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GOVERNMENTAL SYSTEMS FOR DISASTER  
MANAGEMENT

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# **Governmental Systems for Disaster Management**

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## INTRODUCTORY REMARKS

While the focus here will be on the development of governmental systems for disaster management, it is appropriate to provide some initial remarks about the rather confusing concepts of “disaster.” It has many different meanings in popular discourse. A number of years ago, (Dynes, 1974), I noted at least four different meanings: (a) the designation of a disaster agent, such as a flood or an earthquake; (b) the indicator of physical damage, such as a hundred houses destroyed; (c) an indicator of social damage, the uprooting of family living or the destruction of family relationships and (d) an indicator of a negative evaluation, such as a failed culinary effort or a troublesome friend. Unfortunately, these different meanings have little consistent relationship among them. Even considerable physical damage does not automatically translate into social damage. This can be illustrated by the 1988 earthquake in Armenia. That earthquake, 6.9 on the Richter Scale, killed approximately 25,000, injured more than 31,000 and left 514,000 homeless. The next year, an earthquake of greater magnitude (7.1) occurred in the United States; the Loma Prieta earthquake killed 62, injured 3,757 and left more than 12,000 homeless. Floods and earthquakes have social consequences only as a result of the actions of human beings and societies. In effect, all “natural disasters” are social.

Making such distinctions, however, may not be particularly important in the contemporary world dominated by the media presentation of distant events. Not too many years ago, a BBC film crew had a day off from an assignment in Africa and took some film footage of children in the Sudan in an area where malnutrition was chronic. Later that film footage was made into a documentary shown in Britain and later in the U.S. It attracted the attention of some rock performers and later was highlighted by an ad hoc chorus, including Michael Jackson in a song arranged by Quincy Jones - “We Are The World.” This led to considerable fund-raising intended

to alleviate the chronic poverty. The point here is not to condemn such an effort but to point to the media's potential in focusing attention not just on relatively sudden changes but on more long-term and chronic conditions which would be best described as failures in social development. In any case, the point is to emphasize that, in the modern world, the power usually evokes actions by not just entertainers but also by governmental systems.

## EARLY ATTEMPTS AT DISASTER MANAGEMENT

Throughout history, most disasters and their consequences had to be handled by pooling the resources of extended families, kin groups and neighbors. These efforts were an extension of pre-disaster cooperative efforts among these social units. Such cooperation was not considered unusual. Only the circumstances were. Over time, national governments began to give attention to the consequences of disasters and to provide forms of assistance.

In the 18<sup>th</sup> century, in India, the East Asia Company, while a commercial entity, was in fact a colonial power. To protect their commercial interests, chronic famines in many parts of India created the need for new forms of assistance. In a few places, food storage facilities were built to store supplies to be used in famine conditions. In addition, "victims" were provided pay for working on public works, such as road building. This gave them the money to buy food while they were involved in activities of more general welfare. Those efforts became the prototype for later forms of public disaster assistance.

About the same time, in Europe, when new governmental systems were being developed, much of the port city of Lisbon, Portugal was devastated by an earthquake in 1755. Since that port city was essential to the economy of Portugal in trade with their colonies, especially in South

America, there was strong motivation within the government of Portugal to quickly rebuild the port facilities. In addition, rebuilding housing in the downtown area had a high priority, in part because many members of the court lived near the Palace. The prime motive for reconstruction, however, was underlined when the Royal Square was rebuilt and renamed Commerce Square. Early governmental attention to disaster consequences then had both a political and economic rationale, and little attention was given other more personal concerns of a victim population.

#### RECENT MODELS FOR DISASTER MANAGEMENT

Probably the most unimportant model for contemporary disaster management was a product of wartime experience for countries involved in World War II which continued and was subsequently elaborated in the Cold War. During World War II, civilian populations came to be at risk, not just by direct armed conflict but by more impersonal situations, such as bombing. This placed local communities far from the immediate conflict in considerable danger. The possibilities of such threats encouraged governments, such as Great Britain, to develop and maintain a “civil” defense, which took as its organizational premise, duplicating a military model to protect civilian life. The organizational form of civil defense was predicated on an “enemy attack” scenario in which the function of civil defense was to maintain social order and was based on the assumption that “civilian” populations were weak and easily traumatized. The prime function of civil defense was to prevent social disorganization. After the end of World War II, the importance of “protecting” civilian populations was heightened by the emergence of the Cold War. In the United States, civil defense became important and recently demobilized military personnel made an easy transition into developing a civil defense effort. While in some countries, such as the

United States, civil defense was intended to have local disaster responsibility as well as to protect the nation from enemy attack, but greater emphasis in funding and effort was given to national responsibilities. This emphasis was considered misplaced when the enemy attack never came and when communities continued to grapple with local disasters without much national attention. In time, this discontinuity led various states to change the emphasis by focusing on local “emergency management” rather than on national civil defense.

A similar national and military emphasis also developed in other countries not directly related to the Cold War. In many “developing” countries, especially those in South America, Africa, and South Asia, the responsibility to protect civilian populations was usually assigned to their armed forces. While armed conflict was not an immediate threat, new governments often assigned “disaster” responsibility to newly emerging military organizations. Too, since many of these emerging governments elaborated governmental functions at the national level, the placement of disaster responsibility within a national military made organizational sense at the time. It was the military role to protect against the “enemy” and to preserve social order and these organizations often had considerable resources which could be used in disaster situations. On the other hand, in some of these countries, a major responsibility of the armed forces was to control revolutionary movements and regional hostilities so, in many disaster-prone areas, their assistance responsibility was undercut.

As has been suggested, the old civil defense, military model developed a number of serious flaws. National centralized systems were usually too far removed since disasters occur at the local level. Such systems usually became overly bureaucratic which impeded its functioning and overly political, reflecting favoritism. Its wartime assumptions of social chaos, the need for social

control, and the importance of external assistance did not stand up well, with careful scrutiny. Its preoccupation with only responding to disaster, ignored the importance of preparedness, mitigation, and recovery. Disaster is a complex social process, not just an isolated event. National and centralized decision-making was usually inadequate for local and diffuse problems. There was a need to develop local democratic decision-making rather than to encourage national, centralized usually paternalistic decision-making since it lacked both knowledge and understanding of local conditions. Because of these flaws in the military model, a newer model which emphasizes community problem-solving had gradually emerged and in some governmental systems it is becoming normative.

#### MORE ADEQUATE MODELS OF DISASTER MANAGEMENT

In general, while the military model emphasized social chaos and social control, better models emphasize the capacity of communities to maintain considerable continuity to their pre-disaster activities. Even in major disasters, most resources, including people, still exist and continue to function, even in these difficult situations. Utilizing those resources through coordination and cooperation should be the goal of disaster management. Any national system needs to concentrate on the most effective use of those resources in the local community. In those local communities, ways have already developed to deal with recurrent problems. Adapting those structures to the problems caused by disaster then provides a basis for both effective and realistic solutions. Since disasters are frequent in many local communities, the encouragement of local problem-solving is likely to increase attention to the full range of concerns with preparedness, with recovery, and with mitigation rather than being subject to periodic and

idiosyncratic attention dictated by the national government's political needs, rather than the local community's "real" needs. Some other contrast between the military and problem-solving models are summarized in Table 1.

**TABLE 1 Assumptions and Consequences of Different Models of Emergency Planning**

<b>Assumptions about</b>	<b>Military Model</b>	<b>Problem-solving Model</b>
Characteristics of emergency behavior	Chaos	Continuity
Character of emergency response	Command	Coordination
Character of involvement	Control	Cooperation
	Plan for dramatic change	Plan for (and with) continuity
	Plan for reduced social capacity	Plan for unexpected problems
	Create new structures	Utilize existing structures
	Predetermine new authority	Utilize preemergency authority
	Create centralized decision-making	Utilize decentralized decision-making and coordinate
Consequences for planning	Anticipate loss of emergency workers	Anticipate extensive helping behavior
	Expect problems of role abandonment	Anticipate importance of family support systems
	Emphasis on providing authoritative public announcements	Emphasis on organizational intelligence and keeping public informed
	Emphasis on agent-generated demands	Emphasis on response-generated demands as well as agent-generated demands
	Emphasis on standardized scenarios and operating procedures	Emphasis on improvisation based on preparedness and alternative solutions
	Emphasis on creating a paramilitary structure	Emphasis on mobilizing social resources

## DIRECTIONS FOR THE FUTURE

In the future, it would seem that many of the recent directions for disaster management will continue.

- Shift from national concerns to local community concerns
- Shift from an emphasis on maintaining social order to an emphasis on increasing community problem-solving
- Shift from a sole focus on response to a concern for preparedness, response, recovery, and mitigation
- Shift from emphasis on national assistance to an emphasis on mobilizing local community resources
- Shift from a narrow concern for selected hazards to a concern for all hazards
- Shift from a concern for only natural hazards to an increasing concern for technological hazards
- Shift from ad hoc response to low probability events to building a concern for disaster events into the daily routines of individuals, organizations, and communities
- Shift from a preoccupation with external assistance toward developing the capacities of families and other social units to deal with difficult situations.

All of these directions will have to be implemented in a future which will be considerably different from the past. Changes in technology lead to new threats and new disaster-related problems. For example, the increasing dependence of businesses on computers to maintain operations means that power outages will be increasingly disruptive.

In addition to new technologies, the human community in the future will be configured in different ways than it has in the past. For example, for the first time in human history, the world population will be predominantly urban. And much of that urban growth will be in large cities. In those growing cities, there are urban slums, many of them adjacent to labor intensive processing plants with highly risky technology. In some countries, such as the United States, there is population movement from the middle of the country to coastal areas. The west coast is seismically active and the east and gulf coasts are vulnerable to hurricanes. Tourist areas continue to develop in disaster prone areas. All of these changes will require attention and perhaps different emphasis in emergency planning in the future. On the other hand, the continued emphasis of problem-solving at the local level will insure that these changes are considered rather than ignored.

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