1. Summary

Although there are obviously major and manifold differences between the United States and the developing countries, people tend to respond to disasters in similar, constructive ways in all societies. And although the flow of technology as well as disaster assistance has been from the United States and other industrialized nations to the developing countries, there are some lessons that may be transferable to the United States, as a form of reverse technology transfer, from the disaster experience of developing nations.

The purpose of this report is to distill from the application of U.S. disaster assistance to developing countries those lessons that may be applicable to U.S. domestic disaster preparedness and response.

The very lack of resources among the developing countries seems, ironically, to generate lessons for the United States. For, having less, the developing nations must do more with what they have when disasters occur. Hence, the force of straitened circumstances requires that the less developed countries employ different techniques or procedures to achieve the same objectives as the more resourceintensive U.S. institutions.

This applies even to situations where a U.S. instrumentality, the U.S. Office of Foreign Disaster Assistance, is extending aid on the basic of domestic disaster principles and procedures. How those principles and procedures have been adapted to the institutions and disaster environments of the developing nations may also be the source of transferable lessons to U.S. domestic programs.

Since the key difference between disasters in developing countries and those in industrialized countries stems from wide variation in the ability to respond, institutions are, therefore, the main focus of any search for lessons transferable to the United States.

There are two major areas of lessons, the first of which stems from the fact that the term "disaster" actually is a generalization for a whole series of interconnected events, beginning with the existence of a hazard and proceeding through many steps which might be called the hazard and disaster lifecycles. Concentrating on the final phase of these lifecycles, the particular disaster event, tends to divert attention from the fact that it may be far more productive, efficient, and humane to consider possible deficiencies in mitigation, preparedness, education, training and warning capacity. The ability of the United States with its manifold resources, to respond has sometimes obscured these deficiencies. But the less developed countries do not share our ability to respond to disasters and have in many cases turned, therefore, to impressive preparedness, education, and training efforts. The United States has already begun to incorporate into its own aid programs this growing recognition that most emergency conditions share common components and a lifecycle that offers various points at which intervention may usefully occur. Hence, increasing attention is being given to the stages prior to the emergence of a disaster, through prevention, mitigation, warning and preparedness planning. Such programs can reduce the huge direct disaster relief costs as well as the indirect costs of local economic dislocation.

The second source of applicable lessons concerns specific program areas where experiences in developing country disasters may prove beneficial to U.S. domestic disaster efforts. For example, disaster aid in the developing countries emphasizes selfhelp assistance far more than does the U.S. Studies show that people actually prefer rebuilding advice and supplies to extensive mass shelter or temporary housing. This lesson might well be applied in dealing with domestic disasters.

In addition to self-help for disaster victims, the specific areas offering promise for helping improve U.S. domestic disaster programs are:

-Planning -Infrequent disasters -Information -Evacuation -Voluntary agencies -Transportation -Public contributions -Building standards -Emergency organizations -Surveillance -Practice and training -Contingency funding -Stockpiling -Reserve cadre -Adaptation during system failure

Unfortunately there are two organizational impediments hindering the U.S. from taking full ad-

vantage of the lessons available from participating in developing country disasters. The first impediment is the fact that information has not been organized for the specific purpose of facilitating transferable lessons. The second impediment is the lack of a formal mechanism to disseminate principles, practices, and suggestions considered applicable to U.S. disaster programs.