

PART I BACKGROUND

In this background and introductory section we describe the major effects of the earthquake studied, the kind of data that were obtained, and the Mexican sociopolitical context in which the disaster occurred.

First, there is a short description of some physical aspects of the earthquake and some indications of the material damage which was created in Mexico City. This is presented just for introductory background purposes because later in the volume more detailed information is provided from our survey results.

Second, we provide a brief statement on the sources of data and the data collection effort which serve as the base of our descriptions and analyses. The more detailed depiction of these are given in appendices (II and III) to the volume.

Third, we conclude this part of the report with an overview of the preimpact political and governmental setting in Mexico which influenced the emergency time response to the disaster. It is our contention that understanding the short run postimpact reactions, as well as some longer run organizational changes, requires some knowledge of the Mexican social context in which the impact occurred and where the response developed. The beginning of such an understanding is in the special position and power of the Presidency within that political system as well as the distinctive position of the Federal District within the governmental administrative structure.

CHAPTER 1.

THE EARTHQUAKE AND ITS SOCIOPHYSICAL EFFECTS

Mexico, and especially parts of the metropolitan area of Mexico City suffered a major disaster in late 1985. The interaction between two tectonic plates generated a great deal of accumulated energy which was released in two earthquakes: one on September 19, and the other on September 20 (we will not except in a few instances distinguish between the two earthquakes in the rest of this report). The first registering 8.1 on the Richter scale occurred at 7:18 am; the second at 7:38 p.m. on the next day registered 7.5 on the scale and happened about 36 hours later while rescue work was still going on after the first earthquake and while the President of Mexico was in the middle of his fourth on-the-scene inspection tour of damaged areas.

Although the epicenter was about 230 miles away, the greatest impact was in Mexico City (Esteva, 1988). The greatest physical damage was concentrated in relatively few localities where the site conditions and buildings were particularly sensitive. One estimate was that the directly affected neighborhoods involved only 3.2 percent of the federal district (Terremotos 1985 Mexico, 1986: 7). Also, the metropolitan zone emergency committee in a statement issued a month after the disaster said that over 90 percent of the heavy damage to buildings was concentrated in but three boroughs or subdivisions (formally known as delegaciones) of the urban area. However, as we shall document later, this is an underestimation of all building damages and does not take into account that there was major social disruption and indirect effects in much larger parts of the metropolitan complex.

The Mexico City area is subject to numerous seismic shakings every year. The first one recorded in historical chronicles occurred as far back as 1637 although there are recorded reports of earthquakes in Mexico as early as 1460 (Earthquake Mexico '85, 1986: 22; see also the listing in Manzanilla, 1986). A more recent survey indicates that there are an average of 90 per year that register 4 or over on the Richter scale (Herrera, 1986). In fact, in the 45 days following the September earthquake, there were at least 150 tremblers that ranged from 3.5 to 5 on the scale (Terremotos 1985 Mexico, 1986:2). Major earthquakes have occurred in six times in the last 150 years: in 1845, 1859 (which may have been the strongest of all), 1911, 1932, 1957 and the one in 1985. The one in July 1957, whose epicenter was on the Pacific coast about 170 miles away, killed about 160 people, damaged several thousand buildings and resulted in property losses of about 25 million US

dollars, mostly in the downtown area (Earthquake Mexico '85, 1986: 11).

The metropolitan area is especially vulnerable for several reasons. For one, since Mexico City was a town built in the Aztec era above Lake Texcoco (a body of water which existed until the start of this century), many parts of the area--especially the old city in the central zone--now rests on extremely weak and insecure ground. Also, increasingly there is more of a social nature to impact in the 890 square mile area. The number of inhabitants has grown dramatically, possibly tripling in the last two decades (Terremotos 1985 Mexico, 1986: 7). Census figures are only partially current, but it is probable there are between 18-20 million residents, over a fifth of the country's population. An indication of the size of the city is that the subway system alone carries about 4,850 000 passengers every working day!

As noted earlier, at 7:18 am on the morning of September 19, 1988 Mexico was struck by a major earthquake, measuring 8.1 on the Richter scale. The earth movement inflicted some overt damage in the states of Colima, Guerrero, Jalisco, and Michoacan where perhaps 600 were killed and more than 2,000 buildings were destroyed or damaged. But the greatest destruction and damage occurred in the federal district of Mexico City. The next evening at 7:38 pm another major earthquake measuring 7.5 on the Richter scale occurred during the carrying out of initial rescue and relief activities in the capital city.

Whether looked at in general or in specific terms, the more obvious sociophysical consequences of the earthquake in Mexico City are impressive. The earthquake in all of Mexico was probably not as absolutely or relatively disruptive or damaging as the Tangshan one of 1976 in China (where over 275,000 persons died) and perhaps not even the Chilean earthquake of 1985 (where over 400,000 persons were made homeless), neither of which got anywhere near the mass media or world attention that the Mexican disaster received. Yet if the estimates are anywhere near correct, the Mexico City earthquake of 1985 was without doubt a major disaster.

Thousands of persons were killed and tens of thousands were injured. At least a hundred thousand building units, mostly residential ones, were damaged in some way. Hundreds of thousands were made homeless. Tens of millions of dollars were lost in the tourist trade and hundreds of millions in wages by workers who became unemployed as a result of the earthquake. Billions of dollars worth of material damage was done.

Reconstruction and rehabilitation costs, estimated at five billion US dollars (although some estimates run as high as 10 billion, see The 1985 Mexico Earthquake, 1986), was the equivalent of about six percent of the Gross National Product (Arnold, 1989: 63). The World Bank alone provided over a half billion dollars in loans for

reconstruction purposes (Kreimer, 1989). The earthquake was also the worst in decades in terms of the overall insured loss, being exceeded only by San Francisco in 1906 and Tokyo in 1923.

Even when looked at in more specific terms the consequences are impressive. To be sure, even several years after the disaster, exact statistics are lacking as to deaths, injuries, building and property destruction, economic losses or whatever usually could be measured; nevertheless overall the effects were major along a number of different lines. The destruction from the two earthquakes was diffuse and somewhat spatially random throughout the huge metropolitan area. But the complex nature of the subsoil resulted in variation in intensity as well as in damaging resonance effects. Thus, the most damage tended to be concentrated in the north central and eastern sections of the city. In those localities, certain working class neighborhoods such as Morelos, Centro, Guerrero, Doctores, Antonio Abad, Nonoalco-Tlatelolco, and certain middle class areas of Cuauhtemoc, Roma, Condesa, and Juarez were particularly hard hit. Although even two years after the earthquake, figures on building damage issued by different government agencies continued to vary considerably, it appears most of the major damage was centered in three of the delegaciones, namely Benito Juarez, Gustavo Madero, and Cuauhtemoc--the last suffering the most physical damage to buildings. There were particular major pockets of destruction; for example, 43 out of 102 apartment buildings were left unfit for living in Nonoalco-Tlatelolco; 80 percent of the buildings were destroyed or damaged in Morelos (Mendez, 1986: 25).

Apart from the physical damage, there were according to official statements at least five thousand people killed and 14,000 injured. As we shall discuss later, our own survey findings suggest that as many as 2,000,000 residents of the capital at least temporarily moved out of their own homes. Two years after the earthquake, around 90,000 victim families had been rehoused (Storlarski and Santa Maria, 1987: 2).

Other residents of the city, while their own homes were not directly affected, either lost or had their employment interrupted. For example, there is one estimate that 1,326 buildings housing more than 10,000 shops and factories, such as textile and clothing manufacturers, suffered damages (Mendez, 1986: 25), and of course many government agencies housed in over 240 damaged buildings did not resume normal work functioning for days in most cases and weeks sometime (over 150,000 public employees eventually had their work location relocated elsewhere, Perez, 1987: 13). In addition, about 761, 1,435 or 1,687 public schools (depending on which statistics are used) out of around 3,000 suffered structural and/or non-structural damages (Armillas, 1983; de la Madrid, 1986: 5; Mendez, 1986) interrupting the education of over 650,000 children according to some reports (Robinson et al., 1986: 90). Since these kinds of everyday work and school activities were badly affected, ceasing

in many cases, there was a massive disruption of normal routines in the community (see Thier, Gratton and Johnson, 1986; Gratton, 1987).

This was complicated by the fact that many important public services could not function normally. For example, the central telephone exchange was damaged; one consequence was that apart from affecting local phone communication, almost all national and international long distance and telex and telegram lines were renderable inoperable. Along with damages to eight power generating substations about 1,280,000 electrical installations were damaged (de la Madrid, 1986: 5). In addition, with five destroyed and 22 damaged hospitals (including major health centers such as the Juarez Hospital, the General Hospital and the Medical Center) there was a loss of 4,260 hospitals beds, about 30 percent of existing capacity (Armillas, 1989: 3).

By these physical or material criteria alone, what happened was a major disaster. In addition to these many tangible physical consequences, the largest urban complex in the world also suffered many somewhat more intangible or social negative effects, as we shall document later. This report partly attempts to describe the more important ones and particularly the reactions of the citizens of Mexico City and their organizations to the occasion.

CHAPTER 2.

SOURCES OF DATA AND DATA COLLECTION

Earthquakes have been noted in history as far back as oral and written records go. However, studies especially of a systematic nature of the more social aspects of such disasters are a very recent phenomena. Inventories of the social science literature credit research by the National Opinion Research Center at the University of Chicago done on the 1952 Bakersfield, California earthquake, as the first field study of its kind (A Preliminary Report, 1954). The most complete inventory of such work up to 1979 lists only 26 other studies done by social scientists of such occasions as the Alaskan, Niigata, Chilean, Western Sicily, Gediz, Banja Luka, Peruvian, 1971 southern California, Managua, Guatemala City and Friuli earthquakes (Quarantelli, 1984b). However, work on these and even more recent ones such as in Southern Yemen, Campania Baslicata in Italy, and Coalinga, has either not been systematic, done immediately after the disaster and/or of a large urban area. Thus, we had little direct guidance from previous social research on earthquakes on how to proceed in our study of the Mexican City disaster.

However, there is a rather substantial literature from nearly 40 years of research on other kinds of disasters (see Kreps, 1984, 1985), and DRC used that in its approach. We decided to concentrate primarily on the emergency time period reactions and the immediate postimpact response, and secondarily on whatever longer run social effects we could study. This still left us with many research possibilities. After discussions with our Mexican colleagues (see Appendix I for a description of the collaborative effort involved), we eventually centered on two different but related aspects.

On the one hand, we launched a study of the emergency time response of organizations in Mexico City to the earthquake; this was partly dictated by the fact that DRC has over the years undertaken extensive studies of organizational responses to disasters (see, e.g., Warheit and Dynes, 1968; Dynes, 1974; Dynes, Quarantelli and Kreps, 1981; Quarantelli, 1990). On the other hand, we also made a decision to study behavior at the individual or human level; in particular DRC saw in this situation a possibility of carrying out systematic social science surveys of a metropolitan population involved in a disaster, which as just noted above is a rather rare research undertaking up to the present time. We also saw a possibility of seeing the individual behavior occurring in the larger context of organizational behavior.

With the assistance of our Mexican colleagues, DRC obtained three major sets of primary data: survey results, in-depth interview protocols and documentary material.

The survey results. The Instituto de Investigacion de la Comunicacion (Instituto), in consultation with DRC, carried out two population surveys about a year apart. These surveys differed from one another in some respects. (See appendix III to this report for the English language translated copies of both survey instruments). The first survey was conducted during the first week of October 1985, about two weeks after the earthquake, when 567 respondents from the general Mexico City area were contacted. All those interviewed were 16 years of age or older, and the sample was stratified with respect to gender, age, and socioeconomic status. The sample is statistically representative of the larger population universe with a margin of error of three percent.

Topics covered in the survey included: how well the government handled a dozen major earthquake related tasks such as search and rescue, the feeding of victims, the sheltering of the homeless, and the providing of information, etc.; usage of the mass media and attitudes about the reporting of the disaster; perceptions and evaluations of the actions of the Mayor's Office, the military, the police, the President of Mexico, and volunteers following the earthquake; disruptions of services and damages to homes as a result of the disaster; what earthquake occasioned problems should have priority for action; and what kind of volunteer work the respondent did in the trans- and post-impact period of the disaster.

Also, each of the 567 respondents were treated as informants for certain purposes. They were asked to provide information on earthquake-related activities of every member of their household. Therefore, information was available on the extent and nature of volunteer activity for a total of 2,965 individuals. The usual demographic survey background items were obtained for all respondents.

The 1986 survey while it repeated some of the questions asked in 1985 differed in the following respects. A total of 749 persons, sampled in the same way as indicated for the earlier survey, were interviewed. Topics covered included the following: the longer run problems brought about by the earthquake; whether the respondent provided and/or obtained housing and sheltering as a result of the disaster as well as the nature and duration of that kind of assistance; perceptions and attitudes regarding how the government generally and specific agencies (e.g., the police, the telephone company, the Red Cross, the Health Secretariat, the Social Security Institute, the fire department, etc.) had handled earthquake related problems; what had been individually learned from the experience and the knowledge that existed of disaster planning;

comparisons of the handling of immediate post impact earthquake problems and later ones; evaluations of earthquake related tasks such as the handling of foreign aid assistance, the reconstruction of hospitals and schools, the restoration of the water service, the demolishing of damaged buildings and the clearing of debris, the providing of shelters and housing for the victims, etc.; the nature and duration of any volunteering action undertaken; and some of the consequences of the earthquake on preexisting social problems in the capital, as well as the usual demographic survey background items.

The in-depth interview protocols. In addition, La Facultad Latinoamericana de Ciencias Sociales (FLACSO) obtained over three dozen in depth interviews of organizational officials who played major roles in the disaster. DRC drafted the initial interview guide, provided field training in Mexico for the Mexican students who actually conducted the interviews, and recommended who should be interviewed in which organizations. While not formally intended to be a longitudinal study, because the interviews were conducted over a number of months in the year following the earthquake it was possible to obtain information not only on emergency time response but also some of the recovery activities of the involved organizations.

There were lengthy, formal interviews with over 20 representatives in various subunits of the Mayor's Office (what we shall later call the DDF) involved in such varied tasks as central policy formation, public information, urban planning, medical services, public works, hydraulic systems, police and fire operations, transportation, legal services, utilities, morgue operations, the office of civil protection, and from representatives of various delegaciones within the larger office, as well as activities which developed in the aftermath of the earthquake such as listing missing persons. In addition, another 17 long interviews of a formal nature were conducted with representatives from PEMEX (the Mexican national petroleum company), the Red Cross, unions of hospital workers and tenants, and federal agencies including the military. The substantive focus of all the 37 interviews was on intra and interorganizational activities and the behavior of organizational personnel (for translated copies of the interview guides used, see Appendix III).

Documentary material. Besides the survey and organizational data, DRC obtained relevant information from a variety of other sources. With the help of our Mexican colleagues, we were able to acquire a number of Spanish language publications on the earthquake, some of a popular nature but some done in a social science framework. In addition, the Center collected whatever English language reports it could find on the earthquake. In all we eventually acquired about five dozen such items. This set of material proved very useful for background purposes as well as for looking at some

organizational changes which occurred in the year following the earthquake.

The study design, therefore, was developed in collaboration with our colleagues in FLACSO and the Instituto. This collaboration resulted in the development of interview and survey instruments which allowed data collection to flow from existing theoretical understanding about the emergency time behavior of organizations and persons, but yet were adapted for the individual and group sociocultural patterns which existed in Mexico City at the time of the earthquake. All interviewing, whether it involved in-depth organizational interviews or survey interviews, were conducted in Spanish by native speakers. The organizational interviews were translated under DRC supervision in the United States into English and analyzed solely at the Center.

CHAPTER 3.

THE MEXICAN POLITICAL AND GOVERNMENTAL CONTEXT

From our vantage point, the importance of the earthquake lies not below the ground in the interaction of tectonic plates but on the surface in the interaction of people and organizations in dealing with the social consequences. An earthquake like any other physical happening with disastrous consequences occurs within a particular social context. The social response to the disaster which is our concern occurred in a specific city, Mexico City, which is the capital of Mexico. To understand that particular social context requires some understanding of the Mexican political and administrative structure especially since our study partly focused on the emergency response of various organizations, many of them governmental agencies.

Involvement in the emergency time period of any disaster anywhere is dependent initially on the predisaster patterns of formal organizational obligations, the mix of governmental and non-governmental activities, and notions of political accountability and responsibility. Such patterns, of course, can vary considerably from one social system to another. Our intent here is to provide some initial points of reference concerning the Mexican political structure which are important for understanding primarily the emergency response and secondarily for the later organizational changes.

At a formal level the governmental structure in Mexico is highly centralized with the federal government selectively delegating power to 31 states and 2,379 municipalities. These municipalities are the primary political and administrative units of government. Municipal governments are headed by mayors who are elected for three year terms.

One scholar of Mexican society has provided this overall summary of that structure:

My working conception of the Mexican political system is one of a centralized, statist, inclusive system with corporatist features in which the presidency confronts a number of contending forces which it can manipulate in various ways. (Bailey, 1988: 12)

Bailey goes on to suggest that the system belongs to the family of populist movements in Latin America which were spawned by the

Depression of the 1930s, and is based on a multi-class coalition of groups which emphasize a nationalist agenda and endorses a reformist policy agenda. Another Mexican scholar, Reyna, writes about a populist corporatism in which politically significant groups are linked by a complex network of political organizations which relate these groups to the decision making process. Such a political structure:

tends to eliminate competition for power and emphasize conciliation among different societal groups through their vertical or subordinated relationship to the state apparatus (Reyna, 1977: 156).

Two critical elements in this political system are the power of the Presidency and the dominant role played by the official political party, namely the Institutional Revolutionary Party (PRI). First, much of the power and prestige of the Mexican political system is centered in the office of the Presidency. In fact, one observer of the system puts it this way:

The President is the government, and all discussions of Mexican politics must assume that fact (Tannenbaum, 1948: 45).

Perhaps the best way to summarize the complexity and importance of the President's power is to see that office as the nerve center of many demands by various interest groups. As the nerve center, the President must moderate conflict and dispense rewards to balance competing interests so that the coalitions will not fall apart. While such a concentration of power is impressive, it also has its drawbacks, since the President must accept responsibility for all that occurs with the system, even though it is impossible to directly "oversee" the entire system.

Second, under one name or another, the dominant political party, the PRI, has held power in Mexico since 1929. It would be a mistake to consider the PRI in the same context as political parties in the United States, that is, as constituting political support for rather concrete policy alternatives. One way to understand the PRI is as a political bureau at the service of the President and that serving the President is its major political task. One observer suggests that:

The PRI is a vast elite class, surrounding an authoritarian president but the class holds many dissimilar and often contradictory elements (Bailey, 1988: 129).

Many observers have indicated that the PRI was never designed to be a political party but rather its essential features were constructed during the late 1930s as a mechanism to integrate new

elements, especially laborers, farmers and middle class groups into politics in a rather controlled fashion. The party became a kind of holding company of groups at a time of relative social simplicity. The party has evolved as a rather complex structure to absorb and broker conflicts as well as to mobilize support for presidential initiatives.

While the PRI has been historically important in the evolution of the Mexican political system and still continues to be important, perhaps much more significant today has been the evolution and growth of what is generally called the "political" bureaucracy. That bureaucracy, closely integrated with the PRI, has grown significantly in recent years. That growth has resulted from the failures of traditional populist style politics to benefit as much as might be desired the labor and peasant constituencies within the PRI. More recently, there was a new form of populism which emerged which emphasized that state enterprises, especially petroleum reserves which were managed by technocrats, that is traditional bureaucrats could create wealth which would be distributed through public agencies to constituent groups. This has meant the ascendancy of technicians in the traditional political system as well as the development of new federal programs which link groups directly to the government and by-pass the party.

While the previous discussion has focused on the links between the national political and governmental systems, the administrative relationship between the federal level and local governments is also important. Mexico City has a distinctive relationship. In Mexico, as in many other developing countries, all roads lead to the capital of the country; the capital is not only the political and governmental center of the country but it also contains the core of the economic, industrial, educational and cultural activities of the nation as well as well. In fact this densely populated metropolitan area:

produces 44% of the Mexican GNP, contains 25% of the economically active population, is home to 20% of the country's total population, as well as one-third of all public employees in the nation, and absorbs 25% of the Mexican federal budget and 33% of all government investment (Robinson, Franco, Castrejon and Bernard, 1986: 87).

In part because of this, Mexico City has a special status. It is a Federal District and in that is unlike other local governmental entities in Mexico.

In one sense Mexico City does have its own municipal government like other cities in the country. But there are complications that stem from having a central government and a municipal government functioning in the same location. So while the residents of the

Federal District can elect their own deputies and senators for the Mexican Congress, the executive head of the District, the Regent or "Mayor", is appointed and removed by the President. The Mayor names other top "local" officials but only with the approval of the President. This close political and administrative relationship often makes it difficult to have a clear cut demarcation between the various functions which the District should perform and those that the central government should provide.

A further understanding of the position of Mexico City in the larger governmental and political system can perhaps be achieved by making a comparison of the similarities and differences between the capital of Mexico and Washington, D.C. The Federal District of Mexico City (DDF) and the capital of the United States are similar in that they are both federal districts. However, the former is far more complex than the latter or what is usually the referent of the term in cities in the United States. For most purposes, the "Mayor's Office" in Mexico City is synonymous with the entire local governmental structure. Under its domain are such varied functions as police and fire operations, water, sewer, transportation and communication, health, social security and welfare activities, streets and construction, and civil protection.

In addition the DDF is subdivided into 16 boroughs or delegaciones. Within these 16 areas there is considerable autonomy and control of the various metropolitan governmental functions. In many respects there is a decentralization of operational functions. Therefore, on a normal, everyday basis the structure of the local government illustrates dialectically posed forces of formal structural concentration and operational decentralization.

The previous discussion has emphasized certain distinctive feature of the Mexican political system. It is characterized by the centralization of power in the Presidency. That power is nurtured by the PRI and the political bureaucracy. The power further radiates down from the central government to the DDF. Within the DDF there are further structural subdivisions which have distinctive functional or operational responsibilities.

There is reasonable consensus on such a picture by various scholars of the Mexican political and governmental system. But that consensus should not lead to a conclusion that there are no points of contention and disagreement within the system. In fact, the system has evolved on the basis of a necessity to mediate among various contending forces. As such, on an everyday bases many differences will remain muted or latent.

However, this means that at particular times within the life history of a society, certain issues come to the fore or become manifest. Crises can provide such occasions. Thus an occurrence such as a major earthquake in the capital city could raise a number of latent political and governmental issues, not

just as abstract arguments but as realistic concerns in the face of immediate emergency needs. This happened in the Mexico City earthquake of 1985.

Our research found that the following concerns surfaced:

1. Given the disaster, who had responsibility for developing the emergency response?
2. Was that responsibility primarily at the federal level or at the local community level?
3. What should be the relationship between the central government and local governmental entities with respect to the types of contributions each could make in such an emergency response.
4. What governmental agencies should be involved in the emergency response?
5. What are the roles which these governmental agencies should perform?
6. To what extent is the emergency response the sole concern of governmental agencies?
7. What role should private organizations have in the emergency response?
8. Who should have the responsibility to coordinate the activities of public and private groups?
9. Are these responsibilities assigned as a result of some form of prior disaster planning?
10. How much of the emergency response should be directed by "political" considerations as opposed to technical bureaucratic ones?

Beside the complexity of these issues which surfaced in the development of an emergency response, there were two other diffuse concerns which emerged in the emergency period. One of the issue was the proper role of the military in the disaster response and the other centered around the future political consequences of the earthquake.

Civilian-military relationships have, not surprisingly, been the focus of some concern within the Mexican political systems. As one scholar has said:

The spectrum of civil-military relationships in twentieth-century Mexico has ranged from

total military supremacy from 1910 to 1920, to almost complete military submission to civilian authority from the fifties through the late sixties. From the late 1960, the tide turned toward more military influence and that trend will continue for the foreseeable future (Williams, 1986: 149).

It is not difficult for many to recall that it was not until 1946 that Mexico elected its first civilian president. In addition, in recent years, 1968 to be exact, the military played an important role in intervening in the political system to crush demonstrations which opposed allegedly extravagant spending for the Olympics. Several Mexican scholars, including Reyna (1977) argue that the army as an institution was likely to be kept out of politics because in part, the military elite had been coopted by the PRI. That is, the military would not act as an independent political force since now it was well integrated into the political apparatus. While that view generally prevailed, at the time of the earthquake there was some concern that the disaster might be exploited by the military to enhance its power. As we shall see, the military was not allowed to implement a national disaster plan that would have given it formal control of the capital city.

Such a concern was part of a larger set of concerns about the consequences of the earthquake for political stability. As noted earlier, the political system can be viewed as a delicate balance of contenting forces which is monitored by the President. The social effects of the earthquake held the potential for disrupting the existing balance and creating significant political problems for the future.

To a certain extent the social disruptiveness of the disaster might have created a politically new and dangerous "constituency" for the political system, namely the "victims". In the past other potentially "dangerous constituencies" or divisions within the society---laborers, peasants, the urban poor, etc.---had been incorporated into the political system, especially by representation in the PRI. But disaster victims were a new social category whose characteristics were unknown and who could perhaps coalesce or crystalize into some politically dangerous group or social movement. There were generally no established leaders of the victims who could be identified and perhaps coopted. There were a few identifiable small political groups that became involved with disaster victims and participated in public demonstrations after the earthquake. But because of their ideologies they were almost inherently anti-governmental in nature and not inclined to support the existing political status quo.

Also, there was some concern that long standing social divisions within Mexican society might have been further magnified by the earthquake. Later we shall indicate that our survey results showed

that there were consistent social class differences in reactions and behaviors with respect to the disaster. But the concern in some political elites right after the earthquake was that political movements among the urban poor could be given new life and new political agendas by the disaster. If hostility did develop on the part of the victims, such hostility could easily be directed toward the existing political arrangements. That is, much of the blame for the problems of disaster victims might be placed on the President. While as we shall indicate later, our survey data do not support the widespread development of such a perception among victims, it nevertheless appears that such a concern did exist in certain high level political circles in the aftermath of the disaster.

This apprehension about the social effects or aftermaths of the earthquake had another dimension. In a study more than a decade ago Cornelieus (1977) examined the political consequences of the existence of a large numbers of migrant poor. He points out that past smaller scale disasters in urban neighborhoods in Mexico City had traditionally provided an opportunity for the regime to demonstrate its concern for the welfare of the poor. He notes that both the Federal District and the "popular" sector of the PRI had often organized disaster relief operations, much in the style of the big city political machines in the United States in their heyday. Such kind of assistance in Mexico City was highly visible and had lasting psychological and political impact; at the same time, the overall cost was relatively small and there was no commitment necessary for continued assistance. Cornelieus concludes that such:

qualities make disaster relief highly attractive to the government as a means of building support among the more disadvantaged sectors of the city (1977: 207).

If quick, highly visible but "one shot" politically motivated assistance to a small number of disaster victims was seen as important, the consequences of having large number of victims needing longer term assistance could provide a politically explosive situation for which there were no easy solutions. Some Mexican writers have made the same point:

In a Latin American nation like Mexico, where the political and administrative apparatus operates in a complex web of patronage, established political groups have a lot to lose if they cannot respond quickly and effectively to the needs of people who have been struck by a disaster (Robinson, Franco, Castrejon and Bernard, 1986: 84)

In addition to the political repercussions which might have emerged, there were some doubts expressed that the individual who held the Presidency at the time of the earthquake could or would act in a traditional political way. Earlier it was mentioned that technocrats have come to dominate national Mexican politics. The incumbent at the time of the earthquake, Miguel de la Madrid was the third President in a row who never had held any prior elective office. Furthermore, almost all his appointed cabinet were technocrats.

From the viewpoint of more traditional politicians, the technocrats are thought do not possess the necessary skills to run the country. By their training and outlook, technocrats are likely to apply technical methods to solve problems in which political issues are reduced to "mathematical equations". Traditional politicians viewed the technocrats as having little ability to negotiate and compromise as well as having difficulty in dealing with "public" events. At the interpersonal level, technocrats are seen as being much more comfortable in dealing with each other than they are with the "masses" (Smith, 1986: 110).

In any case, one of the important political issues which the earthquake raised was the ability of a regime that was dominated by technocrats to deal with a disaster that might be of considerable political import. In the past, the social effects of disasters had been "solved" by traditional political methods, not technical instrumental ones. The situation also has to be seen in the context of an earthquake hitting a country with a 97 billion dollars (US) foreign debt and whose oil prices had fallen within a relatively short period of time from \$24 to \$15 dollars a barrel.

Thus, in September 1985 Mexico was a country with a particular political and governmental system which had certain vulnerabilities to unexpected crises (besides sources already cited see also the analyses in Hamilton, 1982; Cockcroft, 1983; Hellman, 1983; Johnson, 1984; Camp, 1986 for discussions of various aspects of problematical features of the Mexican government and politics). The disaster potentially could have had a major destabilizing effect on the social system as a whole and might threaten the power of the PRI. It is in this context that the organized response in Mexico City to the earthquake developed and to which we now turn.