



## Hurricane Mitch—the gender effects of coping and crises

*Disaster management efforts should recognize that women and men suffer different effects and have different responses to crises.*

Hurricane Mitch hit Central America in October 2000, causing tremendous losses to property, livelihoods, infrastructure, and human life. The hurricane caused the most damage in Honduras, where economic losses reached nearly \$4 billion. Looking at Honduras and Nicaragua, this note uses a gender approach to explore the effects of disasters and the coping strategies adopted in response to them. (The main sources are World Bank 2000b, World Bank 2001, and household surveys.)

Although the literature argues for the inclusion of gender in all phases of disaster management, there is scant empirical evidence to substantiate its importance. Using poverty data for Honduras and anecdotal evidence collected in Honduras and Nicaragua, this note answers two questions. First, who was affected by hurricane Mitch, and how did these effects vary among men and women? Second, how did people cope with and respond to Mitch? The effects of gender are examined over the disaster cycle—before the disaster, during the emergency, and as part of rehabilitation and reconstruction.

### Who was affected?

The effects of hurricane Mitch were felt at many levels:

- *Mortality.* Natural disasters kill more men than women because men are more likely to engage in risky activities (such as search and rescue) and behavior. In Nicaragua about 54 percent of Mitch's victims were male. Anecdotal informa-

tion for Honduras also suggests that more men died, but data are not available to confirm this assertion.

- *Household structure.* In Nicaragua the hurricane increased the number of households headed by a single mother, most likely because of high levels of male mortality and migration. Before the hurricane women accounted for 24 percent of Nicaragua's household heads, but after the disaster about 40 percent of the households in shelters were headed by a woman (Gomáriz Moraga 1999). Reliable data are not available for Honduras, but according to relief agencies female headship also increased after the hurricane.
- *Property and asset losses by household type.* Female-headed households probably lost a larger portion of their assets to Mitch given that they were more likely to have been poor before the storm. In Honduras the poorest fifth of rural households were less likely to suffer crop damage because they were cropping such small areas, less likely to lose business income because they had none to start with, and less likely to lose assets because their asset base was so small. But proportionally the income and asset losses were much greater for the poorest families. Among households that lost assets, the poorest fifth suffered losses of 18 percent—compared with 3 percent for the richest fifth (Morris and others 2000). Given that in Honduras the per capita income of female-headed households is lower than that of couple-

headed households (World Bank 2001; Wodon and others forthcoming), female-headed households were likely hit harder by Mitch.

- *Labor and income losses.* Because the labor market tends to be segmented by gender, shocks can have different effects on the labor and income patterns of men and women. For example, Mitch caused big losses in Honduran agriculture—a sector that employs mostly men. But the informal sector, which women depend on for work and income more than men (World Bank 2000a), was even more affected due to the disruption of communications and transportation.
  - *Psychological effects.* Reports since the hurricane indicate that women showed signs of depression but were able to maintain their normal responsibilities. In contrast, some men displayed a manic or violent response to their psychological distress, as indicated by such behaviors as alcoholism, gambling, and violence. The literature indicates that women are more likely than men to be debilitated by psychosocial considerations, but that finding is inconsistent with the findings reported here. It is likely that both women and men suffer emotionally but that women do so more openly than men, given that men are socialized not to show emotions or to complain about their physical and emotional health (Barker 1998).
  - *Gender roles.* The hurricane caused a breakdown in women's traditional roles; men's roles were less affected. According to aid agencies and nongovernmental organizations (NGOs), women performed traditionally male tasks (such as clearing roads) during the emergency and attended nontraditional training during reconstruction. Though men also reportedly performed traditionally female tasks, these cases were isolated (Gomáriz Moraga 1999). The question is, how permanent are these changes? The literature suggests that tensions often arise when men and women are expected to return to their predisaster social roles.
- ## How did people cope and respond?
- People and markets responded to the hurricane in a variety of ways:
- *Labor markets.* In Honduras one of the most important strategies for coping with Mitch was mobilizing household labor (Klor and Wodon 2001). As wages fell and more men took on secondary jobs, households responded by increasing labor force participation—especially of women. Increases in women's work were larger than those of men not only relative to the initial participation rate but also in absolute terms, especially in rural areas. Increases in labor force participation had important coping effects in Honduras, enabling households to offset about a quarter of the income losses from Mitch.
  - *Migration.* Relief agencies in Honduras and Nicaragua report that male migration increased—though the magnitude is not known. The remittances from this migration likely helped the female-headed households left behind.
  - *Human capital.* Mitch probably had little effect on gender education patterns. After Mitch enrollment increased for both girls and boys. And while the increase was greater for girls at the primary and secondary levels, this is consistent with trends before Mitch (Klor and Wodon 2001). The number of inactive girls and boys—those not in school or working—fell, but the drop was much more pronounced for girls. The decrease in inactive girls, which was greater than their increase in enrollment, points to the fact that girls entered the job market in greater numbers. This may be because more boys were already working.
  - *Social capital.* Women coped with Mitch by mobilizing formal and informal social networks and organizing women's groups to meet needs, organize temporary shelters, and coordinate relief efforts. They also used kin networks to take in affected family members.
  - *Substance abuse, risky behavior, and violence.* As noted, coping strategies among some men reportedly included increased alcohol consumption, gambling, and crime.

According to aid agencies and NGOs, family and sexual violence decreased immediately after the emergency and steadily increased during reconstruction.

## Gender dimensions of crises and coping

The gender dimensions of crises and coping play out at different levels, but at all levels it is crucial that gender roles be flexible and fluid.

### *The individual level*

Because of their gender role of “protector”—traditionally considered one of men’s most basic functions in Latin America—more men likely died during the disaster and emergency phases of the storm. Higher deaths among men were also linked to risk taking—logical given that Latin American men are socialized to be self-reliant and to adhere to rigid codes of honor and bravado (Barker 1998). As noted, both men and women felt Mitch’s psychological effects. But because of gender socialization, women displayed their anxiety more openly. Men’s psychological stresses exhibited themselves less directly through destructive behavior such as violence and alcoholism.

### *The household level*

Consistent with findings elsewhere in Latin America, households appear to be the most basic institution for dealing with shocks such as Mitch. For example, Honduran families used the labor of women and children—especially girls—to offset the effects of Mitch. In doing so, households recovered a significant portion of their income losses. Households also used male migration to compensate for job and income losses, causing an increase in the number of households headed by a single mother.

The importance of the household for coping raises the question of how household structure affects responses to shocks. Household headed by a single mother would logically be less able to mobilize adult labor and distribute risk by having adults work in different sectors of the labor market. And if households act as a coping mechanism for

disasters, the level of intrahousehold social capital becomes another key issue. Social capital is established through reciprocal relationships between household members, the joint activities and common goals of the members, and so on. Increased domestic violence and spending on alcohol would thus erode social capital within households and decrease household capacity to respond to disasters.

### *The community level*

Reports emphasize the importance of social capital in responding to crises, particularly the importance of women in mobilizing formal and informal social networks and activating organizations for relief needs. This finding suggests that women’s investments in community work—which may be undervalued when no crisis is occurring—may translate into social capital with high pay-offs during shocks and crises.

### *The importance of diversity in gender roles*

Though much has been written on the burden that triple roles—reproductive, productive, and community—place on women, multiple roles can also work in women’s favor. If women are unable to fulfill one role, they still have two others to give them a sense of identity. Indeed, families in Honduras and Nicaragua coped by using the previously unused labor of women and girls: women turned to their secondary role of income earner or producer.

Most men, in contrast, have only one primary role—that of provider—which means that if they are unable to fill that role (which is often the case during crises), they lack other ways of affirming their male identity. This lack of diversity and flexibility in gender roles can lead men to destructive or dysfunctional behavior, with corollary negative consequences on men and their families. Making gender roles more flexible for men could reduce vulnerability to crises and shocks. Interestingly, observations from hurricane Mitch suggest that disasters have the dual effect of accentuating gender roles—particularly of the male protector—and breaking them down—but mostly among women.

## Recommendations

Given that incomplete data preclude a comprehensive analysis of the relationships between gender, vulnerability, and losses, a first recommendation would be to improve the availability of data. While there are obvious constraints on gathering data during the disaster and emergency phases of a calamity, household surveys could better capture data on household structure, coping strategies, and intrahousehold decisionmaking—facilitating better analysis.

Taking into account the disaster cycle, other recommendations include ensuring that both women and men are involved in community efforts to prepare for disasters, such as the organization of disaster brigades and the preparation of emergency plans; ensuring that risk analysis and vulnerability maps take into account single-parent households; providing psychosocial counseling after disasters to men and women according to their specific needs; and providing postdisaster work opportunities for men and women that are not limited by traditional gender roles.

## Further reading

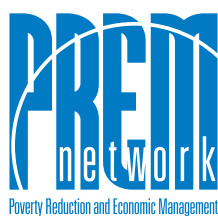
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