ferences in health conditions. Mortality was higher among males but women reported more health problems, both physical and psychological. In El Salvador, women accounted for 52.7% of a total of 8,423 people seeking pre-hospital care and 54.5% of a total of 448 people seeking hospital care. There was also a significant increase in reproductive tract infections (Gomáriz 1999).²

In addition, significantly more women than men reported and sought care for depression and other stress related illnesses, reflecting gender differences in the incidence of depressive disorders, a pattern that has been observed in other disasters. Comparative WHO research data for a number of countries show that depression and anxiety are more common among women than among men and identify women's relative lack of decision making power as a relevant risk factor. The disaster literature confirms this gender difference and shows that lack of empowerment and participation in post-disaster decisions places women in a vulnerable psychosocial situation (Mocellin

1999).

impacts of prolonged stress on women can have particularly adverse effects on the health and growth of their children (Kumar-Range 1999). An assess-ment undertaken by the Civil Coordination Group of Nicaragua shows that women, more so than men, requested post-disaster psychological counseling (Gomáriz, 1999).

In addition, while there is no hard evidence. there are conflicting reports of both an increase in violence against women in shelters, including rape (and adolescent pregnancy), and a decrease in this problem because of the lack of privacy in the shelter environment (Gomáriz 1999). As the aftermath of the disaster progresses, both effects are likely to take place. A review of domestic violence injunctions filed in South Florida between 1990 and 1995 showed a decline right after Hurricane Andrew hit the coast in August of 1992. However, this was followed by a sharp rise through the early months of 1993, as disaster-related stress built up (Enarson and Morrow, 1997).

²The high incidence of RTIs was insightfully observed in a *New York Times* op.ed. by Bob Herbert on 12/24/98.

The Response to the Disaster

Institutional Response

With the exception of Nicaragua, in the first disaster response phase, information on the affected population was not disaggregated by sex and relief efforts from international and national agencies, governments and NGOs, did not incorporate a gender perspective. This was evident in the inadequacy of emergency relief in addressing women's reproductive health needs (no provisions were made for menstruation and other reproductive health needs in the shelters). It was also reflected in the lack of gender guidelines in disaster response and the lack of participation of women's organizations in relief decisions. According to Gomáriz (1999), women's organizations were involved in relief efforts only at the community level and in an ad-hoc fashion.

Gomáriz also acknowledges that governments and NGOs did not demand information disaggregated by sex during the emergency phase. The prevailing view, that gender was not a relevant dimension of the emergency response, led to overlooking women's needs and left a gap in relevant knowledge about the gender differentiated effects of Mitch. The lack of a gender perspective in relief efforts is particularly worrisome because of the increasing share of relief in international development assistance funding (on this last point, see Hoddinott, 1999).

Gender criteria was better incorporated in later recovery phases. Sex disaggregated censuses of the shelter population were collected in Honduras and Nicaragua. Household surveys of the affected population were also carried out in Nicaragua.

Gender dimensions are included to varying degrees in reconstruction proposals made by the affected countries. In El Salvador, women's organizations participated in a dialogue between government and civil society to produce a joint reconstruction proposal. Civil Society Coordinating Groups, established in Guatemala and Nicaragua, incorporated gender criteria proposed by participating women's organizations. In Honduras, gender dimensions were included in national reconstruction plans prepared by the government as well as in proposals prepared by civil society. An unanswered question is the feasibility of implementing the gender dimension of these plans, especially in the absence of budgetary proposals and commitments.

People's Response

In Central America, as in disasters elsewhere, people's involvement was central in the first moments after the disaster and continues to be critical during reconstruction. Gender differences molded the nature of people's response to Mitch. Male tasks were more visible and heroic during the emergency. They went on search and rescue missions and transported the wounded. Women, instead, were involved in less visible tasks that were the extension of their domestic roles, such as food preparation and distribution, and care of the wounded. Although less visible and consequently, perhaps less valued, women undertook myriad tasks that were critical for the recovery of families and communities. They had an especially important role in the shelters, not only providing food, but also establishing and running them. In Honduras, a third of the shelters were run by women, and this figure rose to 42% in the capital. Women are also playing a leading role in housing construction and reconstruction. Women are being favored as beneficiaries of housing property titles in El Salvador and Nicaragua in recognition of their stake in home ownership. This is not the case in Guatemala and Honduras, where criteria benefit previous owners (Gomáriz, 1999).

The nature and range of women's contributions in the recovery phase suggest that more full and equal utilization of their experiences and resources by the institutions engaged in reconstruction could increase the speed and effectiveness of these efforts and set a solid basis for disaster prevention, as explained below.

La Masica: Good Practices in Emergency Preparedness

The municipality of La Masica in Honduras, with a mostly rural population of 24,336 people, stands out in the aftermath of Mitch because, unlike other municipalities in the northern Atlantida Department, it reported no deaths. This outcome can be directly attributed to a process of community emergency preparedness that began about six months prior to the disaster, as a pilot of the project FEMID, launched by CEPREDENAC, the Central America disaster prevention agency, with support of the German agency GTZ.

The pilot project involved the establishment of networks of local organizations in charge of risk and disaster management, coordinated through the Municipality and the Municipal Emergency Commission (CO-DEM). Networks were trained in the geographical mapping of hazards and an early warning system, and undertook an assessment of vulnerabilities differentiated by

gender. Gender lectures were given and, consequently, the community decided that men and women should participate equally in all hazard management activities.

When Mitch struck, the municipality was prepared and vacated the area promptly, thus avoiding deaths. Women participated actively in all relief operations. They went on rescue missions, rehabilitated local infrastructure (such as schools), and along with men, distributed food. They also took over from men who had abandoned the task of continuous monitoring of the early warning system.³

The experience shows that preparedness is an important step in saving lives. The incorporation of women from the start, on an equal footing with men, contributed to the success in saving lives. (The record was less positive in saving physical assets as the hurricane destroyed most social and productive infrastructure.) In addition, and likely because of their active role, women reported a very low incidence of depression. In fact, contrary to repeated findings in the literature on disasters, the community assessed the psychological situation and concluded that help was required for men. rather than women, to restore their capacity to contribute to the community. Lastly, one of the most important gender gains at La Masica was the empowerment of women and the community's recognition of their capabilities and contributions. As a token of recognition, a new sign in the mayor's office reads "Everything is easier with the cooperation of women."

³ More than 20 years earlier, something similar had occurred in Honduras after the devastation brought by Hurricane Fifi. Near San Pedro Sula, women stepped in to carry out soil conservation efforts that men had abandoned (Buvinic 1983).

Conclusions

Lessons Learned

Described below are four general lessons that stem from the analysis of gender issues in the context of disasters:

First, disasters tend to duplicate existing vulnerabilities. Natural disasters such as Hurricane Mitch hit people living in poverty and depleted environments the worst. As presented in this report, the comparative slowness of female-headed households in overcoming the crisis (by moving out of shelters) can be linked to their precarious pre-crisis economic position. However, their prospect can be improved if specific measures are included, as in the case of housing programs in El Salvador and Nicaragua that tend to favor women as beneficiaries of property titles.

Second, disasters tend to exacerbate gender differences. Employment losses because of Mitch seem to have affected relatively more women than men. Reconstruction, with its heavy reliance on infrastructure, created more "male" jobs. In addition, anecdotal evidence shows that preference was given to protecting male employment (based on the assumption that female incomes are secondary to men's roles as breadwinners.)

Third, the active participation of women increases the effectiveness of prevention, disaster relief, reconstruction and transformation. Women's involvement in running shelters and processing food was crucial to the recovery of families and communities. As the La Masica case illustrates, women's participation helped save human lives. It also gave them a

sense of control over their lives, thus reducing the incidence of mental health problems. This, in turn, enabled women to increase their contributions, creating a virtuous cycle of healthy responses to the crisis

Fourth, events that occur before, during and after disasters offer fertile ground for change in gender relations. Disasters highlight particular areas of the vulnerabilities and capabilities of men and women that need to be addressed during reconstruction and transformation. They also highlight the importance of community responses, including women's participation, as a long-term preventive measure. In addition, immediately following a disaster, the political environment may favor a much higher rate of economic and social change than before in areas critical to the well being of women. Property titles for land and housing, job training, housing and neighborhood improvements, and community participation are embodied in the need to transform the societies affected by the disaster. These important opportunities are unlikely to present themselves in later phases.

General Guidelines

Based on the findings discussed in this report, and the input provided by participants at the technical meeting in Tegucigalpa, this section highlights seven basic considerations that should underlie the formulation of gender-informed disaster recovery plans in Central America. They are meant to guide the design and implementation of short- and long-term responses to disasters, and help provide answers to the question of how plans should be formulated.

- 1. Include basic disaster prevention and preparedness in country development plans, incorporating a gender perspective from the start. The success of La Masica in Honduras shows how the active participation of women in disaster preparedness increases the effectiveness to relief efforts. It also empowers women and saves lives.
- 2. Produce long-term gains by incorporating development and gender perspectives into emergency relief. Development opportunities resulting from disasters (including opportunities for improving women's condition) are often missed or compromised because of a narrow focus on short-term relief. Relief is the first stage of a development process and needs to be placed in a development perspective that includes gender analysis.
- 3. Aim for balance between rehabilitation and reconstruction of physical infrastructure, and the recovery and development of social and community infrastructure where women play critical roles. Be cognizant, however, of women's time constraints because of their double functions as home and market producers. This includes the need to "free up" women's time for emergency community action by providing, for instance. emergency child care (as was done in Australia after a cyclone). It is important as well to attend to the income generation needs of poor mothers who are economic providers for their families. Take care not to resort mainly to women for voluntary work. Social investment funds can become an important vehicle for rebuilding social and community infrastructure. However, projects need to integrate a gender perspective and provide jobs for women as well as men.
- 4. Design and support specific initiatives that respond to women's needs and strengthen their contributions. Provide jobs and incomeearning opportunities for women who lost their jobs because of the disaster. This is important because most post-disaster reconstruction jobs absorb mostly male labor. The social benefit of implementing these actions is to contain the intergenerational transmission of poverty between mothers and children that happens when poor mothers do not have the resources to invest in their children's well-being. Make special efforts to address women's reproductive health needs throughout the recovery stages and implement actions to reduce and prevent domestic violence in shelters. Take advantage of opportunities to strengthen women's leadership and their participation in the decisionmaking process during reconstruction.
- 5. Promote community participation and decentralization in disaster preparedness and recovery efforts. Decentralization in the allocation of budgets for disaster recovery programs and community participation improves crisis responses, promotes transparency and efficiency in the use of resources and accelerates reconstruction and a return to normalcy after a crisis. Local stakeholders, including community organizations, should feel a sense of ownership of the disaster reduction activities. As the La Masica experience shows, emergency preparedness starts with community activities. Community-rooted development is the basis of disaster preparedness and ensures continuity from short-term responses to long-term development goals.
- 6. Favor the reconstruction of rural areas. Because rural areas are proportionally poorer, the focus of sustainable growth should be diversified rural production. At the same time, efforts should be made to protect the rural ecology and take into account the

central role women play in rural production and conservation.

7. Integrate a gender perspective in disaster preparedness and recovery plans and initiatives. The first step in integrating a gender perspective into disaster preparedness is to collect information disaggregated by sex. As the case of Mitch showed, the lack of sex disaggregated statistics in emergency relief hampered the response to women's needs and left a significant void in knowledge about the gender-differentiated impacts of the disaster. Define indicators to measure progress in achieving the integration of gender considerations; allocate budget resources if appropriate; and establish monitoring and evaluation mechanisms to measure success in main-streaming gender concerns.

Suggested New Initiatives

The process of preparing and implementing the plans for reconstruction and transformation offers an important opportunity for collaboration between the international financial institutions, bilateral donor organizations, national governments and civil society organizations to address priority gender issues in Central America. That is, to identify specific actions for reducing women's vulnerabilities to natural disasters and strengthening their capacity to participate actively in efforts to mitigate and manage the impacts of future natural disasters.

Two areas of priority for bilateral and multilateral attention emerged from the Tegucigalpa meeting. They are: strengthening the economic opportunities of rural women, and building women's leadership.

Strengthening the economic opportunities of women. Women who work in the rural economy in the agro-export sector, in small-scale enterprises or home-based cottage industries. or who rely largely on subsistence agriculture, were especially hard hit by the hurricane. Between 60% and 70% of all damage caused by Mitch occurred in agriculture and fishery. Few programs currently address the severe loss of employment and other sources of income for these rural women. Two initiatives —credit for rural women and rural works programs— were proposed to address immediate employment losses and promote the development of new economic opportunities for rural women.

The objective of the credit for rural women program is to support the economic activities of rural women through a line of credit for productive purposes that would also provide technical assistance. In addition, it would perform much-needed advocacy functions in favor of poor female producers and entrepreneurs in the rural sector.

To offset the significant losses in female employment in the agro-export sector, the donor community and national governments should consider the creation of a short-term rural works or minimum employment program targeted to women in the affected areas.

Building women's leadership. The post-disaster experience presented in this report highlights the important role women and women's organizations can play in recovery plans. To maximize their contribution, women's leadership roles need strengthening throughout the region. Programs like PROLEAD (the IDB Program to Support Women's Leadership and Representation), can be used to pursue this objective, and should be replicated throughout Central America