

Quick Response Report #115 A REVIEW OF RELIEF: AN EXAMINATION OF THE RESPONSE TO HURRICANE GEORGES IN THE DOMINICAN REPUBLIC

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1999

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This material is based upon work supported by the National Science Foundation under Grant No. CMS-9632458. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.

A REVIEW OF RELIEF: AN EXAMINATION OF THE RESPONSE TO HURRICANE GEORGES IN THE DOMINICAN REPUBLIC

INTRODUCTION

Emergency managers have undoubtedly been preoccupied of late with disaster prevention and sustainable development.¹ But in spite of the current emphasis on mitigation and the ongoing movement away from relief, the number of disaster-related deaths has not fallen.² In fact, evidence suggests that people are becoming more vulnerable to hazards as "development" proceeds.³ Environmental degradation, rapid urbanization, social marginalization, and technological mishaps are only a few of the factors that are to blame for this increased risk.⁴ It appears, therefore, that relief will always be required. But, unfortunately, the study of post-disaster responses has witnessed a decline over the last few decades,⁵ leaving much to be known about humanitarian assistance.⁶ Thus, there can be much justification for examining the successes and failures of a recent relief operation.

Having attempted to rationalize the merit of this research project, the central inquiry to be investigated in the following Quick Response report is: What is the present state of post-disaster responses? This question can, in turn, be broken down into three specific areas of exploration: 1) Have practitioners overcome the obstacles to effective and efficient relief which have been identified in previous studies? 2) What problems remain? And, 3) what are the solutions to those issues which have not been resolved? In addressing these issues, this paper will mention how

information regarding this case was obtained, provide background data about Hurricane Georges and its impact on the Dominican Republic, discuss the findings of this research project, and then conclude with some implications for practitioners in the United States.

INVESTIGATIVE METHODOLOGY

Ten days after Hurricane Georges struck the Dominican Republic, the author visited this developing country in the Caribbean to gather information about the subsequent relief operation. While in the field, disasters victims, government leaders, and officials from local disaster research and prevention institutions, foreign embassies, the United Nations, the United States Agency for International Development, and the Pan American Health Organization were interviewed. The author also spoke with others involved in the relief effort, including volunteers in the United States Peace Corps, and representatives of non-governmental organizations and churches. These aforementioned individuals were asked a series of questions regarding the problems of relief which were identified in earlier studies. These inquiries included:

- Was the government prepared for the relief operation?[7](#)
- Were there delays in the disaster declaration?[8](#)
- Did the media distort the true nature of the disaster?[9](#)
- Was there difficulty in assessing the needs of victims?[10](#)
- Did relief agencies exaggerate the disaster situation?[11](#)
- Was the quantity of aid sufficient?[12](#)
- Was there an overabundance of any particular type of aid?[13](#)
- Was relief being supplied that was not requested or required? [14](#)
- Was the aid damaged, expired or otherwise unusable?[15](#)
- Was the aid appropriate for the disaster context?[16](#)
- Was the relief being distributed equitably or according to need?[17](#)
- Did centralization adversely affect the relief operation?[18](#)
- Was the response being coordinated with other agencies?[19](#)

- Did relief workers have previous experience or training?[20](#)
- Was there a lack of trust between victims and relief workers?[21](#)
- Was relief provided in such a way as to avoid dependency?[22](#)
- Was the disaster response undertaken with development in mind?[23](#)

In addition to these questions, the respondents were asked how unresolved problems could be addressed or minimized in the future, if they were aware of other pertinent issues that were not mentioned in this survey, and if they had an opinion about what areas of disasters will require further attention by practitioners in the future. Furthermore, local newspaper and magazine articles pertaining to the hurricane were also collected and analyzed. And, upon returning to the United States, the author maintained communication (via e-mail correspondence and phone conversations) with contacts in the Dominican Republic in order to clarify - where needed - the prior findings of this research project. Finally, the investigator of this Quick Response project gathered United Nations and NGO situation reports from the Internet, and spoke with other knowledgeable individuals who studied Hurricane Georges to underscore previous findings or highlight additional issues which were deserving of investigation. Thus, a substantial amount of qualitative information about the disaster and its subsequent relief operation was obtained from various and distinct sources.

BACKGROUND TO HURRICANE GEORGES

Located 13.0 North and 45.4 East (1,560 kilometers East of the Antilles Islands in the Atlantic Ocean), Tropical Storm Georges was upgraded to a hurricane on September 18, 1998.[24](#) Moving at a speed of 22 Kilometers per hour, with sustained winds from 186 to 216 kilometers per hour,[25](#) the category 3 hurricane followed a path from St. Kitts in the Caribbean to Alabama in the United States mainland. While several nations felt the destructive presence of Hurricane Georges, "the Dominican Republic [was] by far the worst affected country."[26](#) Lashing

out against the island of Hispaniola on Tuesday, September 23, 1998, Georges had a devastating effect on this developing country which shares a border with Haiti, and is located to the West of Puerto Rico. The impact of the tempest was made evident virtually throughout the entire national territory of the Dominican Republic.²⁷ Strong gales downed trees, ripped corrugated roofs off of houses, and took electric lines out of services. For instance, thousands of trees were uprooted or split in half in Santo Domingo.²⁸ At least 40% of the roofs were blown off in San Francisco de Macoris.²⁹ Electricity had to be totally suspended in the province of Puerto Plata.³⁰ And, approximately 20% of the phone lines in the nation were affected, while this portion rose to 100% in the Eastern sections of the country.³¹ In addition, electric signs and the majority of radio and TV towers were toppled everywhere.³² The gusts also damaged radar equipment and the control tower at the airport in Santo Domingo,³³ knocking this important facility out of commercial service for a few days.

Meanwhile, the impact of the flooding and mud-slides was most evident in the housing, transportation, and agricultural sectors. In the city of Mesopotamia alone, it is estimated that 2,500 houses were destroyed,³⁴ while it is possible that the hurricane devastated 100,000 dwellings through the country.³⁵ In the province of San Juan de la Maguana rising rivers washed away at least seven bridges.³⁶ And, in Cibao, several plantations of yuca, platano, rice, and corn were completely flooded.³⁷ Furthermore, the deluge also broke water lines in numerous cities throughout the nation,³⁸ leading to sanitation concerns and fear about an outbreak of infections water-born diseases.³⁹ Total value of damages in the Dominican Republic are unclear, but estimates range from \$1.2 billion to \$2.8 billion.⁴⁰

Equally vague is the picture of disaster victims. Although the United Nations Disaster Assessment and Coordination Team confirms 287 deaths, 64 missing persons, and 551 reported injuries,⁴¹ it is likely that the exact toll of the disaster will never be known. In the category of deaths, for instance, figures are as low as 200 and as high as 2,000;⁴² but the final count is almost certain to be over 500.⁴³ Also sketchy was the total number of affected persons. Dominican President, Leonel

Fernandez, stated there were 100,000 homeless,⁴⁴ while the country's Public Health and Welfare Office indicated there were 134,836 displaced persons.⁴⁵ The United States Agency for International Development reported almost 300,000 people were affected⁴⁶ and the International Red Cross asserted that close to 300,000 people had to be sheltered.⁴⁷ The Pan American Health Organization even reported 865,510 displaced persons and as many as 400,000 homeless.⁴⁸ In spite of such an imprecise quantity of victims, the effects of Hurricane Georges were crystal clear: a major relief operation would have to be undertaken. It is now to the assessment of this response that the paper will turn.

PROGRESS

When compared to the findings of earlier studies, this evaluation of the response to Hurricane Georges shows evidence of improved relief operations. Areas witnessing progress include an immediate declaration of the disaster, the distribution of appropriate and usable aid, a higher degree of coordination among humanitarian actors, increased experience and training of relief workers, and the integration of humanitarian assistance and development. These issues will now be discussed in order.

Immediate Declaration of the Disaster

This investigation reveals that the Dominican government quickly declared a state of emergency after the disaster and likewise established a curfew that same night to prevent any social disturbances that might have arisen.⁴⁹ Respondents also noted that numerous government agencies started to work right away to clean up the debris that Georges left and to provide relief to its numerous victims.⁵⁰ Furthermore, those interviewed observed that political officials did not delay in requesting assistance from the international humanitarian community.⁵¹ Thus, the government did acknowledge the disaster as well as its need for help

from outside sources.

The Distribution of Appropriate and Usable Aid

Findings about the nature and provision of aid in this research project are not conclusive as many of the respondents had no comment on such questions or were not aware of any difficulties in this area.[52](#) It appears on the surface though - in spite of minor and normal problems that could arise in any large relief operation - that donors and relief providers were "much more conscious" about what they were giving to the victims of Hurricane Georges.[53](#) Four examples support this view. First, while a few of those interviewed asserted that there was too much clothing being provided,[54](#) the greater number did not mention an excess of any other particular type of aid.[55](#) A Program Manager for the United Nations even doubted that an overabundance of relief was possible.[56](#) Second, although there was one reported case of diet medicine showing up in relief supplies,[57](#) there was no additional evidence of aid being sent which was not requested. This is probably due to the fact that non-governmental organizations relay pertinent information to prospective donors.[58](#) Third, and despite the fact that a truck delivered contaminated water to a shelter,[59](#) there were no further reports of unusable aid. In fact, some respondents were impressed by the quality and condition of the aid that was arriving.[60](#) Fourth, there was agreement among those interviewed that the aid was appropriate for the disaster context. This could have been due to the fact that donors attempt to communicate frequently with victims and their representatives in disaster areas,[61](#) or also because some non-governmental organizations receive money from international donors and are able to buy the necessary goods and supplies locally.[62](#) Only one respondent replied that he had seen relief that was inappropriate for the disaster context (i.e. winter coats in a tropical climate).[63](#) Therefore, it appears that aid was generally beneficial to the victims of Hurricane Georges.

A Higher Degree of Coordination

The low level of collaboration among various agencies and

organizations has long been a criticism of relief operations, and the respondents' view of Hurricane Georges in this study was not significantly different. For instance, a Program Development Specialist for USAID stated that everyone in the public, non-governmental and private arenas was doing their own assessments of the disaster.⁶⁴ A Red Cross official stated that the Civil Defense did not advise them of where the shelters were going to be located.⁶⁵ Also, a respondent stated that some organizations were working alone in various parts of the country.⁶⁶ Yet the interviews of this study also indicated that coordination was a significant feature of the relief operation after Hurricane Georges. As an example, officials from foreign nations worked closely with the Dominican government to help fulfill victims' needs.⁶⁷ Non-governmental organizations in the Dominican Republic interacted with other domestic and international disaster relief agencies.⁶⁸ Local social groups and other humanitarian organizations were in constant contact with emergency managers in the Dominican Republic.⁶⁹ Government officials received assistance from businesses in the private sector.⁷⁰ Churches consulted with the Civil Defense and non-governmental organizations.⁷¹ Finally, churches, humanitarian agencies, and governments were exchanging information and assistance with counterparts and/or various branches of their respective organizations.⁷² It is probable that coordination was more prevalent in the response to Hurricane Georges than in the relief operations of 20 years ago. Respondents felt for the most part that "it is impossible to work without collaboration" as coordination facilitates the sharing of resources (i.e. information and supplies) and minimizes the duplication of effort.⁷³

The Experience and Training of Relief Workers

While some of the respondents in this investigation stated that their workers had little or no experience in relief operations,⁷⁴ this appeared to be in the minority of cases. Oxfam, for instance, dispatched a team of specialized nurses to the Dominican Republic in order to provide the necessary medical assistance after Hurricane Georges.⁷⁵ Others divulged the fact that they have been operating in the Dominican

Republic for years with native employees and volunteers who are familiar with the needs of local disaster victims.⁷⁶ Moreover, some respondents stated that they provide regular training or on the job instruction when disaster strikes.⁷⁷ Peace Corps volunteers, as an example, are required to undergo three months of intensive language, culture and humanitarian operations training before they are sent out into the field.⁷⁸ The Adventist Relief and Development Agency also gives their workers and volunteers classes on rural life, relief operations, and what to do in case of emergency.⁷⁹ And, the Dominican Red Cross endeavors to train many of its newer volunteers on the spot when they are delivering relief to victims or opening shelters.⁸⁰ Hence, it looks as if the workers who provided relief after Hurricane Georges were better prepared to respond than those in previous decades.

The Integration of Humanitarian Assistance and Development

Several of the individuals who were interviewed for this study indicated that development is a high priority in their relief operations.⁸¹ Members of some organizations, for instance, taught hygiene, personal health care and disaster prevention to victims who were temporarily located in shelters.⁸² Others distributed construction materials to disaster victims and actually oversaw and helped them rebuild their damaged homes.⁸³ In another exemplary approach, Oxfam gave needy people seeds, tools and fertilizers, and also worked with them to construct irrigation systems in order to restore agricultural production.⁸⁴ Finally, Direct Relief International sent medical equipment to disaster sites and trained local health workers so the response will be sustainable for the future.⁸⁵ This provision of relief with development in mind likely results from the fact that many of the humanitarian organizations which responded to Hurricane Georges also work in development.⁸⁶ But, regardless of the reason, this study concludes that the relief operation after Hurricane Georges was perhaps more sensitive to the issue of development than previous disaster responses.

PERPETUAL PROBLEMS

In addition to the many areas witnessing progress, the response to Hurricane Georges also illustrates unresolved relief issues which continue to plague the humanitarian community. This section examines: inadequate disaster preparation, the scarcity and distortion of disaster related information, the difficulty of assessing victim's needs, an exaggeration of relief requirements, an insufficient amount of aid, an unjust distribution of disaster assistance, the disadvantages of centralization, distrust in emergency managers, and the challenge of avoiding dependency.

Inadequate Preparation for Disaster

The overall consensus among those interviewed was that the nation was ill-prepared for Hurricane Georges. This is not to deny the fact that the government was functioning after the disaster and that it was working diligently to respond to victims' needs.⁸⁷ Nor is it to overlook the fact that the magnitude of the event could have overshadowed some of the measures which were taken in anticipation.⁸⁸ However, several of the respondents were quick to point out and blame the human element in the disaster. In fact, the vast majority of the participants in the study decried the obvious amount of relief improvisation in a country which has always been threatened by hurricanes.⁸⁹ For instance, it was noted that the locations of government shelters were not identified in advance so refugee sites "sprang up by themselves" in churches, schools, and clubs as people sought protection from the tempest or a place to stay after their homes were destroyed.⁹⁰ These unofficial shelters were therefore unprepared for the large quantities of disaster victims, but even some of the sites run by the Civil Defense lacked basic necessities such as potable water, toilet paper and latrines.⁹¹

The respondents gave three reasons why preparatory steps were not taken prior to the hurricane. First, the government was unsure about which path the storm would follow. Meteorologists and Civil Defense

leaders assumed, based on past experience, that the hurricane would veer to the North and miss the Island of Hispaniola completely.⁹² It was also reported that at least one component of the country's meteorological equipment was not functioning properly at the time and had not been repaired due to a lack of parts or other resources.⁹³ Even so, one respondent questioned why the Dominican government did not pay attention to reports coming out of the United States or look at the Weather Channel on cable TV.⁹⁴

Politics was a second factor which inhibited the necessary disaster preparation. While the threat of the hurricane was becoming immanent, the President and other national leaders were giving full attention to a series of meetings on economic reforms for the country.⁹⁵ Only upon the insistence of the Director of Public Health and other officials from the Red Cross did the government begin to take the hurricane seriously.⁹⁶ But, by the time an emergency committee was formed, the storm had already made its way to the Dominican Republic.⁹⁷ Finally, inexperience among key government officials, in addition to weak disaster-related institutions could have also hindered appropriate preparation. For instance, it was asserted that the Director of the Civil Defense was a political appointee who had little understanding about disasters or relief operations.⁹⁸ Likewise, it was noted that the Director of Meteorology had only been in his position one year before Hurricane Georges.⁹⁹ Furthermore, the Dominican Red Cross only had 6 months of existence as an independent entity prior to this calamity (it was previously an arm of the government).¹⁰⁰ What is more, at least two months had passed since joint disaster preparedness meetings were carried out by pertinent government agencies and non-government organizations, and a national emergency committee was not formed until after the Hurricane had already affected the island.¹⁰¹ Such issues necessarily show that the Dominican Republic was insufficiently prepared for a relief operation when Georges departed.

The Scarcity and Distortion of Information

Another area of consensus concerned the availability of accurate

information before, during, and after the disaster.¹⁰² Although there was difficulty relaying news in many devastated areas due to the strong winds which destroyed several TV and radio towers,¹⁰³ the media was not regarded to be the main problem. Instead, the interviewees stated that the government was largely responsible for the lack of disaster information. For instance, besides not providing advanced warning regarding the hurricane,¹⁰⁴ authorities from the Civil Defense diluted available meteorology reports as they didn't want to "alarm" the population or have to deal with opening an excessive amount of shelters.¹⁰⁵ Even while the storm was raging, the government radio station was playing music and discussing recipes, and not relaying details about the catastrophe.¹⁰⁶ And, officials may not have adequately warned the people downstream before opening the flood gates of the Sabaneta Dam which contributed to the deaths of numerous individuals in the city of Mesopotamia.¹⁰⁷ Furthermore, after the hurricane had moved North, it was reported that government leaders were minimizing statistics about the number of deaths and injuries in San Juan.¹⁰⁸ Noting these circumstances surrounding the hurricane, one respondent aptly described the event as an "information impasse."¹⁰⁹

The Difficulty of Assessing Victim's Needs

This investigation of the response to Hurricane Georges illustrates that only a moderate number of relief organizations were able to identify victims' needs with little or no problem. One respondent declared, for example, that the type and amount of assistance required were all too evident because of the severity of the catastrophe.¹¹⁰ Other groups with previous experience or branches in disaster areas also conveyed no challenge in determining what relief supplies would be required to care for the affected persons.¹¹¹ However, a number of interviewees admitted having difficulty in assessing relief needs because of the inability to enter disaster sites or communicate with the victims in affected areas.¹¹² In other words, the destruction of transportation systems and phone lines made assessment extremely problematic in diverse parts of the country. A quick and accurate assessment of relief

needs could therefore be a continual problem in humanitarian assistance

The Exaggeration of Relief Requirements

This broad examination of disaster relief cannot provide definitive conclusions about whether non-governmental organizations overstated victims' needs in the Dominican Republic. Such an issue would obviously require an in-depth examination of the case at hand which is beyond the scope of this investigation. Nonetheless, two findings became apparent in this study of the response to Hurricane Georges. On the one hand, the interviewed representatives of non-governmental organizations emphatically denied exaggerating relief needs in order to obtain more funding from prospective donors.¹¹³ In fact, one respondent observed that such an overstatement would never be attempted as the reputation of his NGO was at stake, and because donors often come to verify for themselves the extent of the disaster anyway.¹¹⁴ On the other hand, there was undoubtedly a significant discrepancy in the number of deaths, injuries and displaced or sheltered persons reported by various humanitarian agencies (see the above section on the background information about Hurricane Georges), which would logically have a direct impact upon the amount of relief being requested. Perhaps the divergence in statistics is due to the fact humanitarian organizations were doing their own assessments of the disaster in distinct locations.¹¹⁵ It should also be recognized, as one neutral observer noted, that "the immediate tendency is to ask for a large sum to make sure you are covered"¹¹⁶ because it is extremely difficult to get in and out of various locations for a quick and comprehensive disaster assessment. Consequently, non-governmental organizations should be given the benefit of the doubt in specific situations because of the practical problems they encounter. But, again, this does not discount the possibility of relief needs being incorrectly conveyed to prospective donors after Hurricane Georges.

An Insufficient Amount of Aid

Of all the areas investigated in this study, none were more conclusive

than that of the quantity of aid. The overwhelming consensus among the respondents was that the amount of relief was inadequate.¹¹⁷ In fact, the replies of several interviewees were almost verbatim: "aid will always be lacking in a poor country like this."¹¹⁸ And, numerous anonymous disaster victims concurred. This is not to assert that those affected by the disaster were starving, or that relief was not being distributed to isolated communities.¹¹⁹ But food was in shortage throughout the Dominican Republic as crops were destroyed by the flooding and high winds of the hurricane.¹²⁰ Diverse regions of the country also lacked toilet paper, diapers, personal hygiene items, jackets, mattresses, and medicines.¹²¹ This project finds that the quantity of relief was therefore lacking after Hurricane Georges.

The Unjust Distribution of Relief

The participants in this investigation agreed that relief was being apportioned in an unjust manner. While this was definitely not intentional on the part of those humanitarian agencies which responded to Hurricane Georges, ethical and logistical issues made an appropriate distribution very difficult in practice. For instance, one respondent asserted that it is a dilemma to know whether to deliver fewer supplies to more victims, or more supplies to fewer victims.¹²² Other representatives of non-governmental organizations also noted how difficult it was to meet disaster needs in inaccessible or far away locations.¹²³ However, there were also reports of intentional and unjust distribution of aid by the government which really generated a considerable amount of ire among those involved in this study. Anonymous victims, emergency managers, and officials from non-governmental organizations believed that the government was providing aid along party lines or to others in order to increase their popularity or political power.¹²⁴ One respondent replied, for instance, that "the reality of [the political situation] is such that there is favoritism . . . [as aid] goes to the party in that community before it gets to others."¹²⁵ In similar fashion, a few interviewees asserted that Haitians in the Dominican Republic were not receiving aid from the government.¹²⁶

Part of this could be due to the fact that many of the Haitians were in the country illegally and without the proper emigration papers.¹²⁷ However, others noted that even those Haitians that entered the country legally "are treated as second class citizens."¹²⁸ It appears therefore, as one interviewee stated, that there was "no absolute and complete guarantee that the aid [was] . . . distributed with justice."¹²⁹ Nonetheless, this is an area which will require more research before a definitive conclusion can be reached.

The Disadvantages of Centralization

This study does not provide conclusive findings about the merit of the government's role in the response to Hurricane Georges. A minority of respondents did affirm, for instance, that bureaucratic centralization permits a higher degree of regulation over the disaster response as well as an increased ability to sort through the donated supplies to determine their usefulness and to more accurately specify where they should be distributed.¹³⁰ Nevertheless, the majority of those interviewed were highly critical of centralization.¹³¹ Four reasons for this aversion were given. First, many respondents worried that the government was not sending supplies to victims because of corruption.¹³² Second, some argued that an unwieldy bureaucratic apparatus automatically slows down the provision of aid in the emergency phase of the relief operation.¹³³ Third, others asserted that the government is less likely to meet victims' needs as it lacks experience in, or knowledge about citizens in rural areas.¹³⁴ Finally, several interviewees acknowledged that there is no way that the government can take care of all of the needs, in all areas, and at all times.¹³⁵ While this area will also require further investigation, it looks as though centralization is not favored among the bulk of relief officials and organizations.

Distrust in Emergency Managers

The response to Hurricane Georges does not provide concrete evidence about the issue of trust in this relief operation either. Anonymous victims conveyed their confidence in humanitarian agencies while relief

workers in non-governmental organizations also believed that the people they were caring for were comfortable in their presence.¹³⁶ But unidentified victims expressed less trust and even hostility towards government leaders and emergency managers in this study. The fact that people would not leave dangerous low-lying areas when warned by the government is perhaps the best indication of this assertion. And the Director of the Civil Defense reported that this was the most obvious reason why hundreds of deaths occurred around the nation.¹³⁷ The previously identified inexperience, misinformation, and political favoritism exhibited in the disaster and its ensuing response are plausible explanations of why victims distrusted officials from the government. Regardless of the reasons, however, the government was seen as suspicious by a large portion of the respondents in this study.

The Challenge of Avoiding Dependency

This study indicates, as one respondent put it, "a fine line between relief and dependency."¹³⁸ On the one hand, a few relief organizations did their best to avert creating a dependent relationship. A coordinator for Direct Relief International asserted that his organization provided relief on a sliding scale based on the victim's needs to pay for goods and services.¹³⁹ Another project coordinator, this time from Church Social Services, stated that it is their policy to end relief operations as quickly as possible so victims can return to their normal activities of daily life.¹⁴⁰ And, a member of a religious organization affirmed that their relief operations are only run by locals which reduces the need for assistance from the outside.¹⁴¹ However, it was evident that not every humanitarian agency took this important issue to heart. For instance, a few respondents noted that they did not have time to worry about creating dependencies in the emergency phase of the disaster.¹⁴² What is even more disturbing is the fact that by providing relief, dependency may become encouraged if not unavoidable altogether. To illustrate, there are still numerous people being sheltered after becoming victims to Hurricane David which passed over the Dominican Republic over 20 years ago.¹⁴³ And, several of the men located in shelters after Hurricane

Georges continued to play cards and felt no obligation to help unload relief supplies or even get up to receive them when the aid was delivered.¹⁴⁴ Explaining this situation, the respondent declared that "we live in a culture where it is enchanting that other people give."¹⁴⁵ This case therefore reiterates the probability that humanitarian assistance may contribute to a growing culture of dependence.

PROSPECTIVE SOLUTIONS

In addition to discussing both the progress and problems in the response to Hurricane Georges, this examination provides prospective solutions to those issues in disaster relief which remain unresolved. The solutions to be discussed in this portion of the paper include: making disaster preparation a priority, gaining and distributing disaster information, accessing all disaster sites and carefully assessing needs, meeting and monitoring relief requests, stretching relief resources, addressing the political issues in disasters and providing relief to non-government organizations, expanding the number of relief participants, providing accurate information and a distributing relief in a just manner, and involving the affected population in a short-lived disaster relief operation. Two unexpected findings - the importance of educating the public and the imperative of preventing disasters - will also be addressed.

Making Disaster Preparation a Priority

After witnessing several problems in the response to Hurricane Georges, many of those interviewed stressed the importance of preparing for disaster. Some participants in this study suggested that all relevant parties must take disaster threats seriously and make preparation a higher priority in their policies.¹⁴⁶ Others recommended strengthening disaster-related institutions by hiring more experienced individuals, or through on-going and regular disaster simulations.¹⁴⁷ Finally, respondents conveyed how crucial having disaster plans and relief

reserves are in advance of any humanitarian operation.[148](#) Thus, there are certainly several ways in which governments and relief institutions may be better prepared for disaster.

Gaining and Distributing Disaster Information

This research project reveals the importance of information in a disaster situation. Respondents explicitly recognized that suppressing knowledge about a catastrophe actually makes the impact more severe.[149](#)

Interviewees therefore recommended that government officials and others give as many details about an impending threat as is realistic.[150](#)

A few also endorsed finding effective means to enter disaster sites (i.e. helicopters) or communicate with inaccessible locations (i.e. computer e-mail and cell phones),[151](#) while others saw better organization, increased networking, and the sharing of information among relief agencies as a solution to this challenging problem.[152](#) Thus, there was agreement that information needs a wider distribution in a disaster situation.

Accessing Disaster Sites and Carefully Assessing Relief Needs

The relief efforts after Hurricane Georges illustrate the difficulty of accurately calculating victims' needs. In response to this problem, some interviewees suggested findings ways to get in and out of disaster sites quickly.[153](#) Others advocated that humanitarian agencies be more meticulous when they survey the quantity of disaster victims to determine their relief requirements.[154](#) Finally, many of those interviewed praised modern communication systems[155](#) or networking among relevant organizations in order to more correctly determine what relief supplies are necessary.[156](#) Consequently, improvement is possible in this aspect of relief operations as well.

Meeting and Monitoring Relief Requests

As noted earlier, this academic undertaking corroborates an unintentional exaggeration of relief needs on the part of humanitarian

agencies. In order to resolve this issue, respondents came up with two specific recommendations. First, it was suggested that donors send a sufficient quantity relief so there will be no need to exaggerate in order to obtain minimal requirements.[157](#) Second, donor oversight of the disaster situation was seen as a way to ensure that relief needs are reported in an accurate fashion.[158](#) It appears, therefore, that donors play a special role in assuring that relief needs are not exaggerated.

Stretching Relief Resources

This examination of Hurricane Georges indicates that the donated supplies were not sufficient for the large quantity of disaster victims. While most respondents had no idea of how to resolve this problem, it was argued that relief resources can be stretched. For instance, a coordinator for the Dominican Disaster Mitigation Association wondered why the government was supplying prefabricated homes for only fifteen percent of the affected population, when it would be ninety percent cheaper to use local materials and labor.[159](#) The lesson of this study, then, is that humanitarian agencies must continue to practice thrift which may allow them to care for more disaster victims in the future.

Addressing Political Issues and Relying on Non-Governmental Organizations

According to this examination of Hurricane Georges, an unjust distribution of aid remains a problem in humanitarian operations. As a possible solution to this problem, one respondent noted that political issues such as corruption or a biased allotment of relief deserve to be addressed by the international community - especially during the remainder of the Decade for Natural Disaster Reduction.[160](#) The more common view, however, was that relief should be distributed by humanitarian organizations instead of local governments.[161](#) Thus, the unjust distribution of aid may be resolved by pointing out government wrong doings directly or by side-stepping the public sector altogether by sending aid to non-governmental organizations.

Expanding the Number of Relief Participants

This evaluation of the disaster in the Dominican Republic reveals that centralization encumbers relief operations which may limit the quantity of victims that can be cared for in a timely manner. Some of the respondents subsequently endorsed having more branches of government agencies in local areas.[162](#) But some wished to see relief distributed through non-governmental organizations,[163](#) or increased civil participation in the disaster response.[164](#) Increasing the quantity of participants in the relief phase is therefore seen as a way to increase the speed and scope of a humanitarian operation.

Providing More Disaster Information and Distributing Relief in a Just Manner

The deaths of numerous Dominicans during Hurricane Georges is tragedy which could have been prevented had citizens heeded the advise of emergency managers and governmental officials who warned them to leave low lying areas. Although the issue of trust may be extremely difficult to resolve, one respondent thought that providing an accurate and adequate notice of an impending disaster would be a good start.[165](#) Others felt that distributing relief in a more equitable fashion would also help to restore confidence in government officials.[166](#) Either way, distrust in emergency managers is an issue which must be addressed before disasters claim the lives of additional victims.

Involving the Local Population in a Quick Disaster Response

Hurricane Georges and previous storms affecting the Dominican Republic illustrate that disaster relief may unfortunately lead to disincentives for self-reliance. Nevertheless, those interviewed in this study felt that dependency creating relationships could be minimized by integrating development into relief operations.[167](#) Specifically, it was argued that the involvement and active participation of the local affected community in the disaster response may increase the likelihood that outside assistance will not be required in the future.[168](#) Another

assertion was that dependency could be reduced by ending the emergency phase of the disaster as soon as is possible.¹⁶⁹ Therefore, local participation in a short-lived relief operation may possibly limit dependency creation in the response phase of disaster.

Educating the Public

An unexpected finding of this investigation of Hurricane Georges is that people do not know how to respond to disaster.¹⁷⁰ Interviewees therefore stressed the importance of educating citizens about disasters as well as businesses, churches and other organizations in the private sector.¹⁷¹ Some respondents thought teaching children and the youth in school would be the ideal forum for spreading knowledge about disasters.¹⁷² But others noted that pamphlets, grass-roots training, and the media could help many learn about the best ways to react in an emergency situation.¹⁷³ Consequently, education is regarded by many knowledgeable individuals as an important component of disaster reduction.

Preventing Disasters

Although this study focuses on the relief phase of disaster, respondents did reiterate the fact that many of the problems experienced in the aftermath of Hurricane Georges could have been eliminated if more attention was given to disaster prevention. Several of the people interviewed argued that the Dominican Republic should learn from previous experience and do more to mitigate the tropical storms which so frequently threaten them.¹⁷⁴ A specific recommendation was that buildings and people must be removed from dangerous low lying areas.¹⁷⁵ This assessment therefore indicates, as one respondent stated so eloquently, that "it is better to prevent than lament."¹⁷⁶

IMPLICATIONS FOR THE UNITED

STATES

While this research project focuses specifically on the response to Hurricane Georges in the Dominican Republic, it does have several transferable implications for disasters and relief operations in the United States. Ten of these lessons will now be mentioned briefly. First, Hurricane Georges indicates that everyone in the private and public sectors must make disaster preparation a priority. Governments should especially ensure that their disaster institutions are strengthened by having frequent simulations as well as response plans made and reserves for relief stored in advance. Second, the disaster in the Dominican Republic shows that emergency managers must recognize the importance of providing advanced warning to citizens who may be confronted by calamity. Pertinent officials should also make sure that the disaster information they provide is as accurate and clear as is possible. Third, the case examined in this paper implies that governments should invest heavily in helicopters and modern communications equipment in order to gain access to, or knowledge about victims in remote disaster sites. Relief agencies must also recall that contact with individuals in the affected area will increase the probability that aid will be appropriate for the disaster situation. Fourth, this research project suggests that relief organizations should survey victims carefully in order to more accurately convey needs to prospective donors. Similarly, relief should be provided at the local level when possible to address this issue. Fifth, this study recommends finding a proper balance between centralization and decentralization. Along these lines, citizens, businesses, churches, and other social organizations should be encouraged to participate actively in disaster responses. Sixth, the previous assessment recommends additional contact between the government and non-governmental relief organizations. Likewise, public officials must harness the increased coordination among pertinent organizations to more efficiently channel relief in the event of disaster. Seventh, this evaluation notes how crucial it is that emergency managers have experience in dealing with disasters and other types of mass emergencies. Regular and on-the-job training is essential if relief

workers are to respond effectively as well. Eighth, this investigation advocates that emergency managers work closely with their respective communities to build a relationship of trust. Distributing relief equitably to disaster victims (i.e. regardless of race, nationality or other factors) will also help to build confidence in civil servants. Ninth, this examination affirms the value of educating the public about the risks of disasters and how best to respond. Governments must be aware that an ideal place to start distributing disaster related knowledge is with children and youth in the school setting. Finally, this study of the response to Hurricane Georges recognizes that a ounce of prevention is better than a pound of cure. Government officials must particularly find ways to remove people and property from dangerous or risk-prone locations.

SUMMARY

The purpose of this Quick Response research project was to evaluate the current state of disaster relief. The reason why this topic was chosen for investigation is because the need for relief has not diminished in spite of the increased attention given to disaster prevention. In other words, vulnerability to calamity is rising in an alarming fashion and disaster impacts appear to be intensifying as the search for a more benevolent form of development is being pursued. At least in the short run, therefore, the discipline must find ways to improve the provision of relief in the response phase of disaster.

In comparing the findings from a recent relief operation to those of previous studies, this paper endeavored to identify the progress, perpetual problems, and prospective solutions of humanitarian activity. The project also attempted to produce a few broad recommendations for emergency managers and relief organizations in the United States. While no single case can provide definitive conclusions or accurate generalizations, it is hoped that this evaluation of the response to Hurricane Georges has nevertheless made a contribution to the field of

disaster studies. To the extent that this goal has not been achieved, the author invites and encourages more research to be conducted on relief issues in this important area of academia.

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