure and to promoting a social environment that enables people to help develop themselves and their communities. Drawing upon contemporary sociological theories regarding bureaucratic structures, in this chapter I analyze the integration within and between public sector institutions, the formal requirements for communities to gain public services and infrastructure, the rigid codification of the official task framework, the informal processes and means of service distribution, public disclosure, and the official bureaucratic plans to address current needs and predicted problems. These sections were ordered beginning with the analysis of the broader, more formalized institutional framework, leading into analysis on the more informal, political, and personalized activities. The last section on planning and prediction was placed at the end of this chapter because it addresses the future goals and structures of public services and infrastructure in Tijuana. Thus, in terms of water-borne diseases, I assess the formally structured public bureaucracies in Tijuana, the informal practices of the civil servants, and the external political and economic environment which
enable The Ministry of Public Health, The State Water Commission, and The State Commission of Public Services Tijuana (CESPT) to fulfill their civic mandates.

**Social Theories of Bureaucracy**

Bureaucracies are designed to achieve control and coordination over complicated and collective tasks (Blau, 1987). As the first social theorist to study such institutions as social systems, Weber analyzed bureaucracies as the epitome of rationality and efficient functioning to ensure "precision, speed, expert control, continuity, discretion, and optimal returns" (Weber, 1947).

Later research into the sociology of bureaucracies theorized that these institutions do not all function according to this ideal principle of rationality (Foster, 1999; Hoy & Miskel, 1996; Blau, 1974; Scott, 1987). Blau (1974) emphasized the role of "social rituals" -- informal practices that after become the routine and unofficial rules of a bureaucracy. This conceptualization of bureaucracies can be identified as the natural systems perspective by which social groups within the bureaucracy are examined in order to understand how they manipulate the institution for their own survival and self-interest (Hoy & Miskel, 1996; Scott, 1987). The original institutional goals are not necessarily the concern or primary interest of these social groups and the resulting formal structure may bear little resemblance to what is actually occurring (Foster, 1999).

Much of the thrust of research into bureaucracies is now focused on how their formal structure attempts to achieve the specified goals while the informal practices of individuals and social groups are assessed in terms of their beliefs, interests, and conflicts with the primary objective (Hoy & Miskel, 1996). In keeping with this open systems
approach, the bureaucracy is not seen as an isolated phenomenon. The external environment is brought into view to grasp how such forces as political groups, resource competition, and culture influence the structure and dynamics of a bureaucracy (Scott, 1992; Hoy & Miskel, 1996).

**Institutional Integration**

To achieve maximum efficiency in the undertaking of its institutional goal(s), the basic structure of a bureaucracy is organized through a series of integrated offices, situated within a hierarchical structure, and guided by formalized relations and regulations (Scott, 1987). The drive for efficiency helps to integrate and coordinate responsibilities between departments and public agencies. Tasks are broken down into discrete categories, whereby distinct departments are responsible for an individual facet of the bureaucracy’s collective task. This specialized division of labor enables greater efficiency as the tasks can be allocated according to technical ability and standardized consistency (Weber, 1947).

Bureaucracies are organized according to a clear structure of departments that are responsible for a specific task. This structure is supposed to make the layout of tasks between departments easy to conceptualize (Scott, 1987). The purpose of this clarity is so the structure can be manipulated to most efficiently cover all of the components that contribute to the ultimate goal of the institution.

Although each office and department is responsible for its own specialized task, individual activities therein must be integrated with the other bureaucratic sectors and with the overall goals of the institution. As a bureaucracy is designed to address a
complex, multifaceted task, the contributions of each component are necessary for its efficient performance (Blau, 1987). Integration is necessary for two reasons: to coordinate duties and to establish an interconnected network of roles and responsibilities that ensures that all relevant tasks necessary for the larger objective can be accomplished within the bureaucracy.

With this ideal structural definition of a bureaucracy, based on a highly refined system of integrated and coordinated departments, I claim that this representation is not reflective of the Ministry of Public Health’s regulation of potable water in Tijuana. Rather than an integration between departments and bureaucratic tasks, the bureaucratic reality of the Ministry of Public Health is loosely organized and large gaps have developed over the supervision of water dealers and in the communication about poor water quality to at-risk communities.

The first example of the failure of the institution to effectively organize their bureaucratic structure is evident in the Ministry of Public Health’s supervision of private water dealers. With many communities not yet connected to the city’s water system, a vibrant private water industry exists in Tijuana. I interviewed Lazaro from Tijuana’s largest water company, Agua Clara. The company uses a federally certified, reverse osmosis, water purification process. In addition to this federal regulation, the state branch of the Ministry of Public Health conducts routine water quality tests of the Agua Clara water (Lazaro). Agua Clara distributes its water primarily through two retail methods: in local shops selling five-gallon refillable water bottles and through a fleet of water trucks that daily drive around Tijuana’s communities peddling the water in barrel quantities (Lazaro).
The Department of Environmental Health must initially register each store that sells water. Afterwards, Environmental Health is supposed to conduct water quality tests and site inspection every six months (Lazaro). Agua Clara is responsible for the quality of the water sold in these local shops. Consequently, should any impurities be found with the water or the sanitary quality of the distribution system, Agua Clara must quickly rectify the situation. If after five days the store still does not pass the Environmental Health inspection, then the local water retailer will be closed down (Lazaro).

Lazaro’s narrative, however, reflects the official procedures that regulate the private water industry. When I spoke with Jose, a shop owner and water dealer in Terrazas Del Valle, about his experiences with Public Health, a very different tale emerged. Jose has been selling Agua Azul water, Agua Clara’s main competitor, for eight months. His store has never been registered with Public Health and the Environmental Health water quality inspectors have never visited him (Jose). Furthermore, when the water tank and distribution system were first installed in his store, the Agua Azul representatives told him that an inspector from Public Health might come and try to inspect the store. Jose was informed that should this happen, “not to worry,” but that he should quickly call the head office. He was then instructed to tell the water inspector that there was no need to test the water since everything had already been approved by federal certification.

Although the water companies are responsible for the stores that distribute their water, the companies are not responsible for the quality of the water sold in the water trucks. Lazaro says that Agua Clara classifies the water trucks as independent businesses and should Environmental Health find something wrong with the water-truck water, this
discovery would not be Agua Clara’s concern (Lazaro). Despite this claim that the water trucks are not the company’s responsibility, Agua Clara prevents territorial disputes by assigning and regulating where the trucks can sell their water (Lazaro). The admission that Agua Clara regulates the location of where the “private trucks” can sell, appears to contradict Lazaro’s earlier argument that the trucks are independent of the company.

It is easy to understand why Agua Clara does not want to be responsible for the quality of the water sold by the private trucks. The purified quality of the water sold in these trucks is very difficult to maintain. The trucks have a hole on the top, where new water is added. This hole usually does not have a cover, and the water is constantly exposed to the arid environment and dust floating in the air. When filling a barrel, the water flows from the truck tank through a hose to an open barrel. No indication is posted of when the hose was last cleaned and no regulations exist to enforce any basic sanitary standards. When delivered, the water is put into a big blue barrel supplied to households by the municipal government. These barrels do not have a lid. I have often seen these barrels with a plywood board covering the top of the barrel. There is no indication of how often the blue barrels are cleaned. The plywood boards appear to provide only a marginal seal against dust and grit. At any point along this line of distribution, the water can easily accumulate dirt and bacteria. As such, with so few measures taken to preserve the purity of the water, Aqua Clara would be more open to liability if that firm was responsible for the quality of the water sold in the water trucks.

Further, there is no guarantee that the water in the water trucks comes from the water companies that regulate the trucks. These water trucks also get their water from field pumps that are most likely contaminated from the open containers and particles in
the air as well as from the lack of sanitation system and the resulting unregulated disposal of untreated sewage waste. As the private water companies can have no control over the sources of the water sold by the contract water trucks, it is easy to understand why these companies do not want to assume any responsibility over the quality of the water product.

Finally to emphasize the unregulated, unsanitary quality of the water sold by these private water trucks, Francisco, the Director of the Department of Environmental Health, said that his office is not responsible for monitoring the quality of the water sold by these trucks. Instead, the water sold by the private water trucks falls under the jurisdiction of the Ministry of Goods and Services (Francisco). Thus, the water sold by the water-trucks is not officially recognized as a public health concern.

The classification under the Ministry of Goods and Services further removes the water truck water from the realm and responsibility of the Ministry of Public Health. According to this classification, the water from the private trucks is a consumer product where individuals can decide whether they want to buy it or not. This classification thereby emphasizes "individual choice and therefore highlights the voluntary nature of the exposure" (McMullan & Eyles, 1999: 301).

Yet the water sold in these trucks is the primary source of domestic potable water in communities without water infrastructure. Little choice is available for the inhabitants of undeveloped communities such as Terrazas Del Valle but to buy this water. Thus, this arrangement is a public health concern. The Ministry of Public Health should regulate and enforce the quality of the water in the trucks as it does the water sold in the stores. Yet, the responsibilities between the departments in Public Health are not being effectively coordinated and gaps have developed in the regulation of water quality.
distributed in the local stores and by the water trucks. As such, the Ministry of Public Health appears to be failing to ensure the public’s health in the communities that must rely upon water sold in stores and by the water trucks.

The capacity gap in water quality regulation is possibly the result of the exportation of first world bureaucratic structures to developing countries. Water quality is a public health concern throughout the world, however the distribution of potable water by private trucks is a health concern characteristic of developing countries with limited infrastructure development. When the original structure of the Ministry of Public Health was designed, the international agencies that funded the development of these public institutions in the ‘50s and ‘60s, might not have considered water trucks as a primary source of potable water. Additionally, Tijuana is a rapidly urbanizing city, and the development of infrastructure has not kept pace with the growth of the city. For this reason as well, the original bureaucrats who conceived of the structure of the Ministry of Public Health, might not have considered it necessary to designate an employee’s position or a departmental task specifically to the supervision and regulation of private water dealers. As such, the structure of the Ministry of Public Health has not kept pace with the changing dynamics of Tijuana and with the means through which many of the city’s communities obtain potable water.

The second example of the failure of the Ministry of Public Health to tackle the policy problem of water-borne diseases within its organizational structure is evident in the lack of community health educators and the communication of institutional knowledge to prevent incidents of disease in at-risk communities. While the example of
the water trucks showed that there were gaps in the coordination of Public Health concerns, in this second example formal programs officially are in place; in actuality, however, these programs are not manifest at the community level. Thus structural integration is a matter of design only and the Ministry of Public Health appears to be not fulfilling its bureaucratic mandate to protect the public's health.

According to Esmerelda from the Department of Health Education, community courses are offered throughout the communities of La Presa that specifically focus on water-borne diseases. This course educates members of the community, mostly mothers, about the ways that they can prevent their families from falling ill due to diarrheal diseases (Esmerelda). This course teaches people about the bacteria and viruses in the water, the importance of boiling drinking and cooking water, steps to undertake Oral Rehydration Therapy (ORT), and the avoidance and treatment of dehydration due to diarrhea (Esmerelda). The programs are designed to teach individuals about the actions that they can personally take to prevent and treat water-borne diseases.

According to Esmerelda, this course on water consumption and diarrhea preventative measures was being taught in Mariano Matamoros Sur and La Morita 1 throughout the summer of 1999. To help me with my research, so I could interview the community-health educators, Esmerelda mentioned two community centers in Mariano Matamoros Sur where this diarrhea health education and prevention course was being offered.

When I went to these community centers, Toney and Eva, the program coordinators of each center, had no knowledge of the diarrhea education and prevention program that Esmerelda had been describing. This supposed course was not being
offered after all at their community centers (Toney; Eva). Trying to be helpful, Toney suggested Lupe, a local woman in Mariano Matamoros Sur who taught herbal remedies for diarrhea and dehydration through a non-governmental organization from San Diego. When I spoke to Lupe however, she too reported no contact with either the Department of Health Education or the Ministry of Public Health.

Officially a program is in place to educate community inhabitants about the risks and preventative measures involved in water consumption. In reality, however, I could not find any proof of this program in the communities where I conducted my fieldwork and even within the community centers that were supposedly providing the course. This example indicates that even with Public Health tasks formally assigned, these programs do not necessarily translate from the official bureaucratic realm to the pragmatic reality of the communities.

The potential benefits from the integration of these departmental responsibilities further dissipate as both informants from Environmental Health and Epidemiology claim that communicating to the other sections of Public Health such as community health centers or primary health care is not part of their job (Ilena; Francisco). Thus, even if the community-health educators, to which Esmerelda referred, actually existed in the communities, they still could not be effective communicators of institutional knowledge because the poor water quality results are not provided to the at-risk communities (Francisco).

It is at this point that the goals of the bureaucracy, to prevent incidence of disease, begin to be overshadowed and fractured by the behaviors of the bureaucrats. As the results from the water quality measurements are not related to the primary health
programs, no dissemination of the knowledge of poor water quality occurs, to heighten community awareness. The lack of communication between these two departments prevents the community health specialists from being aware of the health hazards within the community. It further prevents people from being aware and able to effectively take these risks into consideration when it is officially known in the public sector that the local water quality is poor.

Theoretically, the integration and communication between the Departments of Health Education, Environmental Health, and Epidemiology would be an effective means to transmit institutional knowledge, improve community knowledge and awareness, and create an active program to directly prevent the incidence of water-borne diseases in the communities most at jeopardy.

The foregoing indicates a lack of integration between the various departments in Public Health, between CESPT and Public Health, and between the government agencies and private doctors (Andres; Madero; Paloma) and water companies. It also indicates that the coordination between departments is limited and faulty, that there are huge gaps in the coverage of institutional responsibility where there should be measures to control and protect the public’s health. Instead of an effective system of integration that covers all factors associated with health and potable water, the parameters of institutional responsibility inhibit a comprehensive coverage of services. Institutional responsibility is defined in such a limited fashion that the primary means through which communities unconnected to the municipal service system used to get water is unregulated by the government’s water or health agencies.
Integration between Institutions

The comprehensive regulation of potable water requires the attention of several organizations in Tijuana. The notion of integration is still appropriate because these institutions must communicate and coordinate responsibility through reports and meetings. Grindle (1997) labels the organizations that must integrate their activities as “task networks.” The level of communication and coordination between the institutions affects the combined performance of the organizations within a task network. Grindle (1997) further labels gaps between organizations that result from a lack of interaction and poor task performance as “capacity gaps.” These capacity gaps prevent public bureaucracies from effectively fulfilling their institutional goals. As such it is important to clarify how the overall institutional structure handles the particular issue and to locate where the gaps exist (i.e., where the communication and coordination break down between the institutions).

But the integration of tasks and institutional responsibility are important issues to trace as both the Ministry of Public Health and CESPT are jointly responsible for water quality testing (Francisco). In the Ministry of Public Health and CESPT, systemic integration is facilitated through the sharing of information and results in the form of reports. The basic task of the Department of Environmental Health is to routinely conduct water quality tests throughout Tijuana. The water is tested for its chlorine levels as well as for the presence of microorganisms and fecal matter. The water quality tests are conducted approximately once a week at random locations throughout the city and at fixed points in community waters tanks. The results from these tests are written up in a report every month (Francisco).
CESPT also performs water quality tests at its own fixed sites (Esteban; Francisco). CESPT has 30 fixed testing sites located in community distribution tanks and watering holes (Francisco). Similar to the department of Environmental Health, CESPT checks the chlorine levels and performs a bacterial analysis. In addition, CESPT also does physical analysis of the pH levels, temperature, and the level of heavy metals present in the water (Esteban; Francisco).

According to Esteban and Francisco, results from these tests are also written up as monthly reports. CESPT is required to share its reports with the department of Environmental Health (Francisco), but Environmental Health only has to inform CESPT if its own test results discover a high bacteria count. When this happens, the Department of Environmental Health has to order CESPT to increase the amount of chlorine in the water.

Meanwhile, the Department of Epidemiology routinely collects disease rates in Tijuana. The weekly disease rates are compared against the maximum and minimum disease rates from the past five years (Ilena). These results are then presented in a report and regularly offered to the federal Department of Statistics (Ilena). At the beginning of the interview with Ilena, she claimed that the Department of Epidemiology did not keep track of water-borne diseases because it was too much work and her organization did not have enough resources. As the interview progressed, however, Ilena admitted that her Department is officially expected to monitor some water-borne disease such as cholera and deaths from gastro-intestinal (GI) diseases.

Incidents of disease are reported to Epidemiology from all sectors of health services in Tijuana (Ilena). These diseases are only reported however when a doctor fills
out an Epidemiological Report. The quality of these “disease rates,” however, is not high. Ilena admitted that the epidemiological statistics did not include the disease rates from La Presa. In fact many of the communities do not have a health center where a doctor could fill out the Epidemiology Report. I asked the doctors in Terrazas Del Valle and in La Morita whether they had ever filled out the forms to report to Epidemiology; they replied that they had not (Paloma; Ramon). Furthermore, they said that many people in La Presa do not go to doctors, thereby hindering a comprehensive accurate account of all incidents. In addition, when I spoke with Elsa at the pharmacy in Mariano Matamoros Sur, she estimated that only 30 percent of her patients had seen a doctor regarding their illness. None of her cases were ever reported to the Epidemiology Department.

Epidemiology does not try to conduct any statistical analysis that would connect poor water quality results to the incidences of water-borne diseases (Ilena, Francisco). In fact, Epidemiology does not perform any other grand geographical making to even record the location of where the incidence of illness or disease occurs. Ilena’s excuse for a lack of spatial coordination of incident of disease is that it would be “too difficult” to track the geographical distribution of people. Many patients, I was told, travel to downtown Tijuana to be treated in the central hospitals, a trip that would hide the true location of the incidence of disease. Ilena did not think that a doctor should inquire where a patient lives and how one’s health might be related to the spatial patterns of disease in Tijuana.

Thus the burden of disease in the three communities does not become part of official bureaucratic discourse. The pervasive water-borne diseases in La Presa are not tracked by Epidemiology, and the health care practitioners in that peripheral region do not report to Epidemiology. These two factors operate like a catch-22. The lack of
bureaucratic interest in the disease rates from La Presa hides the actual burden of disease that could provide pressure for these communities to get water and sanitation resources. The lack of local incentive to report to Epidemiology and to force Public Health to officially recognize the high rates of water-borne illnesses prevents programs from being initiated to address this need.

An interesting part of this example in Tijuana is that the production and exchange of reports are occuring between two separate public institutions. It is important to note that the bureaucratic incapacity extends beyond the formal framework of an individual institution and into its relationships with other public agencies in Tijuana. Thus the notion of bureaucratic integration and the coordination of complex tasks must examine the level of coordination and communication with other bureaucracies to flag and rectify any capacity gaps.

This lack of communication begs the question of what is the purpose of the water quality tests and the reports that get produced. Merton (1968) theorized that the creation of paperwork and reports are a negative side effect of the aspiration for institutional integration. Paperwork and the exchange of reports within the hierarchical structure and between departments become the official means of communication. The production of water quality reports signify that the Departments of Environmental Health and Epidemiology are doing something and working according to the official responsibilities of the Public Health mission. Creating paperwork and files creates a façade of action and makes it appear as if the institutions are working to fulfill their bureaucratic mission. The city’s water quality is being monitored, although that is all that the agencies appear to be doing. The reports are a physical symbol that the standards of Tijuana’s water quality are
under control and that the government is aware of what is going on in regard to public health.

The role of the Ministry of Public Health and its creation of reports can be related to Foucault’s theories on surveillance and the panopticon. The panopticon is the systematic exercise of power and the registration of knowledge through a centrally located, all-seeing gaze (Foucault, 1980). Foucault further analyzes how societies increasingly came to value statistical measures to judge what is normal (Hillyard & Watson, 1996). This measurement distinguishes and classifies the mechanics of biological processes: births and mortality, morbidity, life expectancy, and the conditions that cause these processes to vary (Foucault, 1979). The measurement of the biological processes is conducted through the panoptic system of surveillance. Although this form of regulation and population control is enacted to prevent people from harmful acts and to stay within the classification of “normal,” the system of surveillance and knowledge gathering simultaneously does not necessarily translate into action (Foucault, 1980).

The Ministry of Public Health through the Departments of Environmental Health and Epidemiology has this panoptic system of surveillance that gathers and classifies knowledge of the biological processes surrounding water and health. Despite the fact that the collection of these data creates societal norms for acceptable levels of bacteria, fecal coliforms, and rates of water-borne diseases, these departments do not try to intervene and exercise the power that comes through their system of surveillance and knowledge gathering. So the Ministry of Public Health’s system of surveillance becomes a technical exercise of power and classification, rather than a tool for social policy and intervention to those in need.
Formal Community-Institutional Requirements

Formalized rules and regulations are necessary in bureaucracies to create a standardized plan that can be consistently applied to accomplish the bureaucratic goal and to deal with all clients in a similar manner (Hall, 1999; Blau, 1987). These standardized rules create formal routines that must be applied under all circumstances. The routines guide the actions of employees, thereby preventing the need for individual discretion.

Within a bureaucracy, predicated upon formalized relations, an action is rational if it conforms to the internal rules of the organization (Calhoun, 1990). This rationality continues if the rules are applied in a consistent format to exclude any unique circumstances that are not conceived within the original formulation of the regulations. Under the dictates of the rigid and repetitive bureaucratic mold, rationality and efficiency are synonymous (Calhoun, 1990). From one perspective, the bureaucratic mold is very equitable, as everyone must meet similar requirements. If a client cannot fulfill these requirements, however, s/he becomes unable to obtain the public resources or services under the bureaucracy’s authority.

To obtain water and sanitation services, CESPT requires the inhabitants of every community to have title to their land, a neighborhood association, local funding, and a community census (Esteban). By the very nature of CESPT’s requirements, many of the communities on the periphery of Tijuana are particularly unable to meet these institutional demands.

Stansfield (1992) questioned why notions of efficiency in Mexico’s public institutions are of primary importance rather than measurements regarding the equitable
distribution of services and resources. Yet because the fulfillment of these official regulations is of utmost importance, CESPT actively inhibits communities and households from gaining access to water, sanitation, and health services.

The first official requirement is that the community residents must have title to their land. This can be a difficult requirement to fulfill for both squatter and municipally planned settlements in Tijuana. Because Mariano Matamoros Sur was originally settled during a land invasion in 1985, its inhabitants had to quickly form neighborhood organizations. In turn, the neighborhood associations aligned themselves with the PRD opposition political party to put pressure on the then-PRI municipal government to gain governmental recognition and title to the land (Monse).

Since its settlement, Mariano Matamoros Sur has continued to grow in size and population. Due to this extension of settlement, even within Mariano Matamoros Sur, several waves of community organization have attained title to the land. The core of the Mariano Matamoros Sur settlement has had title to their land for over a decade (Monse). Meanwhile, the newer section of Mariano Matamoros Sur have had title to their land for only 5 years (Luis). Even within the official categorization of the “community” of Mariano Matamoros Sur, variations on the ground do not easily fall into CESPT’s first guideline for the development of water and sanitation infrastructure.

In 1992, Tijuana was threatened with severe flooding and loss of life that forced many people to evacuate from high-risk areas to safer locations (Alicia). IMPLAN, the municipal planning agency responsible for emergency relocations, resettled a community of flood victims to the current site of La Morita 1. Because the shuffle of the residents of La Morita 1 was deemed a governmental “planned” settlement, these households, unlike
the squatter settlement, were legally entitled to basic services of electricity, water, and sewage (Alicia; Alex).

Unfortunately, IMPLAN did not have the right to give away this land (Pilar). The land that La Morita 1 was settled on had been private agricultural land left to pasture. Needing to relocate the flood victims, IMPLAN simply decided to move the inhabitants onto the unused agricultural land. Whether the planning agency thought that it should solve the immediate crisis and deal with the consequences later, or if it simply assumed that the land was governmentally owned, is unclear. Whatever the rationale, this decision left the community of La Morita 1 in a precarious position that prolonged the length of time that these residents had to wait to secure services. This situation is ironic since, as mentioned earlier, according to one branch of the municipal government (IMPLAN) the citizens were legally entitled to electricity, water, and sanitation. However, because title to the land was under dispute with the owner of the agricultural land, CESPT, another branch of the municipal government, refused to recognize the settlement of La Morita 1 (Alicia). It was not until 1997 that this case was resolved and CESPT finally recognized the land title of the La Morita 1 residents (Pilar; Alicia).

The third community of Terrazas Del Valle is currently being developed. Although the government is selling parcels of land to the new inhabitants, Terrazas Del Valle is not considered to be a “planned community.” As a result, residents are not legally entitled to the basic services that are supposedly officially guaranteed to the residents of La Morita 1 (Dora; Alex). After purchase, each household immediately acquires title to the land. Up to the time of my fieldwork, all three communities had
gained, through very different methods, title to their lands, and therefore were able to satisfy CESPT’s first requirement.

The second formal requirement for CESPT is that a community must have a formal association to represent the interests of the community. In this example, formality is defined as a group of local inhabitants who are in charge of interacting with CESPT and fulfilling all of the institution’s requirements. CESPT mandates require formal community organizations due to concerns over funds and grassroots organizational ability (Esteban). Regarding money, CESPT does not cover all of the construction and installation expenses needed to connect a community to the municipal water and sanitation systems. Receiving communities are expected to fund half the expenses (Esteban). The assumption is that community groups can effectively raise the large amount of collective money that is needed to cover the community’s portion of construction costs (Esteban; Raquel).

Further, CESPT requires a thorough community survey before it can approve the provision of services. Community organizations are needed to help CESPT complete the necessary census (Esteban). It seems strange that the community groups are responsible for counting the number of household residents and even for measuring their own property sizes for the CESPT census (Luis; Alicia). With such a method, there seems no guarantee of standardized results within and between communities. The arrangements indicate that CESPT depends upon the funding and organizational ability that community associations furnish.

Institutional requirements are also directed towards the household level. Individual households are expected to pay a connection fee, a levy that excludes the
households that cannot afford this charge. Each household must complete paperwork for
the CESPT registry in order to have a record and to set up a water account.

According to Baja California State statistics, however, 17 percent of Tijuana’s
population is illiterate (INEGI, 1998). Literacy rates in Tijuana are not broken down to
Tijuana’s five districts or according to the individual community rates. Although
unconfirmed by any study or statistics, it is generally believed that the inhabitants of La
Presa, the district where the three research communities are located, have the poorest
education levels of all of Tijuana (Mendoza; Doroteo). So at least one-fifth of the
residents of Mariano Matamoros Sur, La Morita 1, and Terrazas Del Valle do not have
the reading and writing capabilities needed to themselves fill out the CESPT paperwork.
Although the community and neighborhoods that they live in might be connected to the
water and sanitation system, individual households can still be excluded from these
services due to their financial and literacy conditions.

Even when a community fulfills all of these requirements for land title,
community association, local funding, and paperwork, the decision to install water and
sanitation services still ultimately resides with CESPT. Officially, the last condition for
community services is for CESPT to determine that it has sufficient institutional funds to
construct the water and sanitation infrastructure (Esteban). This issue is complicated by
several factors. On the municipal level, the availability of project development funds is
set by the priority that the government places on a community to gain infrastructure.
Political affiliation can either aid or inhibit attainment of these public services (Raquel;
Ernesto). Members of the opposition political parties to the PAN government claim that
their associations with community groups can hinder a community from getting services
from a public institution under the authority of the PAN government (Raquel; Ernesto).

This topic on the influence of political affiliation and access to public services is laid out in greater detail in the proceeding chapter on community organization and clientelism.

**Formal Client-Bureaucratic Relations**

It is necessary to understand the direct bureaucratic-client relations after a community is connected to the water and sanitation systems. This involves understanding how members of the bureaucracy deal with clients among the public, and in return, how these clients react to the social environment and the behavior of the people in the bureaucracy. While direct interaction with a public agency is not the preferred strategy for a member of the public (Ricardo) the formal structure needs to be probed to discover why people are avoiding direct application to CESPT for services.

No matter how low a person's position in the bureaucracy; s/he is still a representative of the organization. Thus, all employees are able to assume some of the power and prestige of their institution in terms of interactions with the public (Merton, 1968). This is not personal power invested in the individual; rather, it is the veil of authority and power inherent in their institutional position. The impersonal, formal behavior of a bureaucrat can cause conflict when interacting with the public (Merton, 1968). Clients believe that they deserve individual attention based on their unique circumstances, but the bureaucratic mode of behavior values rules and rigidity above all else, which can be offensive to the clients. Clients are convinced of the special features of their problems and do not want to be slotted in pre-categorizations or worse yet, have their individual characteristics deny them access to the bureaucratic services. Blau
characterizes the bureaucratic lack of sensitive and personalized treatment as a source of social problems. Clients who must confront and interact with a bureaucrat who has assumed this veneer of institutional authority, often see these mannerisms as a domineering and de-humanizing attitude (Merton, 1968).

To further elaborate on this notion, I suggest that bureaucracies in developing countries are not the faceless institutions that Merton describes. The lack of formal communication to a client regarding his/her petition can lead to feelings of uncertainty and a desire to use more secure avenues of request such as patron-client relationships. A personal example is illustrative. To gain insight into CESPT’s bureaucracy, at first, I tried to apply for a direct interview with an informant. Although I would have preferred to have a face-to-face interview, this was not allowed due to an institutional regulation that prohibited such direct communication. Instead, in order to obtain any information, I had to apply in writing. This application consisted of a letter of introduction and an accompanying list of my research questions. According to procedure, these questions would then be submitted for official approval and passed on to an informant who was deemed to be most capable of answering my concerns.

After I learned of the regulations regarding interviews, I submitted two copies, one that was designated for a potential informant, and another that was stamped and returned to me. At the time, I wondered about the purpose of stamping only the copy that went back to me. Yet there are several reasons within this bureaucratic environment that explain why this stamp was necessary.

To CESPT, the stamp on the research questions symbolizes official approval. The stamp is the physical certification that my questions passed official inspection and were
deemed acceptable to enter the institutional framework. But the stamp also signifies the permanence of the questions and that they cannot be altered once they have attained this formal approval. Note that I qualify this statement by saying that the questions were only determined to be acceptable to move through the institution. They were not judged whether or not they should be answered by anyone in CESPT.

The stamp also operated as a personal protection of my interests. I could use it as evidence that my questions had been accepted. In fact, I had to do this, as the first copy of my letter of introduction and attached list of questions were lost within CESPT. When this happened, I used the original stamped copy within my possession to claim that the bureaucracy had promised me that my issues would be addressed. Through this application process, I followed the official procedures for all clients of CESPT. I had to submit a formal request, go through the proper channels, and maintain proof at all times that my request was originally made and approved.

This official procedure left me with no control over who would eventually answer my questions; I would have no knowledge if anyone were actually looking at them or if they were just in the trash. A certain amount of trust is necessary in such a situation, and the little knowledge of what was happening to my questions only contributed to my perceived lack of control over the situation.

Each time that Libia and I went to the CESPT reception, we cheerfully talked to the secretary. Although Tijuana is accustomed to foreigners, I was a bit of an odd sight, standing in line, obviously a foreign, English-speaking woman, in a place where Mexicans normally go to communicate some concern about their water or sanitation services. By the third visit, the secretary easily recognized Libia and me. This personal
recognition was very helpful. Circumventing the normal bureaucratic procedures of the paperwork, the secretary, ignoring the other people in line, stopped Esteban, as he happened to be walking by and gave him my list of questions. Esteban, Director of the Department of Planning, Evaluation, and Control, responded directly to me that he would look at the questions and answer them for me. Although he had the time and we were both there, he acted according to the formalized relations between a bureaucratic representative and a public client: he refused to give me a face-to-face interview.

The question now is how this scenario should be interpreted in terms of the bureaucratic structure and also in relation to the bureaucracy’s relations with the Mexican public. There is no denying my privileged position. During my first visits to CESPT, I was treated according to the official regulations that were in place to deal with all the clients that approached CESPT. These official regulations demanded the submission of the research questions for approval. However, in contradiction to the formal procedures, with my presence in an unusual environment for foreigners, I was able to establish an informal relationship with the secretary that transcended the ‘normal’ processes. With some circumspection, I stepped ahead of the other clients in line; I also bypassed the rest of the application procedures and I was given preferential treatment. This form of interaction does certainly not accord with the formal parameters that guide the bureaucrat-client relations. Presumably, other clients who cannot establish some sort of personal connection with a member of the bureaucracy have to go through the entire official requirements to answer their concerns. The personal is more in apparent contradiction with the formal properties of the bureaucracy.
Merton (1968) argued that clients who had to fulfill the entire official requirements would come to perceive the bureaucracy as a de-humanizing institution that is non-responsive to their interests. In his more contemporary analysis, Blau (1987) also thought that the official requirements conceived in terms of files and paperwork can create a dehumanizing culture, perpetuating an official lack of concern for clients' individual needs and concerns.

In my case study of public agencies in Tijuana, I would argue that different processes are in operation. Personally, I did not feel "dehumanized"; I did, however, feel a lack of control and concerned about my research petition. This lack of control directly shapes why people choose not to use the formal bureaucratic means to secure public services, but rather turn to informal clientelist strategies. As I previously stated, my informants from the communities have avoided this direct method of application to a public agency (Ricardo; Raquel; Arturo). The preferred strategy, through personal and political connections, is a way that clients can ensure control over the expression of their petition and concerns. Personal networks can give a client someone to ask, "What is happening to my petition?" There is a measure of control in such a situation that paperwork and an institutional barrier cannot provide.

Ultimately, all of these predetermined rules situate CESPT within a position of power over its citizen clients. It is up to CESPT to determine whether a community will get services. CESPT has the power to tell the community that providing its residents with water and sanitation services is not a high priority. The public agency also has the power and authority to inform the communities that they will either have to continue to live without water and sanitation services, or else they have to raise their own funds to pay for
their construction (Raquel; Ernesto). Even after a community has been notified that it will soon be receiving water or sanitation services, the CESPT-community interactions are guided by a formal framework. The community has to complete the requirements necessary to begin construction, such as conduct a community survey describing basic community demographics, fill out all of the required paperwork, and individually pay for the household connection fee. Connection to the municipal water and sanitation systems is not automatic, and communities and households have to organize, apply, and make sure that they fulfill all of the institutional criteria.

This requirement is an example of how CESPT uses its bureaucratic structure to maintain the procedures of the institution, rather than have the public agency work to ensure that the people have access to its services. The dynamics of institutional power and community relations run counter to the original intention of the public bureaucracies which were originally designed to efficiently undertake a complex task that needed a coordinated effort between many individuals and types of labor. Bureaucracies are then supposed to act as the “servant to the people” (Merton, 1968, p. 257). Instead, through the distortion of the procedures originally designed to make a bureaucracy efficient, the public’s needs become subordinate to those of the bureaucracy itself.

Dynamics of Formal Job Classification

Formal rules prevent conflict between departments, managers, and their subordinates (Merton, 1968). Having a clearly defined code of behavior for all employees in a bureaucracy is supposed to prevent arbitrary actions and attitudes that might initiate interpersonal hostility and tension. Personal conflicts are seen as
potentially harmful to bureaucracies, because they can distract personnel from efficiently conducting their individual duties and integrating their tasks in a cooperative and productive fashion. Actions that fall outside of the official bureaucratic regulations are perceived to be at best, disruptive and inefficient, and at worst, beyond the acceptable norms and procedures of the institution (Hall, 1999).

Inside the bureaucratic structure, public officials are segregated in Departments that are responsible for strictly assigned tasks according to technical expertise. This is based on the notion of the machine, where an individual efficiently undertakes the same designated task over and over again (Blau, 1974). With a bureaucracy’s formal regulations in operation, an employee’s responsibilities are clearly defined. This designation creates a clear boundary for what an employee should be doing, as well as a clear definition of what is beyond his/her formal responsibility. Authority is based on an employee’s administrative position within the hierarchical structure (Calhoun, 1990). Managers determine departmental directives and communicate this information down to their employees. Similarly, employee activities and results should be communicated to the administrators responsible for the direction of institutional operations (Blau, 1987).

These expert assignments are situated within a hierarchical structure wherein a supervisor is responsible for, and has authority over, his or her assistants (Blau, 1987). When a supervisor does not follow the guidelines and assigns an extra task that falls outside of an employee’s specified duties, an arbitrary action is considered to take place and is not accepted within the formal bureaucratic regulations. This reason centers on the quest for efficiency. An unofficial task would distract a subordinate from her official duties, a distraction that would inhibit bureaucratic efficiency because the employee
would not be working towards collective bureaucratic goals. Furthermore, because the supervisor and employee are situated in a hierarchical context, the subordinate would feel pressure to undertake the unauthorized task. Saying no to the distracting task might be outside of the power of the employee. This lack of control over extraneous assignments can easily create feelings of uncertainty and resentment (Blau, 1987). Ultimately, hostility and office tension could also disrupt the overall efficiency of the institution.

Within the Ministry of Public Health, I originally tried to speak to Dr. Calvillo, a director within Tijuana's branch of Public Health. Several sources had recommended his name to me as a potential informant. Much as I wanted to speak to Dr. Calvillo, however, he did not want to speak to me. This potential relationship with Dr. Calvillo is analyzed in the next chapter on clientelism but what is relevant in this section on bureaucracy is that to avoid speaking to me, Dr. Calvillo offered up his subordinate, Ilena, from the Department of Epidemiology.

Ilena was not happy with Dr. Calvillo's referral. In fact when I first met her, she could be characterized as abrasive. Ilena's displeasure was evident, as she demanded to know my credentials. She did not believe that I had neither the knowledge nor the personal or institutional authority to speak to her. Several times she iterated that her office had nothing to contribute to my research and that an interview was a total waste of time. According to Ilena, all that the Department of Epidemiology was responsible for within the Ministry of Public Health was to monitor and track the changing incidents of illness and disease in Tijuana. Speaking to me was outside of these specific duties and I was an unwanted distraction from this job.
Despite her objections, Ilena had to speak to me, because her supervisor Dr. Calvillo had assigned her this task. Ilena was forced to accept Dr. Calvillo's "arbitrary" assignment because he possessed authority over her, stemming from his position within the hierarchy of Public Health (Robbins, 1991). This legitimate power, with control over her employment, enabled him to coerce Ilena's cooperation.

Ilena's verbal and emotional response dramatically illustrated how she felt about undertaking any task that fell outside her official duties. Ilena turned out to be one of my most interesting informants. Not only was her dialogue extremely relevant to my research, but her entire demeanor and reaction became illustrations for my research. While it must be acknowledged that Ilena may have been deeply resentful of taking time away from her duties to talk with me, a plausible case exists that her mindset approximates her outlook towards communication with the public. Indeed, she may have become even more pleasant to me during the course of the interview because I captured her interests and was interested in her story and her opinions, than to clients who clamor for her agency's scarce resources.

The second issue that should be extracted from this interview refers to the rigid definition of employment responsibility. The routinization of departmental responsibility means that employees no longer necessarily perceive their role in terms of the grand agenda of the overarching bureaucracy (Merton, 1968). Roles are reduced to fragmented daily tasks that ignore the broader structural goal. Individual employees begin to assume a dispassionate mindset, limiting their technical roles to a greater extreme than was originally intended (Merton, 1968). This lack of flexibility and broad vision that sees the
relationship between various departmental categories may constrain a bureaucracy from achieving a successful and equitable accomplishment of its original task.

Ilena is a civil servant in the Ministry of Public Health who does not conceive of her job beyond the context and collection of numerical data. As with the officials in the previous section on integration, Ilena has a job that lacks any active component to improve public health. Not only was it not her job to communicate her epidemiological findings to the other offices in the institution, but talking to the public was also outside the jurisdiction of her 'office'.

This example supports Merton’s and Blau’s analysis that arbitrarily assigned tasks can cause antipathy in subordinates. It also reveals the very narrow conception that Ilena had regarding her position in public health. Her job was not to communicate to the public. Ilena declared that she was not there to disseminate her epidemiological findings beyond the confines of her department and the federal Bureau of Statistics. Anything that fell outside of the statistical analysis of rates of disease simply was not her job.

The gathering of statistical information on the rates of disease in a city is very important, but this information should be collected for a purpose. As part of the Ministry of Public Health, the collection of these rates of disease should be done to reduce the burden of disease in the city. The collection of numbers and the act of measuring a variable “impl(ies) a need for action, because we do not measure things except when we want to change them or change our behavior in response to them” (Stone, 1997: 167-168). McMullan and Eyles (1999: 298) similarly highlight the significance of numbers on public policy, as “anything measured is thus deemed as important.”
The failure to connect geographical location to disease rates causes the Department of Epidemiology to lose a powerful, quantitative tool to emphasize La Presa's disproportionate burden of disease. Epidemiology does a disservice to itself and its clients by not communicating the Department's statistical findings. The lack of communication downplays the potential importance of Epidemiology's numbers in setting institutional priorities.

Numbers create a powerful argument that dramatically and symbolically demonstrate a heavy burden of disease. These numbers need to be accurately collected and then communicated to the administrators ultimately in charge of health policy. Because the numbers come from recognized scientists, such as the epidemiologists within the Ministry of Public Health, the decision makers within the Ministry are more likely to credibly recognize the information and to base their decisions accordingly (McMullan & Eyles, 1999).

Yet this lack of intra-institutional communication seems at odds with the original goal of the Ministry of Public Health. The institution does not warn communities about polluted water, nor does it appear to raise institutional awareness that water-borne diseases are highly pervasive in marginalized communities. Therefore, health programs are officially functioning but they do not reach the communities that need the extra support. The emphasis on water-borne diseases is erroneously categorized as an individual responsibility and neither the Ministry of Public Health nor CESPT recognize more systematic explanations of the problem of the high prevalence of water-borne diseases in communities that lack their basic public services.
Informal Social Rituals

Blau’s analysis of the sociology of bureaucracies has emphasized the informal interactions and social rituals of a bureaucracy as a means to maintain institutional flexibility (Calhoun, 1990). This conceptualization of bureaucracies is often identified as the natural systems perspective, by which the social groups within a bureaucracy are highlighted in order to understand how they manipulate the institution for their own survival and self-interests (Hoy & Miskel, 1996; Scott, 1987). The original institutional goals are not necessarily the concern or primary interest of these social groups and the resulting formal structure may bare little resemblance to what is actually occurring (Hoy & Miskel, 1996).

The bureaucratic structure and administration of public resources and services concerning water and sanitation services and community development is not isolated from the political system of clientelism in Tijuana. These two systems are inter-linked, through personal and professional relationships and through the informal social rituals that bind the two systems together.

Ricardo, a PAN party patron, needed an informal political favor from CESPT to reduce the water bill of a family from Mariano Matamoros Sur. This family, as clients of the PAN party and upon Ricardo’s request, received preferential treatment from CESPT (Ricardo). This is an example of the informal social rituals used by employees of CESPT and further reflects the dynamic interaction between the formal system of the public bureaucracy and the informal system of clientelism.

Although a director from CESPT fulfilled Ricardo’s request for a clientelist “favor,” this informal action and preferential treatment countermined the official codes of
bureaucratic formality and requirements. To make these informal and political requests institutionally acceptable, CESPT did a “Socio-Economic Study” of the individual or family to receive the favor (Ricardo). Officially, this Socio-Economic Study is undertaken to fix the required level of assistance to the client. CESPT will send a representative out to the home of the petitioner to assess the situation and ascertain whether the petitioner has a valid claim to institutional assistance. The CESPT agent will examine the house and estimate its value. Then the agent will interview the petitioner with a standard list of questions such as: Do they have any dependents? Do they own a car? And how much does the family earn? Based on the answers to these questions, CESPT will officially establish the level of institutional assistance.

Now it is important to say that Ricardo has been assured that CESPT will answer all of his requests (Ricardo). No matter what situation the Socio-Economic Study discovers, Ricardo’s and the PAN party clients have already been guaranteed CESPT’s assistance. Hence, the Socio-Economic Study does not conclude whether or not the client actually needs help or whether CESPT will help him or her. No matter what the Socio-Economic Study finds, CESPT will help the individual as a favor to the PAN party (Ricardo).

For this reason, it is important to question the purpose of conducting the Socio-Economic Study. I argue that the Socio-Economic Study is conducted to create an institutional façade that can cover up the informal political request. The Socio-Economic Study creates a lot of paperwork to assess a situation whose outcome has already been inevitably determined. Yet, through the process of conducting an “official” study, CESPT can label the petitioner as needing assistance. This creation of officially
recognized need covers the entire process of political requests and the informal yet systematic use of clientelism within the public bureaucracy. It makes the granting of assistance seem like a charitable act rather than a political favor.

In this instance, the paperwork created by the Socio-Economic Study yields legitimacy to the informal actions of the bureaucrats. It creates the façade that all public clients are equal before the institutional procedures and that all needy can apply for assistance and receive it, if they are judged according to the criteria of the Socio-Economic Study. But this is not the case, as the true criterion that settles whether someone will receive assistance appears to be his or her connection and petition to the PAN party and to Ricardo in particular. The Socio-Economic Study creates an image of institutional transparency through the production of paperwork and the construction of institutionally legitimate acts. Thus, in the end these informal social rituals turn out to be counter-productive to the efficiency of the bureaucracy (Grindle, 1997; Ward, 1989). As the rules through which the bureaucracy operates are inconsistently applied, this dynamic thereby limits the fairness of the institution’s public service.

Public Disclosure

In his social analysis on bureaucracies, Merton observed that these institutions tend to value secrecy (Merton, 1968). This observation was based upon private bureaucracies and their need to protect against competition. His analysis did not calculate the value of secrecy in public institutions, presumably as public institutions operate on behalf of the public.
Simmel (1950) theorized that lying, bureaucratic or not, is undemocratic in nature. The liars inherently have the advantage in a situation, because they have greater knowledge and are not being deceived or harmed by the lie. Among groups, lies are usually controlled by a few and enacted upon the many. On the other hand, truthfulness situates members of society on a level terrain as people have equal access to information (Simmel, 1950).

The example that is explored in this section is not a lie. Nonetheless, through the manipulation of the numbers created by the Ministry of Public Health, the public is deceived regarding water-borne diseases. The lack of full public disclosure could potentially undermine a public bureaucracy’s ability to serve and inform the people.

Furthermore, this deception creates an image that the Ministry of Public Health is effectively addressing this health issue.

Table 3

![Mortality Rates from Diarrhea for Children under 5 in Baja California](chart.png)


During our interview, Ricardo provided me with a copy of a Public Health report on Advances in Health from 1990 to 1999 in Baja California (Ministry of Public Health,
1999). With regards to my particular research focus, I examined the page pertaining to mortality rates from diarrhea. This report provided a graph that showed annual mortality rates for children under five declining from a high of 70 deaths in 1990 to a low of 15 in 1999 (see Table 3). In contrast, this graph also illustrated the number of diarrhea deaths prevented during the 1990s from a low of 0 in 1990 to a high of 140 deaths avoided in 1999. Unfortunately this report did not provide any raw numbers, the denominator of the statistics, or any indication of how these numbers were created. There also was not any corresponding description of new programs that could account for this decline of infant morality rates. Absent is a definition of statistical construction or program implementation, the report did not provide any basis of understanding on how the 618 deaths had been avoided in 1999 (Public Health, 1999).

To get a perspective on this decline in diarrhea mortality rates, I turned to Ilena, my informant from the Ministry of Public Health and the Department of Epidemiology. When I mentioned the report, however, Ilena became angry. She repeatedly demanded to know where I had gotten a copy of the report. When I went on to outline its contents regarding diarrhea disease prevention, she stated her skepticism about the quality of the statistics. To begin, the statistics from the report did not come from her department. As part of the Department of Epidemiology, she receives all the death certificates and the department must code and classify these according to disease type (Ilena). Ilena claimed that she had never heard of the Public Health Report, and flatly stated that her Department had not contributed the numbers that described the decline in infant mortality.
If the Department of Epidemiology finds that the rates of illness are above or below the average from the past five years, it investigates. Ilena usually finds that the increase in incidence rates has resulted from more people going to see the doctor rather than a change in the general prevalence of GI diseases.

In support of the Public Health report, Ilena did think that there has been a general lowering of incidences of GI deaths over the past five years in Tijuana. She guessed that the numerical information could come from several sources, not actually from saving any children, but from other programs such as the distribution of Oral Rehydration Therapy (ORT) and health education programs for mothers (Ilena). Instead, using information developed by the Department of Epidemiology, Ilena asserted that the report was a political construction and that the government was manipulating numbers for its own convenience (Ilena).

As Ilena relates, the report by the Ministry of Public Health is a political document because it influences the distribution of public resources to health. The report, with its statistic of 618 deaths averted, creates the image that the Ministry of Public Health is effectively confronting the prevalence of water-borne diseases throughout Tijuana. Ilena’s suspicion of the political motives behind the Public Health seems supported by the PAN party being the document’s distributor. Because the report is from the Ministry of Public Health, this authorship works to create an apolitical image to the document rather than revealing the actual numerical construction of the political benefit of the PAN government and political party.
Bureaucratic Planning and Prediction

The formal rationality of bureaucracies, based on job codification and goal specificity, depends upon consistent, efficient, and reliable behavior. These formalized relations become the crucial preconditions for bureaucratic predictability (Hoy & Miskel, 1996; Calhoun, Meyer, & Scott, 1990). While institutional goals provide a general direction for the bureaucracy or a retrospective justification for an action or an event, an institution is primarily guided by its operative goals (Hoy & Miskel, 1996). It is these operative goals that are designed to provide direction, reduce uncertainty, and reflect the intentions of an organization (Hoy & Miskel, 1996). Operative goals also represent standards to assess an organization, in order to appraise whether it is successfully meeting its own ambitions. Yet Scott (1987) noted that bureaucratic behavior is not always guided by these specific formalized goals. For this reason, operative goals cannot satisfactorily predict organizational behavior. Furthermore, bureaucratic formality, official regulations, and rigid task codification increases the capacity of institutions to resist or ignore external factors of change or complexity (Blau & Meyer, 1987).

In this last section on bureaucracy, I trace how the public sector water management institutions in Tijuana plan to reverse the prevalence of waterborne diseases in the future. The State Water Commission has identified the development of water and sanitation infrastructure in Tijuana as a pressing issue and as an institutional goal. All the same, the State Water Commission has structured the problem in very narrow terms, based on a stable population rate, that does not take into account external changes from urban growth and CESPT's increased provision of sanitation infrastructure throughout the city. This particular example further brings to light the institutional manipulation of
numbers, ostensibly created as attempts to overcome the economic constraints and to emphasize the importance of the State Water Commission’s mandate.

To fill the institutional vacuum created by the decentralization of federal authority over the development of water and sanitation infrastructure to the state level, Baja California created the institution of the State Water Commission in March 1999. Behind the creation of the State Water Commission was a wish to generate greater state organisation and cohesion over limited water supplies and services between Baja California’s major cities (Filipe).

The State Water Commission is made up of the Public Service Institutions from Tijuana, Mexicalli, Ensenada, and Tecate (Filipe). The State government has allocated funds for the State Water Commission and the Public Service Institution from each city in Baja California; each is expected to help plan and fund its own municipal development projects (Filipe). Filipe, the Director of the Department of Planning and Program Evaluation, as well as many others now employed at Tijuana’s branch of the State Water Commission, formally worked at CESPT (Filipe). As such, the personal and institutional integration between these two bureaucracies is very close (Filipe; Esteban).

The State Water Commission already has plans to improve the level of water and sanitation infrastructure in Tijuana. According to Filipe, the extension of water infrastructure in Tijuana is well under control, while the lack of sanitation services and wastewater treatment facilities remains a municipal problem (Filipe).

In 1998, CESPT produced a document, Feasibility Study of the Hydraulic Infrastructure for the Environmental Sanitation and Water Supply in Baja California that outlined the state’s current water and sanitation situation. According to this report
(CESPT, 1998), 10% of the city’s population lives without piped water, while 40% of the population are without water and sanitation infrastructure. Unfortunately, this limited provision of water and sanitation services in Tijuana is only expected to get worse as the city’s population steadily grows over in the next 10 years (CESPT, 1998, Filipe). In early 2001, CESPT expects that the demand for water in Tijuana will exceed the city’s water supply (see Table 4). The report also concludes that the city only catches and treats 34% of Tijuana’s wastewater (CESPT, 1998).
To rectify this situation, the State Water Commission has designed a grand infrastructure development project. Under this plan, all communities in Tijuana are officially scheduled to receive water and sanitation services through this agency by 2003. The plan will streamline all the types of water infrastructure throughout the state (potable water, sewage system, and water treatment). The purpose of this new project is to fight the backlog of infrastructure development in the cities, as the urban infrastructure development has not kept pace with the rate of population growth. The goal of the State Water Commission is to extend water and sanitation services to 98% of the Tijuana’s households (Filipe). The immediate plans of the State Water Commission are to improve the collection and treatment of sewage in Tijuana.

Unfortunately, the plans to improve treatment capacity are quite limited. The projection of proportional wastewater treatment is expected to increase, but this is only to treat the water that is already within the sanitation system. Meanwhile, 66% of the city’s
wastewater is not addressed within the future plans for sanitation infrastructure
development. The construction of water and sanitation infrastructure is primarily
directed towards the areas of urban expansion, particularly along the city’s western edge,
where the three field sites of this study are located (CESPT, 1998). Yet this goal only
includes households that have legal title to their land (Esteban). Resultantly, this statistic
excludes many of the recent immigrants to Tijuana who might still be fighting for the title
to their land (Esteban, Pilar). As I described earlier in this chapter, it can be very difficult
for communities to gain title to their land. Hence, the goal of providing water and
sanitation services to 98% of Tijuana’s household is a deceptively large number that only
encompasses a portion of the city’s population.

To apply Hoy’s and Miskel’s evaluative guidelines by measuring the success or
failure of the operational goals of bureaucratic institution, it becomes clear that these
plans for the extension of hydraulic infrastructure throughout Tijuana are already behind
schedule. Originally, construction of water and sanitation infrastructure in La Presa was
set to begin in 1998 under the authority of CESPT before the State Water Commission
had been formed. Construction, however, has not yet begun. Terrazas Del Valle was
originally scheduled to get a water system in 2000 and both La Morita 1 and Terrazas Del
Valle were also originally expected to receive a sanitation system in 2000 (Filipe;
CESPT, 1998). However when I interviewed Filipe from the State Water Commission,
these dates for water and sanitation systems had been postponed and the commission was
hoping that La Morita 1 and Terrazas Del Valle might be connected to the municipal
water and sanitation system by 2001.
The bulk of the funding (60%) for this water and sanitation development project was to come from the Japanese government through its Japanese Overseas Economic Co-operation Fund (OECF), 20% from the federal government, and 20% from Baja California’s Public Service water companies. Still, by August 1999, the State Water Commission had not yet received funding approval from either the Federal government or the Japanese Overseas Economic Co-operation Fund (Filipe, Esteban).

Although Northern Mexico is a poor region, especially compared to the United States, it is the wealthiest area of Mexico. Accordingly, the Mexican Federal government has decided that it will allocate federal infrastructure development funds to the lesser-developed southern states. Meanwhile, Baja California and the other northern States of Mexico are now responsible for finding their own funding (Erickson & Eaton, 2000).

This federal policy makes funding particularly arduous for the State Water Commission. As of August 1999, the OECF had not formally agreed to provide funding for the Baja California’s hydraulic infrastructure development project. The OECF was waiting for the Mexican Federal government funding agreement (Filipe), which according to current federal policy, might never come through. Despite these setbacks, Filipe was still very enthusiastic, convinced that the funding for the project would eventually materialize.

Other problems loom with the State Water Commission’s infrastructure development plan. The population estimates for La Morita and Terrazas Del Valle are unusual. The population for La Morita 1 is given as 5,624 (CESPT, 1998), which is similar to the population estimates from the municipal planning agency IMPLAN, which estimates the community’s population at 5,977 (Alex). The numbers provided for
Terrazas Del Valle are more problematic. The CESPT report lists the population of Terrazas Del Valle as 12,483 people (CESPT, 1998), while in sharp contrast, IMPLAN claims that Terrazas Del Valle has a population of 1,515 (Alex).

From my personal observation, I would estimate that both numbers from CESPT and IMPLAN are incorrect for Terrazas Del Valle and that the population of that community is somewhere in between. In spite of this observation, there are reasons for fixing these two numbers. As I previously outlined, the State Water Commission is desperately trying to get funding for its hydraulic infrastructure development project. The high population number creates a bigger need for the project, and increases the number of “population benefited” (CESPT, 1998). This high estimate offers more “bang for the buck” in terms of the number of people who will potentially use the water and sanitation services. In contrast, IMPLAN seriously underestimates the population of Terrazas Del Valle, because it is the planning agency that is responsible for the coordination of community development. After all, a large population in an under-serviced community would reflect badly on the planning agency and on the municipal government.

Ironically, the San Diego Union Tribune has already hailed the State Water Commission as one of “Mexico’s success stories” (Shirk, 1999). This success is predicated upon the decentralization of responsibility from federal to the state government which is seen as a means to better addresses local needs and help Tijuana’s poor (Shirk, 1999). Other sources are less enthusiastic about the State Water Commission (Umberto; Erickson & Eaton, 2000). They claim that it is appropriate that the State Water Commission is trying to improve the development of water and sanitation
infrastructure in the city -- but the Commission is only playing “catch-up” and does not have any long-term plan to control the city’s development (Ernesto, Umberto).

These examples of the limited plans for water and sanitation infrastructure development illustrate that the State Water Commission does not appear to be effectively predicting the future situation of the city, by not considering external change in increased sanitation systems, urban growth, and irregular settlement. Consequently, the State Water Commission is unable to even conceive of operational goals that encompass the actual water and sanitation deficiency in Tijuana. Additionally, the State Water Commission, despite its construction of a set of rational operational goals to guide its actions for the next three years, has been unable to begin its grand hydraulic project because it failed to consider changing political and economic events from the Mexican Federal government and the Japanese Overseas Economic Co-operation Fund. So, instead of playing “catch-up,” the State Water Commission through its narrow conceptualization of the external environment and its insufficient operational plans, is already falling behind.

Conclusion

The public bureaucracies in Tijuana that tackle water-borne diseases operate according to rules and social rituals that were originally developed to maintain cohesion and prevent conflict. These formalities and daily procedures have begun, however, to supersede the primary institutional goals of serving the public good. The original purpose has been replaced by the rising importance of discipline and regulations for functionaries. The standardized application of official rules and procedures helps to
create routine, and regularity is reassuring, for it provides the illusion of equitable treatment before the operational laws of the institution. Public bureaucracies are further compromised as the institutions and their civil servant employees lose their autonomy from political interference and must answer to the clientelist dictates of their political patrons.

To summarize, the first purpose of the public bureaucracies is to insure all clients equally satisfy all of the bureaucratic demands to receive a product or service. This creates a formal mold whereby efficiency becomes more important that the distribution of public resources. When clients do not exactly fit this mold, they are unable to gain access to the public services and resources. The three field sites, of Mariano Matamoros Sur, La Morita 1, and Terrazas Del Valle, have settlement histories that do not uniformly fit into CESPT's infrastructure requirements. Because of this lack of fit, the inhabitants of the communities have all had to, and some still do, live without the basic provision of public water and sanitation services.

Secondly, with respect to integration, the agencies of Public Health and CESPT, are linked by reports exchanged between Departments and institutions. These reports also have the symbolic and powerful purpose showing that the Departments are successfully accomplishing their designated bureaucratic tasks. Integration is also supposed to guarantee that all relevant aspects to the collective institutional goal fall under the jurisdiction of some office in the bureaucracy. This integration should ideally operate as an extensive safety net meant to prevent unevenness in the provision institutional services and programs.
Yet rigid internal regulations prevent bureaucracies from effectively addressing situations that fall outside of the defined characteristics for acceptance (Merton, 1968). As the prevalence of water-borne diseases crosses institutional boundaries, the integration between CESPT and the Ministry of Public Health fails to create overlapping responsibility. Rather, large gaps in responsibility, such as the lack of monitoring over the private water trucks and the failure of official health programs to reach the community level, demonstrate the limited institutional attention placed on water-borne diseases in underdeveloped communities in Tijuana. As such, the rigid regulations prevent the Public Health and CESPT bureaucracies from guaranteeing the quality of the potable water in Tijuana and ensuring the health of the population.

The official goals of bureaucracies may become displaced, when formalized and regulatory behaviors achieve higher value than the original goals that the institution was designed to address. Social, economic, and political external environments can further constrain the ability of a bureaucracy to effectively follow through with its institutional mandate. Although the State Water Commission identified the limited provision of water and sanitation infrastructure as an institutional concern and had created a formal program to resolve the issue, so far it has been unable to follow through with its goals and expand the service coverage throughout the city. Despite the institutional priority, the lack of federal and international funding is delaying the development of water and sanitation infrastructure in La Morita 1 and Terrazas Del Valle.

According to the bureaucratic model, control and continuity take precedence over outcomes. Similarly, efficiency suffers when personal considerations influence administrative decisions, where management forces employees to do tasks that are not
part of their official responsibilities. It has been observed that "the formal rationality of bureaucracy, once a crucial precondition for stability, predictability and efficient control, is now developed into an obstacle to future change" (Calhoun, 1990: 212). As the public agencies pertaining to water and health in Tijuana seem less oriented towards the common good of the population, the definition of rationality changes to what is best for one's own self interests. These strategies, where individual actors must fight for their own self interest and community development, will be dealt with in the ensuing chapter.
"Consuela and I are soon to be married. We have been together for years, but because we have only had a common-law marriage, Consuela is not covered by the national health insurance. Now we are getting married so she can be covered through me.

A clinic in Terrazas would help a lot of people with low incomes. Ideally it would be nice to have a full-time doctor because people get ill and have a lot of accidents, but even a doctor that comes twice a week, maybe for half a day, would be good.

Before the PRI helped us get a doctor for this clinic, but the doctor could only come once a week for two months and now he has gone on vacation and the clinic is inoperative. Right now the closest clinic is in Mariano, but this clinic will charge 50 pesos for a consultation, plus medication and the people in Terrazas do not even have money to travel on the bus to Mariano.

I am trying to save up enough money to buy sand for the clinic's floor, but I want the people of Terrazas to see that I am poor and that I will pay for the clinic floor myself. I do not want people to say that I worked for this clinic only to help myself and to improve my household. I tried to get support from the state and municipal government for the clinic, but they required that this clinic be located on a new piece of land separate from my home. But I cannot afford to pay for this new piece of land. Also if the government gives funds for the clinic or for the paved floor, then they will want to manage the clinic. And I do not want to put in all my hard work so someone else can run the clinic.

Now Consuela and I are part of a Civil Association. This Civil Association has done more for Terrazas than the PRI. Political parties have their own agenda and they only fulfil their job when it benefits their own goals. Always afterwards political parties forget about the people and nothing gets done. But I am no longer so naive to believe in politics anymore. Instead I want to get things done and this is through the Civil Association.

Although the clinic was originally formed through the PRI medical networks, it is now part of the Colonia Esfuerzo Civil Association. Colonia Esfuerzo is a strong Civil Association with many members throughout Tijuana. Because this Civil Association has many people's support, they can demand that the public agencies lower their costs for electricity, water, and medical bills. This organization is different than the political parties, because they are not a political group and do not look for public office.

Water for the clinic is a priority, and we are programmed to get water in 2001. But these services are done in political terms. Nothing gets installed because it is needed, but because of politics. The people of Terrazas cannot demand that the government gives them water or even make it come faster because providing drinking water to this community is not a priority. Terrazas will get water after the next election, when there is a new government that will develop its own priorities and projects."
Arturo's story highlights many of the issues revolving around the role of political clientelism for local participation in community development. Patron-client relationships between community associations and political parties are common in Mexico and are structured as part of the political system. Although political parties encourage the formation of community associations, this promotion is done to control local demands and gain political support.

During the summer of 1999, two neighborhood associations functioned in Mariano Matamoros Sur and one neighborhood association in La Morita. Currently, no community associations are found in Terrazas Del Valle. Although both community associations and non-governmental organizations (NGOs) rely upon local participation, these two types of organizations use extremely different strategies to promote community development. Community associations in Tijuana look to the government and political parties for developmental assistance and patronage. In contrast, NGOs are more concerned with maintaining autonomy from political interference while providing a service to community residents. The NGOs in the three field-sites did not engage in political patron-client relationships; however, this relational strategy was consciously used by the community associations in Mariano Matamoros Sur and La Morita.

In this chapter, I give an account of the development of community organizations and the use of patron-client relationships to secure local health care services and water and sanitation infrastructure. This chapter is divided into two sections, the first addresses the use of clientelism by the political parties and community associations, and the second

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3 To distinguish between the two local associations in Mariano Matamoros Sur, I refer to the older community association as "South," while I label the newer group as the "West" community association.
with the contrasting views and tactics of non-governmental organizations. The political structures of clientelism and community management in Tijuana are examined to discern how these frameworks facilitate and constrain local levels of participation and development. This section begins with a discussion of the formalized framework of clientelism by the political parties, leading to analysis of more local level community approaches to development within the clientelist structure. The section dealing with non-governmental organizations outlines the reasons why local NGOs do not engage in patron-client relationships and whether they provide a viable autonomous alternative for local participation and community development. This chapter demonstrates that participative community developmental efforts geared through both community associations and non-governmental organizations, is both a means of gaining local empowerment and constraining the autonomy of local civic mobilization.

**Clientelism**

Clientelism is defined as the distribution of resources, such as goods and services, along the lines of patron-client relationships. It is an exchange relationship of goods and services, favors, or information between individuals of differing power and status whereby a person of low status becomes personally dependent upon, and subservient to the support from, a higher status individual (Kaufman, 1977). Low status participants voluntarily engage in this hierarchical relationship for the chance to attain better opportunities, and to win a share of municipal, state, or national resources (Carlos & Anderson, 1981). Simultaneously, the patron in a clientelist relationship profits from debts and obligations incurred for services rendered. When, as often happens, a client
cannot fully repay the patron, interest can accrue leaving the client with a debt substantially exceeding the original (Kaufman, 1977). The patron can use this debt to his/her advantage and ‘lean on’ the client for a ‘favor’ whenever it is needed. In turn, the client is unable to refuse this ‘favor’ because s/he owes the patron for the previous services rendered.

Carlos and Anderson (1981) argue that clientelism is nothing less than Mexico’s main political framework. Networks of exchange relationships are continually being developed and nurtured along vertical and horizontal lines in the social, economic, and political realms of society (Carlos & Anderson, 1981). They depict clientelism in Mexico as a network of relations that extends through a structural pyramid of political exchanges of goods and services. At the base of the pyramid is a massive foundation of actors competing for a limited distribution of public resources. This structure narrows upward from these marginalized groups to more elite individuals and to groups who have greater access to national resources (Carlos & Anderson, 1981). The strength of political and material demands becomes less effective as the distance increases between the client in need and the patron in control (Bennett, 1995; Carlos & Anderson, 1981). As requests have to travel through a chain of power brokers or patron-client relationships, intervening interests of other actors can dilute these demands.

**Structures of Political Patronage**

Clientelism is a central framework in the Mexican political system (Ward, 1989; Carlos & Anderson, 1981). In his research into the influence of corruption on development in Mexico, Ward (1989) relates the paradoxical relationship between
clientelism, political parties, and community groups. Although political parties need community support, particularly during election periods, these political parties are also scared of the challenges that community mobilization poses to the dominance of the Mexican socio-political elite (Ward, 1989). This paradox explains why the Mexican political parties encourage grassroots mobilization, yet also try to control the community associations. As much as this may be recognized in the literature on Mexican politics, research has not specifically delved into how the political parties organize their patronage system and how the various positions of power between the ruling and opposition parties influence the distinct characteristics of the patronage systems. In this section, I examine how the PAN and PRI parties construct their systems of political patronage. The PRD maintains a platform in ideological opposition to the clientelist activities of the other two parties. The PRD example is explored at the end of this section on the political structures of clientelism.

The PAN party has an office specifically devoted to community patronage. Ricardo, the head of this department, described his position within the PAN party as the middleman between community clients and government offices for such services as potable water, sewage, electricity, and health. PAN clients requesting Ricardo's services are self-selected. Clients that perceive that they have a need will approach Ricardo in the central PAN office, or be referred to him from one of the five district PAN offices. In this selection of clients, Ricardo says that he does not approach communities to provide PAN or government services or resources in a proactive fashion. Instead he is only reactive to the needs that are presented before him.
After a client has requested Ricardo's services, he will bring the case of the individual or community to the attention of the public official that is responsible for the desired service or resource (Ricardo). At the beginning of his request to a government official, Ricardo will explain the plight of the individual or community. Following this tale of woe, Ricardo will remind the official that s/he is a civil servant and therefore part of the government. As both the municipal and state governments are under the control of the PAN party, Ricardo will then remind the civil servant that they are both part of the same ruling party. Hence, the civil servant has a "moral obligation" to help with Ricardo's request (Ricardo).

The moral obligation is articulated according to the PAN party's four official principles (Ricardo). Everyone that is part of the PAN government, including party politicians, as well as civil servants in all branches of the government, ideally should work according to these principles. The first principle is that party members should have respect for the dignity of all humans. The second motto is solidarity, meaning that everyone in Tijuana should help each other when there is a problem. The third principle is that there is a distinct division of roles and responsibilities between individuals and the state. Ricardo elaborated this PAN principle by saying that everyone has a responsibility to work to develop themselves and that the government cannot take the place of each citizen. The fourth principle is that the citizens of Tijuana should work for the common good of the city (Ricardo).

Ricardo's referral to a moral obligation can be viewed as a pressure tactic. This tactic is revealed in Ricardo's statement that if a civil servant "does not adapt to the doctrines of PAN, I will remind them of their obligations" (Ricardo). Part of Ricardo's
argument is based on the idealistic principles of the PAN party. Ricardo manipulates these principles in his requests and arguments to the government officials. Few people that Ricardo confronts could argue that the PAN notions of respect, dignity, and individual service for the greater good are immoral codes of behavior. However, the referral to the civil servant's "moral obligation" may still be seen as a veiled threat.

This threat is based on the Mexican sexenio and its effect on the government. Every six years Mexican states have a non-renewable election that is referred to as the sexenio. With the passing of each new sexenio, Mexican states experience a dramatic change in the people who make up the government (Ward, 1986). The appointment and rotation of governmental employees based on political affiliation place bureaucratic civil servants in a tenuous position. These civil servants are reliant upon the support of the current political administration for their jobs (Ward, 1986; Doroteo; Mendoza). Thus, when Ricardo, a representative of the current municipal party in power, calls upon a bureaucrat with a request from the PAN party, Ricardo is not asking as an autonomous agent for a personal favor. Rather his authority emanates from his political position and the civil servant must respond to his political demands. It is not the high morality of Ricardo's request that convinces the civil servants to cooperate. It is the threat to the civil servant's position within the government that forces them to cooperate.

In addition to negotiating with public agencies on behalf of a client, the PAN government has a special fund under Ricardo's discretionary control that is specifically designated to help with individual or community petitions (Ricardo). According to Ricardo's classification, this fund falls under the PAN principle of solidarity, conceding that if a person cannot pay for their bills, then the government will help them out. This
This emergency fund is a governmental fund and as such is public supposedly for the welfare of the Tijuana population (Ricardo). Ricardo specifically stated that the fund was not a PAN party patronage fund. However, the distinction between these two types of funds is only symbolic, as the PAN party controls the government and uses this power to serve its own political interests as well as those of its party clients. This argument is supported by the very nature of the fund itself. It is not used to create a broadly based safety net that could be equitably applied to help the poor in Tijuana. Rather, the fund is under the authority of Ricardo, the head of the Department of Community Management who is in charge of the municipal party's provision of patron-client services.

Ricardo also maintains the capacity to reject community petitions. The rationale for rejecting the petition of a potential client is the rhetoric of the official PAN party principles. The third PAN principle dictates that each level of society has its own distinct roles and responsibilities. As such, individuals in society have a responsibility to help themselves and they cannot rely upon the PAN government for total support.

This servicing of political clients is in contrast to an equitable distribution of resources whereby the greater allocation of resources goes to those most in need (Jones & Moon, 1987). Although the PAN clients have an expressed need, this dispensation of governmental services, based on political patronage, provides services and resources only to a select portion of the population with political connections. But this is not a black and white issue, of complete welfare support, which the government would not be able to afford, or an utter lack of provision of public services. Instead, it is a question of degree
regarding how the government and political party allocate the distribution of public resources to those in need or to those pledged to support the continuity of the party in power.

The next example of a system of political patronage is from Tijuana's municipal PRI party. The PRI patronage system is structured to accommodate community groups rather than individual petitioners. Every Friday morning in the Tijuana PRI headquarters, Pilar, resides over a meeting for the presidents of client community associations. These weekly meetings are designed as a forum for the presidents of the local associations to express the needs and concerns of their communities (Pilar). Pilar finds that these community representatives express a diversity of need, ranging across issues such as concern over landslides, soil contamination from a recycling plant, and the desire to obtain title to the land (Pilar; Luis). In such cases, the PRI party will try to help, but it does not always have the financial and technical capacity to satisfy all.

Although the PRI cannot speak to all issues, it has designed its clientelist practices to revolve around the services that it can provide. The actual day to day administration of these clientelist activities is the responsibility of Raquel in the PRI party. Raquel is the head of the Department of Community Management. Throughout our interview, Raquel repeatedly emphasized the importance of community organization. To undertake this process of "organization," a community, under strict directions from Raquel and conforming to PRI policies, must create a formal organization (Raquel). To begin, the people of the community must elect a president and committees. Then the president should talk to Raquel to find out what services the PRI can provide to the community. In addition, the community leaders should determine exactly what they want to obtain
This is to make sure that the group does not just ask the PRI for everything, and also to ensure that the organization is working towards very concrete objectives. The president of the community association should regularly attend the Friday meetings at the PRI municipal headquarters. Attendance at this meeting is important, so that the community presidents can share their experiences and voice local concerns and needs.

The services that the Department of Community Management provides are distributed directly from the main PRI office in Tijuana as well as through a travelling Health and Legal Brigade that visits communities affiliated with the PRI. It is at the Friday meetings that Raquel determines which community will receive the PRI Health and Legal Brigade for the upcoming Sunday mornings.

The PRI has one brigade that travels to communities to dispense health and legal services once a week on Sundays mornings, operating between 9 am to 1 pm. Consultations cost 20 pesos and the services provided are basic primary health care, children's health, women's gynecological health, and diabetes testing. The legal services provided include informing citizens on how to register and obtain their State Voting Registration Card, registering infants for their birth certificate, as well as other legal counseling.

To obtain the Health and Legal Brigade, the community must not only lobby Raquel and Pilar, but they must also arrange the local details of hosting the PRI Brigade. The community organization must find a suitable public location that can host the Brigade and it must advertise the event throughout their community. Raquel expects the community association to handle all of these details; however, she will guide the
community through the PRI and Brigade demands. Ultimately, it is up to the community association to ensure that all of these requirements to obtain the Brigade are fulfilled.

The PRI policy requires a formal local organization has been in effect for three years. According to Raquel's perspective, before this policy was implemented, PRI-community relations had been a "mess." Community groups would make extensive demands and would get upset with Raquel and the PRI party when they could not solve all of the community's local problems. In response to the barrage of demands, the PRI now requires formal community associations (Raquel).

In contrast to both the PAN and PRI parties, the PRD maintains that the use of political patron client relationships is a deceptive and inefficient means of administering community development (Ernesto). Hence the PRD party does not have a department devoted to community patron-client relations because it believes that clientelism only provides a superficial form of community development that fails to address the deeper need of under-serviced communities. Instead, Ernesto idealized that the PRD works with communities to strengthen the negotiation capabilities of the people, so that the community can obtain services for themselves (Ernesto). The goal of this approach to community development is to help people and to enable communities to become self-sufficient in their interaction with governmental agencies.

One of the major constraints to development that Ernesto confronts in the communities is the lack of local mobilization. To counter this apathy, the PRD party continually tells people that if they want to solve their problems then they must get together and form an active association. The PRD will work with existing groups or help communities form a new association. Unlike the PRI's community policies, the PRD
does not force mobilized inhabitants to coordinate their activities into one uniform type of organization (Ernesto). Instead, Ernesto affirms that the community inhabitants should determine the structure of their community association, and that the expressed needs of the members should determine the shape and actions of its association (Ernesto).

Ernesto criticized the PRI's use of health brigades, stating that the health brigades are not a real solution to the health problems in the under-serviced communities. Ernesto claims that the health brigades only make people into "followers." Ernesto is against the deceptive ability of the health brigade to cause people to affiliate themselves with a political party, while not wrestling with the 'real' health issues of the communities (Ernesto). For example, the health brigades do not consider the causes of diseases (e.g. such as the lack of sanitation) in the communities. As such, the PRI's health brigades only work to cure illnesses in the short term but do not prevent sicknesses such as diarrhea and skin rashes from reoccurring (Ernesto). As far as he goes, Ernesto provides an accurate assessment of the PRI's activities. Yet, the PRI's health brigades are in constant demand because they meet a locally recognized need. Meanwhile, by not providing medical brigades, the PRD does not gain access to communities who want curative rather than preventative medicine.

While PRD abstains from clientelism, both the PAN and PRI have departments specifically devoted to patron-client relationships. The process through which the PAN and PRI political parties structure their systems of clientelism is very different. The PAN system is geared towards individual or group applicants approaching the party for a favor with Tijuana public agencies, while the PRI system is oriented toward a pattern of strict regulation over the community organizations. The means through which the parties
recruit clients are also strikingly different. In face of the bureaucratic incapacity described in the previous chapter, clients turn to PAN patronage for assistance to negotiate through the bureaucratic constraints of public agencies. Without connections to these public agencies, the PRI party has to use a patronage system that actively mobilizes, recruits, and maintains communities under their political structure. Although the PAN and PRI clientelist structures are in operation in Tijuana, it is important to examine the reasons and means through which the community inhabitants are mobilized to form community associations, and how their local participation relates to the political structure of clientelism.

**Community Recruitment**

Bennett (1995) as well as Coleman and Skogstad (1990) argue that interest associations usually form when a group’s members recognize that they are estranged from the flow of national, state, or municipal resources. Membership within community groups can be based upon territorial alliances fighting against a common problem such as the inadequate supplies of public services within their community (Bennett, 1995). Depending on their level of local participation, community associations can represent the interests of blocks, neighborhoods, or an entire community.

In contrast to Bennett's, Coleman's, and Skogstad's findings, community associations in the three Tijuana field sites were initially organized with the encouragement from members of the municipal PRI and PRD parties. Although the community inhabitants of Mariano Matamoros Sur and La Morita 1 had identified local problems, such as youth gangs, loneliness, and high rent, the residents only formed into
activist associations at the urging of these political parties and directly to resolve the local issues.

The PRI party in Tijuana has created a system to encourage the organization of community associations to build a foundation of political support. Pilar's role within the municipal party is to recruit new communities to the PRI's patronage system. In this capacity, Pilar encourages communities to organize in a coherent group, to elect representatives that support the PRI party in exchange for access to PRI health and legal services (Pilar; Luis; Alicia). Although Pilar affirmed that the PRI would like to be involved in the development of all the communities in Tijuana, the municipal party focuses its attention on the communities in the La Presa. It is through this outreach that the PRI party administers a very aggressive outreach and political patronage program to secure the support of these disenfranchised communities. It was also through this PRI recruitment that the La Morita 1 and Mariano Matamoros Sur West Community Associations came into being.

In early 1999, Pilar visited the west-end of Mariano Matamoros Sur and encouraged local inhabitants to form into a PRI community association. As incentive to form a community association affiliated with the PRI party, Pilar offered the residents access to PRI services (Luis). At that time, Luis, who had recently been abandoned by his wife, had been feeling lonely and depressed (Luis). With Pilar's invitation, Luis thought that community participation could fill this lonely void in his life. The PRI community association offered Luis a means to meet people and to gain strength from his local activism. Thus, with Pilar's encouragement and Luis's local mobilization, seven
neighbors formally organized into the Mariano Matamoros Sur West Community Association and this group became a client to the municipal PRI party (Luis).

The La Morita 1 Community Association was similarly borne through the PRI system of community patronage. The community association originally coalesced when the parents in the community became concerned about the welfare of their children. In particular, they were worried that their children might become members of local gangs or become addicted to drugs. Similar to actions at Mariano Matamoros Sur, Pilar came to La Morita and at a community meeting at the elementary school, she encouraged the community inhabitants to organize into a formal association. Based on this encouragement and the need to prevent deviant juvenile behavior, the parents in La Morita 1 initiated a community association. The inhabitants of La Morita 1 decided to work with the PRI because Pilar was the only political representative to approach the community, offer services, and stimulate the inhabitants to form an active association (Alicia).

The PRD's recruitment of community support is on a much smaller scale than the PRI and PAN's systems. That stems from the PRD not actively trying to and recruit a broad spectrum of people to join its party. For his part, Ernesto said that he tries to identify individuals whose philosophy already seems oriented towards the PRD's policies. It is these individuals on which Ernesto focuses his energy and tries to convince them to become PRD representatives (Ernesto).

In the early 1980s, Ernesto went to the Mariano Matamoros Sur to encourage community organization, but coming on a cold and rainy evening, he was unsuccessful in gaining the attention of any community inhabitants. Monse was so surprised to see a
person standing outside, shivering, and trying to pass out fliers, that she became curious and went to talk to Ernesto (Monse). During this time, many of the residents of Mariano Matamoros Sur had been having problems paying rent. Their rental contracts were listed in American dollars, which had been fine until the Mexican Peso crashed in the 1980s. After the currency devaluation, many of the inhabitants experienced difficulty. During their meeting, Ernesto convinced Monse to fight to change the rental contracts and she thereafter began her efforts to mobilize the community. At first, many of the residents were suspicious of the PRD's motivations, but slowly with Monse's and Ernesto's persistent pressure, the community mobilized into a cohesive organization against the landlord and collectively forced a re-negotiation of its rental contract (Monse).

In all three examples of community organizations in the field sites in Tijuana, the local residents had identified a local problem. For Alicia and Monse, the problem was a general issue that pertained to most of the community inhabitants, while Luis's problem was more personal in nature. However, in all three instances, it was not until a recruiter from the PRI and PRD parties approached and encouraged the communities to mobilize, that the La Morita 1, and Mariano Matamoros Sur South, and West community associations organized into locally based political forces.

Residents of Terrazas Del Valle only began moving into the community three years ago. Several social scientists (Perkins, Brown, & Taylor, 1996; Kayo & Norvell, 1994) have remarked that the length of time that a community has been established plays a significant role in the development of community-based organizations. Kayo and Norvell conducted a case study comparing three neighborhoods in a newly urbanized section of Jakarta. They found that it took a minimum of two years before new migrants
to Jakarta would begin to participate in local organizations and health clinics. Perkins, Brown, and Taylor contend that the length of community residency is related to the residents' possession of a community spirit which could only develop through familiarity and mutual interaction. Whatever the dynamic that may be involved, Terrazas Del Valle has only been formed for a short period of time, so many of the residents might not be interested or familiar enough to form a community association.

A lack of perceived need could be another reason why Terrazas Del Valle does not have a community association. Several informants from this community, notably Arturo, Andres, and Jose, thought that they did not actually need to form a community group to pressure the government and Public Services Tijuana for water and sanitation infrastructure. What they all believed was that given time, the government would underwrite these services. All three informants acknowledged that their belief was based purely on speculation and that they lacked any official interaction or documentation to support these beliefs. Nonetheless, because the provision of water and sanitation infrastructure was perceived to be inevitable, these informants did not think that they needed to organize and work towards these goals. This shows a common belief in the state on the part of the inhabitants of Terrazas Del Valle. They believe the government ultimately will recognize the local state of underdevelopment and will take on the issues of water and sanitation without community pressure. This belief also contrasts with the inhabitants’ need to resort to clientelism and personal connections in order to attain public services.
Patron-Client Services

Clientelism “humanizes the workings of a bureaucracy, offering a way through the red tape and providing opportunities for face to face interaction“ (Ward, 1989: p. 2). As patron-client relationships are rooted in personal connections, these relationships equip individuals or groups to “jump the queue” in terms of access to public resources. Ward’s assessment is relevant to the PAN structure of patron-client relationship, however it is not reflective of the PRI clientelism system. In this section, I enumerate examples of PAN and PRI clientelism in relation to access to health, water, and sanitation services, and explain how the separate party patronage systems help to affect the type of services that are requested.

As Ricardo previously described, the PAN patron services are to operate as a connection to officials within Tijuana and Baja California's public-agencies. As one of the PAN patron-client services is to network bureaucracies in the public sector, this type of access to public services and resources shapes the type of petitioners who approach Ricardo for assistance. The first example of PAN acts of patronage concerns a low-income family from Mariano Matamoros Sur that could not afford to pay their Public Services Tijuana water bill (Ricardo). The family came to Ricardo because they owed Public Services Tijuana US$250, but they did not have the money to pay the bill. They were worried that their water supply would stop and naturally enough, they wanted to continue to receive domestic tap water. Presented with this need, Ricardo spoke with one of the departmental directors in Public Services Tijuana. This director was selected through Ricardo's network of PAN party connections. Through this direct contact and
political connection, Ricardo was able to reduce the family's water bill to the more affordable amount of US$150.

The second example of PAN party use of clientelist services comes from my personal interactions with Ricardo. During the course of our interview, Ricardo suggested that I should speak to Dr. Calvillo from the Ministry of Public Health. Libia and I replied that we had previously been referred to Dr. Calvillo by another informant, and that we had visited his office several times in order to speak to him. Instead of gaining an interview, we were repeatedly told by Dr. Calvillo's secretaries to wait or to come back another day. My first interview with Ricardo came after a series of five frustrating visits to Dr. Calvillo's office, where Libia and I were unable to get a definite answer about whether he would accept or reject my petition for an interview.

In response to our story, Ricardo said that Dr. Calvillo should not treat us in such a distant fashion. Ricardo then said that he would call Dr. Calvillo and speak to him on our behalf. Using his personal phone book, Ricardo called Dr. Calvillo's office and easily got past the secretary and through to speak with Dr. Calvillo. Ricardo informed the doctor that he had a responsibility to speak to me and to create a positive image of the city, of the government, and of public health care in Tijuana. According to Ricardo's logic, Dr. Calvillo's interview would affirm the glory and reputation of health and health care in Tijuana to an interested foreigner and that Dr. Calvillo's secretive attitude and behavior was tarnishing the image of the city under the PAN government (Ricardo).

These examples illustrate that the PAN patronage is based on personal and political connections to public bureaucrats. Furthermore, the PAN networking service effectively overcomes the bureaucratic structures of the official codes of conduct.
In contrast to the PAN system, the PRI patronage system is structured according to more formal modes of organization and interactions between the political patron and client communities. Whatever the original needs that helped initiate the community organization, health and legal services are the only patronage assistance that the PRI party provides. They are less able than the PAN to accommodate the individual demands of the local communities. Instead, the petitioning communities must match their needs with the health and legal services that the PRI provides.

Knowing that the PRI offered health care services to client communities, Luis petitioned for the PRI health brigade to visit the West section of Mariano Matamoros Sur. After this lobbying, the PRI health brigade came to Mariano Matamoros Sur for one Sunday in June (Luis). The brigade stayed for one day and saw many clients, but Luis found this one-day access to local medical services to be insufficient. According to Luis, the children in the neighborhood were frequently sick, particularly with skin rashes and they needed more local and regular medical attention. He says he is currently trying to lobby Raquel for another visit by the health brigade but has been unsuccessful on this front.

Although the original purpose of the La Morita 1 Community Association was to organize sports and fieldtrips for the local children, through their interaction with the PRI patronage system, the community members became aware of the medical services that they could attain. After the original needs assessment that provided the incentive to form the community association, the members of the La Morita 1 group focused their attention on the PRI patronage network (Alicia). Members of the community association pressured the municipal PRI party to host the PRI Health Brigade for four months
(Alicia, Raquel). As a result, the PRI medical specialists treated many of the inhabitants in La Morita 1, but Alicia considered the brigade to be most successful in its health care for women. The doctors did pap smears of the women from the community and three women were found to have cancer cells. These women are now being treated for cervical cancer solely because they became aware that they had the disease through the PRI's health brigade. Alicia of course was very relieved that the health brigade diagnosed these women before they became terminally ill.

The diagnosis of three women with cervical cancer illustrated to Alicia the importance of local access to health care (Alicia). The health brigade, however, has not been in La Morita since July. The community is trying to lobby the PRI for further visits and more importantly it is trying to find a doctor who can reside more permanently in the community (Alicia). The community association has been unsuccessful on this front.

The PRI patronage services are based on the formal provision of local health and legal services. Unlike the PAN clientelism, the PRI services do not require personal or political connections to civil servants and public institutions. As these two political parties provide different sorts of clientelist services, allegiance to a particular political party determines how communities develop. Informants from the PRD and PRI parties were well aware of this dynamic. They complained about the PAN party’s use of clientelism and how this has reduced the effectiveness of their party’s involvement with community groups. Zakus (1998), Bennett (1995), and Carlos and Anderson (1981) theorize that the politically charged networks of clientelism in Mexico make it possible for the governing political party not to grant public services and resources to communities that question its policies and actions. Although the PRI and PRD
community groups are not “hostile,” their support of opposition groups might be enough for the PAN government to limit their community development.

Two years ago, Ernesto and the PRD made a tentative alliance with a community group in Terrazas Del Valle that was working very hard to get electricity. In their attempts, community members started negotiations with both the PRI and PRD parties. As part of their strategy, group leaders went back and forth between the PRI and the PRD in order to see which political party would give the community the most in exchange for political support (Ernesto). The community group's search for the most generous political patron also coincided with the municipal elections. At this point, the PAN party needed political support. In exchange for electricity and garbage service, the community group pledged its support to the PAN party and disavowed any connection to either the PRD or PRI parties. The PRD party currently does not have any contact with the inhabitants of Terrazas Del Valle (Ernesto). It is through this example that Ernesto criticizes the way that the political structure of clientelism leads community associations to play the various political parties off of each other.

Ernesto claims that the PRD's unpopularity in Tijuana is due to the party's ideological refusal to engage in clientelist behavior (Ernesto). Ernesto also complained that community groups think that they have to entirely support one political party to obtain services. This "all or nothing" attitude prevents cooperation between political parties in assisting a community. It also inhibits the ability of the PRD party to develop inroads into unassociated communities. Ernesto believes that communities such as Terrazas Del Valle only use the PRD as a bargaining chip in negotiations for services and resources from other political parties. This strategy fosters an attitude of competition,
instead of promoting cooperation between the various political parties and the parties and communities.

Raquel, the patronage manager in the PRI party, is similarly disturbed by the constraining effect that PAN clientelism has on PRI community development; she goes so far as to accuse the PAN party and government as biased in their community development efforts (Raquel). Raquel has found that community groups have trouble getting access to municipal infrastructure if they are part of the PRI party. Because of the discretionary power of the PAN government to allot public services and infrastructure only to PAN community clients, Raquel has informally advised some communities to hide their PRI affiliation if they want to tap water or sanitation services (Raquel). She finds the PAN party and government's use of patronage services to be very partisan and unfair to the non-PAN communities (Raquel). Raquel also thought that the vying between political parties and the structure of clientelism prevented communities from forming into local associations. If a community could only organize under the umbrella of the PAN party in order to acquire public services, this restriction could inhibit local mobilization and organization among people who might not support the ideologies of PAN (Raquel). Because the PAN government favored its clients, Raquel thought it was an elite regime that did not help everyone. Raquel did not seem to reflect the reality that her critique of the PAN party's clientelist activities could also be turned back upon her and the PRI party's system of patron-client relations. However, Raquel's harsh criticism of the PAN party illustrates that she and the party are aware of the limitations of clientelism in terms of community development.
Patron Benefits

In the past two state elections in Baja California, the race between the PAN party and the PRI party has been extremely close. In 1989, the PAN party won the Baja California State election and the Municipality of Tijuana. In the state election the PAN party gained 45.2% of the vote while the PRI party was supported by 31.8% of the voting population (Rodriguez & Ward, 1995). By 1992, the gubernatorial race was even closer. The PAN party stayed in power with 46.5% of the vote, while the PRI party, at the expense of the PRD party, increased its share of the vote to 44.1% (Rodriguez & Ward, 1995). In Tijuana, the 1992 electoral race was also close. The PAN government won all six districts in the municipality, but only by a small margin over the PRI party (Rodriguez & Ward, 1995). Thus, in this hotly contested electoral terrain, both the PAN and PRI political parties need all the support and positive images that they can garner. As a result, the PAN and PRI use of patron-client relationships is crucial to secure and maintain political power.

The PAN patron-client services instill feelings of relief that the citizen’s problem had been fixed, with gratitude thereafter towards Ricardo, and by extension towards the PAN party. These positive emotions help explain why the PAN party engages in the provision of these patron-client services. These services are geared to personally endear the PAN party to its clients. Few people would not like and support the organization that helped them out of a difficult situation. Through my personal experience as a PAN client, I gained an insider's perspective into what a client feels when she suddenly gains access to the needed service. When Dr. Calvillo consented to an interview for the next day I felt
as if a great weight had come off of my shoulders and also a huge amount of gratitude to Ricardo for his assistance with my problems.

With regard to the family who had their water bill reduced, they were very happy with the arrangement that Ricardo negotiated. With its reduction to US$150, the family could afford to pay their water bill (Ricardo). This situation helps the PAN party in two ways. To begin, that family will probably vote for the PAN party in the upcoming elections. Furthermore, Ricardo's assistance to the poor family has created a happy story recounting the generosity of the PAN party. The family can spread this story to their friends, family, and neighbors, thereby expanding upon the benefits of a PAN government, while Ricardo can broadcast the story to interested parties such as myself. This patron-client system of assistance is very helpful to the individual in need, but it is also geared towards the reputation of the PAN party.

The PAN party also benefits from the client's incurred debt to the political party. This obligation might be to show political support for the PAN party in the future. Additionally, if the PAN party has a need, Ricardo can turn to a previous client for a political favor. For example, Ricardo and the secretary at the PAN office took two of my business cards and said that they would contact me if there were to be anything that I could provide of assistance to the party. It should also be remembered that the civil servants who provide the bureaucratic 'favors' to Ricardo do so because many of them owe their position within the civil service to their connections within the PAN party. Thus, these examples illustrate how the PAN party extends its network of political relationships and uses their system of patron-client relationships for the party's political benefit.
The PRI party provides patron-client services for reasons similar to those of the PAN party. The PRI party has historically experienced its greatest wellspring of political support among poorer communities throughout Mexico (Grindle, 1997; Rodriguez & Ward, 1995). It is this grassroots organization that has served the PRI party well in harnessing voting power and in manning voting stations throughout the country (Ward, 1989). In Tijuana, the municipal PRI party conducted a study to identify marginalized communities based on indicators such as socio-economic levels, access to services, and infrastructure development (Pilar). This study found that Tijuana's marginalized communities were not isolated or randomly scattered throughout the city. Instead, they tended to be clustered in the southeastern section of the city and in the district of La Presa (Pilar). It was in response to this study's findings that the municipal PRI party began specifically targeting these marginalized communities and encouraging them to participate in the patronage structure of the PRI party. This has proved to be successful, as these under-serviced communities are more likely to feel alienated from the PAN municipal government (Pilar; Alicia). Furthermore, these peripheral communities often support the PRI because they are the only political group to approach and advocate local participation in the community development (Alicia, Arturo).

The provision of patronage services such as the health and legal brigade also work to the PRI party's benefit. The health services instill gratitude, while the legal assistance makes sure that the inhabitants of the grateful pro-PRI communities are legally eligible to vote in Baja California elections. Raquel believes that people should be grateful for the PRI's assistance, and that this gratitude should translate into support and participation in the PRI organization. For example, some community groups simply want the PRI to give
them money, but the PRI will not do this (Raquel). Raquel made it plain that the PRI has many services that it can provide to individuals and communities, but these services can only be obtained in exchange for political support of the PRI. That means that it is the communities' role to organize, to create a solid electoral front that can harness the resources of the community. Thus communities need to bring their voting abilities to the table in their negotiation for PRI services (Raquel).

The PRD's lack of support in the three field-sites is representative of the party's national standing. The PRD party has been pushed to the political margins throughout Mexico. In particular, the PRD does not have a strong political base in Baja California or Tijuana (Rodriguez & Ward, 1995). Part of the PRD's national marginalization is due to the PRI's perceived threat against the presidency and also against a political party that has taken over the PRI's position of far left (Rodriguez & Ward, 1995). Ernesto argued that the PRD in Tijuana did not provide clientelist services because it is ideologically above such manipulative and temporary tactics (Ernesto). At odds with this idealist attitude is the fact that PRD does not have much national, state, or local support in Tijuana. The PRD party does not control the local government and public services and resources like the PAN party. Nor does the PRD party receive financial and political support from the federal PRI government. As such, the PRD is at a disadvantage; even if the PRD party wanted to use clientelist tactics to ensure political support, it would have few resources or services to offer in its patronage.
Securing a Patron

Because the structure of political clientelism is organized around an exchange relationship of the provision of community services for political support, election time is an important period for community associations to instigate a personal relationship and secure a political candidate as a patron. Community groups with an identified need specifically select the political party they support in order to procure the services and resources that are desired. Within this clientelist framework, a community association can still be active instead of passively receiving the services strictly provided with the PAN or PRI patronage structures. This strategy balances the need for community development against immediate and short-term political support when it is most needed during election time.

In 1988, the Mariano Matamoros South Community Association secured the patronage of PRI presidential candidate Salinas to obtain public lighting. When Salinas had been campaigning in Tijuana in 1988, the community group wrote him a letter asking for electricity and public lighting to improve the public safety in Mariano Matamoros Sur. A group of people from Mariano Matamoros Sur then went to a PRI election rally and broke through Salinas' bodyguards to hand him the community petition. A few days after the rally, Salinas came to a community meeting at the local high school, read out the petition, and promised that Mariano Matamoros Sur would soon get electricity and public lighting.

The community association in La Morita used similar tactics in 1999 during the PRI primary presidential campaign to gain control over a local plot of confiscated land. Earlier in 1999, a local Tijuana drug lord had been arrested. After his arrest, the federal
Narcotic Police confiscated all of his property, part of which had been a ranch in La Morita. Since this confiscation, the community association has been trying to have the ranch converted into a local park or sports field (Pilar, Claudia). Members of the La Morita 1 Community Association decided that they needed a patron to help them get this land and in that vein, the group used the impending 2000 presidential election to its benefit. Several PRI primary presidential hopefuls visited Tijuana in their quest to win support and become the PRI's official candidate. Through connections at the PRI municipal headquarters, the community association covertly obtained the itinerary for presidential candidate Madrazo during his stay in Tijuana (Alicia). From this itinerary, they learned that Madrazo liked to jog early in the morning and that he was scheduled to be at the Municipal Sports Complex at 6 in the morning. The community association concluded this the early morning was the best time to approach Madrazo with their petition. Because he would be jogging and not campaigning, Madrazo would be relatively unguarded. In contrast, if they tried to approach a candidate officially at the PRI offices, the community group might be unable to either speak to him or pass on their petition.

Alicia and other group members gathered 13 children from the community and brought them to the Sports Complex in the morning (Alicia). Alicia and two other adults from La Morita 1 instructed the children to chase after Madrazo as he jogged around the track. As they came alongside of him, one of the children passed the La Morita 1's petition to the presidential candidate. From this petition, Madrazo arranged for a photo of him surrounded by the happy children to be printed in one of the Tijuana newspapers (Alicia). In exchange for the image of Madrazo surrounded by a group of supportive
children, he ensured that the La Morita 1 petition for the confiscated land was approved (Alicia).

**Lobbying the Patrons**

Although the structure of political patron-client relationships provides services for the community clients and political support for the party patrons, it is still a structure that carefully controls the amount of assistance that clients receive. Bennett (1995) found that community associations need a strong resource base in order to become formally recognized as an important interest group (Bennett, 1995). As the membership base expands and diversifies, the neighborhood organization is able to become stronger and is therefore better positioned to pressure the municipal, state, or federal agency (Coleman & Skogstad, 1990). Meanwhile, Kaufman (1977) noted that clientelism hinges on informal interactions and personal relationships, not on the number of mobilized petitioners. Local mobilization is not necessarily an important factor within the PAN system of patronage that is based on personal and professional connections.

As a negotiator between community clients and public institutions, Ricardo finds that he is on good terms with government officials and that he can easily approach bureaucrats with his client's petitions (Ricardo). Ricardo has personal and professional relationships with many of the directors of the public institutions. These relationships are grounded from working together in the past or meeting at PAN party functions. Ricardo says that he is on particularly good terms with the new governor of Baja California because the two of them used to work in the same building and they now attend the same PAN motivational classes (Ricardo). Furthermore, Ricardo claims to have a good
working relationship with the director of Public Services Tijuana. In terms of Ricardo's patron services, the director of Public Services Tijuana has personally assured Ricardo that PAN petitions will always receive immediate attention and are considered an institutional priority (Ricardo). It is this form of personal connection that makes it easy for Ricardo to call up many civil servants and have his request handled quickly. So far, Ricardo has never had any problems with a civil servant in response to one of his requests. When I probed about this possibility, Ricardo replied that should he encounter this hypothetical situation, he could easily obtain political backing from the PAN political officials in Tijuana or else he could turn to the officials in the state capital, Mexicalli, for support (Ricardo).

Ricardo thinks that individuals and communities in need should go through him, rather than directly approaching the public institutions (Ricardo). This is because Ricardo interacts with people from the PAN party all the time and these members have an obligation to help boost the party profile and aid another PAN official. From his perspective, it is simply more efficient for Ricardo to personally undertake a client's petition, rather than the client directly trying to penetrate the public institution.

In contrast, Bennett's observation regarding the importance of a strong and mobilized membership base is particularly true of the community associations within the PRI patronage system. The PRI party bases its allocation of PRI services on conforming to the PRI organizational dictates and showing supporter strength. Especially during election time, the health and legal brigade will be especially active and visit many of communities that do not normally capture PRI attention.
Claudia, referring to the federal PRI party, thinks that the government never goes out to the communities unless it is election time. During these election years, Claudia’s elementary school hosts health campaigns; the parties give out lice shampoo and oral rehydration therapy for free to the local residents. For this reason, Claudia cynically expressed that during election year, “even the dog gets a shot” (Claudia).

Thirty people were present at the Friday meeting of the PRI Community Associations presidents that I attended. From the three field-sites of this study, Luis from Mariano Matamoros Sur and Alicia, her sister, and another woman from the La Morita 1 community sectional were in attendance.

La Morita 1 was very effective in advocating for the health and legal brigade because its community association was forceful and sent many representatives to the weekly sectional meeting. This was evident when I was in attendance, as the La Morita 1 sectional had three representatives, while the other community sectionals only had one representative present. With such a strong lobbying force, the La Morita 1 community sectional was able to secure the health and legal brigade on Sundays for four months. Since it received such lavish services, however, it will not be getting the PRI brigade for a long time thereafter (Raquel).

The Mariano Matamoros Sur West community association has only hosted the PRI health and legal brigade once. Besides pressing Raquel for the brigade, Luis hopes to build a local clinic that can regularly host a PRI doctor twice a week. The West Community Association’s ability to elicit regular PRI medical services is doubtful due to the limited PRI medical resources and the supplicant structure of the patronage system. To begin, the PRI’s medical services are limited to one travelling health and legal brigade
and one doctor located at the downtown PRI headquarters. The services provided through the travelling medical brigade are only obtained through the active persuasion efforts of affiliated community associations (Raquel). The ability of Luis and the West community association to exploit the continued support of Raquel is doubtful. Raquel's narrative clearly outlines that the PRI medical services have too many petitioners and that they cannot devote too much attention to one neighborhood's medical needs.

Furthermore, Alicia's story registers that the successful lobbying for the health brigades requires a strong show of force at the PRI Friday Community Association meetings. Raquel, the PRI brigade organizer, did favor the La Morita 1 Community Association with the health brigade for several months, but this was the result of the strong participation and determination expressed by that particular association (Raquel). In contrast, when I went to the Friday PRI meeting, Luis was the only member from his local group in attendance. This lone representative does not evince the same active organization and participation as the presence of numerous members from the La Morita 1 community association.

As my previous example related, La Morita was successful with numerous supporters, while the West community association has been less successful with Luis as the lone activist. Yet the presidents of the community associations are supposed to regularly go to the “Presidents” meeting. Representatives’ from the community associations are supposed to lobby Raquel for the health and legal brigade at the Friday meetings. On the face of it, these meetings do not seem like a place for the presidents to express their opinions and provide input to the PRI party. I only went to one meeting, at
which Pilar did most of the talking at this meeting, while the presidents simply sat and listened.

As a caveat to my previous analysis, strong demands and social protests communicated through the clientelist networks are not always productive for a community association (Carlos & Anderson, 1981). The constant exchange of goods and services creates a fine balance within a chain of patrons and clients. Patrons will usually try to maintain more than one constituency for social, political, and economic support. These separate constituencies are often played-off against each other by patrons deciding where to allocate a limited quantity of goods and services (Carlos & Anderson, 1981). Clients who make the least demands upon a patron, yet offer the most political or economic support, are preferred over other competing constituents.

This phenomenon can be seen in Raquel’s analysis with respect to community demand upon the PRI party. Raquel feels that the PRI has to continually give, and that the people from the communities do not appreciate the PRI’s role in providing these services. Raquel finds that people get angry when the PRI does not satisfy all of their demands. Instead, of just complaining, Raquel tell people that they need to get organized into a formal group and raise their own funds for local projects. If the community does not do something for itself, such as organize into a community association, then it is the community members' own fault for not receiving assistance from the PRI (Raquel).

Against this backdrop, it is the communities who make the fewest demands, yet have the most community support that are the most successful in gaining the PRI services. Through this process of political selection, a community that makes too many
demands might simply be ignored while a patron chooses to favor another community for the same political support.

**Short-Term Goals, Long-Term Organization**

Other social scientists have reasoned that community associations in Mexico will organize into informal groups in order to work towards one specific and immediate goal (Bennett, 1995). In her case study in Monterrey, Bennett (1995) observed that community groups, angered over the lack of domestic potable water during a severe drought, used aggressive tactics such as riots and kidnapping of civil servants to pressure the municipal government for water infrastructure. However, Ward (1989) has theorized that patron-client relationships provide a structural means for communities to fulfill local needs because clientelism provides an alternative to political violence and social protest. Community organization, for services such as water or sanitation systems, was based upon short-term actions geared towards resolving one specific problem. Once these public services became available, the organized opposition ended and the neighborhood associations demobilized. Bennett described this social organization as a short-term approach that generally did not challenge the social structure that situated these underserviced communities in a politically disadvantaged location (Bennett, 1995).

This notion of short-term social mobilization for community associations needs to be further evaluated because the analysis of short term versus long term goals can present a misleading image of community development. The notion that groups are only organizing for short-term, immediate gains ignores the force that charismatic individuals and short-term strategic affiliation with various political parties can yield long-term
benefits to a community. Furthermore, while aggressive tactics such as kidnapping and riots were successful in Monterrey, the community associations in Tijuana did not consider similar forms of social protest a viable strategy. Instead, community groups in the three field-sites in Tijuana identified political patronage as the best strategy to develop their community.

In support of Bennett's analysis, Monse originally stated that the South community group only organizes on a short-term basis. An immediate community need is identified by several people in the neighborhood who will then muster into a group to cope with the issue. Once the problem has been resolved, the coalition of neighbors would dissolve (Monse).

While this was Monse's initial claim, as she expanded upon her experiences within the community association, she acknowledged that the group membership is constantly rotating according to the current goal of the community association and the vested interests of the neighborhood inhabitants. At times Monse has been the main organizer of this association, and at other times the group has had other leaders (Monse). Even though there are no identified long-term goals, the local participation in the development of the neighborhood has held steady over the course of a decade.

The South neighborhood association in Mariano Matamoros Sur has successfully developed an agenda for settling a series of community needs. The group members initially organized to change their rent contracts and then to secure title to their lands. Later in 1984 the community group fought for running water in their households. Then during the 1989 presidential election, the group successfully petitioned to get electricity. They next tackled the lack of sewage system, receiving this service in 1995. Currently, a
group of neighborhood inhabitants are working to have paved roads constructed by the
government (Monse). They have been partly successful, as the sloping north-south roads
have been paved, while the flatter east-west roads have not. The north-south roads were
paved first to provide traction and to make it easier for the cars to drive up and down the
sloping streets during the rainy season (Monse). So, paving the east-west roads was less
critical, but Monse still expects that these will be paved next year.

Once the roads have been completed, Monse and the South Community
Association are already planning to work towards a local day care center. This too will
affect the membership of the South community association, as Monse expects the women
who need the day care facilities to work towards this goal (Monse). The municipal
planning agency officially told the members of the community group that they had to buy
a piece of land on which to locate a private day care center. After they have the land, the
community association can then petition the government and begin the process of
application. Monse, however, has heard rumors of a different means of getting a
community day care. This alternative and preferred plan has the government giving the
community a parcel of land and operating a public day care (Monse). This alternative
plan is preferred because it is less expensive and, in the long term, less time-consuming
in the continual upkeep and management of the day care for the community members.
Monse has only tentatively begun inquiring about a day care, and the community group
has not yet begun any firm measures to place pressure on the government for this service
(Monse). However, now that she knows that the government gives funding for public
day care, she is determined to have one in her community (Monse). Her next priority will
be to bring together the neighborhood to pressure the government to provide land and
trees for a neighborhood park. Already, during our interview she seemed to be thinking about the reasons why the neighborhood needed green spaces and why the government should provide one in Mariano Matamoros Sur.

While Monse characterized the South Community Association as an informal and short-term coalition of neighbors, I would suggest a different perspective. From her narrative, Monse seems to always have a plan and to be continually thinking of new ways to improve the life and environment of her neighborhood. Even before one community goal, such as the paved roads, has been successfully resolved, she has already identified and explored the possibility of two more needs that her neighborhood association should work to attain. Hence, I suspect that Monse is always organizing and reorganizing her neighbors to increase local participation and to put more pressure on the government for services and infrastructure.

The factor of charisma has been identified as an important element in the fostering strong organizations (Bryman, 1992). Charisma is important to bring people together and to keep the momentum of an organization going. As a motivating factor of community development, however, charisma is limiting, as it is a characteristic that is embedded strictly within one person. For long term mobilization to occur, beyond the capabilities of Monse, the Mariano Matamoros South community association must learn to rely upon other factors of participation and organization.

The La Morita 1 and the Mariano Matamoros Sur West community associations have only been launched for approximately one year. This limited period of community activism is not conducive to a long-term perspective upon the communities' participation
rate and the evolution of local goals. Nonetheless, both of these community associations are already characterized by quite different membership patterns.

The La Morita 1 Community Association consists mostly of parents, both mothers and fathers (Alicia; Claudia). The association has a small group of core members, but they have a broad support throughout the community, and support appears to have increased over the past year. For one community activity they mobilized over one hundred community inhabitants (Alicia). The community group manages to include a broad spectrum of local inhabitants in their activities and tries to hold public meetings that advertise the projects that are moving ahead. The association's projects are seen as benefitting the entire community, but Alicia still finds that the most popular projects are those that are directed towards the community's children (Alicia).

In contrast to the successful mobilization in La Morita 1, the Mariano Matamoros Sur West Community Association is struggling to maintain local interest. Currently, Luis and the other members of the West Community Association are trying to expand their local support, by holding a public meeting every month to advertise the association's activities to their neighbors. They have also distributed leaflets to increase awareness of the local activities. At the very beginning, the community association had many curious neighbors who wanted to know what the local association was trying to do, but the number of people attending the monthly meetings has steadily declined. Luis, although admitting to this decline of local interest and participation, still thinks that the neighborhood inhabitants support the association's activities. His ability to harness a strong membership base is limited, however, a subject I examine in more depth later in this chapter.
From these three examples, it can be seen that the long-term effort towards community development must be based upon short-term goals. First, the South Community Association has identified practical goals that the group steadily and successfully resolves to their satisfaction. The membership base may change, but the steady effort to improve the neighborhood has been constant. Second, although they have been formed for only a year, the La Morita 1 Community Association is showing signs of being able to similarly mobilize a large group of community inhabitants based on a collective concern over the physical and psychological health of their children. Third, the West Community Association does not seem to be equally successful and Luis has had difficulty mobilizing his neighbors under the PRI patronage banner.

Community groups are not entirely passive within the political structure of clientelism. Community groups can strategically employ short-term alliances during elections or between political parties for increased access to community services and infrastructure. However, these types of development strategies are still within the clientelist structure that diverts public resources away from the wider interests of the poor and onto a particular few with political connections. Some academics (Vakil, 2000; Ward, 1989) question whether community mobilization within clientelist structures is actually an empowering form of local participation in development. However, clientelism is not the only option for community involvement and development. In this next section, I address the role and perceptions of non-governmental organizations in terms of clientelism, access to local health care, and the development of water and sanitation infrastructure.
Non-Governmental Organizations

Between the bureaucracies described in the previous chapter, and the structure of political clientelism, Vakil (2000) suggests that there is a vacuum that limits where community inhabitants can turn to for information, organization, and development assistance. It is within this vacuum that NGOs are currently being hailed as the best means to fill the development void, encourage civil participation, and to meet local development needs in developing countries (Vakil, 2000; Chen, 1996). Chen (1996) argues that the increasing emphasis placed on NGOs is a response to the unresolved problems of bureaucratic incapacity and corruption that have prevented more efficient forms of development. Non-governmental agencies are emerging as such an important force in developing countries because they have been so successful in mobilizing local participation and using innovative approaches to resolve persistent problems. For these reasons, it is important to look at the role of NGOs in the three field-sites in Tijuana to understand how these organizations are responding to Mexico’s system of clientelism and whether they are offering an alternative and politically independent mode of local participation and community development.

NGO Perceptions of Clientelism

Informants from the NGOs in Mariano Matamoros Sur, La Morita 1, and Terrazas Del Valle consistently expressed attitudes of suspicion and animosity towards the clientelist practices of the political parties and government in Tijuana. Arturo is personally acquainted with the constraining influence of political clientelism as he
formerly was president of a PRI Community Association (Arturo). In fact, the health clinic in Arturo's house and in Terrazas Del Valle was originally formed to host the PRI health and legal brigade. Arturo criticizes the selfish motivations of the political parties for providing community services. The health and legal services are not on tap to help the local residents or really to develop the community. Instead the PRI party provides the brigades for its own re-election needs (Arturo). This is Arturo's construction of what happened with the health clinic in Terrazas Del Valle during the last election. While the PRI party did send the health brigade to Terrazas Del Valle, the community only received these services for a short period of time. Once the election was over, Arturo could not obtain the PRI health brigade and the community's medical needs were left untreated. This limited assistance, only at the PRI's convenience, has left Arturo with a cynical view of the patronage system (Arturo)

According to Arturo, health care funding is equated with the power to control what happens to the funds and to the health clinic. As such, Arturo refuses to seek assistance from any governmental agency or political party because he fears that he would lose control and authority over the management and operation of the clinic (Arturo). Furthermore, Arturo's independence and that of the clinic is extremely important to him. This is evident in the example of the clinic's dirt floor. Arturo knew that he could obtain money for the pavement through his connections with the PRI party. However, if he re-integrated himself into the PRI system of community patronage, this might diminish his reputation in Terrazas Del Valle (Arturo). Instead, he vowed that he would continue to work in construction until he had saved up enough money for the
pavement (Arturo). In Arturo's perspective, independence from political involvement translates into integrity and trustworthiness in the community.

Lupe, a local midwife and herbal health educator in Mariano Matamoros Sur, has a similarly skeptical perspective on political involvement in community associations. Los Ninos, the NGO through which she works, has never looked to the government for financial or service support. In fact when I asked her whether she had ever considered such a strategy, she responded in the negative and inferred that I was very naïve for suggesting such a possibility (Lupe). Like Arturo, Lupe affirmed her independence and said that she would never even consider turning to the government for social or financial support. Similar to Arturo, she thought that any assistance would come with strings attached and that she would not be able to independently determine the type of herbal health education that she offered (Lupe). Unlike Arturo, Lupe did not have any previous experience with Tijuana's political parties to validate her suspicion of political involvement, still, her belief was so strong that anecdotal stories were not evoked by her.

Madero's narrative also reveals a deep suspicion of the nature of governmental affiliation. Madero is the director of the Episcopalian health clinic in Mariano Matamoros Sur. Four years ago, this clinic was burned down shortly after the clinic's coordinators refused to align themselves with the PAN party. Madero acknowledges that he has no proof to support his suspicion of politically motivated arson. Nevertheless, he vehemently insists that the PAN political group purposely burned down the health care clinic because the clinic refused to support the PAN party (Madero). To Madero, this story of fire and destruction is a cautionary tale regarding the effects that can occur when an independent association becomes involved with sinister government associations.
Although none of these claims are backed up by physical proof, it is these citizens' negative perceptions regarding political involvement that is relevant. When all of these narratives are taken together, they point towards a strong belief among the community activists that government involvement means a loss of independence and an inability to determine the direction of their community associations. The provision of financial assistance and political connection is perceived to limit the autonomy of the NGOs. Indeed, support from municipal, state, or federal agencies is thought to shift the focus of the NGOs from local concerns to the broader interests of the financing agency. The political support of NGOs is also perceived to be fickle and dangerous when clientelist affiliation is rejected. These firmly held beliefs have therefore prevented the members of these non-governmental organizations from seeking developmental assistance from either the government or the political parties. Hence, in contrast to the community associations that actively engaged in patron-client relationships with the political parties, the NGOs in the three field-sites consciously avoided any sort of formal involvement with political groups.

**NGOs and Health Care**

As these NGOs are providing services that are the responsibility of the government, another question in regards to their role in community development is whether they are capable of providing a broad-based and equitable means of development. Most of the NGOs in the three field-sites currently are, or were at one time, providers of health services in the communities. Currently, however, two health clinics are run by NGOs successfully operating in the three field-sites. One of the health
clinics is in Mariano Matamoros Sur, the other in La Morita 1. Although the provision of health services is the priority of these two clinics, their efforts are strictly reactive to the illnesses of the communities, they do not try to educate or prevent further incidence of water-borne diseases.

An Episcopalian Health Clinic is open daily in Mariano Matamoros Sur. To see a doctor the cost for pregnant women is 50 pesos while a general consultation costs 60 pesos. The health clinic is mostly focused on women's reproductive health, pre-natal care, and pediatrics (Madero). GI diseases are the most common illness that Madero treats in the clinic and these are usually treated by ORT and antibiotics. Although the clinic provides health education classes to expectant mothers, Madero, the director of the clinic, did not see a need to furnish other types of health education classes. In addition, Madero believes that the mothers of the infant patients would really use preventative measures regarding water borne diseases. Using this logic, Madero did not think that health education classes would decrease the prevalence of GI diseases in young children (Madero).

In La Morita 1, Paloma oversees a health clinic at a Catholic Charity on Saturday mornings from 10am to 1pm. On average she sees between 15 to 30 patients on those Saturday mornings, usually infants, young children, and the elderly. She finds that water-borne diseases are the most common illnesses that she treats, but she has noticed over the past several years that she is increasingly treating patients for respiratory problems (Paloma). Consultations cost 15 pesos; however, she will give free consultations to families that cannot afford her services. She also offers free medication to all her patients. Although her medical services are oriented towards curative health care
services, she will individually instruct patients on preventative health care methods if she thinks that they will listen to her. Paloma provides the only health care services in the charity. She finds that although the nuns in the charity are aware of the heavy burden of disease amongst La Morita's population, -- the head nun that hosts the health clinic is a nurse – the nuns in Catholic charity are more concerned with providing religious services and converting the local inhabitants. Consequently health education and Paloma's services are not a priority of the charity.

Although the clinics in Mariano Matamoros Sur and La Morita 1 were providing much needed medical services, their concentration was specifically directed towards the provision of curative health care services, prenatal care, and religious conversion. Preventative techniques and health education courses regarding hygiene and water-use were not an objective of these clinics. Therefore, these clinics did not connect the treatment of the water-borne diseases to the broader circumstances of the communities, such as the lack of available health education and the poor sanitation conditions.

**Balancing Community Needs and NGO Services**

Although access to local health care is considered to be equally important by other NGOs in the three communities, local medical services can sometimes be allocated at the expense of other development programs. The provision of these medical services can represent a delicate balancing act for a NGO, as the agency’s members must carefully choose where they will direct their energies and assign their organizational space.

At present, the Christian Community Center in Mariano Matamoros Sur supplies day care services and adult education courses such as cooking and hair-cutting. These
courses are considered to be very important because learning to cut hair can regularly save families a lot of money and cooking classes have helped women gain employment in restaurants and catering services.

In 1994, however, the Christian Community Center hosted a medical clinic that introduced free services to the local community. This clinic was operated by the charity, Hospital of the Californias, however, after a year the clinic was moved to another needy community in Tijuana.

Since then, the Christian Community Center has not extended any medical services, although it is trying to find another charity that can summon the same services. The current plan is to see if the Community Center can host medical students, so that they can complete their social service requirement in Mariano Matamoros Sur. The main problem with this potential solution, however, is that the Community Center lacks the space to host a clinic (Eva). Adapting the community center to the medical clinic would impose restrictions on the types of services that they could offer and some of the current projects would have to be sacrificed. When it first hosted the Hospital of the Californias, the Christian Community Center had only recently been established and had developed only a few programs. Thus, in the past, the medical clinic had not particularly “interfered” with the provision of other types of community development programs. Eva was not sure how the community center would balance the need to provide medical services against courses that could potentially enable families to make or save money. In any case, this had not yet emerged as a controversial issue since Eva has been unsuccessful in lining up any doctors or medical students to come out to Mariano Matamoros Sur.
Arturo is having similar problems bringing alive his health care clinic in Terrazas Del Valle. Although it is not religiously oriented like the NGOs in the other field-sites, he is having difficulty raising money to build the clinic and finding doctors who are willing to work in Terrazas Del Valle. At this point, the Health Clinic is only a building with a sign and Arturo's dream.

Daniel, the head of a Christian NGO in Terrazas Del Valle, thinks that the community has a hard time keeping doctors because they do not want to work with the poor – with that demographic for patients, it is hard for them to make a living. Furthermore, most doctors do not want to drive their cars out to Terrazas Del Valle on the hard, unpaved roads (Daniel). Thus, according to Daniel's assessment, it is always initially difficult for new communities to procure services. Until the streets are paved, doctors are reluctant to come to the poorer communities.

Although most of the NGOs in the Mariano Matamoros Sur, La Morita 1, and Terrazas Del Valle are interested in backing projects relating to community health, the only two successful clinics are primarily oriented towards curative health care. Meanwhile, other NGOs that want to deliver health care have difficulty in finding space for a local clinic and in securing doctors who are willing to travel the rugged distance to these communities. These resources would be more easily obtained within the PRI and PAN systems of clientelism, where many doctors are willing to extend their services; however, outside of the urban core and the party political networks, these resources can be scarce. Hence the wish of these NGOs to extend health care services to these underserviced communities is extremely undercut by their physical environment, the low level
NGOs, Water, and Sanitation

Although the NGOs in all three communities are eager to set up medical services, the development of water and sanitation services is a more sensitive subject. Compared to doctoring, community infrastructure development is a more difficult issue to tackle in terms of local involvement and political connections. When I asked Daniel whether his NGO had any projects oriented towards water and sanitation development in Terrazas Del Valle, he claimed that trying to help the communities gain water and sanitation services was seen as ultimately too political of a subject for a foreigner to broach in Mexico (Daniel). The provision of water and sanitation was a political and election issue, and so the community residents had to do something about it themselves rather than gain assistance from a foreign organization.

Rather than directly attacking the "political" issue regarding the lack of water and sanitation infrastructure, Daniel and his NGO experimented with a neutral water purification program. That is, at one point, Daniel had tried to organize a water purification program in Terrazas Del Valle but according to him this program miserably failed. Water filters were given to several houses by Daniel's NGO. To properly use these filters, these households had to slowly and continuously drip their water through the filter (Daniel). If the water ran through the filter too quickly, it would not be properly filtered for the families. Because this filtering technique took so long, the Mexican families would quickly grab a glass of water without bothering to wait the required five
minutes of filtering. In Daniel’s account, his water filtration project failed because the families were too impatient and could not plan their water consumption schedule in advance (Daniel). His was an innovative attempt to improve the drinking water quality in Terrazas but it failed to take into consideration the social habits of the community residents. As a result of this failure, Daniel became disenchanted with the willingness of the community residents to prevent illness and improve their own health (Daniel). With such an attitude, but still with a Christian devotion to improving the lives of the community inhabitants, Daniel now hopes that he can find a doctor who is willing to come to Terrazas Del Valle and to treat the illnesses after they have already begun (Daniel).

Another reason that the foreign NGOs are not committed to redressing the lack of water and sanitation infrastructure in the communities is that some NGO informants did not perceive the community to want or need that type of infrastructure development. Daniel, from the Christian NGO in Terrazas Del Valle, and Rochelle, from the Lutheran Housing NGO, said that the community inhabitants preferred to buy their water. Rochelle thought that having domestic water would only be problematic to poor households because the family would suddenly have to keep track of the water meter and their household budget. Rochelle and Martin from the Lutheran Housing NGO both thought that the Mexicans were accustomed to the high bacterial count in the water, and so, at bottom the dirty water from the trucks was not a big health concern.

Given their disinterest, it is important to carefully consider whether NGOs are capable of filling the developmental vacuum to which Vakil and Chen have referred. NGOs may experiment with innovative programs, such as Daniel's water filtering project,
but these do not necessarily succeed. Although supplies of clean domestic water are considered important by some NGOs these organizations appear unable to champion local infrastructure needs because they are shrouded under "political" overtones. Furthermore, NGOs are not responsible for outfitting all of the services that a community requires. Personal biases among the NGO employees also rationalize that the current lack of water and sanitation infrastructure in the communities is actually preferred by the local residents, as a result, the uneven distribution of domestic water and sanitation facilities was not pursued by the non-governmental organizations.

Conclusion

In sum, community associations identified political clientelism as the best strategy to meet their local health needs, while non-governmental organizations encouraged local participation without political affiliation. Although the PAN and PRI structures of clientelism did not necessarily address locally identified needs, these frameworks did ensure that the communities would receive some type of community service or resource. In contrast, informants from the non-governmental organizations were cynical of the self-serving motivations of the political parties and preferred to operate as independent organizations. Although NGOs are commonly perceived as an alternative development option based upon their apolitical and non-dependent framework, the NGOs in the three communities have been unable to provide a broad-based form of community development. Local health care was considered to be an important issue, but successful NGOs only provided curative rather than preventative care. Meanwhile, unsuccessful NGOs were unable to receive steady program financial and professional support to
produce the desired services. The development of water and sanitation infrastructure was not in the interest of NGOs because this was seen as too political an issue and because some NGOs did not perceive this safeguard as an important form of community development. Through all this, it appears that NGOs are extremely important to local participation and access to local services -- yet community development still needs governmental assistance to mount basic public services and to guarantee an equitable distribution of community development resources rather than small pockets of local development based on privileged contacts and clientelism.
Chapter 5

Conclusion

Through the construction of a metanarrative, the empirical findings in this thesis can generally be divided into two separate categories reflecting upon the issues of bureaucratic capacity and local participation in developing countries. Through the construction of my own narrative, the in-depth stories, counter stories, and non-stories from informants in Tijuana have been woven together in order to clarify the events, relations, and positions of the policy subsystem pertaining to the persistent prevalence of waterborne diseases in Tijuana, Mexico.

Using contemporary management and occupational theories, Chapter 3 examines the role of public sector bureaucracies to ensure public health and manage water and sanitation systems. The public institutions of the State Commission of Public Services of Tijuana, The State Water Commission, and The Ministry of Public Health have large capacity gaps that fail to ensure and regulate water quality in communities on the periphery of urban Tijuana. Institutional measures to inform and educate high-risk groups are officially in place, yet they fail to be observed on the local level. Departmental tasks have become compartmentalized and some public health employees are either unable or unwilling to relate their responsibilities to the broader institutional goals of ensuring and promoting the public’s health. Within these official parameters, informal social rituals that bypass the official regulations have become the dominant means for bureaucrats to get things done. Chapter 3 as a case study of the public sector policy subsystem involving the prevalence of waterborne diseases, is a clear example of such institutional incapacity and bureaucratic stagnation.
Despite academic claims hailing the significance of local participation as the best strategy for local development and empowerment, Chapter 4 narrates that not all actors in the policy subsystem of community development in Tijuana equally value participation. To begin, local activists value participation as a means to achieve community development and personal empowerment. For their part, informants from the political parties in Tijuana value local participation when the community mobilization is conducted within the structure of political clientelism. This is to ensure party control over local mobilization and to create an active grassroots base for continued electoral support. Public sector organizations, such as the State Commission of Public Services of Tijuana (CESPT), value local participation and community organization as a tool for planning and fundraising for infrastructure development.

Furthermore, some forms of participation are more equal that others. Local participation that falls within the structure of clientelism can successfully attain community services and infrastructure sometimes at the expense of co-opting local priorities and only receiving marginal amounts of health care services and infrastructure development. Participation through non-governmental organizations is unable to push ahead on issues of water and sanitation because infrastructure development is conceived as a political issue. Non-governmental organizations in the three field-sites have to resort to program and financial support from American and Canadian religious agencies, which have placed preventative primary health care as lower priority to issues such as housing, religious conversion, and curative and reproductive health. Ultimately, local participation does not challenge the dominant cultural structure. Rather, community
participation and organization operate as a process to slowly incorporate marginal groups into the political and developmental system in Tijuana.

Emerging Questions

Generally, this examination of community participation and water management has raised more questions that it has answered. Furthermore, all my research has teasingly made me aware of new development issues that I had previously been unaware. The research findings presented in this thesis comment on many bodies of literature and have implications on the development discourse that extend beyond the artificial confines constructed by the two empirical chapters on bureaucracies and water management and on clientelism and community development. In this next section, I highlight some of the questions that have emerged and how parts of the research findings extend into other areas of study and consideration. In particular, I briefly touch upon emerging questions involving Changes in Community Development Strategies, Institutional Transparency and Accountability, and the Equity and Economics of Public Water Management.

Changes in Community Development Strategies

Both Monse and Alicia outlined positive experiences in terms of clientelism and community development. With both of these informants, successful past experiences prompted the Mariano Matamoros South and the La Morita 1 community associations to continue operating within the clientelist structure. The only variation in local strategies over time has been to secure various patrons from different political parties to take advantage of the vulnerability and temporary generosity of electoral candidates.
Although the community groups did not necessarily attain their locally identified priorities, by remaining within the overarching socio-political structure, the community clients were guaranteed at least some form of local services and resources.

Meanwhile, Arturo, Madero, and Lupe from the NGOs working in the three field-sites all related highly negative stories about political intrusion and external controls that hindered their ability to effectively mitigate local development needs. Instead of opting to remain within the clientelist system, these informants and their NGOs decided to try and furnish local services without the benefit of political assistance. The lack of political affiliation has constrained the ability of these NGOs to provide their community services.

The contrast of these two positions raises the question of whether a person’s experience in community development, either of past success or failure, influences the shape of local priorities and strategies. Are the informants from the NGOs only trying to remain autonomous from political involvement because they already had tried clientelism but were unsuccessful? Do past experiences of success or failure effect the type of strategies that are used by community groups? These questions have emerged from the findings of this study and should be considered with regard to further research into community mobilization and development.

Another area for investigation that springs from the findings of this study concern the role of religiously oriented NGOs in community development. Future research should weigh the implications of religious NGOs being partially responsible for local development particularly in the absence of state involvement in community service and infrastructure development. The call for increased support of non-governmental organizations needs to be critically sorted out due to the limited ability of these
organizations to independently and successfully facilitate community development in cultures that traditionally manage public goods and services through clientelist codes of conduct.

Ultimately, policy questions should be directed at how to best facilitate community development. This emphasis differs from placing moral labels that politically autonomous and non-governmental modes of development are automatically superior to patron-client relationships. Or else, questions surrounding community development should be directed towards apprehending ways to empower community inhabitants as informed and autonomous individuals within the traditional framework of clientelism.

Institutional Transparency and Public Accountability

Increased institutional transparency and accountability are commonly cited as a possible solution to the institutional incapacity found in many public sector agencies within developing countries (Vakil, 2000; Grindle, 1997; Ward, 1989; 1986). Calls for transparency and accountability are made to counteract more traditional forms of “corruption” stemming from the manipulation of public goods for personal and political purposes. As the case study from Tijuana illustrates, however, CESPT, the municipal organization responsible for water and sanitation services and infrastructure, is already extremely transparent. Yet this myth of “transparency” presents only a veneer of legitimacy created by “socio-economic” reports and paperwork that justify all formal and informal institutional actions. This raises the question whether institutional transparency would really bring the much-expected benefits of equitable and accountable distribution of public goods. Future research needs to critically dissect what the notions of
“transparency” mean in various cultural and political contexts. Research should also seek to understand whether institutions only play lip services to international calls for “transparency” and whether its forms create public accountability within a clientelist system.

Equity and Economics of Public Water Management

Throughout this thesis I have repeatedly referred to notions regarding the equitable distribution of water and other public resources. Consciously I used the word “equity” rather than equality. Equality refers to the equal division of public resources between all members of society, whereas equity refers to overcoming the uneven distribution of public resources, but still maintaining basic standards by allocating the resources and services to those that need it most (Jones & Moon, 1987).

This notion of “equity” however, is value-laden and underscores the belief that people have a fundamental right to water. Franks (1999) argues that this moral claim has emerged from the perception of water being in abundance and vital to human health. This cultural perception has caused water to become labeled as a public good and as a resource to be managed by the public sector (Franks, 1999). Many environmentalists and development advocates are currently challenging the claim that humanity has a “fundamental right to water” (Cosgrove & Rijsberman, 2000; deVilliers, 1999; Franks, 1999). Water can no longer be viewed as an inexhaustible resource, and in that vein, Frank (1999) argues that humans should no longer have free and unconstrained access.

It is within this context that the notion of the market economy is currently gaining attention in the management of water and sanitation services in developing countries. The
role of the public sector versus the marketing of water as an economic good is indisputably an unresolved and much contested issue both in the developing world and in the more industrialized countries. One perspective currently gaining attention in the development sector is that water should be regulated not as a public resource but as an economic good (Franks, 1999; Stackhouse, 1999). In fact, both the World Bank and the Inter-American Development Bank have held conferences strictly on this issue of water, development, and privatization (Le Moigne, Easter, Ochs, Giltner, 1992; Inter-American Development Bank, 1997). Proponents of water as an economic good claim that the poor in developing countries already purchase much of their domestic water from private bottled water companies and from water trucks (Stackhouse, 1999). This is certainly true of the three field sites in Tijuana, Mexico. Even residents from Mariano Matamoros Sur purchased bottled water because they thought that it was more “pure” than the water that comes through their household taps and that is treated and regulated by public sector institutions (Toney; Lazaro). Armed with similar anecdotes from throughout the developing world Franks (1999) and Stackhouse (1999) argue that the poor already view water as an economic good and devote a significant proportion of their household income to obtaining water, while wealthier households that are connected to municipal water infrastructure systems pay disproportionately lower water rates. The upshot is that where it is managed as a public resource only the wealthy benefit; in effect, water then acts as a subsidy to the richer strata of society (Franks, 1999).

I mention these themes in this concluding chapter not because they directly reflect upon my research, but because their context illuminates on much of my research findings and value claims. The underlying assumption throughout this thesis is that the Tijuana’s
public sector should more efficiently and equitably provide water and sanitation resources and services to the poorer neighborhoods of Tijuana and throughout the city. Although it is not my claim, the bureaucratic inefficiency and incapacity that I demonstrate in Chapter 3 have been used as evidence to support the argument that the public sector should not be responsible for the management of such an important "commodity" (Franks, 1999).

This is not an argument that I favor. Perhaps, Franks's claims are true, however much of this argument is wrapped up in questions on what should be the role of the state in developing countries. Water by its very nature, is a non-voluntary product, consumed for a variety of purposes and is still fundamental to human health.

The evidence in this study appears to lead to the conclusion that private water dealers do not have the incentive to regulate the quality of their product. The water companies disavow any responsibility over their water truck dealers and maintain few hygienic standards to ensure the cleanliness of privately sold potable water. Although this example demonstrates institutional capacity gaps, where the public sector is not effectively supervising a public health issue, it also equally demonstrates that the private water sector is equally negligent in ensuring public health.

In conclusion, these questions point to new directions of research, involving heavily contested practical and theoretical development issues. As no one study can answer everything, it is important to question what is taken for granted -- that local participation is always an empowering activity and that the formal public sector does not interact with informal political and economic infrastructure allocations. Neither of these
above claims are completely true or false. Yet, further developmental research, planning, and policy claims need to carefully consider both the formal and informal cultural modes of operation. Finally, I think that this study reinforces the importance of always double checking that what is on paper and considered “official policy” is actually empirically occurring on the local level. This jarring discord between policy and reality ultimately affects people’s lives and whether change and development are actually being realized.
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Appendix A

Research Questions

Description of neighbourhood(s):
   Census information of demographics of neighbourhoods
   How do these neighbourhoods compare to other neighbourhoods (and each other) in terms of polluted water and associated burden of disease?
   Paved road?
   Distance to road?
   Types of transportation available?
   Industrial neighbourhood? (maquiladora?)
   Electricity?
   Health clinic?
   School?
   Level of education of community?
   Source of water
      - Piped/ treatment of piped water
      - Community well
      - Stored water? Barrels, open containers, where did storage unit come from?
      - Buy water-water trucks/ (garafon) differential pricing
      - River
      - Iodine/ bleach, disinfecting for household food consumption
      - How long food soaks
   Sanitation system
      - Type of sanitation system in use
      - Sewage lines?
      - Disposal system?

Comparison:
   Why do communities perceive that they have the type of water distribution system that they do?
   Has the change in infrastructure affected the perception of health and rates of Waterborne Illnesses?
      What is considered to be responsible for change of rates of illnesses? and better water distribution systems?
   How are their actions, activities affected by the type of water distribution system?
   How are the illnesses caused? By foul water perceived? Diseases of the poor? High risk? Happens to other people?
Social Cohesion:
How long the community has been established?
Rural/urban background?
Beginning to organise into advocacy groups?
Local sanitation and clean water initiatives? Or advocate groups
- What are the impediments to organisation?
- What has facilitated organisation?
Social networks? Gender of participatory/ advocates involvement?
Political brokers and their connection to municipal authorities?
- Political benefits of being incorporated?
Local, municipal, state or federal support for developing infrastructure
- Money, workers, expertise, co-ordination with other communities
Media sources of public policy and health promotional material
- TV, radio, family, neighbours, neighbourhood meetings?
Type of representative/ community and municipality level (PRI, opposition, PAN, PDR)

Health Clinic:
Common illnesses brought to clinic
Doctor? Nurses? Healers? Midwives? Community volunteers?
- Primary care? Intervention? Ability to refer more serious health complaints
- Is clean water and sanitation an important issue in the primary care clinic?
- What are the perceived causes by health care professionals?
- What are the health care goals?
- How do they treat water borne illnesses?
- Health promotion?
Cost of medical treatment -- money, time, effort, co-ordination
Resources available at health clinic?
How do they obtain their resources? Who do they bring their demands to? Or just top-down medical supply?
Community involvement? Participation?
Community control/ say in what types of health projects are implemented?
Provision of drugs/ oral rehydration therapy/ alternative medicines used to treat waterborne illnesses
- How obtained? How long taken? Pharmacist/ doctor/ self medicated

Water and Sanitation Agencies:
How is the water distributed in the community?
How is it determined when a neighbourhood gets water distribution and sanitation system?
What kinds of forces, pressures, paperwork needs to be initiated for Implementation of project?
Funding sources?
What types of water and sanitation systems are preferred? By the community, the water and sanitation departments, NGOs, health care workers?
How much does the department communicate, co-operate with the community in developing a system?
Community Activists:
How do the community activist/leaders believe their actions can affect/improve their community? What is the community activist doing?
Are clean water and sanitation systems an issue of importance?
What types of social mobilisation are they attempting?
  Public protests?
  Increased awareness? Health promotion
  Community participation?
  Bureaucratic networking?
  Is health being used as a political tool?
  Connection to international NGOs?

Political Parties?
How do they try to develop communities?
How does water and sanitation fit into their political priorities?
Do they encourage local participation?
How do they encourage local participation?
Do they have any interaction with public sector agencies?

Non-Governmental Organisations:
Dealing with water and sanitation in community?
  What are they doing? What do they perceive as the important issues?
  What kind of water and sanitation projects do they do?
  How do they incorporate the community?
  What kind of funding do they get? How much control over development do they hold?
How long has NGO been there, dealing with water issues?
How long do NGO workers stay there?
How are they incorporating the neighbourhoods within their water projects?
How much authority and control over project development, construction, and finances do they instil in the community?
What tactics do they use to improve water and sanitation and the associated health effects?
How does the NGO workers perceive the different actors within the community?
Responsibility, attitudes, roles, power, authority, facilitators, impediments?
CESPT letter of introduction and questions (Spanish Copy)

Mi nombre es Kaya Townsend y soy estudiante de maestría en la Universidad McMaster en Canadá. Este verano estoy haciendo mi investigación de campo sobre agua, salud y desarrollo comunitario en Tijuana. Estoy interesada en entrevistar a alguna persona de CESPT que pueda explicar la perspectiva de la empresa en cuanto a la distribución y calidad del agua en la zona de la delegación de ‘La Presa’.

En particular estoy haciendo una comparación entre 3 colonias: Mariano Matamoros, Las Moritas y Terrazas. Estoy estudiando la percepción que se tiene en cuanto al agua y la salud en estas comunidades así como los proyectos de desarrollo y construcción de infraestructura que afecten las índices de enfermedades cuyo origen es el agua.

Se me ha informado que de las colonias que estoy estudiando las Moritas solo cuenta con acceso a agua potable desde hace un par de años mientras que en Las Terrazas al momento existe un proyecto para construir un sistema de agua por tubería para la colonia.

Me gustaría hablar sobre el desarrollo de esta infraestructura.

En general las preguntas serían:

-¿Cómo planea la CESPT extender sus servicios a estas comunidades?
-¿Necesita la comunidad acercarse a la CESPT?
-¿Pagan por estos servicios o tiene la CESPT la capacidad interna para identificar las crecientes necesidades de la población en Tijuana?
-¿Cómo logra una comunidad pasar de no tener infraestructura a tener tanto agua potable por tubería y sistema de drenaje?
-¿Cómo intenta la CESPT proveer servicios para la población flotante que esta menos organizada que una comunidad?
-¿Cómo planea la CESPT sus presupuestos?
-¿Cómo determina la CESPT a donde asignar sus recursos? ¿Para nuevas construcciones, mantenimiento o tratamiento de aguas?
-¿Existen planes a largo plazo que intenten abordar con el problema del acelerado crecimiento de la población?
-¿Hay planes de contingencia para tratar con recortes de presupuesto y con la inflación?
-¿Tiene la CESPT algún papel en cuanto salud pública?
-¿Cuales son las políticas de la CESPT sobre agua y su impacto en la salud?
-¿Cuales son las metas de la CESPT en cuanto al suministro de agua a la ciudad de Tijuana?
-¿Cómo están trabajando para realizar esta meta?
-¿Cuales son los problemas al momento que están impidiendo el cumplimiento de esta meta?
-Para finalizar ¿De quien debería ser la responsabilidad última de que exista un equilibrio entre el agua y la salud en Tijuana?
En cuanto a la calidad de agua:
-¿Se me podría facilitar cualquier información respecto a la calidad de agua en las colonias que estoy estudiando?
-¿Qué tipo de tratamiento se le da al agua antes de que esta llegue a su consumidor final?
-¿Qué tipo de sistemas hay para el monitoreo de calidad?
-¿Cómo percibe la CESPT la relación entre calidad de agua, el acceso a esta y los índices de enfermedades cuyo origen proviene de problemas con el agua?

En cuanto a población:
-¿Sabe la CESPT a que porcentaje de la población o la cantidad de hogares a los que esta llegando servicio de agua por tubería en la zona de la delegación la Presa?

Quisiera agradecerles la atención que han mostrado a mis preguntas y por ayudarme a cumplir mis metas en cuanto a mi investigación. Como muestra del compromiso profesional a mi trabajo de investigación y para futuras referencias incluyo mi tarjeta de presentación y la de mi maestro supervisor y espero con mucho interés mi entrevista para conocer mas acerca de la CESPT en Tijuana.
English Translation of CESPT Letter

My name is Kaya Townsend and I am a Master's student from McMaster University in Canada. I am currently doing my fieldwork this summer on water, health, and community development in Tijuana. I am interested in interviewing someone from CESPT who would be able to explain the organisation's perspective into water distribution and water quality in La Presa.

In particular I am doing a comparison between three communities, Mariano Matamoros Sur, La Morita 1, and Terrazas Del Valle. I am studying the perceptions of health and water throughout these communities and the development projects and infrastructure construction that effect the rates of waterborne diseases.

I have heard that La Morita has only in the past couple years gained access to a piped water system, while there are plans for the construction of a water system in Terrazas.

I would like to speak about the development of this infrastructure. Generally my questions will be:

What plans does CESPT have to provide services to these communities?
Does the community have to approach CESPT?
Does CESPT have the internal capacity to identify the growing needs of Tijuana's population?
How does a community go from no infrastructure to both piped water and a sanitation system?
How is CESPT attempting to provide services to more transient populations who are less organised within a community?
How does CESPT plan its budgets?
How does it determine where to allocate its resources? For new construction, for upkeep, for water treatment?
Are there any long term plans that attempt to address the rapidly growing population?
Are there plans to address inflation or budget cutbacks?

Water Quality
Could I obtain any information concerning water quality in the colonias?
What sort of treatment does CESPT do to the water before it reaches households?
What sort of quality monitoring system is in place?
How do the people at CESPT perceive the relationship between water quality, access to water resources, and rates of disease?
Does CESPT have any role in public health?
What are CESPT's policies towards water and health?
What are CESPT's ultimate goals in terms of providing water throughout Tijuana?
How are they working to achieve that?
What have been the successes?
What problems are currently preventing this goal from fruition?

I would like to thank you for looking at my research questions and in helping me successfully pursue my research goals. As a token of my professional commitment and as a reference for future reference I have included my professor’s and my own business cards. I look forward to my interview and to learning all about CESPT’s plans in Tijuana.
## Appendix B

### Informants, Their Roles, and Number of Interviews

<table>
<thead>
<tr>
<th>Community Informants</th>
<th>Role Description</th>
<th>Interviews</th>
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</thead>
<tbody>
<tr>
<td>Alicia</td>
<td>PRI Community Activist in La Morita</td>
<td>2</td>
</tr>
<tr>
<td>Andres</td>
<td>Doctor in Terrazas Del Valle</td>
<td>2</td>
</tr>
<tr>
<td>Arturo</td>
<td>Runs NGO in Terrazas Del Valle</td>
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</tr>
<tr>
<td>Claudia</td>
<td>Teacher in La Morita 1</td>
<td>1</td>
</tr>
<tr>
<td>Daniel</td>
<td>Runs Christian NGO in Terrazas Del Valle</td>
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</tr>
<tr>
<td>Doroteo</td>
<td>Principle in La Morita 1</td>
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</tr>
<tr>
<td>Elsa</td>
<td>Pharmacist in Mariano Matamoros Sur</td>
<td>1</td>
</tr>
<tr>
<td>Eva</td>
<td>Coordinator of Community Center in Mariano Matamoros Sur</td>
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</tr>
<tr>
<td>Luis</td>
<td>Mariano Matamoros Sur Community Activist</td>
<td>2</td>
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<tr>
<td>Lupe</td>
<td>Community Health Educator and Herbalist in Mariano Matamoros Sur</td>
<td>2</td>
</tr>
<tr>
<td>Madero</td>
<td>Doctor in Community Clinic in Mariano Matamoros Sur</td>
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<tr>
<td>Martin</td>
<td>American representative from Lutheran Housing NGO</td>
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</tr>
<tr>
<td>Monse</td>
<td>Mariano Matamoros Sur Community Activist</td>
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</tr>
<tr>
<td>Paloma</td>
<td>Doctor in La Morita 1</td>
<td>1</td>
</tr>
<tr>
<td>Rachelle</td>
<td>Coordinates Lutheran Housing NGO</td>
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### Informants from the Municipal Political Parties

<table>
<thead>
<tr>
<th>Name</th>
<th>Party/Role</th>
<th>Division</th>
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<tbody>
<tr>
<td>Ernesto</td>
<td>PRD President</td>
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<tr>
<td>Pilar</td>
<td>PRI Community Recruiter</td>
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</tr>
<tr>
<td>Raquel</td>
<td>PRI Community Coordinator</td>
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</tr>
<tr>
<td>Ricardo</td>
<td>PAN Community Coordinator</td>
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</table>

### Municipal Public Health Officials

<table>
<thead>
<tr>
<th>Name</th>
<th>Department/Role</th>
<th>Division</th>
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</thead>
<tbody>
<tr>
<td>Esmerelda</td>
<td>Department of Health Education</td>
<td>1</td>
</tr>
<tr>
<td>Ilena</td>
<td>Department of Epidemiology</td>
<td>1</td>
</tr>
<tr>
<td>Toney</td>
<td>Coordinator of Health Clinic in Mariano Matamoros Sur</td>
<td>2</td>
</tr>
</tbody>
</table>

### Private Water Dealers (Municipal and Community)

<table>
<thead>
<tr>
<th>Name</th>
<th>Role/Type</th>
<th>Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jose</td>
<td>Private Store Water Seller</td>
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</tr>
<tr>
<td>Lazaro</td>
<td>Agua Clara Water Seller</td>
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</tbody>
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### Public Water and Sanitation Officials (Municipal, State, and International)

<table>
<thead>
<tr>
<th>Name</th>
<th>Department/Role</th>
<th>Division</th>
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</thead>
<tbody>
<tr>
<td>Esteban</td>
<td>CESPT, Department of Planning and Evaluation</td>
<td>2</td>
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<tr>
<td>Filipe</td>
<td>State Water Commission</td>
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</tr>
<tr>
<td>Francisco</td>
<td>Environmental Health</td>
<td>2</td>
</tr>
<tr>
<td>Mark</td>
<td>International Boundary and Water Commission</td>
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</tbody>
</table>

### Municipal Community Development Experts

<table>
<thead>
<tr>
<th>Name</th>
<th>Role/Department</th>
<th>Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alex</td>
<td>IMPLAN</td>
<td>1</td>
</tr>
<tr>
<td>Mauricio</td>
<td>Director of Department of Social Development</td>
<td>1</td>
</tr>
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