Quick Response 2010 Report Anna Versluis

Extent and Impact of Formal and Familial Material Aid Following the 2010 Earthquake Disaster in Haiti

Abstract

The January 12, 2010, earthquake in Haiti affected millions of people: over 200 thousand persons were killed, countless numbers were injured, and millions were displaced from their homes in the areas of Port-au-Prince, Leogane, and Jacmel. Of those displaced, over 2 million persons are living in temporary camps. This study focuses on the situation of those living in displaced persons camps in the Port-au-Prince area seven weeks after the disaster. Of special interest was the amount, type and source of material assistance people in the camps had received since the earthquake, with a focus on any differences between assistance received from formal aid agencies and assistance received from "informal" sources, such as family and friends. The study found that a sizable percent of persons living in the camps (32 percent) reported getting no assistance whatsoever. Fifty-five percent had received formal aid, most often in the form of a tent or tarp, while 40 percent had received informal aid, most often in the form of cash transfers from family living outside of Haiti. While people were grateful for aid from the formal aid agencies, the material assistance from informal sources was usually considered more timely by the displaced persons. While the small sample size makes generalization difficult, there is intriguing evidence to suggest that informal assistance was often considered more effective than formal assistance by those receiving it. Should this study be indicative of the greater displaced population, then formal aid agencies should consider what lessons they might learn from the informal aid sector.

Introduction

On January 12, 2010, one of the worst natural disasters ever struck Haiti: a shallow, 7.0 magnitude earthquake whose epicenter was close to Haiti's most populous area, the capital of Port-au-Prince, as well as the cities of Leogane and Jacmel. Between 200,000 and 300,000 people were killed, and over 300,000 were injured (Direction de la Protection Civile 2010). Hundreds of thousands of buildings—from shacks in slums to the National Palace and National Cathedral—were destroyed or rendered uninhabitable. Many people lost limbs; others died because medical care was not available in the hours and days after the disaster.

Port-au-Prince had not experienced a damaging earthquake since 1770 and 1751 (Eberhard et al. 2010), and neither the populace nor the government was in any way prepared for such an earthquake. The disaster had been building for years: both the accumulated stress along the earthquake fault, and the vulnerability of an ever growing population living in extremely high-density neighborhoods in buildings not designed to withstand an earthquake. With the exception of a number of geologists who had try to warn their government of the earthquake risk for years (e.g., Delacroix 2008), few had dared to imagine that Port-au-Prince, already suffering from so many problems, could really become even more tragic.

With the dust settling and frequent aftershocks occurring, people who weren't searching for relatives and friends in the rubble began to gather in the few safe, open spaces: parks, roads, a golf course. Having lost their house or afraid to sleep under cement roofs, they began creating camps with sheets and tarps. Others left Port-au-Prince and similarly hard-hit areas for the provincial towns and countryside. With an estimated population of 3 million persons, at least 200,000 were presumed dead,

and another 600,000 left the capital. One and a half million persons were left without homes. Sometimes people were able to set up camp in a courtyard or driveway, but more often than not the street was the only option.

For a time, the world's attention was focused on Haiti. The news media reported on the situation around the clock, and aid rolled in. Over three billion dollars have been donated or committed by individuals, private organizations, and governments (United Nations Office for the Coordination of Humanitarian Affairs (OCHA) 2010). An amazing 50 percent of all American households purportedly donated to the Haiti earthquake recovery cause (The Pew Research Center 2010). The U.S. sent 14,000 troops and took over control of the Port-au-Prince airport. Though slowed by the damaged seaport and single airport, aid and aid workers streamed into Haiti. Prior to the earthquake about 10,000 non-governmental organizations worked in Haiti—more per capita than anywhere else in the world (Buss with Gardner, 2008, in Dupuy 2010). Within weeks, the streets of Port-au-Prince were filled even more than usual with the trucks and SUVS marked as international aid vehicles.

Yet five months after the earthquake, the displaced persons camps are still full of families, rubble lines many roads, and some are questioning if the camps will be permanent features for the next ten or more years. While some progress has been made—notably, many schools have reopened—there remains so much to accomplish.

This study aims to examine both the formal and informal material assistance people received within the first seven weeks after the earthquake disaster. Formal assistance is defined as aid coming from governments and institutionalized aid agencies like the Red Cross or Catholic Relief Services. Informal assistance is the aid people receive from family, neighbors, friends, and local or informal social groups. This study examines the levels of both types of aid, the form the aid takes (cash versus food versus medical help and so forth), the timeliness of the aid, and its effectiveness as measured by the people receiving the aid. This question is especially pertinent to Haiti because many Haitians survive only thanks to remittances—transfers of cash, food and other goods usually coming from relatives living in places like the United States. The value of remittances sent to Haiti each year is huge—it far exceeds all the international aid Haiti receives and is estimated to be at least 19 percent of Haiti's gross domestic product (GDP). Remittances are thought to increase following disaster (Fagen 2006). In addition, because remittances often take the form of cash, the money is spent locally and so helps out the local economy. Rather than eating aid rice grown in Arkansas, families can buy Haitian-grown rice and support Haitian agriculture. Informal disaster aid, for families that receive it, may be more timely and more effective than formal material aid. If this proves to be the case, then formal aid groups should pay more attention to how the informal aid sector works to see what they can learn from it. To try to answer these questions, several assistants and I spent a week interviewing people living in the displaced persons camps in Port-au-Prince in early March 2010.

Background

Migration and its effects

Haiti is divided into ten departments, but everyone acknowledges one additional "department": the diaspora, or the estimated one to two million Haitians living outside of Haiti. Compared to Haiti's population of nine million people, the diaspora is proportionally one of the largest in the world (Collier 2009). The greatest concentrations of Haitians abroad—about 87 percent—live in the United States, the Dominican Republic and Canada (Orozco 2006).

For many generations, a number of push and pull migration factors have steadily built the Haitian diaspora. The U.S. occupation of Haiti from 1915 to 1934 encouraged out-migration from Haiti, especially to U.S.-owned sugar plantations in Cuba and the Dominican Republic (Laguerre 1987). Under

the ruthless dictatorship of Francois Duvalier (1957 to 1971), emigration from Haiti, especially of the educated class, grew. "[S]ince the early sixties, migration to Port-au-Prince and emigration to North American have been a fundamental factor in the restructuring of Haitian society, including the social landscape of the capital city" (Laguerre 1987). Between 1957 and 1982, an estimated one million people left Haiti (Haggerty 1989). Haitians have continued to leave Haiti in the years since, especially after the Haitian coup d'état in 1991, which was followed by a severe economic embargo. Between 1991 and 1997, an estimated 3.5 percent of Haiti's population immigrated to the US (Orozco 2006). Today, about 40 percent of Haitians have family living abroad (Haitian Census 2001).

Over the same years, and especially since the Duvaliers' rule, there has been an equally important concurrent trend of internal migration from Haiti's rural areas to cities, especially Port-au-Prince. The government of Haiti has consistently sustained itself by profiting from the meager earnings of agriculture, while joining the "predatory state," located almost entirely in Port-au-Prince, became one of the few possible means for Haitians to raise their socio-economic status (Trouillot 1990). For many years, the primacy of Port-au-Prince and the dependence of the rural areas on the capital and the capital on the United States has encouraged both internal migration and emigration (Laguerre 1987). Starting in the 1970s, structural adjustment measures implemented by the international community for Haiti liberalized trade by reducing tariffs and wages as well as privatizing state industries and curtailing spending on social services (Dupuy 2007; Fatton Jr. 2010; Maguire 2010). These policies have worked to destroy the agricultural base of Haiti, forcing people to migrate to the capital in search of work in factories:

"Whereas in the 1970s Haiti imported only 10 percent of its food needs, currently it is spending 80 percent of its export revenues to pay for its food imports, with rice leading the list. Haiti went from being self-sufficient in the production of rice, sugar, poultry, and pork to become the fourth-largest importer of subsidized U.S. rice in the world and the largest importer of foodstuffs from the United States in the Caribbean. Trade liberalization, then, essentially meant transferring wealth from Haitian to U.S. farmers and the few firms in Haiti that controlled food imports. These policies, too, propelled rural-to-urban migration as farmers became dispossessed and headed for Port-au-Prince or emigrated to the neighboring Dominican Republic, the Caribbean, and North America" (Dupuy 2010).

One of the interesting phenomenon after the earthquake was the mass "reverse migration" of people from Port-au-Prince to other parts of Haiti. With the capital city in ruins, an estimated 600,000 people left Port-au-Prince at least temporarily (Booth 2010). A study based on locations of the ubiquitous cell phone showed that people departed Port-au-Prince immediately after the earthquake disaster and then began returning to the capital gradually at the end of January 2010 (Bengtsson et al. 2010). The provincial population is still estimated to be higher than prior to the January 12 earthquake. This "reverse migration" is unprecedented in Haiti's recent history, and it remains to be seen if this phenomenon will be lasting or not.

Many of Haiti's emigrants stay in close contact with Haiti, visiting Haiti frequently, talking with friends and family on the phone, and sending material assistance (Orozco 2006). The assistance may take the form of cash transfers or gifts in kind, especially clothing or food, either bought in Haiti or shipped to Haiti. The cash transfers may go through banks or other licensed transfer agencies, but the use of informal networks—such as trusted friends traveling to Haiti—is a common practice as well (Fagen 2006). According to the 2001 Haitian census, one in every five Haitians receive remittances from abroad. Remitters send an average \$150 per month (Orozco 2006), although this amount may often be shared among several receivers.

INSERT FIGURE 1 ABOUT HERE

There has been an increase in remittances to Haiti since data began to be collected in 1971 (Figure 1). Since the mid-1990s, the trend is undeniably one of increasing reliance on remittances. In 2008, remittances made up 19 percent of Haiti's gross domestic product (World Bank 2009)—or up to 30 percent according to some sources (Abrams 2010); in 2008, this was the 13th highest remittance-to-GDP ratio in the world (World Bank 2009). The 1.9 billion in remittances is double the amount Haiti receives from international aid (Abrams 2010) and is equal to 90 percent of Haiti's federal budget (Luce 2010).

Remittances are a major source of revenue for many living in Haiti. The money received is used primarily for food, education and clothing (Orozco 2006). It is not uncommon that a family in Haiti has no income beyond what they receive from remittances. Yet, at the same time, remittances result in only incremental improvements in the quality of life and do not counter the larger problem of poverty (Fagen 2006).

Disaster assistance: Formal and informal, cash and in-kind

Following a disaster, those affected may receive assistance from both formal and informal channels, and the assistance may take a variety of forms. Formal assistance is received from governments and official aid agencies whose purpose is to provide relief and recovery from a disaster. Informal assistance is received from family, neighbors, friends and other, smaller local groups such as churches. The type of assistance may involve material (or tangible) assistance, emotional and psychological support, advice and information, encouragement and belongingness, among others. This study focuses only on material assistance, including medical care.

Formal material assistance following a disaster most often takes the form of in-kind assistance like food aid, but the idea of cash transfers is gaining some acceptance. While aid-in-kind has largely been the norm for disaster agencies, cash transfers hold a number of potential advantages (Harvey 2007; Dreze and Sen 1989). First, recipients of assistance consistently prefer cash. The cash allows greater flexibility, autonomy, opportunity to invest the aid, and often greater dignity as there is no need stand in long distribution lines. For governments and aid agencies, the cash may be easier and cheaper to transport than in-kind assistance. Additionally, while the potential for local inflation is a danger, cash transfers allow local markets to supply goods and services, which promotes the local economy.

Why are cash transfers not used more? Harvey (2007) reviews a number of possibilities, which include institutional investment in food aid structures and programs, bureaucratic self-interest, donors with surpluses of food, fear of aid agencies losing control, and "attitudes of paternalism and superiority" (55) on the part of donors and agencies—a "rarely acknowledged. . .belief that aid agencies know what people in crisis need better than these people do themselves (54)." The debate between cash and inkind assistance is a classic question in microeconomics. Economists generally find that cash is best, but gifts in kind are more appealing to donors, who are afraid the cash might be used for "anti-social" purchases, such as drugs or alcohol (Perloff 2007; Frank and Glass 1999).

In times of crisis most people turn to family and other social supports before seeking help from more formal channels, such as the government, welfare agencies or psychologists (Solomon 1985). Quarantelli (1960) reported that up to three-quarters of those affected by disaster received a substantial proportion of aid from kin. The exception is medical care, in which case health care professionals are usually sought out directly.

Much of the literature on informal disaster assistance focuses on the role families and friends play in providing social support after a disaster (e.g., Kaniasty and Norris 2004; Figley 1985). Less,

however, is known about the role of kin and friends in providing material assistance post-disaster. This study begins to explore the ways in which formal and informal material assistance were received by those living in displaced persons camps in Port-au-Prince nearly two months after the January 12, 2010, earthquake.

Methods

In-person interviews were conducted with 53 persons living in five different displaced persons camps in the greater Port-au-Prince area (Figure 2, Table 1). The interviews occurred the week of March 1-6, 2010, about a month and a half after the earthquake. A purposive sampling method was used to select participants in which the interviewers (the author and two assistants) walked throughout the camps and requested interviews. An attempt was made to balance the number of women and men interviewed. Usually only one interview per camp area was performed before moving to another section of the camp. People who approached and requested to be interviewed were denied. Each interview took an hour or less. If the participant granted permission, the interview was digitally recorded on an audio device.

INSERT FIGURE 2 ABOUT HERE INSERT TABLE 1 ABOUT HERE

Results

Most camps were formed spontaneously in the hours and days immediately after the January 12 earthquake: people who had lost their homes and others who were too frightened to sleep indoors set up shelters in parks, soccer fields and other open spaces throughout the city. As people were able, the sheets and cardboard structures were gradually replaced by tarps and tents.

The camps chosen for the interviews are shown in Table 1; these camps represent some of the largest displaced persons camps in Haiti. The very largest, stretching from Delmas 40 to Delmas 48, is a camp occupying what was the golf course for the elite Petionville Club. Established in 1928 during the first U.S. occupation of Haiti, the American Club, as it was called then, once banned all Haitians except those working as servants (Schmidt 1995). After the 2010 earthquake, the club was taken over by the U.S. 82 Airborne Division and food was distributed by the U.S. military, Catholic Relief Services and Sean Penn's organization J/P Haitian Relief Organization (Vasquez and Daniel 2010; Basu 2010; Sontag 2010). Most of the shelters are made of tarps donated by various relief organizations. Because the camp is located on private property, efforts are underway to move the camp to a remote area north of Port-au-Prince called Corail Cesselesse, which the Haitian government requisitioned on March 22, 2010 (Guyler Delva 2010).

The Champ de Mars camp, the third largest camp in Haiti, sprawls across the system of parks around the presidential palace and many government ministry buildings near downtown Port-au-Prince. Statues of Haitian heroes—some of the few cultural artifacts left undamaged by the earthquake—look out over thousands of tent and tarp shelters. Because the downtown area of Port-au-Prince sustained some of the worst damage in the earthquake, thousands of people who lost their houses have moved to this camp. While some have aid-distributed tents, others live under tarps or even sheets. According to the CCCM Cluster Group, a UN-affiliated group coordinating relief efforts in Haiti, this camp has no external management agency. (All the camps appeared to have camp-organized governing committees, though the extent to which they function is not known). Efforts are underway to relocate the camp to the Fort National neighborhood, an extremely hard-hit and high density Port-au-Prince neighborhood not far from Champ de Mars.

The camp at Delmas 31-33 is situated on the grounds of one of Haiti's most elite schools, the St Louis de Gonzague high school, a private Roman Catholic school. The majority of families in this camp have high quality tents, although there are some families living under cardboard or sheets. There are rumors that the camp has no external management agency because the school leaders are trying to restrict services that might encourage displaced persons to stay (Herz 2010). Because the school desires to recommence classes as soon as possible, there appears to be pressure for the camp inhabitants to relocate. To my knowledge, no relocation area has yet been identified. Security is reported to be relatively high in this camp (RNDDH 2010)

The Delmas 33 Accra Nord camp is a camp set up by Islamic Relief that houses about 3,000 people. Most of the families in this camp have tents provided by Islamic Relief. The land appears to be privately owned by the Accra family (LAMP for Haiti Foundation et al. 2010).

The camp at Place Saint Pierre is a spontaneous camp that arose directly after the disaster. The camp occupies a small park in Petionville, often considered the well-to-do suburb of Port-au-Prince, but also home to many densely populated neighborhoods. The camp did not have any formal camp management agency at the time of the interviews. The Petionville police station is located next to the camp and presumably provides some security for the camp.

All the camps are crowded with often only a narrow corridor between tents or tarp structures. There is little privacy, and the temporary houses become extremely hot during the day, yet little open area (especially with shade) exists in the camps. Water, toilet and bathing facilities differ from camp to camp, but are generally overcrowded and less than ideal. For some camps, it was not readily apparent what, if any, bath and toilet facilities were available.

Many people lost all their belongings in the earthquake, so even a simple wood stool to sit on may be hard to come by. Those who are able have elevated their sleeping areas on blocks or other structures so that when it rains the bedding is not soaked. Security—both bodily and for belongings—is a real issue as there is no way to lock a tent or tarp.

Despite the many difficulties of life in the camps, the camps were tidy and calm. Portions of the camps served as open air markets, and there were often other services like hair salons and small restaurants readily available in the larger camps. A few of the camps had medical services and areas for children to play or attend classes. Overwhelmingly, people's grievances centered on the larger picture of need for work, a permanent home and school rather than anything to do with the state of the camps.

Some general characteristics of the study participants are shown in Table 2. Most people's houses had been destroyed or damaged in the earthquake, and they had relocated to the camp—usually a camp near their former house—in the days immediately after the earthquake. Some families return to their house during the day for bathing, toilets or cooking. Such facilities in the camps are limited, crowded and often unsanitary.

INSERT TABLE 2 HERE

Very few people interviewed had work and few of their partners had work. Most of those that did work worked in the "informal sector"—usually selling goods in open-air markets or streets, sometimes as masons, tailors or drivers. Often these people had lost their ability to continue business when their small stocks of goods were destroyed in the earthquake or, in some cases, looted after the earthquake. A very few people worked for regular wages and, of these, almost all had lost their jobs due to the earthquake. One man who worked in a factory making spaghetti had earned about \$5 per day, but the factory was destroyed in the earthquake and he was out of work. A woman who cleaned houses had earned \$2.30 per day, but had likewise lost her employment after the earthquake. Two people who worked for the government and made \$4.60 and \$14 per day, respectively, lost their jobs when the buildings they worked in were destroyed.

The data confirmed there are high levels of migration from rural areas and smaller cities to Portau-Prince. Few of those living in the displaced persons camps are originally from Port-au-Prince: only 23 percent were born in Port-au-Prince. The majority came to Port-au-Prince, often as teenagers or young adults, in search of education or work. Only about eight percent of those interviewed had parents who were born in Port-au-Prince.

The majority of people did not own the house they had lived in but were renters. Of those who owned the house, only a handful reported having house insurance. Everyone lived in a cement block house; sometimes the roof was cement block as well and sometimes it was metal. Forty-six percent of their houses had been destroyed, and 52 percent had been damaged; only one person reported no damage to their home.

The majority of people in the camps had lost family in the earthquake. Twenty-one percent had lost a member of their immediate family (sibling, child, spouse or parent) while an additional 42 percent had lost at least one extended family member. Most of these deaths occurred when a house collapsed around them, but others were at school, at church, in stores, at work or in the street when they died.

Forty-seven percent of those in the camps have family living outside of Haiti with whom they are in communication. The majority of this group (64 percent) have at least one immediate family member (sibling, child, spouse or parent) living abroad, while the rest have at least one extended family member (aunt, grandchild, cousin, etc.). Forty percent report receiving material assistance (remittances, food, clothes or other items) from family outside of Haiti prior to the earthquake disaster. (Another eight percent receive material assistance from family living in Haiti only.) The vast majority of this familial assistance is in the form of cash as well, sometimes, as food, clothes or school payments. The amount of cash sent ranges from \$20 to \$400, with most cash transfers taking place on the lower end of this scale. Although most receive remittances irregularly—when the sender is able to send money—there are a few who receive regular, monthly transfers of cash from relatives. The amount sent depends on the economic situation of the remitter and the number of people they support in Haiti. If the receiver marries or finds work, the transfers usually stop or diminish. Buying food and paying school fees are two common uses of the cash remittances.

INSERT FIGURE 3 ABOUT HERE

Figure 3 shows the various sources of material assistance received by people living in the camps in the first seven weeks after the disaster. A sizable proportion of those interviewed (32 percent) had not received any material assistance since the disaster; if they were living in a tent or under a tarp, they usually had bought the shelter with their own funds. Formal assistance came from sources like Catholic Relief Services, the Red Cross, Doctors Without Borders, and Islamic Relief. Sometimes respondents did not know the source of the aid. Informal assistance came primarily from family members, but also from friends and local churches. Many people mentioned sharing cooked food or other goods with neighbors; because of the various difficulties in measuring such frequent sharing of small amounts of food and other items, the study concentrated on informal material assistance involving cash or temporary shelter given largely by family and friends outside of Haiti. Additionally, many people reported receiving water from formal aid agencies, and this was also not included in the analysis.

Given the large amount of international aid designated for Haiti's relief from the earthquake, a surprisingly low level of this formal aid was reported in the camps. Most likely those not living in camps received even less. Just over half (55 percent) of those interviewed reported receiving formal material assistance in the nearly two months after the disaster. The most frequently reported formal assistance came in the form of a tent (30 percent) or tarp (11 percent), followed by food aid (25 percent), household items or toiletries (9 percent), and medical care (2 percent). No one had received cash from a

formal aid agency. The study estimate that 41 percent of displaced persons had received a tent or tarp from an aid group corresponds exactly to that of the United Nations on March 5, 2010 (Bigg 2010).

Formal aid was usually distributed using a card system. Prior to the aid distribution cards would be distributed to households in the camps. The cards could then be used to enter a line to pick up the material aid. In most cases, people were not aware of the type of aid they would get. Generally, people seemed satisfied with the card delivery system, although if they were not in the camp when cards were distributed they missed out on the aid; this was the case for a number of respondents who were living under sheets rather than tarps or tents. A number of people mentioned passing up the opportunity to receive aid because the distribution was not organized and they wanted to avoid fights and long lines in the hot sun.

Not all of the interviewees had access to familial assistance prior to the disaster, and these tended to not have access after the disaster either. Forty percent of those interviewed reported receiving informal material assistance after the disaster. Most of these (32 percent of interviewees) had received a cash gift from family members or, more infrequently, friends. Ten percent had received a tent or tarp from family, friends or a local church. Those who had family connections prior to the disaster tended to receive cash transfers post-disaster as well, but not in much larger amounts than they received before the disaster.

Generally the informal aid was reported to be more timely and often more useful than the formal aid, though there are a variety of experiences with this. Forty-seven percent of the time the formal aid was deemed timely by the recipient and 74 percent of the time the informal aid was deemed timely (Chi-square test p-value = 0.06 from a one-tailed Fisher exact probability test).

There were 13 cases in which the interviewee had received both informal and formal material assistance. In three of these cases, the participant did not see any difference in the usefulness or timeliness of the two types of aid. In three cases, the formal aid was deemed more useful than the informal aid. In one case, the informal aid was more timely, but the (formal) medical care was more appreciated than the tent and tarps received from both formal and informal sources. In the remaining six cases, the informal aid was deemed more useful than the formal aid. People appreciated the flexibility, dignity and timeliness of the cash transfers they received from family.

The expressed needs of the study respondents were quite simple. Most people desired work, a permanent place to live, and education for their children. A desire for a return to normalcy was expressed by many. Life in the displaced persons camps was "not a life" and they longed to leave the camps for a better and more permanent situation.

Conclusion

It is clear that two months after the disaster a sizable proportion of those most affected by the earthquake disaster had not received material aid, or had not received much aid. There is a disconnect between the levels of donations that international aid agencies received and that governments allocated to disaster relief and the level of material aid reaching people living in the displaced persons camps. Fifty-five percent of the respondents reported receiving some form of formal material aid in the seven weeks after the disaster. A similar study conducted in late February 2010 found that 64 percent of the population had received aid (because the February study included water aid and this study did not, this may have led to a higher percentage) (LAMP for Haiti Foundation et al. 2010). The same study reported that about half had not received any food aid—and this figure rose to 75 percent in the Champ de Mars camp. In any case, even when considering that some respondents may have underreported the aid they received, it is evident that many basic needs of people in the camps were not being met.

There are at least two actions formal aid agencies and governments could take to address this discrepancy. First, the organizations giving aid should be more transparent about how much money and

in-kind assistance they raise and how, where and when the aid is allocated. Second, international organizations and governments should work closely with Haitian organizations at all stages in disaster relief and recovery. There are many reputable Haitian organizations whose expertise would greatly help international organizations decide how best to address the disaster in an equitable and efficient way. Despite this, numerous local organizations I talked with noted they had not been consulted by the international actors.

Formal aid groups could also learn from the material assistance that flows to disaster victims from families and friends. This informal material assistance in Haiti most often takes the form of cash transfers, while formal aid agencies in Haiti tend to provide in-kind assistance like food. Food aid and highly subsidized food imports subject to few trade barriers are known to be damaging to Haitian agriculture (Fatton Jr. 2010). In the months after the 2010 earthquake, the Port-au-Prince markets were flooded with U.S.-grown food aid for sale, much to the detriment of Haitian agriculture (IRIN 2010; Weisbrot, Johnston, and Ray 2010).

Formal aid organizations should at least consider cash transfers as one way to provide support to those affected by the disaster. Cash transfers may have some logistical advantages over aid in-kind and the transfers may be made quickly using banks and transfer services that were at least partially functioning within days of the earthquake. Cash assistance allows the recipients to make their own choices as to how to spend the aid money, and provides opportunity for a greater variety of food, for example, while also saving people the trouble and indignity of standing in lines to receive hand-outs. Perhaps best of all, cash transfers have the ability to support rather than harm the local economy because the money will enter local markets.

The study confirms that Port-au-Prince is a city largely made up of people who have fled rural Haiti to seek a better life in the capital. Many of these people, in turn, are financially dependent on family living abroad. Many of the conditions that made Port-au-Prince so vulnerable to the earthquake—a large population, high population density, crowded living conditions, slums and shoddily built houses—stem from the fact that Port-au-Prince's population outstrips its infrastructure many times over. The roots of this urban migration are found in both Haiti's tradition, since slavery times, of siphoning wealth off the rural agricultural dweller, and policies instigated in the 1970s and 1980s by international financial organizations that destroyed the ability of Haitian farmers to compete with food imports, especially from the United States. Additionally, countries like the United States and organizations like the World Bank see Haiti's potential not in agriculture but in cheap labor to supply manufacturing industries like the garment industry, which is largely concentrated in Port-au-Prince (e.g., Collier 2009). This, too, encourages migration to an urban area but, beyond a relatively few very low-paying jobs, provides few to no services to the increased urban population.

While migration to Port-au-Prince is one survival mechanism, emigration out of Haiti is another—both for those who leave Haiti and those who stay behind. Remittances sent from abroad are playing an ever-increasing role in Haiti. This is true in normal times, and becomes even more apparent after a disaster, when material assistance from family abroad—even if not at levels higher than prior to the disaster—is (for those fortunate enough to receive it) often more timely and effective than material assistance from formal aid agencies and governments.

To address these issues, Haiti and the international community need to focus on making Haitian agriculture a viable livelihood. There must be investment in Haitian agriculture, and provision of services to people living in both rural and urban areas. Haiti's international debt should be completely forgiven so that more government revenues can be applied to providing social services (Sassen 2010) and policies to protect Haitian farmers from cheap food imports and food aid need to be implemented.

Acknowledgements

This research was funded by a grant from the University of Colorado Natural Hazards Center through its Quick Response Research Program, which is funded by National Science Foundation grant number CMM10734304. The assistance of Jean-Hugue Delmond, Pierre Esperance, Esaïe Clervil, Jean-Lourdy St Fleur, and Sara Versluis was greatly appreciated.

References

- Abrams, Elliott. 2010. What Haiti needs: A Haitian diaspora. *Washington Post*, January 22, 2010.
- Basu, Moni. 2010. For Sean Penn, on ground in Haiti, time is of the essence. May 9, 2010.
- Bengtsson, Linus, Xin Lu, Richard Garfield, Anna Thorson, and Johan von Schreeb. 2010. Internal Population Displacement in Haiti: Preliminary Analyses of Movement Patterns of Digicel Mobile Phones: 1 January to 11 March 2010. Karolinska Institute, Center for Disaster Medicine and Columbia University, Schools of Nursing and Public Health.
- Bigg, Matthew. 2010. Aid group shocked over lack of shelter for Haitians. *Reuters*, March 5, 2010. Booth, William. 2010. Haitians who fled capital strain impoverished towns in countryside. *Washington Post*, March 15, 2010.
- Buss, T. F. with A. Gardner (2008) *Haiti in the Balance: Why Foreign Aid Has Failed and What We Can Do About It.* Washington, DC: Brookings Institution Press.
- Collier, Paul. 2009. Haiti: From Natural Catastrophe to Economic Security. A Report for the Secretary-General of the United Nations.
- Delacroix, Phoenix. 2008. Haiti menace de catasrophe naturelle: Risque sismique eleve sur Port-au-Prince. *Le Matin*, 25 septembre.
- Direction de la Protection Civile. 2010. *Haiti Seisme 2010*. Gouvernment de Haiti 2010 [cited June 13 2010]. Available from http://haitiseisme2010.gouv.ht/.
- Dreze, Jean, and Amartya Kumar Sen. 1989. Hunger and Public Action. Oxford: Clarendon Press.
- Dupuy, A. 2010. Commentary: Beyond the Earthquake A Wake-Up Call for Haiti. *Latin American Perspectives* 37 (3):195-204.
- Dupuy, Alex. 2007. *The Prophet and Power: Jean-Bertrand Aristide, the International Community, and Haiti.* Lanham, MD: Rowman & Littlefield.
- Eberhard, M O, S Baldridge, J Marshall, W Mooney, and G J Rix. 2010. The MW 7.0 Haiti Earthquake of January 12, 2010: USGS/EERI Advance Reconnaissance Team report. edited by p. U.S. Geological Survey Open-File Report 2010-1048.
- Fagen, Patricia. 2006. Remittances in Crises: A Haiti Case Study. London: Humanitarian Policy Group Overseas Development Institute.
- Fatton Jr., Robert. 2010. *Hope amidst devastation: Towards a new Haitian state*. Social Science Research Council 2010 [cited June 14, 2010]. Available from http://www.ssrc.org/features/pages/haitinow-and-next/1338/1330/.
- Figley, C R. 1985. Traumatic stress: The role of the family and social support. In *Trauma and Its Wake*, edited by C. R. Figley. New York, NY: Brunner/Mazel.
- Frank, Robert H, and Amy J Glass. 1999. *Microeconomics and Behavior*. 4th ed. Boston: Irwin McGraw-Hill.
- Guyler Delva, Joseph. 2010. Haiti starts moving quake victims to safer refuge. Reuters, April 10, 2010.
- Haggerty, Richard A (ed). 1989. Haiti: A Country Study. Washington, D.C.: Library of Congress.
- Harvey, Paul. 2007. Cash-based responses in emergencies. London: Humanitarian Policy Group, Overseas Development Institute.
- Herz, Ansel. 2010. Displaced fear expulsion from makeshift camps. Inter Press Service, April 8, 2010.
- IRIN. 2010. *Haiti-US: Washington aid policy may be shifting*. UN Office for the Coordination of Humanitarian Affairs, April 19, 2010 [cited June 14, 2010]. Available from http://www.irinnews.org/Report.aspx?ReportId=88857.

- Kaniasty, Krzysztof, and Fran H Norris. 2004. Social support in the aftermath of disasters, catastrophes, and acts of terrorism: altruistic, overwhelmed, uncertain, antagonistic, and patriotic communities. In *Bioterrorism: Psychological and Public Health Interventions*, edited by R. J. Ursano, A. E. Norwood and C. S. Fullerton. Cambridge: Cambridge University Press.
- Laguerre, M S. 1987. Migration and urbanization in Haiti. Sociologus 37 (2):118-139.
- LAMP for Haiti Foundation, The Drexel Haiti Justice Project, Bureau des Avocats Internationaux, Institute for Justice & Democracy in Haiti, and Lawyers' Earthquake Response Network. 2010. Neglect in the Encampments: Haiti's Second-Wave Humanitarian Disaster.
- Luce, Jim. 2010. Fonkonze: Haitian diaspora units across U.S. In *Huffington Post*.
- Maguire, Robert. 2010. *In the aftermath of the earthquake: Rebuilding to rebalance Haiti*. Social Science Research Council 2010 [cited June 14, 2010]. Available from http://www.ssrc.org/features/pages/haiti-now-and-next/1338/1459/.
- Orozco, Manuel. 2006. Understanding the Remittance Economy in Haiti. Paper commissioned by the World Bank.
- Perloff, Jeffrey M. 2007. Microeconomics. 4th edition ed. Boston: Pearson.
- Quarantelli, Enrico L. 1960. A note on the protective function of the family in disasters. *Marriage and Family Living* 22 (3):263-264.
- RNDDH. 2010. Seisme du 12 janvier 2010: Un drame national qui necessite la conjugaison des efforts de tous les Haitiens. Port-au-Prince: Reseau National de Defense des Droits Humains (RNDDH).
- Sassen, Saskia. 2010. *Haiti and the international system: The need for new organizational lending formats* 2010 [cited June 14, 2010]. Available from http://www.ssrc.org/features/pages/haiti-now-and-next/1338/1346/.
- Schmidt, Hans. 1995. *The United States Occupation of Haiti 1915-1934*. New Brunswick, NJ: Rutgers University Press.
- Solomon, Susan D. 1985. Mobilizing social support networks in times of disaster. In *Trauma and Its Wake*, edited by C. R. Figley. New York, NY: Brunner/Mazel.
- Sontag, Deborah. 2010. Tent city at a golf club dramatizes Haiti's limbo. *New York Times*, March 21, 2010.
- The Pew Research Center. 2010. Haiti Dominates Public's Consciousness: Nearly Half Have Donated or Plan to Give. The Pew Research Center For The People & The Press.
- Trouillot, M-R. 1990. *Haiti, State Against Nation: The Origins and Legacy of Duvalierism*. New York, NY: Monthly Review Press.
- United Nations Office for the Coordination of Humanitarian Affairs (OCHA). 2010. *ReliefWeb* 2010 [cited June 13, 2010 2010]. Available from http://www.reliefweb.int/rw/fts.nsf/doc105?OpenForm&rc=2&emid=EQ-2010-000009-HTI.
- Vasquez, Michael, and Trenton Daniel. 2010. Haiti golf course now a camp for homeless earthquake victims. *Miami Herald*, April 10, 2010.
- Weisbrot, Mark, Jake Johnston, and Rebecca Ray. 2010. Using Food Aid to Support, Not Harm, Haitian Agriculture. Washington, D.C.: Center for Economic and Policy Research (CEPR).