

# Learning Lessons from Disaster Recovery

The Case of Honduras

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The World Bank

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## Acronyms and Abbreviations

AHMON	Association of Honduran municipalities
ASONOG	Honduran association of NGOs
CABEI (BCIE in Spanish)	Central American Bank for Economic Integration
CEDAC	Centro de Diseño, Arquitectura y Construcción (Honduran NGO)
CEPREDENAC	Central American Natural Disasters Prevention Center
CIDA	Canadian International Development Agency
CODELES	Local Development Committees
COMAL	Honduran NGO
COPECO (Nacional), CODER (Regional), CODEM (Municipal), and COPEL (Local)	Permanent Commission for Contingencies
CRE	Spanish Red Cross
CRS	Catholic Relief Services (US NGO)
DFID	Department for International Development (UK)
DMP	Disaster Management Program
ECHO	European Community Humanitarian Office
ECLAC (CEPAL in Spanish)	Economic Commission for Latin America and the Caribbean
FHIS	Honduran Social Development Fund
G-5 (subsequently G-15 and G-19)	Group of five major donors (subsequently expanded)
GDP	Gross Domestic Product
GNI	Gross National Income
GOAL	Irish NGO
HIPC	Highly Indebted Poor Countries
IDB/IADB (BID in Spanish)	Inter American Development Bank
IDA	International Development Agency
IMF	International Monetary Fund
INGO	International NGO
INTERFOROS	Honduran association of NGOs
JAICA	Japanese Agency for International Cooperation
NGO	Non-Governmental Organization
NINGO	National Non-Governmental Organization
OECD-DAC	Development Assistance Committee of the Organization for Economic Cooperation and Development
PAHO (OPS in Spanish)	Pan-American Health Organization
SDC (COSUDE in Spanish)	Swiss Development Cooperation
SETCO	Technical Secretariat for Cooperation (international aid/cooperation)
SIDA	Swedish International Development Agency
SOPTRAVI	Secretariat for Public Works, Transportation and Housing
UK	United Kingdom
UN	United Nations
UNAT	Technical Unit (of the Honduran Presidency)
UNDP	United Nations Development Programme
US HUD	United States Department of Housing and Urban Development
USA	United States of America
USAID	United States Agency for International Development
USGS	United States Geological Survey
WB	World Bank



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## Preface

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This report summarizes the findings of a Honduras country case study, which is part of a ProVention Consortium initiative aimed at learning lessons from recovery efforts following major natural disasters. The other four country case studies – on Bangladesh, India, Mozambique, and Turkey – are also being issued as stand-alone reports. A synthesis report summarizing the findings of the review, and drawing out similarities and differences between the different experiences of recovery, is also being published. The ProVention Consortium is an international network of public, private, non-governmental, and academic organizations dedicated to reducing the impacts of disasters in developing countries. The activity was managed by the World Bank, and benefited from the guidance and conceptual inputs of a number of ProVention partners.

The key purpose of the lessons learning review was to identify lessons learned and good practice, how these lessons can be replicated, as well as how constraints to good practice can be overcome. The studies examined four main areas: policies related to disaster recovery/management; systems for disaster recovery; resources for recovery; and impacts of recovery efforts. The study team for this initiative consisted of: Alcira Kreimer and Margaret Arnold (co-task team leaders for the activity) of the World Bank's Hazard Management Unit, formerly the Disaster Management Facility; Tony Beck (lead consultant, India and Bangladesh desk reviews); John Telford (Honduras country mission and dissemination report); Peter Wiles (Mozambique country mission and Turkey desk study); and, Jonathan Agwe, María Eugenia Quintero, and Zoe Trohanis (research, administrative support, and editing). Margaret Arnold and Alberto Harth also participated in the Honduras country mission. Kerry Selvester, Lourdes Fidalgo, and Isabel Guzman of the Food Security and Nutrition Association, Maputo, carried out the Mozambique community survey. The Disaster Mitigation Institute (DMI), Ahmedabad, carried out the India community survey under the direction of Mihir Bhatt. Alberto Harth supervised the Honduras community survey, which was carried out by ASONOG, and in particular María López. Professor Nurul Alam of the Department of Anthropology, Jahaniar Nagar University, Dhaka, wrote a background paper for the Bangladesh desk review. Professor Polat Gulkan of the Disaster Management Research and Implementation Center, Middle East Technical University, wrote a background paper for the Turkey desk review.

The guidance and support of the ad hoc committee that supervised the review is deeply appreciated: Margaret Arnold (World Bank), Yasemin Aysan (UNDP), Mihir Bhatt (DMI), John Borton (independent consultant), Eva von Oelreich (IFRC), Fenella Frost (DFID), Alberto Harth (CIVITAS), Alcira Kreimer (chair, World Bank), Ronald Parker (World Bank), David Peppiatt (ProVention Consortium), Aloysius Rego (ADPC), Sálvano Briceño, and Helena Molin Valdés (ISDR).

Inputs for this report have come from a variety of sources. We would like to thank all the interviewees for their time, knowledge and insights. Second, the members of the mission would like to acknowledge the support from the ASONOG team who conducted the community survey. Third, the logistical support received from the World Bank office in Honduras was of great assistance.

Thanks also go to a number of World Bank staff who supported this initiative and provided valuable feedback on the Honduras country study: Caroline Anstey, Jane Armitage, D. M. Dowsett-Coirolo, John Flora, James Fitz Ford, Maryse Gautier, Arnaud Guinard, Joseph M. Owen, Maryvonne Plessis-Fraissard, M. Vitor Serra, Nemat T. Shafik, and Tova Solo.

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Funding for the study was provided by the World Bank's Hazard Management Unit, the United Kingdom's Department for International Development, and the Norwegian Ministry of Foreign Affairs under the umbrella of the ProVention Consortium. Their generous support is greatly appreciated.

## Executive summary

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The Honduras study was conducted during September and October 2002 as part of the lessons learned after major natural disasters review of five countries, carried out by the ProVention Consortium. It comprised a field mission and a community survey. This is the first review of recovery in Honduras that examines all sectors.

Hurricane Mitch was an exceptional event. It hit Honduras (and other areas of Central America, especially Nicaragua) from 25 October to 1 November, 1998. The hurricane remained static over the isthmus for days, resulting in the largest natural disaster experienced in Honduras in recent memory. Honduras was particularly vulnerable to its effects because of environmental degradation (such as deforestation), rapid population growth, inadequate infrastructure (especially for flood management), and massive disparities in the distribution of wealth, which resulted in extremely vulnerable living conditions for the poorest. Economic losses were estimated at some US\$4 billion. The country was vulnerable and unprepared in terms of policy, systems, and resources for rapid recovery.

### **Policy**

A policy of "all aid is welcome" was adopted, which resulted in a supply driven response to the recovery phase (i.e., the recovery was driven largely by what was offered). A demand driven process would have been preferable. Responses should be based on needs and not merely on what aid is available. No clear criteria existed to determine who had been affected by Mitch, to what degree, and therefore who might be eligible for state and/or international assistance. Criteria for deciding on interim versus permanent solutions, be it for energy restoration, water drainage or housing reconstruction, have also been lacking. Access to appropriate land for reconstruction was a major problem. No legal framework has existed for enforcement of planning and construction standards. In 2002, a draft legal framework for emergencies, spatial planning and a construction code were prepared, with the support of donors.

### **Systems**

National coordination for recovery was weak. Countrywide needs and recovery project mapping has been inadequate. The presence and activities of NGOs in municipalities was determined on an ad hoc basis. Monitoring was also piecemeal. The government has shown a low rate of execution for repairing or constructing services for new housing. The rotation of staff in government bodies, especially following the recent change in government, has resulted in a loss of institutional experience and memory. The municipal and community level has been key in the recovery phase. The capacities of municipalities varied widely, however. While most were chronically weak, some displayed greater capacity and were able to respond in the absence of external assistance. Municipalities and communities required greater access to and authority over resources.

The oft repeated need to decentralize must be balanced against the need for centralization, however. There is a need to strike a balance between what tasks are best centralized and what can and should be decentralized. For instance, broad, flexible standards need to be set and enforced at a *central* level. These should be adapted to regional, municipal, and community needs and preferences (e.g., housing design in accordance with preferences of beneficiaries, especially women).

While the coordination support role by the UN was weak, the donor G-5, subsequently G-15 mechanism, is considered to be a model in that it achieved a significant level of discussion, networking, information exchange, and division of tasks and responsibilities. Nonetheless, coordination in the group was mainly limited to bilateral donors, and competition and duplication was evident among many international agencies. International recovery efforts worked best where international agencies already had a presence in the country, since they knew partners and the local context. Some international organizations arrived with little or no prior experience in the country, and with staff unable to speak Spanish.

The quality of the work of many NGOs has been inadequate. Many reported that this was their first involvement in housing reconstruction. Sub-standard work and an absence of socio-economic and environmental assessments were common. Many INGOs, and even large national NGOs, acted more as channels of funding than direct implementers of projects. Most INGOs did not operate *systematically* at the *grassroots level* in Honduras.

### **Resources**

Direct implementation by donors has been due to a perceived shortage of national capacity, a desire to retain financial control, and a desire to benefit from visibility. It also reflects a broader international trend to move away from multilateral channels and mechanisms. Actual construction was generally carried out by Honduran companies and staff, often under the supervision of donor technical experts.

The majority of the external funding was time-limited (under, for example, emergency reconstruction instruments). This occurrence, along with competition for donor visibility, has frequently resulted in rushed projects. Conditions set for some major international loans were excessive. Financial control overlapped from one donor to another and with national control mechanisms. Multiple audits were, for instance, required by donors of the same broad activities by the same ministries. Likewise, separate project management units were established by different donors within the same government offices.

Mitch pushed donors to pay more attention, temporarily, to development programs for Honduras. It remains to be seen whether qualification for HIPC debt relief will provide continued access to development resources. Donors frequently apply separate aid instruments (e.g., funding budget lines) through separate administrative structures, under separate management, by separate staff, based in separate physical locations. As a result, ongoing development programs have rarely been *integrated* with reconstruction or recovery efforts, and vice versa.

### **Livelihoods**

Interviews indicate that, as a rule, individual families have not recuperated their losses in property and savings that were used up during the disaster. Reinvigorated social and family networks allowed groups to unite in the face of economic, social, and personal losses. People's own skills, efforts, and resources, based on family remittances from abroad, family or individual labor and savings, and/or standard rate bank loans, were probably the main source of family support during the recovery period.

While macro-indicators provide mixed conclusions, interviewees believe they are worse off now than prior to the disaster. Interviewees at all levels reflected this conclusion. International trade conditions, in particular, have worsened. Worldwide coffee, banana, sugar, and basic-grain prices have plummeted. Drought continues to have a major impact, especially in the West. Interest rates hover at around 30 – 40 % for personal borrowing.

The agricultural and livestock sectors were among those most affected. Few positive experiences of recovery were encountered. The majority of the aid was oriented towards the restitution of basic grains or the replacement of lost animals, even if it led to continued deforestation of mountainsides. In the urban sector, no initiatives for employment creation were found.

### **Impact**

The Stockholm Conference set transformation, not just reconstruction, as the objective for the recovery phase. Transformation was to happen under five headings: transparency and good governance; ecological and social vulnerability; decentralization and local development; and trade and migration. In small ways, change for the better is evident. In none of these agenda items, however, has there been significant transformation. The objective was probably unrealistically ambitious for a country in crisis.

Perceptions of high levels of corruption were repeatedly highlighted to be of major concern. They were invoked as a reason for direct involvement of bilaterals and NGOs in reconstruction activities.

Physical reconstruction of infrastructure and housing has been the most visible legacy of the post-Mitch experience. Where successful, contributing factors were: people's own skills, efforts, and resources (e.g., based on family remittances from abroad, family or individual labor and savings, and/or new standard rate bank loans); the large influx of international funds; the integration of physical reconstruction with other socio-economic and cultural facilities and infrastructure (jobs, child-care, schools, community, recreation and religious facilities, shops, transport and access routes, etc.); appropriate consultation with and involvement of communities and families; and use of high quality resources, both human and material (e.g., engineers and construction materials such as steel).

Many infrastructural and housing needs still remain to be met, however. Hundreds of people remain in temporary shelter. Additionally, the quality of the reconstruction work has been varied, often seriously inadequate. Appropriate consultation with beneficiaries often did not take place, resulting in inappropriate programs. The public at large did not receive regular, clear and unequivocal information on their entitlements to assistance and how to access support. Large housing resettlement projects in Tegucigalpa, such as those developed in the Amaratéca Valley, were still uninhabited and unserved (without sanitation or paved road and footpaths, for instance) four years after the event. People have relocated onto hazardous sites or back to flood damaged areas.

Positive steps in risk management have been taken. Nonetheless, without profound changes in a wide range of areas such as urban planning and political culture, long-term risk management and vulnerability reduction will remain weak.

### ***Good practices***

While by no means generalized, good practices were identified in a number of individual activities. These include:

- individual cases of impressive municipal leadership
- housing reconstruction projects, including:
  - the integration of physical construction and socio-economic and cultural aspects
  - community led housing projects
  - self-help construction
  - follow-up project reviews in order to make projects more sustainable
  - relocation and land deed management by the community
- national NGO coordination, social audit of aid efforts, advocacy and organization
- G-15 bilateral coordination and the Stockholm Conference
- donor flexibility
- preparation and training for donor staff

### ***Main lessons and recommendations***

The principal lesson from this study is that recovery is essentially a development issue. Recovery is inextricably intertwined with poverty and the vulnerability of the affected state and communities before, during, and after the disaster. If we are serious about recovery, we must be serious about development. If we are serious about development, however, we may not need to be so serious about recovery. Good recovery and development are both built on the same basic principles. What hinders development also hinders recovery. If you remove constraints to one then you also do so for the other. Rather than pumping resources frantically once disaster hits, governments and donors should work to remove the constraints to development, thus reducing the risk of a disaster in the first place, and in the event of a disaster, accelerating appropriate recovery. Honduras required, for example, that the Stockholm agenda for transformation be an agenda for development before, during, and after Mitch. In fact, transformation was an unrealistically ambitious objective during the recovery phase. Many recovery project deadlines were unrealistically short.

First, issues *during* post-disaster recovery cannot usefully be separated from the broader dynamics of a society prior to, during, and after a disaster. For most Hondurans consulted, it was strange, if not meaningless, to

attempt to extract lessons on post-Mitch recovery from broader realities in Honduras. While certain recovery strengths and good practices have been identified, these have been dwarfed by the immensity of the weaknesses evident in the Honduran developmental process. These include ever-deepening gaps in the distribution of wealth; the catastrophic collapse of international commodity prices; persistent drought in Western Honduras; the chronic shortage of gainful employment; the impact of price increases in and privatizations of basic services such as water; woefully inadequate land distribution and urban-planning laws and practices; structural fragmentation of the international aid community (both intra and interagency); public skepticism regarding the honesty of the ruling class; high levels of external debt and, crucially, the chronic weakness of the state and most communities to deal with these overwhelming realities.

Second, lessons on recovery inevitably lead back to actions that were, or should have been, taken *prior* to the disaster. The single most important element determining the quality of recovery initiatives has been the quality of the pre-disaster development process, namely to what extent communities, society, and the state had remained *vulnerable* to the effects of Mitch. The inadequacy of risk reduction and risk management measures as *integral* components of the developmental process was clearly evident.

Third, good recovery practices (see above) were generally found to reflect basic principles of good development practice, albeit applied within a shorter timeframe. Examples include the integration of physical reconstruction with other aspects of human development, such as access to employment, recreation and cultural activities, consideration of differences in age, ethnicity and gender, and meaningful consultation and participation of communities. *Existing* development plans obviously need to be reviewed after a major disaster. They should form the starting point for any recovery efforts, however, rather than be ignored, as was all too often the case in Honduras.

*Specific conclusions and recommendations on recovery should be considered in light of this overriding lesson.*

Broad recommendations for the two key target audience groups, potentially affected governments and donors, include the following (details on which can be found in the relevant chapter at the end of the report):

- Recommendations for donors cover the need for coordination, flexibility, and greater integration of aid policies and structures. Joint national-international consortia are also put forward as possible options for addressing the overwhelming use of external resources in reconstruction efforts.
- Recommendations for governments of potentially affected countries cover a wide range of aspects, given their central role in recovery. They include the need for: strong state coordination and management, balancing centralization and decentralization, transparency and information management, effective urban planning and special powers and state monitoring and conditioning of international aid.

The need was also noted for multilateral agencies to continue to assist affected states in the preparation of appeals and international donor conferences. The development of guidelines regarding mutually supportive relationships between INGOs and national NGOs (as opposed to mere sub-contracting of national counterparts).

Finally, it is worth repeating that basic principles for all actors underline the need to approach recovery as an issue of development, particularly the integration of risk reduction and management approaches within that process. The need for transparency and equity is also highlighted for all actors.



## **SECTION I: HONDURAS COUNTRY CASE STUDY**

## Chapter 1.

# Background

### 1.1 Introduction to Honduras

Honduras is the third poorest country in Central America with per capita income of US\$860 in 2000. Over half of its population lives in poverty, one third in extreme poverty. Its economy is one of the least developed in Latin America, and the country is heavily dependent on the export of coffee and bananas. Successive Governments have tried to diversify the economy, with little success, and economic reform has generally been inconsistent.<sup>1</sup>

**Table 1.1: Honduras – Key indicators for 2000**

**Population:** 6.4 million (estimated to reach 10.7 million by 2025). The vast majority are mestizos of mixed European and indigenous ancestry, with a five percent black minority, mostly along the coast. Garifunas are descendants of fugitive slaves and indigenous peoples and define themselves as an indigenous group. The majority are Christians, 90 percent of which are Roman Catholics and 10 percent of which are Protestants.

**Climate:** Tropical and sub-tropical, with a wide range of daily temperatures in the mountainous region, cooler than those in the low-lying areas. Winter rains between May to October, with the Caribbean coast being the most humid.

**Surface area:** 112.1 thousand sq. km

**Population per sq. km:** 57.4

**Population growth:** 2.5 %

**Life expectancy:** 63.2 years male, 68.8 years female

**Population below national poverty line:** 54%

**GNI per capita:** 860 US\$

**GDP:** 5.9 billion US\$

**Infant Mortality General:** 33 per 1,000 live births

**Maternal mortality ratio:** 110 per 100,000 live births

**Illiteracy:** 26.1 percent male, 25.9 percent female above 15 years

**Access to basic health care:** 40 percent

**Access to safe water:** 90 percent

**Human development index value:** 0.634 (1999)

**Defense budget:** Estimated \$35 million

Sources: *World Development Indicators Database 2002; AlertNet 2000; The State of World Population 1999, UNFPA; Human Development Report 2001, UNDP.*

Honduras has public debts amounting to over 60% of its GDP. By the end of 2003, Honduran authorities estimate that the total public debt will be some US\$4,300 million (some \$170 million internal, and the rest

<sup>1</sup> Joint report on structural adjustment E/CN.4/2000/51, 14 January 2000, COMMISSION ON HUMAN RIGHTS, Fifty-sixth session, ECONOMIC, SOCIAL AND CULTURAL RIGHTS, Note by the Secretariat.



external). This amounts to almost US\$717 per head of population. Honduras has recently been included in the Highly Indebted Poor Countries (HIPC) initiative and stands to be pardoned some US\$738 million.<sup>2</sup>

Below is a quote from a United Nations Human Rights Commission report on the difficulties facing Hondurans in their quest for debt pardon:

“...since 1994, on average, Honduras has been paying \$300 million in debt service (annually), covering both principal and interest. In 1998, for example, (the) total debt payment was \$300.5 million. Of this amount, \$190.4 million (63.4 percent) were for the multilateral (debt), and \$106 million (35.5 percent) for the bilateral debt.”<sup>3</sup>

This situation is further compounded by the virtual collapse of coffee prices over recent years. In 2000-2001, Honduras earned US\$345 million from coffee. This figure dropped to US\$167 million a year later. The total trade deficit for 2002 is estimated at US\$1,400 million.<sup>4</sup> These macro-economic realities have had profound implications for the recovery phase. Despite the availability of huge aid, the economy remains extremely weak, arguably even weaker than prior to Mitch. Root causes of economic vulnerability have not been addressed. In many cases, it was difficult, if not impossible, to distinguish the impacts of Mitch from these broader aspects.

## 1.2 Disasters affecting Honduras

Honduras has repeatedly suffered from natural disasters (as shown in the annexes). While seismic movements are common, devastating earthquakes have been rare. While movements up to 7.4 on the Richter scale have been recorded (1956 in the West of Honduras), most movements have been on a much smaller scale. In 1999, for example, 800 seismic movements were recorded in Honduras, 72% of which measured at or below 3.5 on the Richter scale.

Hurricanes and tropical storms have been the main disaster events. The north of the country has been the main area affected. Flooding has been the most common event, affecting houses, roads, bridges, livestock, and cultivated land in the relatively flat coastal areas and river flood planes. The following table shows the main events by year since 1969.

**Table 1.2: Main flooding events in Honduras**

Event	Date	Where
Hurricane Francelia	1969	North, central area and West
Hurricane Marco	1969	Santa Bárbara, Cortés Yoro, Atlántida, Colón (More than 80,000 families affected)
Hurricane Fifi	1974	Affected the whole country (8,000 deaths, 100,000 affected, losses of US\$200 million)

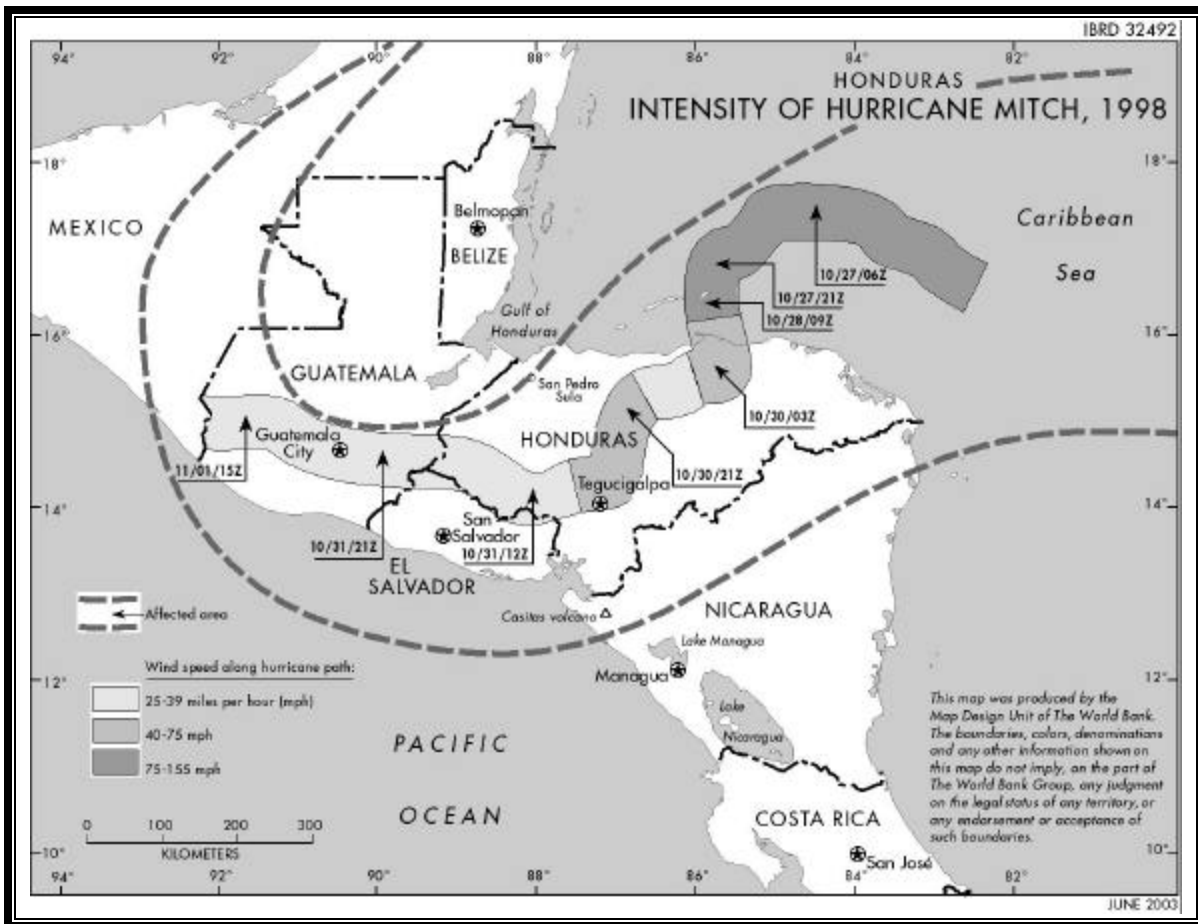
<sup>2</sup> Central America commercial weekly newspaper, Moneda, P. 14, 23 – 27 September, 2002 which cites as its source the Consejo Monetario Centroamericano.

<sup>3</sup> Joint report on structural adjustment, E/CN.4/2000/51, 14 January 2000, COMMISSION ON HUMAN RIGHTS, Fifty-sixth session, Item 10 of the provisional agenda, ECONOMIC, SOCIAL AND CULTURAL RIGHTS, Note by the Secretariat.

<sup>4</sup> El Heraldo newspaper, Tegucigalpa, 28 September, 2002 p.15.

Hurricane Gilberto	1988	The North
Hurricane Hugo	1989	The North
Tropical Storm Gert	1993	North, central area and South
Tropical Storm Bret	1993	North, central area and West
Hurricane Mitch	1998	Impacted entire country, as described in this report
Tropical Storm Katrina	1999	North and North West, 34 dead, 15,875 evacuated, 116 houses destroyed, 1,428 houses damaged, 25 bridges and passes destroyed and 16 damaged
Tropical Storm Michelle	2001	North and North West, 7 dead and 14 missing, 25,768 evacuated, 123 houses destroyed, affected 62,557, houses damaged 1,395, 48 bridges and river passes destroyed and 14 damaged

### 1.3 Map of Honduras



Almost every region of the country was seriously affected. Lower-lying areas and river valleys were, as a rule, more affected than mountainous areas. The following were particularly affected areas: the North Coast (including San Pedro Sula, El Progreso, La Ceiba), the Choluteca region in the south, and Tegucigalpa.

### 1.4 Introduction to the review

This country report forms part of a five-country review of lessons learned from recovery after major natural disasters. The countries covered in the review are Bangladesh, Honduras, India, Mozambique, and Turkey. Recovery is defined for the purposes of the review as (Tierney 1993: 1-2):

Longer-term efforts to (1) reconstruct and restore the disaster-stricken area, e.g. through repairing or replacing homes, businesses, public works, and other structures; (2) deal with the disruption that the disaster has caused in community life and meet the recovery-related needs of victims; and (3) mitigate future hazards.

In terms of time scale, the recovery period is approximately six to 24 months after the disaster.

The review stems from the need for a greater understanding of the ways in which the recovery process takes place, both how the affected population responds, how governments, donors, the UN system, and NGOs intervene, and the connection between these two levels of response.

Five countries were selected for the review to ensure broad geographical representation and to include a number of disaster types, countries with a range of development experience, and a variety of responses.

The review has aimed to be representative, to include some of the most important disasters of the last few years, and to draw generic findings from across the five country studies into a synthesis report, which will be published in 2004.

The review as a whole has been managed by the ProVention Consortium and funded by the the World Bank, the United Kingdom's Department for International Development (DFID), and the Norwegian Ministry of Foreign Affairs. The ProVention Consortium is a global coalition of governments, international and civil society organizations, academic institutions, and the private sector, aimed at reducing disaster impacts in developing countries. The Consortium functions as a network to share knowledge and connect and leverage resources to reduce disaster risk. It focuses on synergy and coordination so that efforts and benefits are shared.

The main objectives of the Consortium are:

- To promote a culture of safety through education and training among leaders and citizens of developing countries;
- To support public policy that can reduce the risk of natural and technological disasters within developing countries;
- To support pilot projects and to disseminate information about "best practices" that have been proven to mitigate the scope and frequency of disasters; and
- To develop governments' ability to minimize disasters and to respond effectively when they occur.

Drawing on both long-term discussion with ProVention Consortium partners and a background paper (ProVention Consortium 2002), it was decided that the focus for the review would be lessons learned and good practice, intended to be of use to the donor community and governments in developing more effective policies and procedures and in constructing future disaster programs. The review also intends to fill a number of policy and program -related gaps in knowledge in relation to the recovery process. Within this framework, areas of inquiry for the review were defined as follows:

1. The comparative processes of recovery;
2. Lessons learned in the policy and administrative areas;
3. Community and individual responses to vulnerability; and
4. The match between external intervention and internal response.

## 1.5 Introduction to the Honduras country case study

### *Timing and team*

The Honduras study was conducted during September and October 2002. It comprised a field mission by two consultants (one from El Salvador and one from Ireland) and one World Bank official from Washington. The mission to Honduras took place from the 26<sup>th</sup> of September to the 14<sup>th</sup> October 2002.<sup>5</sup>

### *Method*

This case study used the following method:

- A background documentary review.
- On-site observations in Honduras of affected areas and of recovery projects. These were carried out in Tegucigalpa (which was heavily affected), in the West of Honduras (in conjunction with the

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<sup>5</sup> Margaret Arnold, World Bank, Washington; Alberto Harth, consultant and former World Bank official, El Salvador; John Telford, consultant, Ireland; and ASONOG, Santa Rosa de Copan, San Pedro Sula and Tegucigalpa, Honduras.

community survey), and areas near the North Coast city of San Pedro Sula (areas and communities severely affected by flooding).

- Semi-structured interviewing of key stakeholders involved in the recovery process in Honduras, including members of the current and the past governments, staff of international bodies, and members of Honduran civil society (such as academics). The list of those interviewed is provided in the annexes.
- A semi-structured community survey of affected communities was conducted by the association of Honduran NGOs, ASONOG. The focus of this survey was on the perspective of the affected population, including livelihood strategies. (Details of the method used in this survey are provided in section two).
- A half-day workshop involving national and international NGOs operating in recovery programs in Honduras.
- A review of newspapers and current affairs media in Honduras.

This mix of methods was chosen to give a holistic perspective on recovery of government, donors, UN, NGOs, and the affected population.

## Chapter 2.

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# Findings

### 2.1 Overview

Central America is renowned for its vulnerability to natural events - seismic and volcanic activity, hurricanes, forest fires, and most recently, drought. Environmental degradation (especially the loss of hillside pine forests due to a variety of causes, including extensive logging and slash and burn agricultural practices) has increased vulnerability, as was clear in 1998 when Hurricane Mitch resulted in massive flooding and landslides.

Hurricane Mitch hit Honduras (and other areas of Central America, especially Nicaragua) from 25 October to 1 November 1998. The hurricane moved inland and remained static over the isthmus for days, resulting in the largest natural disaster experienced in Honduras in recent memory.

Rapid population growth, combined with massive disparities in the distribution of wealth, has compounded this vulnerability. Emigration, to the USA in particular, has been one response by significant numbers of Hondurans. Emigration has resulted in remittances being a major source of income for Hondurans.

The immediate impact of the disaster affected over 1.5 million people, the highest on record for any disaster in Honduras, including:<sup>6</sup>

- 5,757 dead, 12,272 injured and 8,058 reported missing
- 441,150 people displaced (to relations or friends or to other temporary shelter: 1,375 collective centers were established)
- 4.2 million people lost access to running water (70% of the entire population).

Immediate response activities included search and rescue, emergency public health care, food, blankets, domestic items, temporary shelter distribution, and sanitation programs, including the disposal of human and animal remains. The distribution of potable water was a priority given the massive water shortage. Emergency sanitation activities were required given the damage to or loss of sewerage and drainage systems.

Health problems included gastro-intestinal infections, acute respiratory infections, dehydration, and injuries caused by the floods. Leptospirosis (spread by rodent urine), which had been virtually non-existent in the previous year, reappeared.<sup>7</sup>

Agricultural output dropped dramatically, as livestock were lost or drowned, and land was eroded, stripped of fertile soil, or covered in mud. Roads, hospitals, even prisons, were damaged or destroyed on a massive scale. The loss to the economy has been estimated at some US\$4 billion. Unemployment and migration increased as a result.

It is worth noting that while damage was all-encompassing, as analyzed later in the report, recovery efforts focused on physical reconstruction.

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<sup>6</sup> Based on COPECO sources, Honduras.

<sup>7</sup> Source: ECHO evaluation *Central America. Hurricane Mitch, Global Plan 1998 and 1999. Synthesis report-2000*, by Dr. Juan Luis Dominguez, 2000, which draws on the "Independent Evaluation of Expenditure of DEC Central America Hurricane Appeal Funds" report, March 2000.

Much of the Government's institutional infrastructure was damaged, including destruction of the Ministry of Education buildings and extensive damage to the Ministry of Finance.

Preliminary estimates<sup>8</sup> of damage and replacement costs prepared by UNDP and ECLAC estimate total direct and indirect damage of US\$3.6 billion. This was the equivalent of 74% of Honduras' 1997 GDP (there is considerable variation among estimates by different organizations). Reconstruction costs are estimated at US\$5 billion (see table 2.1).

**Table 2.1: Summary of damages and reconstruction costs (US\$ million)**

	<b>Direct</b>	<b>Indirect</b>	<b>Total</b>	<b>Replacement</b>
<b>Total</b>	<b>2,177.4</b>	<b>1,461.1</b>	<b>3,638.5</b>	<b>4,987</b>
Social sectors	305.4	719.4	1,024.8	580.5
Housing	259.1	675.3	934.4	484.0
Health	25.6	36.7	62.3	64.5
Education	20.7	7.4	28.1	31.2
Infrastructure	347.6	164.2	511.7	713.2
Roads, bridges	314.1	140.04	54.1	571.4
Water/sanitation	24.2	7.2	31.3	118.6
Energy	9.3	17.0	26.3	23.2
Productive sectors	1,477.6	577.1	2,054.8	3,694.0
Agric./livestock/forestry	1,387.3	274.2	1,661.5	2,990.7
Manufacture	15.8	196.3	212.1	381.8
Trade, hotels	74.5	106.7	181.2	326.2
Environment	46.8	0.44	7.2	n.a.

*Source: UNDP/ECLAC, A Preliminary Assessment of Damages Caused by Hurricane Mitch, 10 December 1998.*

The resources pledged for post-Mitch programs are recognized as having been exceptionally high as compared to other countries suffering from major disasters.

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<sup>8</sup> Joint report on structural adjustment, E/CN.4/2000/51, 14 January 2000, COMMISSION ON HUMAN RIGHTS, Fifty-sixth session, Item 10 of the provisional agenda, ECONOMIC, SOCIAL AND CULTURAL RIGHTS, Note by the Secretariat.

Table 2.2: Donor indications of support at the Stockholm CG Meeting, 1998-2003.

Donor	\$M	Priorities
<b>Bilateral</b>	<b>1,078.4</b>	
France	33	Education, culture, infrastructure
Germany	72.4	Social and physical infrastructure
Italy	66.5	Community development, water/sanitation, import finance
Japan	62	Basic infrastructure, health (incl. water supply/sanitation), agriculture, housing
Netherlands	28.9	n/a
Spain	268.5	Infrastructure, education, judicial, legislature, security, culture, technical training
Sweden	99	Infrastructure, rural water and municipal development
USA	373.6	Health, education, private sector development, shelter, environment, forestry, disaster preparedness, judicial, accountability, (municipalities), HIV/AIDS prevention, tilling and feeder roads
Other bilateral	74.5	Housing, forestry, municipal water and transparency
<b>Multilateral</b>	<b>1,685</b>	
EC	142.9	Health, education, economic integration, democratic strengthening
NDF	20.4	N/A
WFP	81	Food Aid
IDB	730	N/A
IDA	702.4	N/A
Other Multilateral	8.3	Immunization
<b>Total Indications</b>	<b>2,763.4</b>	

Source: World Bank Honduras Country Assistance Strategy, 2000 Annex F P. 2 of 3, which gives as its source the IDB Report on Stockholm CG, June 30, 1999 and other donor inputs.<sup>9</sup>

<sup>9</sup> This excludes US\$346.8 million for regional programs, and US\$1,006.2 million where donors did not indicate a country allocation within Central America. It also excludes debt relief and write-offs.



Resources focus significantly on infrastructure. The relationship between debt and the Mitch disaster is addressed extensively in a UN Human Rights Commission report.<sup>10</sup>

At the Consultative Group meeting for Central America in Stockholm last May (1999), \$2.7 billion were pledged for emergency reconstruction of Honduras. ... A Central American Emergency Trust Fund was established by IDA in December 1998 at the request of several bilateral donors to which contributions are being made to help Honduras and the other hurricane-affected countries cover multilateral debt service payments. By September 1999, Honduras had received \$71.9 million from nine bilateral donors. Of this amount, \$70.5 million were paid out to the following creditor institutions: IDB (\$31.2 million), World Bank (\$33.3 million) and the Central American Bank for Economic Integration (\$6 million).<sup>11</sup>

In addition to the Emergency Trust Fund, the Paris Club of creditors granted Honduras in April 1999 a moratorium on debt service payments for the period 1999-2002. Yet, a year after the hurricane, Honduras is still awaiting significant reduction (approximately \$1.1 billion) in its external obligations under the HIPC initiative while it has taken an additional \$1.7 billion in new loans since the hurricane under the banner of disaster aid. Perplexed by the contradictory response of the donor community, the Economist magazine asked its readers: Does it make sense to give them disaster aid with one hand, while hindering recovery by insisting on debt service payments with the other (14 November 1998)? Needless to say, this is the current reality in Central America: debt service payment is "crowding out" funding for reconstruction, rehabilitation and poverty reduction.

This relationship underlines the fact that issues not directly related to a disaster may play a central role in determining the success of recovery efforts. Macroeconomic realities, especially debt and unfavorable international trade conditions, have overshadowed post-Mitch recovery efforts. Most concerns, even despondency, expressed by interviewees from widely diverse backgrounds reflect these negative economic realities. The inextricable link between development issues and recovery is again evident.

## 2.2 Impact

### *Physical reconstruction: visible but incomplete*

Physical reconstruction of infrastructure and housing has been the most visible legacy of the post-Mitch experience. Results have been mixed.

Major reconstruction has taken place. This has focused more on urban areas or inter-urban infrastructure than on rural areas. Examples include the bridge at Trujillo, the repairs to the Pan American highway and the many large bridge repair and reconstruction projects in Tegucigalpa. The government social fund (FHIS) alone has conducted 1,276 reconstruction/repair projects from the 15th February 1999 to date. FHIS officials highlight that through some 1,600 educational facilities projects, school "classes did not stop and not a single month of classes was lost." Likewise, national and international NGOs have managed thousands of projects.<sup>12</sup> When finished, the inhabitants of Ciudad España, in the Amaratéca valley will provide inhabitants with much improved housing.<sup>13</sup>

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<sup>10</sup> Joint report on structural adjustment, E/CN.4/2000/51, 14 January 2000, COMMISSION ON HUMAN RIGHTS, Fifty-sixth session, Item 10 of the provisional agenda, ECONOMIC, SOCIAL AND CULTURAL RIGHTS, Note by the secretariat, 2000.

<sup>11</sup> "Fuentes de Financiamiento Reembolsable y Respaldo al Proceso de Reconstrucción," presentation by Gabriela Nuñez de Reyes, Ministry of Finance, October 1999, p. 1, as quoted in the already cited Joint report by the Independent expert on structural adjustment, E/CN.4/2000/51, 14 January 2000.

<sup>12</sup> No single, comprehensive database is available detailing all these projects.

<sup>13</sup> Interviews with beneficiaries.

Where reconstruction was successful, contributing factors were:

- People's own skills, efforts, and resources (e.g., based on family remittances from abroad, family or individual labor and savings and/or new standard rate bank loans<sup>14</sup>)
- The large influx of international funds
- Programs that integrate physical reconstruction with other socio-economic and cultural facilities and infrastructure (jobs, child-care, schools, community, recreation and religious facilities, shops, transport and access routes, etc.)
- Appropriate consultation with and involvement of communities and families<sup>15</sup>
- Use of high quality resources, both human and material (e.g., engineers and construction materials such as steel<sup>16</sup>).

Many infrastructural and housing needs still remain to be completed, however. The national housing deficit is estimated at 200,000 units,<sup>17</sup> albeit, not all due to Mitch. Hundreds of Mitch victims remain in temporary shelter, be it in Tegucigalpa,<sup>18</sup> Choluteca, or near San Pedro Sula.<sup>19</sup>

Road and bridge repairs, especially secondary roads, remain incomplete.<sup>20</sup> The quality of the reconstruction work has often been poor.<sup>21</sup> Several large resettlement programs (e.g., the 2,500 unit project in Choluteca or the Buen Pastor effort in Cofradia near San Pedro Sula) were less than successful due to inadequacies in terms of location, price, basic infrastructure, minimum standards, and unresponsiveness to the specific needs of beneficiaries.

Failures may be attributed to a variety of factors:

- The state was not able to generate and ensure adequate standards for recovery to be applied across projects and geographical areas. An effective national, regional and municipal planning authorization and construction inspection capacity does not exist. Even state bodies differed widely in the criteria and standards they applied in the reconstruction of, for example, bridges.<sup>22</sup>
- The quality of the NGOs that implemented housing projects has frequently been inadequate. Many reported that this was their first involvement in housing reconstruction. Sub-standard work and an absence of socio-economic and environmental assessments frequently resulted.<sup>23</sup>
- Self-help projects were often poorly managed, unsupervised, and ineffective. Families and communities were often left to fend for themselves in, for example, their efforts to reconstruct their

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<sup>14</sup> See community survey interviews and ad hoc consultations with individuals in Tegucigalpa.

<sup>15</sup> See community survey and interviews with donor and INGOs.

<sup>16</sup> Direct observation of works and interviews with, inter-alia, international and national civil engineers.

<sup>17</sup> *El Heraldo* Honduran national newspaper, Sunday 29<sup>th</sup> September.

<sup>18</sup> In the Trebol camps, or the neighboring Betania community.

<sup>19</sup> Los Poterillos, colonia Las Arobas.

<sup>20</sup> e.g., in Yoro, in the North, as reported in *El Heraldo*, Honduran national daily newspaper, September 29<sup>th</sup>, p.9 and *Honduras This Week*, English language weekly newspaper, October 5, 2002, p. 1 and 3.

<sup>21</sup> As was the case for a 44 Km. stretch of the Pan American highway, North of Tegucigalpa, as described in an interview with an inspecting engineer.

<sup>22</sup> This was the case for FHS and SOPTRAVI, the former conducting more rapid but less high quality reconstruction than the latter (source FHS staff).

<sup>23</sup> Interviews with international NGOs and on-site observation.

homes, with little or no technical or financial support from anyone, be it from the state, civil society or international agencies. Alternatively, self-help in some cases amounted to no more than a token presence of beneficiaries, while construction was carried out by paid companies and labor.

- There has been a perceived shortage of adequate reconstruction capacity (e.g., sufficiently large construction companies and adequate numbers of construction engineers and technicians) in Honduras, given the immensity of the reconstruction task. This perception is shared by both international and key national interlocutors. Some argue, however, that the problem was more an inability to identify existing capacities than the absence of those capacities.
- Relocation was badly planned. A key issue in this regard is access to land for reconstruction. A perceived shortage of land in Tegucigalpa was a major blow to the housing reconstruction process. It resulted in, for example, hundreds of houses being built in the Amaratéca valley, at one hour's distance by bus from Tegucigalpa. The areas in question had not been prepared for urbanization. Problems of access and services, such as water and sanitation, combined with environmental risk (from nearby gas works and other industries), have all been important drawbacks.
- Registration of title deeds for new houses has been a serious difficulty in the reconstruction process. It is estimated that as many as half the new houses have not been adequately registered.

### ***Economic recovery has not taken place***

While macro-indicators provide mixed conclusions, no interviewee at any level suggested that the people of Honduras are economically better off now than they had been prior to the disaster. On the contrary, interviewees at all levels suggested the opposite.

International trade conditions, in particular, have worsened. Worldwide, coffee, banana, sugar, and basic - grain prices have plummeted. Drought continues to have a major impact, especially in the West. Interest rates hover at around 30 – 40 % for personal borrowing.

Economic recovery from the *direct* impact of Mitch (e.g., the recovery of agricultural areas affected by viruses, mud damage, and reduced physical access), has also been slow. Interviews indicate that individual families, as a rule, have not recuperated their losses in property and savings that were used up during the disaster. Economic recovery programs were few-and-far between, compared to the proliferation of physical reconstruction projects. While clear explanations are not available, interviewees suggest that the need for physical reconstruction was more immediately evident, projects were more visible and more easily managed, and results more rapidly measurable.

The external public debt has increased dramatically by US\$1.5 - 5.5 billion. Approximately half of the US\$3.6 billion Stockholm pledges were in the form of loans. Even with qualification for HIPC, debt reduction will amount to only some US\$500 – 900 million.

According to figures provided by an academic specialist, the budget deficit has gone up from 4.3 to 6.1% of GDP (and even 9.1%, depending on how calculations are made). The same source claims that corruption has had a massive negative impact. He observes that the multiplicity of control mechanisms has ironically increased the opportunity for corrupt payments (in order to circumvent the controls). Accusations of corruption have also been made to the study team by government officials, donors, media, the public, and NGOs. It should be noted, however, that despite his/her conviction that corruption was taking place, no interviewee provided hard evidence.

### ***Transformation has not taken place***

In line with the wishes of the presidents of the four most affected countries,<sup>24</sup> the Stockholm Conference<sup>25</sup> set *transformation*, not just reconstruction, as the objective for recovery. According to the Stockholm agenda for change, transformation was to take place regarding:

- transparency and good governance
- ecological and social vulnerability
- decentralization and local development
- trade
- migration

This objective was reiterated throughout the post-Mitch phase. For instance, "Reconstruction must not be at the expense of transformation" was the title of an announcement posted on relief web by the IDB on Oct. 12<sup>th</sup>, 1999, almost one year after Mitch. Similarly, a document hyperlinked on to that web page is entitled: *Central America After Hurricane Mitch: The Challenge of Turning a Disaster into an Opportunity*.

In certain aspects, change for the better is evident. One knowledgeable and experienced interviewee noted that:

"Single-female-headed households are the ones that benefited most from the reconstruction process. They were trained in self-help construction methods, and 70% of the housing reconstructed has been in the name of women" (e.g., in NGO records, though not necessarily in formally registered land titles).

Another interviewee, with extensive direct knowledge of municipal administration adds that:

"Women participate more than men in the communities, such as in the Garifuna areas" (an ethnic minority group inhabiting areas on the north coast).

Other alleged advances raised by interviewees:

- Honduras developed a strengthened management capacity and willingness to coordinate in emergencies (based on the realization that a single mechanism for coordinating all external assistance should be created in such cases).
- A sense of nationalism and unity emerged in the face of the emergency.
- Civil society gained experience and participated in the *Plan Maestro de Reconstrucción* (Reconstruction Master Plan).
- The government has realized it had to depend more on NGOs and on a broad consultation process with civil society.
- The media and authorities appear to have learned to report more accurately the seriousness of weather events.
- Donors realize they need to work more closely with specifically chosen local counterparts (similar to approaches applied by PAHO in supporting the Ministry of Health).

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<sup>24</sup> As expressed in their joint letter prior to the conference.

<sup>25</sup> May 25-28, 1999 meeting of the Consultative Group for the Reconstruction and Transformation of Central America held in Stockholm, Sweden.

- There is a general realization that vulnerability reduction needs to be integrated into all recovery programs. As an example, community preparedness has improved through the dissemination of risk maps for some of the communities affected (these were used during the Choluteca tsunami).
- Qualification for HIPC may have been accelerated and the PRSP strengthened through the post-Mitch process.

A number of interviewees pointed to the modernization of the disaster management system. It is no longer managed under the military on narrow civil defense lines. That said, COPECO is still weak in terms of its budget and overall capacity.

Certain civil society groups have either emerged or been strengthened during the Mitch process. INTERFOROS was created post-Mitch to conduct social audits of the actions of local mayors. While displaying the internal tensions inherent to NGO coordination,<sup>26</sup> it emerged bolstered by the resources and challenges made available in the recovery phase.

The ex-director of INTERFOROS recognizes that change has taken place, albeit limited:

“There is discussion now on the causes of poverty, while there had not been any before. This is new. This consciousness on the part of ordinary citizens is new. But this is still all at the level of debate, and discussion.”

Two INTERFOROS member organizations<sup>27</sup> have been invited by the World Bank to conduct monitoring of aspects of the poverty reduction strategy. ASONOG was also given as an example of an association of NGOs being strengthened as a result of the Post-Mitch experience. Other NGOs, however, virtually collapsed under the weight of unprecedented resources and demands.<sup>28</sup>

Disaster mitigation and prevention (DMP) programs have flourished. Government agencies (such as COPECO), NGOs, bilaterals, and multilaterals (both UN and multilateral banks) have all established DMP programs.<sup>29</sup> Training programs, materials dissemination, and awareness programs have been run countrywide, at central, regional, and community levels. Thanks to this proliferation, and based on the direct experiences of Mitch, risk management awareness has grown among the population at large.

It is widely recognized by interviewees,<sup>30</sup> however, that in none of these agenda items has there been *major* transformation. In the sobering words of a respected member of the G-15:

“Reconstruction more-or-less happened, but transformation has not. Security has deteriorated dramatically, poverty is increasing. The coffee crisis is more devastating than the drought. If we (donors) don’t see fundamental transformation we shall leave.”

Other sources echo this conclusion:

“Sadly little has changed since Stockholm ... implementation of the Stockholm Accords is still desperately needed.”<sup>31</sup>

It is probable that transformation was an unrealistically ambitious objective. Apart from global trade imbalances and deeply embedded social inequalities, timescales were also an issue. Many project

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<sup>26</sup>e.g., significant differences among member NGOs on the content and priorities of INTERFOROS initiatives.

<sup>27</sup> COMAL and the Mennonites.

<sup>28</sup> Interview, Siguatepque, with NGO director.

<sup>29</sup> e.g., the World Bank disaster mitigation project.

<sup>30</sup> e.g., interview with key members of the G-15, donor coordination group.

<sup>31</sup> P.62 Conclusions “Democratizing Development” Lessons from Hurricane Mitch, Viki Gass, WOLA ([wola@wola.org](mailto:wola@wola.org) and [www.wola.org](http://www.wola.org)).

deadlines in the Mitch recovery process were unrealistically short. The above menu for transformation covers aspects of development which in the most favorable of conditions would take decades to achieve.

While disasters may be opportunities for change, by their very nature they expose fundamental weaknesses – economic, social, political, and organizational. These became accentuated when, in particular, relocation of families and communities away from highly vulnerable areas became necessary. Problems of land availability and distribution, the absence of enforcement of construction codes, inadequate community consultations, and the weaknesses of international organizations in identifying local capacities and resources (e.g., for reconstruction) all highlighted the need for a less rushed approach.

As noted, perceptions of high levels of corruption were repeatedly highlighted<sup>32</sup> as a major, continuing weakness hindering the recovery process. Even government staff were overtly critical. In this respect, the *limited* involvement of the government in housing reconstruction is seen by some, including government officials, as positive. Despite their many weaknesses (see later in this report), non-governmental agencies and bilateral donor projects were perceived to be more transparent.

### ***Vulnerability reduction***

Positive steps in risk management have been taken. Housing reconstruction practices have improved in certain cases. Lessons have been learned, or good practices reinforced, such as the construction of houses on stilts, as in El Progreso, the Mosquitia, and on the North coast. The Honduran emergencies committee system<sup>33</sup> has been strengthened. Communities have become more integrated with the disaster and risk management institutions. A system of interrelated institutions is now emerging in Honduras, each with an internal emergency coordinator linked nationally to COPECO and regionally to the seven emergency offices. As a result, natural events subsequent to Mitch, such as tropical storm Michelle, have been managed markedly better than was the post-Mitch phase. Other positive developments have been the preparation of two important laws, one for risk management and the other establishing a construction code.

Nonetheless, the overall system remains relatively weak and vulnerability remains high. While awareness of risk is currently high, and concepts are well disseminated (in schools, by radio, in community events, etc.<sup>34</sup>), there is little evidence of actual *vulnerability reduction*. At the time of the mission, debates were raging over allegedly vulnerable new housing estates. Similarly, populations have moved back into locations where lodgings had been washed away. This is evident in the center of Tegucigalpa and also in the south of the country, on the Choluteca river. In many cases, houses were built with materials and in locations that run the risk of being affected by future flooding.

In some cases the ecological system is now more vulnerable. Rivers have changed their courses, and beds have been choked with sand and stones. Thus, flooding is now more likely. This phenomenon is compounded by deforestation. In the words of an expert:

“There will be more disasters, even if the people are more aware and systems are established. There is no culture of risk management in planning. For example, the drainage from palm-tree plantations is not constructed to (reach) the sea, they just take the water out of the plantations to adjoining land, making (those lands) more vulnerable. There is no special planning control on how and where to construct.”

Another noted that:

“real mitigation is not happening, such as flood insurance programs. Even risk mapping is very general and ill-defined in that flood areas may be identified, but not the frequency and maximum

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<sup>32</sup> In interviews with government and donor officials, NGO staff, and affected populations.

<sup>33</sup> COPECO (National), CODER (Regional), CODEM (Municipal), and COPEL (Local) network and related bodies.

<sup>34</sup> Examples include the pilot program through 5<sup>th</sup> and 6<sup>th</sup> grade teachers funded by the World Bank Mitigation Project, the training program developed for CABEI staff, and the inclusion of mitigation components in all CRS projects.

levels. We tag a little flood control element to individual projects, we draft a few laws, and restructure COPECO, but there is no real overall program. The main weakness is not to have taken a development approach to all these issues.”

A local expert adds that:

“the disasters cycle is getting shorter, we are more vulnerable, and losses are higher. The location of human settlements is increasingly vulnerable.”

The rotation of government staff, especially following a change of government, is a significant weakness in long-term risk management. This has a debilitating effect on key institutions.<sup>35</sup> Without profound changes in a wide range of areas such as urban planning and political culture, and long-term risk-management, vulnerability reduction will remain weak.

## 2.3 Policy

### *Supply driven*

As previously stated, a policy of “all aid is welcome” was adopted.<sup>36</sup> This resulted in a supply driven recovery phase (i.e., the recovery was driven largely by what was offered) rather than a demand driven process (i.e., that Honduras would plan clearly what should and should not be done and provided).

No clear criteria existed to determine who was affected by Mitch, to what degree, and therefore who might be eligible for what state and/or international assistance. Without such a basic requirement, coherent, nation-wide strategies and programs could not be established. This was compounded by the fact that the public at large did not receive regular, clear, and unequivocal information on their entitlements to assistance and how to access support. A clear and comprehensive mass-information campaign was required.

### *Land policies*

Access to appropriate land for reconstruction was a major problem. The sensitive issue of land shortages is thus described by one donor interviewee:

“Land was available for reconstruction (in the Tegucigalpa area), but it was controlled by vested interests.”

This statement has been supported by at least three other interviewees, two of whom claim to have first-hand knowledge. There was neither a generalized policy on land expropriation or land purchase at controlled prices (i.e., at prices below the inflated market prices generated after the disaster), nor was there a capacity to enforce basic urban planning standards.

A compounding factor has been that many houses were not registered or the registration was unclear, prior to the disaster. This continued to be the case in the reconstruction phase. A recent study<sup>37</sup> claims that title deeds have been issued for less than half of the estimated 85,000 houses reconstructed.

It was only in late 2002, after the new government took over, that a draft legal framework for emergencies (*ley marco*) was prepared in Honduras. Donor support has been significant in this respect. Several draft laws are now under discussion which should improve the sustainability of the recovery process (e.g., laws

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<sup>35</sup> In one notable case, the highly motivated and widely respected head of a key government agency was replaced, thus weakening the institutional capacity and memory of the agency concerned.

<sup>36</sup> Interviews with government officials, and a bilateral donor agency official.

<sup>37</sup> No agreed criteria for categorizing projects, and no central database existed during the reconstruction phase; thus, any such statistic may be quite approximate.

on building standards, spatial and urban planning, disaster management, water management, and forestry management).

Up to and including Mitch, government policy on managing natural disasters was based on a narrow response model. This model centered on the state emergencies entity COPECO. This body had been managed under the ministry of Defense, as a classical Civil Defense body. This approach changed post-Mitch. Now the accepted wisdom places disasters and vulnerability firmly within a development framework. COPECO is no longer under the military and, for instance, educational programs on vulnerability reduction are a significant part of their work.

### ***Construction standards and costs***

Enforcement of reconstruction standards did not take place at a national level. Nor were guidelines issued on target costs for different categories of housing. While this has now been done in the current government's *general* housing program (whereby different levels of housing assistance, mainly 'below market price' credit schemes are differentiated by cost), it had *not* been done for post-Mitch reconstruction.

Frequently, people moved onto hazardous sites. In the words of an interviewee;

“many agencies did not abide by the requirement to tear down old houses and so people moved back into or rented them, so an opportunity for disaster mitigation was lost.”

Few organizations conducted geological studies or risk analyses of prospective sites. Technical expertise was evidently lacking in the planning teams for such projects.

### ***Timeliness: speed versus quality***

A lack of clarity has existed regarding criteria for deciding on interim versus permanent solutions, be it regarding energy restoration or water drainage of housing reconstruction.

There is still concern in Honduras regarding the timeliness of assistance. Housing resettlement projects in Tegucigalpa, such as some developed in the Amaratéca Valley, remained largely uninhabited and unserved four years after the event. Reports have been received of similarly incomplete or sub-standard projects in Choluteca.

In addition, the majority of the external funding was time-limited (e.g., under emergency reconstruction instruments).<sup>38</sup> This has resulted in hurried projects, a significant number of which are either still incomplete, or less than adequate. The rush for visibility and/or funding deadlines resulted in hurried, low quality, or incomplete construction.

## **2.4 Systems**

### ***Community organization and consultation***

Broad consultations with communities and groups of beneficiaries are essential to ensure that actions and assistance are derived from locally-driven priorities. In-depth consultations with beneficiaries rarely took place, resulting in inappropriate programs.<sup>39</sup> The main constraints to community consultation, while rarely explained, appear to have included a lack of interest or sensitivity to its importance and feasibility. A lack of expertise and capacity may also have played a role, while a perceived need for speed was probably an overriding consideration. On occasion, consultations and involvement of beneficiaries were superficial and

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<sup>38</sup> Such as the US Congress limitation that funds be spent by Dec. 31, 2001.

<sup>39</sup> A notable case is the HABITAT housing project in Amaratéca valley.



ill-planned. A frequent complaint has been assessment fatigue.<sup>40</sup> Communities and individuals have denounced the practice of “consultation without follow-up action or benefit.”

Assistance at the local level was more efficiently used when there was some level of community organization prior to Mitch, such as the in the COMAL (NNGO) projects nationwide. When there was none, training and support were required in order for the assistance to be used effectively, as was post-completion monitoring and follow-up.

### ***The state was weak and unprepared***

#### **a.) At the national level**

As has been widely recognized by interviewees, including government officials, the state was unprepared in terms of policy, systems, and resources for rapid recovery. The Honduran state proved to be weak. Government leadership, organization, and overall capacity have been inadequate. The implementation capacity of entities such as SOPTRAVI (public works and transport ministry) was shown to be inadequate. Occasionally, individual leadership capacities compensated somewhat for an absence of preparedness. This was at both central and local levels. At a central level, individuals in key positions made a significant impact by dint of their personal presence and capacities.<sup>41</sup>

Serious overlaps, and widely differing criteria and standards could have been avoided if the Government had developed guidelines and conditions for assistance. Such conditions could have included, for instance, that foreign agencies have a previous knowledge of the country and that staff speak Spanish, or, at least, that they work with recognized local partners.

The presence and activities of NGOs in municipalities were determined on an ad hoc basis. For instance, ad hoc agreements were reached among NGOs not to enter a municipality which had already been “claimed” by another NGO.

Monitoring was also piecemeal. Government bodies, donors, and NGOs monitored recovery activities as they saw fit. This resulted in an absence of professional monitoring in many cases, resulting in the sub-standard work referred to in this report. Systematic monitoring of projects by a qualified central body, in support of local authorities, did not exist.

Coordination mechanisms were developed (and are still being developed in some cases) in an ad hoc fashion. Some worked relatively well. In general, however, national coordination for recovery was weak and ineffective. Resource tracking has been difficult in the absence of an adequate centralization of financial and project information. Separate databases existed in SETCO (Secretaria Técnica), the reconstruction technical unit UNAT, and SOPTRAVI. Countrywide needs and recovery project mapping has been seriously inadequate and duplicated. (A mitigation project funded by the World Bank is attempting to redress this major flaw). These problems, characteristic of the relief phase, continued on into the recovery phase.

The reconstruction cabinet involved a number of individuals who provided a degree of direction and leadership. Had it been developed more systematically as a key part of a more complete central coordination mechanism, it could have been much more effective. This would have required that it be formally linked to and supported by both the technical unit and the subsequently established project monitoring units. It would also have required a formal mechanism to integrate sectoral coordination (involving the ministries), civil society, and international coordination fora (such as the G-15 and international NGOs).

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<sup>40</sup> Interviews in Lempira and in the community survey.

<sup>41</sup> Two individuals, in particular, were repeatedly mentioned as having played key roles in organizing and channeling central government recovery activities

Line ministry preparedness could have mitigated the absence of strong central coordination. It is only as the result of G-15 effort, however, that sectoral working groups and permanent sectoral focal-points in line ministries were appointed.

The rotation of staff in governmental bodies, especially following the change in government, has had a debilitating effect on key institutions. Donor agencies and INGOs would appear to suffer from the same complaint, given that many key actors were well gone by the time of this study. This generic problem suggests that at the very least, better reporting and record keeping mechanisms are required to mitigate the effects of such rotations.

#### **b.) At the municipal level**

The municipal level has been key in the recovery phase. In the words of one knowledgeable interviewee:

“The mayors were the ones who saved the day, they got organized, and they responded.”

Another source added that:

“For housing, the *alcaldías* (mayor’s offices) were the ones that got a hold of the land for rebuilding.”

This was supported by another interviewee:

“More money trickled through to the municipalities, much more, than if we (international agencies) had gone through the central authorities. The planning was much more realistic and concrete, we could examine the actual roads to be fixed ...”

Practical coordination was conducted more effectively at the local level than at a central level. Key actors included the mayor, and church, and community leaders. The capacities of municipalities varied widely. CRS noted, for instance, that they had to return to complete projects that some municipalities could not complete on their own. While most were chronically weak, some displayed greater capacity and were able to respond in the absence of external assistance. Where strong mayors were present, this was especially the case. The small number of actors at the local level and the immediacy of the needs to be addressed facilitated such coordination.

Municipalities ran the risk of political partisanship. Mayors have been accused, on occasion, of acting in accordance with their political aspirations more than the needs of those whom they represent.

An innovative, and seemingly efficient and effective approach has been the organization of a number of municipalities in *mancomunidades*, or municipal associations. This took place both post-Mitch, and now in relation to recovery from the Michelle tropical storm. The initiative amounts to municipalities coming together in geographic al regions in order to advocate for and manage responses to shared problems.<sup>42</sup>

The oft cited need to decentralize must be balanced against the need to centralize, however. As noted above, a strong central capacity for data gathering and management, planning, and the setting and monitoring of overall criteria and standards (e.g., housing standards) was a clear requirement in post-Mitch Honduras. The existence of several incompatible land registry systems (e.g., one at a municipal level for tax collection, versus the national system) complicated time and again the resolution of land problems. There is a need, therefore, to strike a balance between what tasks need to be centralized and what can and should be decentralized.

### **International coordination and action**

#### **a) Direct international implementation**

Donors implemented construction projects directly as well as through NGOs and municipal offices. Many bilateral donors funded companies from their own countries. Similar to NGOs, donors “adopted”

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<sup>42</sup> As explained in an interview with the representative of the municipalities’ and mayors’ association AHMON.

municipalities. Direct implementation was often favored due to a perceived shortage of national capacity (a perception shared by some government officials), a desire to retain financial control, and a desire to benefit from both the visibility and from the return of a portion of their investment to their own economies. It also reflects a broader international trend to move away from multilateral channels and mechanisms in all phases of international aid.<sup>43</sup> A considerable opportunity to boost national capacity, which in itself would have contributed to transformation, has thus been lost.

One interviewee argued that major bilateral agencies did not have the capacity to manage the huge resources put at their disposal. The administrative challenge of establishing contracts, not to mention supervising, supporting, and managing the projects, stretched at least one agency to its limits.

Cost-effectiveness was also an issue. In the words of a government official:

“The donors came here with their directly managed operations at a huge cost, and did not coordinate these with the government.”

Donors retort that to have high-quality, sustainable works, high prices had to be paid. On at least one occasion, however, a major donor resisted the impulse and pressure to contract a well-known, large international construction company, relying instead on national capacities. This was seen to have been both wise and a more efficient use of resources.

Irrespective of the channel, in many cases actual construction was conducted by Honduran companies and staff, contracted under the supervision of donor technical experts. One interviewee argued that a middle layer emerged whereby non-national contractors sub-contracted local entities. This suggests that more capacity existed nationally than was recognized by donors. This seems to be the case in the reconstruction of highways. It is also the case in housing where either local builders and/or beneficiaries did much of the reconstruction.

It is argued that considerable local technical capacity did exist but was not tapped into sufficiently, partly because international agencies did not “know where it was.” One interviewee suggested that *joint national and international* consortia could have been formed to get the best from both sources.

## **b.) International coordination**

The donor G-5 mechanism (group of five donors,<sup>44</sup> subsequently the G-15), is considered to be a model for donor coordination.<sup>45</sup> Recognition comes from national authorities, multilateral and bilateral donors themselves, and from NGOs. This mechanism emanated from the Stockholm conference (supported in particular by the IDB), which was seen to have been effective in galvanizing support for Honduras. Coordination resulted in a *practical* division of tasks.<sup>46</sup> Its strengths included its relatively small and manageable size, its formation around a core of motivated and experienced individuals who knew each other well, and perhaps crucially, a political will on the part of bilateral donors that a central coordination forum be established, albeit a donor mechanism. According to some donors, it was the result of a perceived lack of government capacity to coordinate.

One interviewee argued, however, that while the mechanism “worked well and is considered unique in the world,” it did not strengthen the government, given that “it often substituted for it (the government).” Despite

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<sup>43</sup> As noted openly by both donor and UN interviewees.

<sup>44</sup> Sweden, Germany, Spain, Canada and the USA, followed subsequently by Italy, the Netherlands, the UK, and multilateral agencies such as the IADB, UNDP, the IMF, and the World Bank.

<sup>45</sup> See Memoria Transformación Nacional, Diálogo Tripartito, 14 March, 2002.

<sup>46</sup> The Swedish and Japanese offered to concentrate on primary roads and bridges, while USAID would do secondary roads.

the G15, many donors still acted independently.<sup>47</sup> Competition was evident among international agencies, even among those from the same donor nation,<sup>48</sup> regarding both high profile works (e.g., bridges) and medium scale housing projects. Duplication of initiatives was significant. According to knowledgeable experts,<sup>49</sup> the World Bank mitigation program includes aspects already implemented by others. JAICA conducted risk mapping in the same area as the USGS, and a Spanish entity has conducted risk management training and a land-use study overlapping in part with that conducted by the US HUD.

The coordination support role by the UN and other multilateral bodies such as CEPREDENAC,<sup>50</sup> was regarded as weak. This may reflect the above noted broader trend towards donor bilateralization of aid efforts.<sup>51</sup> It also reflects weaknesses in the UN's capacity to coordinate with bilateral donors which provide large amounts of funds tightly earmarked regarding when and where they are to be spent.

Coordination among NGOs was notably weak. International NGOs overtly staked their claim to work in certain municipalities, to the exclusion of others, as agreed through closed-shop, ad hoc coordination groups.

### c.) Conditions and controls

Flexibility by donors in dealings with implementing agencies, including official bodies, was warmly recognized by interviewees. The World Bank is notable in this respect. Conditions set by international bodies for some major loans were unduly onerous, however. Donors frequently applied criteria for approving, evaluating, monitoring, and controlling projects that were not appropriate to the emergency nature of recovery programs or were, according to state implementing bodies, unclear. In one case, an IADB loan is reported to have had 92 pre-conditions, the fulfillment of which have delayed its disbursement.

The expected quality of refurbishment of school repairs and reconstruction is another case. The FHIS was criticized by a multilateral investment bank for what was perceived to have been inadequate repair standards, while the FHIS claims expected standards were never agreed. They had conducted only basic repairs on the understanding that these were what had been expected.

Multiple layers of control were also imposed on governmental bodies, such as the FHIS, by uncoordinated donor programs and at considerable cost. In one case, the supervision contract for one donor-funded project cost some 80 Million Lempiras (approximately US\$5 million). SOPTRAVI is reported as having had separate project management units, concurrently, for IDB, BCIE, World Bank, and USAID projects.

The World Bank, for instance, does not coordinate its control requirements with other major donors, though this would simplify implementation. Such coordination could reduce repetitive layers of national and external control while still respecting basic principles of financial monitoring and auditing. Furthermore, such duplication does not appear to have increased transparency. Rather, it has taxed the resources of already overstretched institutions. Donors ought to agree on a single set of control mechanisms and requirements. A central project-monitoring and control unit, as was eventually established in Honduras, ought to have been established earlier.

Ironically, some donors have applied more lax controls to their own projects than those required of recipient state bodies. One interviewee, working for a major bilateral body, reported that the level of internal control was disturbingly weak, providing concrete examples from his direct experience.

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<sup>47</sup> Interview with a bilateral donor agency in Tegucigalpa, in which their preference for individual discussions with the Honduran government was expressed.

<sup>48</sup> Interview World Bank, Washington.

<sup>49</sup> Interview with contractors to a bilateral agency, Tegucigalpa.

<sup>50</sup> Interviews with international agencies in Tegucigalpa.

<sup>51</sup> As noted by staff of multi-lateral agencies and supported by recent studies emanating from groups such as the Humanitarian Practice Network, based in ODI, London.

It is worth quoting a senior government official, regarding international agencies and donors in general:

- “The main problem is the conditionalities. Flexibility is crucial. Budget support is the best way to assist. It is the most flexible. The IADB has a ‘time-slice’ mechanism which allows for spending in, for example, roads, but it can be executed anywhere within a set period.”
- “The dispersion of internationally funded projects is a problem.”
- “The multilateral investment banks compete or are simply not coordinated.”
- “There have been delays on the part of international donors in fulfilling their funding commitments. There are still (major) projects outstanding. (Some countries) take three years to approve loans.”
- “There should be a donor and government joint project inspection unit.”
- “Social projects (involving health, ethnic groups, education, etc.) are highly complex, often too complex for international agencies to manage. We have had problems with the health unions and with the teachers, for instance (which donors do not understand).”

#### d.) **Linking with development**

International reconstruction efforts worked best where international agencies already had a presence in the country, since they knew partners and the local context. This was the case of, for example, the Swiss Agency for Development and Cooperation. The commitment to remain after the disaster has in some cases allowed for increased or significantly reoriented development efforts for the new post-disaster situation. The significantly increased Swedish bilateral aid program is an example. On the other hand, some donors have dramatically reduced their aid portfolios now that the Post-Mitch phase is over.<sup>52</sup>

Some international organizations arrived with little or no prior experience in the country. This includes INGOs such as GOAL, and bilateral agencies such as various US departments not normally involved in foreign assistance. Where the presence was new, more effort should have been invested in identifying local partners prior to or upon arrival. In some cases it would have been better to have provided financial aid rather than deploying to Honduras in relative ignorance of local conditions and language. As already noted above regarding demand-driven programs, the government could have been more active in discouraging the arrival of organizations without prior country experience, or at least requiring that they work through a recognized local partner.

In the words of one interviewee, “donors want blood before they come to help.” The point being made is that prevention is more effective and efficient than response. Some donors have contributed resources for development and prevention both prior to and now post-Mitch.<sup>53</sup>

That said, there is no question that such funding was seriously inadequate. Second, it did indeed take a colossal disaster to galvanize the international community into temporarily upping aid levels dramatically. Mitch has pushed some donors to pay more attention to their development programs for Honduras, and the country’s inclusion in the HIPC process ought to be a continuing opportunity for this.

The fragmentation and compartmentalization of intra-agency donor aid capacities and instruments (emergency, rehabilitation, and development, for instance) has been a notable weakness. Most international agencies now intervene in emergency, rehabilitation, and development. Yet, as evidenced in Honduras, they frequently apply separate instruments (e.g., funding budget lines), through separate administrative structures, under separate management, by separate staff, based in separate physical locations. Despite

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<sup>52</sup> USAID has been reported by a member of the G-15 to have decreased its program from several hundred million to an annual total of \$US 25 million.

<sup>53</sup> An example of this is the World Bank mitigation project. Prior to Mitch, the World Bank “had begun discussing ... a program ... for disaster preparedness and management.” This resulted in a post-Mitch self-standing Disaster preparedness and Mitigation Project, pp. 19, 29 Honduras Country Assistance Strategy, World Bank, 2000.

laudable efforts to link recovery and development (transformation, as set out in the Stockholm objectives), this has not taken place.

### ***The Changing role of INGOs***

NGOs have traditionally been favored by some donors as rapid, grassroots implementers of projects. In Honduras, many INGOs, and even large national NGOs (NNGOs), acted more as channels of funding than direct implementers of projects. INGOs have been accused of competing with NNGOs for resources.<sup>54</sup> This has resulted in an additional administrative layer whereby funding has passed from donor country to an INGO (perhaps first passing through the UN), to a national umbrella NGO, and eventually to the implementing NGO or municipality.

INGOs may have brought knowledge and technical skills to such relationships, including expertise in project planning and management. Nonetheless, most INGOs did not operate systematically at the grassroots level in Honduras. That important role has been largely fulfilled by national or local NGOs and other civil society groups (such as professional trade union organizations).

Finally, not all grassroots work is ethical. The sectarian methods of operation of certain religious NGOs were noted by a number of interviewees. Concern was expressed that these NGOs used their reconstruction activities to proselytize.

## **2.5 Resources**

### ***Large financial resources***

Reconstruction has been greatly facilitated by the major infusion of resources from the international community, totaling between US\$ 3-4 billion. These have been in the form of both loans, grants, and in-kind arrangements.

The development banks (World Bank, IDB, and CABEL) played a major role in providing resources. They restructured their portfolios, particularly those that were delayed and/or not disbursed. Specific recovery projects were also prepared, as part of the Plan Nacional de Reconstrucción Nacional. New sectoral loans were also approved, to the FHIS for vulnerable ethnic groups, infrastructure (sanitation and water), roads and highways. For balance of payments, a two year moratorium was granted on debt payments (Spain and France were instrumental early on in this aspect).

### ***National resources***

The government has shown a low rate of execution for repairing or constructing services for new housing. A serious difficulty arose when a government official intimated that the government would provide services (water, sanitation, pavement and access roads) for housing projects.<sup>55</sup> As it turned out, the government did not have the capacity to provide these services for all housing projects in a timely manner. This led to major inadequacies, misunderstandings, delays and sub-standard housing projects. The FHIS eventually provided services for many housing estates, albeit after considerable delays.

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<sup>54</sup> Interview with a bilateral agency, Tegucigalpa.

<sup>55</sup> The official admits that SETCO would “undertake to see that basic services were put in place” (“hacer las gestiones para conseguir los servicios básicos”)

## 2.6 Good practices

### ***Stockholm Conference and the G-15 coordination***

The first Consultative Group meeting in Washington (December 1998, supported by inter-alia, the IADB) and the Stockholm Conference are recognized widely as significant catalysts in attracting major international funding for post-Mitch Honduras. Support from bilateral agencies and multilaterals, such as the IDB, UNDP, and CEPAL, was key to helping Honduras prepare for the conference.

The donor follow-up coordination group (initially G-5, subsequently G-15, and reportedly rising to G-19) that emerged after the conference is also seen widely in Honduras as an example of good bilateral coordination. The presence of technical cooperation agencies (such as USAID, SIDA, and CIDA) at the helm of the G-5 was a key to its success. These agencies were deeply involved in the day-to-day management of many of the recovery programs. It is also praised by NGOs, in particular, for having nudged the authorities, especially the UNAT, to consult more in their recovery and reconstruction projects.

The seven sectoral task forces (*mesas sectoriales*) that involved NGOs and were supported by the national technical unit, UNAT) include: (i) governance and human rights, (ii) human development, (iii) social protection networks, (iv) macro-economics and competitiveness, (v) social and road infrastructure, (vi) rural development, and (vii) environment and risk management.

The strengths of the G-15 included its strong leadership, limited size, effectiveness as an information sharing forum, and the common backgrounds of its mainly bilateral donor membership. These strengths, seen from another perspective, can also be regarded as limitations, however. Ideally, such a coordination mechanism should be but one component of a broader *national* coordination system. It is widely recognized that during disasters, coordination should be state-led, including coordination with donors *supporting* that state. It should involve all key actors, including the state, civil society, and multilateral agencies (UN and, for example, multilateral investment banks).

### ***Municipal leadership***

A lasting memory of the post-Mitch phase relates to the mayor of Morolica town. The town was destroyed, much of it washed away. The mayor (apart from his heroic march from the isolated town to call emotionally on the national media for help for the town) has played a galvanizing role in attracting and coordinating assistance in the construction of *Nueva Morolica*. His leadership is an example of how municipal authorities can lead recovery efforts at a local level.

### ***Donor flexibility***

A government official has highlighted the IADB *time-slice* mechanism applied to certain projects. This allows for spending on, for example, roads, to be executed in any location within a set period. This is a good example of flexible funding, which is of great importance for government agencies, in particular, in recovery project management.

USAID was also noted as being flexible during implementation, particularly as priorities changed over time.

### ***Training for donor staff***

As the result of Mitch, the Central American Bank for Economic Integration (CABEI) introduced the requirement that all of its staff be trained on risk assessment. (A manual is being produced to introduce this training course outside the Bank, in collaboration with UNDP).

### ***INTERFOROS advocacy and organization***

INTERFOROS is an NGO coordination body and network. It was created during the post-Mitch phase, as a direct result of the recovery phase. In the words of its former Director,

“INTERFOROS emerged from Mitch to organize and monitor the reconstruction process, to seek respect for the rights of the poorest through auditoria social (social audit) of the performance and

actions of local mayors. This was done at many levels, including checking the number of bags of cement used in building a bridge.”

It plays both a coordination and advocacy role. INTERFOROS members have highlighted the linkages between the disaster and development in Honduras. They have taken up a strong position regarding, for instance, the global trade regime which, they argue, impedes recovery in Honduras. Until fair trade in primary products such as coffee and bananas is facilitated, they argue, Honduras will not recover and develop.

This mixture of advocacy and coordination around the linkages between disasters and development is an example of how civil society bodies can play a role in recovery that transcends mere reconstruction and local issues.

### ***Housing reconstruction projects***

A number of cases of good practice have emerged. A recent study entitled *Best Practice In Housing Reconstruction*<sup>56</sup> should be consulted as a more complete and authoritative source of examples of good (and bad) housing reconstruction practices.

The Amarateca valley, at an hour’s distance from Tegucigalpa, is the site for a number of housing relocation projects. While some (already referred to in this report) are seriously sub-standard, the Ciudad España housing estate is impressive. Despite the major delays in the completion of the project, it has managed to integrate a variety of key components, including quality housing, recreational facilities, access roads, and high quality services (water and sewerage).

Villa Linda Miller is an excellent example of a community-led housing project. The community was highly organized and motivated. The project contains a park, a playground, a plot for a school, and dedicated bus routes.<sup>57</sup>

Another example of good practice in housing is the self-construction of houses in the community Waller Bordo in Cortes. This not only influenced the physical recovery of the community, but also, through the training in masonry, endowed the beneficiaries with new skills. Based on the payments for 60% of the cost of the materials within a ten year term, the local bank will generate capital that can be invested in projects for the benefit of the community.

Another case is that of GOAL.<sup>58</sup> The NGO not only consulted with beneficiaries prior to and during the implementation of their housing projects, but they also conducted follow-up project reviews in order to make projects more sustainable. (This practice, regrettably, has been more the exception than the rule in many donor and NGO housing programs.)

The Spanish Red Cross encountered major difficulties in getting land signed over to them for reconstruction, to be then signed on to the new individual owners. A positive experience was to sign over land by community, rather than by individual family. This was, they argue, much easier to manage and more effective in that the community relocated and managed the individual land deed issues collectively.

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<sup>56</sup> By CEDAC, Tegucigalpa, Honduras, October 4<sup>th</sup> 2002, kindly made available to this study team by Prof. Mario Martin, CEDAC.

<sup>57</sup> For details, see the *Best Practices in Housing Reconstruction* report, by CEDAC. This case is likened by an interviewee to a project in La Ceiba, where apparently the mayor was instrumental in having land purchased for a housing project.

<sup>58</sup> An Irish-based International NGO.



## Chapter 3.

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# Conclusions, Lessons, and Recommendations

### 3.1 Overview

Hurricane Mitch was an exceptional event; Honduras was particularly vulnerable to its effects. Massive disparities in the distribution of wealth, the weakness of the state, and unfavorable global economic conditions have undermined recovery efforts. The Stockholm Conference set *transformation*, not just reconstruction, as the objective for the recovery phase. Though in small ways change towards transformation is evident, significant transformation has not taken place. The objective was overly ambitious.

Physical reconstruction has been the most visible legacy of the post-Mitch experience. Results have been very mixed, however. Many infrastructural and housing needs still remain to be covered. Without profound changes in a wide range of areas such as urban planning and political culture, long-term vulnerability reduction will remain weak.

A demand-driven process would have been preferable to an “all aid is welcome” policy (i.e., that Honduras would plan clearly what should and should not be done and provided). The municipal level has been key in the recovery phase. The oft repeated need to decentralize must be balanced against the need for centralization of certain key functions, however. A lack of clarity has existed regarding criteria for deciding on interim versus permanent solutions, be it for energy restoration, water drainage, or housing reconstruction. Access to appropriate land for reconstruction was a major problem. No legal framework has existed for enforcement of construction standards.

While the coordination support role by the UN was weak, the donor G-5, subsequently G-15 mechanism, is considered to be a model by donors. Competition and duplication was evident among international agencies, however. Direct implementation by donors has been due to a perceived shortage of national capacity. Actual construction was generally conducted by Honduran companies and staff, however, under the supervision of donor technical experts. The majority of the external funding was time-limited (e.g. under emergency reconstruction instruments). This, and competition for donor visibility has resulted in rushed projects. Conditions set for some major international loans were often excessive. Financial control mechanisms overlapped from one donor to another and with existing national control mechanisms.

International reconstruction efforts worked best where international agencies already had a presence in the country, since they knew the local partners and context. Mitch pushed donors to pay more attention, temporarily, to the development programs for Honduras. The fragmentation and compartmentalization of donor aid capacities and instruments (emergency, rehabilitation, and development, for instance) has been a notable weakness, however. As a result, ongoing development programs have rarely been integrated with reconstruction or recovery efforts and vice versa.

The following recommendations are presented according to who might be the principle audience.

### 3.2 Basic principles for all actors

#### *Development*

1. The recovery phase is an artificially delimited concept. It is an integral part of ongoing developmental processes at all levels – national, regional, and local. Recurring lessons mostly point to accepted good development practice, albeit adapted to a recovery phase. Post-disaster recovery can rapidly feed into risk management, prevention, mitigation and preparedness activities, all core components of good development programs. Second, the avoidance of recurring problems

in recovery generally requires action *prior* to the disaster, again through risk management, prevention, mitigation, and preparedness. For example, policies should address the importance of managing urban planning, ecosystems and natural resources in a manner that allows for both income generation and environmental sustainability.

Widely accepted guidance on good development practice (such as the OECD/DAC Poverty Reduction Guidelines, 2001)<sup>59</sup> can form a useful *starting-point* from which generic guidance for recovery can be adapted. External actors (including donors and potentially affected national governments, the primary target audiences for this study) should support potentially affected communities *continuously* both well before and well after a disaster event occurs.

While obvious differences exist between a stable development environment and the inherently unstable recovery phase, key constraints and recognized good practices are common to both. Fundamentally, development principles should not be dropped just because the recovery phase is seen to be responding to an emergency.

2. While they will probably need to be adapted to the post-disaster situation, *existing local development plans* should form a basis for recovery activities. Adaptations should be based on self-identified needs of affected communities. These communities need to be disaggregated according to who has been affected, how, and to what resources they have access, and do not have access, in order to meet their needs.

Aims to bring about *major* socio-economic, cultural and political changes *during* a post-disaster recovery process are probably over-ambitious, given the fragility and weaknesses inherent to a post-disaster context. Such transformation requires a highly complex political and developmental process which will more likely take decades rather than months or years.

### ***Transparency and equity***

3. Recovery aid should be provided in a fair, transparent, and balanced manner. This requires the inclusion of remote areas and vulnerable sectors where the impact of the disaster may not have been as visible or dramatic as in more accessible areas. Gender and ethnic equity should be assured. The public should be kept aware of recovery programs and their entitlements to assistance through public information campaigns.

### ***Risk management***

4. A culture of risk and vulnerability reduction (prevention and mitigation) should be fomented at all levels, before, during, and after a disaster. This includes international, national, and community levels. Risk reduction requires awareness and action.
5. Training and information campaigns on risk reduction and management, utilizing appropriate communication technology, are examples of *awareness-raising*. Practical, technical training in risk and vulnerability analysis, and crucially *how* to conduct risk reduction, should be provided to all actors potentially involved in physical reconstruction programs, including key donor staff.
6. *Action* to reduce vulnerability, thus reducing the need for recovery, requires a complex mixture of socio-economic, political, cultural and material aspects, central to all developmental processes. Strengthening offices for emergency response or running sporadic risk management training courses are insufficient and piecemeal. Action may well be required which will affect vested interests in vulnerable societies. A strong political will is a key requirement for success.
7. Donors should make long-term commitments to developing the risk management capacity of countries.

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<sup>59</sup> See OECD/DAC website at [www.oecd.org](http://www.oecd.org).

### 3.3 Donors

#### *Donor coordination*

8. International actors (bilateral, multilateral, and NGO) should formally recognize, in both policy documentation and in practice, the right and responsibility of the affected state to manage and coordinate the recovery phase.
9. Where donor inputs are substantial, a strong donor coordination mechanism is an essential component of a national-led recovery coordination system. This should aim to support national leadership and efforts. A joint donor-government central monitoring and control unit should be considered.

#### *Donor flexibility*

10. Donors should limit conditionalities associated with recovery funds, particularly on multilateral loans. Budget support is the most flexible form of support for recovery.
11. Donors should coordinate and adapt the financial control requirements they require for their aid, so as to minimize duplication and contradictions while retaining acceptable levels of accountability and transparency (e.g., procurement and audit requirements). This may require a *single* set of control mechanisms and requirements.

#### *Joint consortia*

12. Joint national and international consortia could be an option for combining international and national capacities for the implementation of major reconstruction works.

#### *Aid policies and structures*

13. Donors should integrate their international aid structures, instruments, and approaches (emergency, rehabilitation, and development). In practical terms this would require dismantling the administrative and structural barriers separating these categories of cooperation. The *same* body of staff (at headquarters or in affected countries) should be authorized, resourced, and trained to apply aid flexibly across a variety of contexts and needs.
14. Donors should redress the imbalance between disaster response and reconstruction aid by increasing development aid (e.g., to the UN target of 0.7% of GNP) and by strengthening risk management approaches within development programs.
15. Donors should review the value added of passing aid through layers of funding channels, such as INGOs. Methods of funding national and local actors directly in accordance with their absorption capacities should be explored.
16. All program and operational staff of international organizations should be trained in risk management approaches in aid programs.

### 3.4 Governments of potentially affected countries

#### *Strong state coordination and management*

17. Affected states, obviously, need to be strong to ensure rapid recovery. Governments should have the capacity to manage the recovery process at central, regional, and local levels, including structures, strategies, and resources. These capacities ought to be built as integral components of ongoing development programs.

18. Criteria should be set to determine who has been affected by the disaster, to what degree, and therefore who might be eligible for state and/or international assistance. These criteria can feed into nationwide strategies covering grants, credits, and self-help modalities in a fair and transparent manner (as in the case of the Honduras poverty reduction strategy paper, a requirement for HIPC).
19. A comprehensive national and international coordination system is required involving all actors. The system should be led by the affected national government and duly supported by donors. The system should allow for the involvement of NGOs and local organizations. It needs to have the capacity to operate at various levels: political (senior central government representatives and major donors); policy (involving a broader range of actors, including ministerial level expertise); and implementation (involving all major implementing actors). While anchored at a central level, the coordination mechanism requires the capacity to support, involve, and be replicated at the regional and municipal levels. Though the creation of new bodies (e.g., a reconstruction agency) should probably be avoided, such a system will probably require the appointment of a recovery chief coordinator.
20. The coordination system should facilitate access to technical guidance and support for entities and communities involved in recovery initiatives. This could be made available through, for instance, permanently staffed technical desks.
21. Tools, such as checklists and timelines, should be developed for government and donor officials to facilitate key decisions in the recovery process (e.g., setting out the most frequent and/or important decisions which may need to be taken and when). This would include a critical path including the establishment of assessment, information management and coordination mechanisms, support to municipalities to replicate/decentralize these mechanisms, setting housing entitlements and standards, registration of available recovery resources, including construction companies and experts, public information campaigns, etc. Criteria need to be developed to facilitate decision-making on interim versus permanent solutions in, for example, shelter and housing recovery programs.
22. Government posts key to recovery (and risk and disaster management) should not be subject to political rotation.

#### ***State conditioning of international aid***

23. A policy of accepting whatever is offered should be avoided. This requires a rapid assessment of needs for recovery aid appeals.
24. An affected government should invite assistance primarily from international agencies that have been present prior to the disaster and which commit themselves to remaining afterwards.
25. National NGOs and community bodies should take a measured approach in taking on major international funding. They should carefully review their capacity to absorb major increases in funding and manage growth in a measured manner in order to avoid overextension.
26. Priority should be given to national or local materials and resources over importation of materials and staff. Support to and participation of local institutions and community organizations are indispensable elements in all recovery processes, in priority setting, monitoring, accountability, and financial control activities. Social networks and community organizations should be strengthened, permitting them to manage their own recovery programs. The feasibility of preparing and deploying mobile teams to assess, profile, and increase municipal capacities to manage and coordinate the emergency and recovery phases should be examined.
27. Legislation is required to regulate and hold accountable NGOs regarding, for example, cases of incomplete or sub-standard projects and the abuse of aid programs as vehicles for religious proselytizing.

### ***A balance between centralization and decentralization***

28. A balance should be arrived at between the need to centralize certain tasks and resources and to decentralize others. For instance, broad, flexible standards and guidelines for recovery need to be set and enforced at a central level. These should then be *adapted* at regional, municipal, and community levels according to local conditions.
29. Community leaders and local mayors should be trained and equipped to manage decentralized resources (to allow them to assess and plan, to establish local databases, to implement recovery activities with their communities, etc.). Building the capacity of local communities can be a source of employment generation and development of new skills that should be encouraged as an alternative to a massive influx of foreign personnel. Local financial initiatives, such as credit schemes, are also a means of cushioning the impact of future disasters.
30. Inter-municipal associations (working in "mancomunidades") can be an efficient and effective way of facilitating this balance.

### ***Transparency and information management***

31. A multi-faceted information system is required to support planning, implementation, monitoring, evaluation, and correction of initiatives. Such a system includes collection capacities (censuses and needs assessments), integrated, central, regional, and municipal databases, and appropriate dissemination capacities (hard-copy, electronic, and mass media, in accordance with resources and needs).
32. Agreements should be prepared with national radio and television stations to facilitate national public information campaigns regarding recovery program entitlements and procedures for accessing support.

### ***Urban planning and special powers***

33. Specific recovery and reconstruction legislation is required, including special powers for land expropriation or emergency purchase. Spatial and urban planning legal frameworks, based on internationally accepted standards for construction and concepts of risk management, should be established. These should include appropriate (re)construction standards. Appropriate land registration laws and systems are essential for reconstruction. The system should be unique (not duplicated or contradicted by parallel land registry systems) and easily accessible, especially at a municipal level.
34. Relocation of communities or individual groups should be seen as an extreme option, due to the serious negative impact it can have on those communities and groups.

## **3.5 Other international organizations**

35. Specialized multilateral agencies have a particularly important role to play. This includes assisting affected countries prepare appeals and submission to be presented to donors, especially at international conferences.
36. Guidelines are required for INGOs in their relations with national NGOs. These may exist in certain individual organizations already. Nonetheless, reinforcement of lessons on the need to avoid competition for resources, and on establishing mutually supportive relationships with NNGOs, as opposed to mere sub-contracting, is still evidently required.

## Annex A.

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## List of Persons Met

### In Tegucigalpa, Honduras by Alberto Harth

- Hugo Arévalo, Sub-Comisionado Nacional, Comisión Permanente de Contingencias, COPECO
- Cristóbal Simón Asfura, Gerencia Regional en Honduras, Banco Centroamericano de Integración Económica, BCIE
- Jeffrey Avina, Resident Representative, United Nations Development Program, Honduras
- Julia Chambers, DFID, Great Britain
- Efraín Correa, Coordinador del Área de Políticas y Programas, Unidad de Apoyo Técnico, UNAT, Secretaría de Estado del Despacho Presidencial
- Rolando Durán, Coordinador de Emergencias, Secretaría de Salud
- Miguel Flores and Darinel Lainez, Catholic Relief Services, CRS Honduras
- José Angel Herrera, Director, Comité de Emergencia Municipal, CODEM, Alcaldía Municipal del Distrito Central
- María Luisa Interiano, Coordinadora de Capacitación, Visión Mundial
- Shailesh Kataria, Director Honduras El Salvador, GOAL, International Humanitarian Organization
- Hernán Leiva, Coordinador Municipal de Emergencias, Municipalidad de La Ceiba
- Guadalupe López, Director Ejecutivo, Asociación de Municipios de Honduras, AHMON
- Mario Martín, Rector, Centro de Educación de Arquitectura y Construcción, CEDAC
- Mauro Membreño, Asesor Residencial, Coordinador Oficina Presidencial de Seguimiento de Proyectos, OPSP
- Mateo Molina, Interamerican Development Bank, IDB
- José Donald Ochoa, Jefe Departamento Desarrollo Sostenible, BCIE
- Víctor Rojas, Asesor, Oficina Panamericana de Salud, OPS, ante la Secretaría de Salud Pública
- Juanita Vásquez, Coordinadora de Emergencias, Secretaría de Educación
- Lic. Waleska Pastor, Secretaria Ejecutiva, Despacho Sr. Alcalde, Alcaldía Municipal del Distrito Central

### In Washington, D.C. by John Telford

- Tova Solo, Task Manager for the World Bank's Latin America and the Caribbean region, Washington, D.C.

### In Honduras, by John Telford and Margaret Arnold

- Dan Alder, Consultant Engineer Wolfgang Stiebens Asesor Principia GTZ-FEMID, Tegucigalpa

- Hugo Arevalo, COPECO
- Juan Bendek, Ex-Director of COPECO
- Annik Boucquey and Cedric Chantraine, volunteers, ASONOG
- Luis Bran, APSO
- Robyn Braverman, HUD Risk Management specialist
- Alfonso Calzadilla Buenza, Delegado regional de Construcción y Rehabilitación, CRE
- Jorge A. Centeno, Coordinador del UPEG, FHIS
- Diana Rodríguez Cruz, ASONOG
- Adrian Fitzgerald, APSO
- Rafael Flores FOSDE/ASONOG
- Duty Green, USAID
- Erlan Vitelio Hernandez, COMAL
- Hanke Hoops, Oxfam official de proyectos
- Maria Lopez, volunteer ASONOG
- Guadalupe Lopez, AMHON
- Mario Martin, CEDAC
- Leonel Martinez D., the executive office of the Presidency
- Suyapa Martinez, CAMH
- Rene Matamoros Salgado, the executive office of the Presidency
- Mauro Membreno, the executive office of the Presidency
- Obdulia Hervera Mene, Jefa Delacion Cruz Roja Española (CRE)
- Carlos Munoz, UNDP/COSUDE
- Martin Ochoa, World Bank , Tegucigalpa
- Alexis Pacheco, Tearfund UK
- George Redmond, Trocaire
- Fidelina Rodriguez, Poterillos, colonia Las Arobas, San Pedro Sula
- Deborah Rull, delegada de Desarrollo, CRE
- Jose-Trinidad Sanchez, COMAL and Interforos
- Alfredo Stein H., Swedish Embassy
- Miguel Angel Trinidad, Jefe de Mision IOM
- Waleska Pastor M., office of the mayor of Tegucigalpa
- John Walkey, USGS, GIS specialist
- Gunther Weiss, FHIS

## Annex B.

## Disasters in Honduras

The following tables show major disasters as recorded for Honduras.

Source: Centro de Documentación.- Unidad de Emergencia Pública COPECO

### B.1. Flooding

Most flooding has been due to hurricanes and storms.

Date	Location
Sept. 1906	Central and South
23 y 28 Oct. 1935	North and West
24 December 1935	North and West
28 Sept. 1954	Central and North West
10 Oct. 1954	North West
14 Sept. 1971	Whole country
22 Oct. 1971	Central
22 Nov. 1971	North West
Sept 1974	Central, South and North (Hurricane FIFÍ)
Sept. 1991	North
1993	North
1994	North
1995	North & West
1996	North
1998	Whole country (Hurricane Mitch, 3,638.5 MUSD damages)
1999	North (Tropical Storm Katrina)



2001	North, North West (Tropical Storm Michelle)
2002	Central, West

## B.2. Earthquakes

Date	Location	Comments
1774	Central	
1856	Central	
1915	West	Magnitude Richter scale 6
1974	West	Magnitude Richter scale 6.2
1956	In El Salvador, affected the West	Magnitude Richter scale 7.5
1980	Golfo de Fonseca	Magnitude Richter scale 6.4
1982	Central Area	Magnitude Richter scale 5.6
1999	February Comunidad nueva Esperanza El Ocote y Agua Caliente del Municipio de Concepción del Sur, Santa Bárbara.	Magnitude Richter scale 6.5
1999	February Municipios de Concepción del Sur, Santa Bárbara, las Vegas	
1999	May South, East, East Nicaragua and part of El Salvador 15 Km. from Tegucigalpa and 59 Km. from Amapala	
1999	July, Falla sísmica de Motagua, Polochi close to Barrios port	

In 1999, 800 seismic movements were recorded in Honduras, 72% at or below 3.5 on the Richter scale.

## B.3. Hurricanes

Hurricane	Year	Location
Hurricane Lida	1954	North
Temporal	1959	North and South
Tropical Storm	1962	North
Hurricane Francelia	1969	North, central area and West
Hurricane Marco	1969	Santa Bárbara, Cortés Yoro, Atlántida, Colón (More than 80,000 families were affected)
Hurricane Fifi	1974	Affected the whole country (8,000 deaths, 100,000 affected, losses of 200 million USD)
Hurricane Gilberto	1988	The North
Hurricane Hugo	1989	The North
Tropical Storm Gert	1993	North, central area and South
Tropical Storm Bret	1993	North, central area and West
Hurricane Mitch	1998	Impact throughout the country
Tropical Storm Katrina	1999	North and North West, 34 dead, 15,875 evacuated, 116 houses destroyed, 1, 428 houses damaged, 25 bridges and passes destroyed and 16 damaged
Tropical Storm Michelle	2001	North and North West, 7 dead and 14 missing, 25,768 evacuated, 123 houses destroyed, affected 62,557, houses damaged 1,395, 48 bridges and river passes destroyed and 14 damaged



## **SECTION II: THE HONDURAS COMMUNITY SURVEY**



## Executive summary

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This summary synthesizes the process and the findings of the community survey carried out in Honduras four years after Hurricane Mitch. The effort is part of the ProVention Consortium project, "Learning Lessons From Recovery Efforts After Major Natural Disasters."

### **Method**

The method applied was the Participatory Rural Appraisal. The Community Study Team conducted semi-structured surveys with household heads, community leaders, and representatives of local institutions and ethnic groups affected by the hurricane. One interviewer would ask the questions and a second one would take notes and record the interview. In addition, institutional group meetings were organized, and workshops were held before and after the survey. This process was complemented by on-site observation.

The selection of communities for the survey took into account the path that Hurricane Mitch followed through Honduras. As a result, 16 communities were chosen from six departments: Choluteca, Francisco Morazán, Cortés, Lempira, Ocotepeque and Copán. In order to contrast these results, the survey team sought to choose a community that had not received aid; however, none was found. The team interviewed 91 persons, of which 42 were women and 49 were men. Of those interviewed, 17 were Lencas, 11 were Maya Chortis, 4 were Garífunas, and 59 were Mestizos.<sup>60</sup>

The interviews took place in a variety of environments, from small rural communities such as Limón de la Cerca in Choluteca, to large urban neighborhoods like Betania in Tegucigalpa; from mountainous communities like La Mohaga, to coastal communities like Travesia in Puerto Cortés. The team found communities that had lost their entire housing stock, such as El Triunfo in Cortés, and others that lost their crops as well as portions of the land that they cultivated, such as Rincón del Buey in Copán. Many also lost their source of employment, as the case of the El Trébol temporary shelter, or the artisans of the El Chile in Tegucigalpa who lost the tools of their trade. In many of the communities visited, entire water systems were damaged and aquifers contaminated. Some secondary highways were totally cut off and bridges and fords were destroyed by the force of the water, isolating many communities for days and even weeks.

During the community visits and interviews, the team found both positive and negative experiences from which the following lessons learned and good practices were extracted for this summary.

### **Institutions**

By adopting a more active role in the project cycle, local institutions, such as the community council or the local water board, which had a working relationship with a community, were best able to meet the needs of the affected population. However, recently created community institutions were also strengthened through the interaction with national and international NGOs. In addition, leaders of local institutions greatly enhanced their organizational and leadership skills in the recovery process.

On the other hand, national institutions seemed to have focused on infrastructure recovery using "food for work" assistance to recover the infrastructure while mitigating the loss of family income and assets. Despite the significant progress conferred to this sector, years after the disaster, several bridges and access roads for rural communities are still being rebuilt.

Many national and international NGOs worked in housing reconstruction. However, the lack of standards, transparent contracting, and even urban planning, characterized these projects. Self-built housing

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<sup>60</sup>. There were some difficulties with the study: (i) *emergency* and *recovery* were terms perceived as having the same meaning; (ii) since interviewers were expatriates, they were often identified with donors; (iii) due to time constraints, the selection of the survey sample was not random but rather chosen through the recommendations of local agencies and leaders.

reconstruction appeared as the most successful of all because these projects responded better to the needs of beneficiaries. Generally, the implementation of works was more timely if institutions included citizen participation during the entire project cycle.

In the area of economic recovery, in rural areas national and international NGOs concentrated on the distribution of grains for harvest and for consumption, while in urban areas the focus was on the provision of training in coordination with a national agency. In some instances, some national and international NGOs provided training courses in disaster mitigation and risk reduction in order to develop a culture of prevention.

### ***Livelihoods***

From the community survey it appears that family strategies, such as one family giving shelter to another or relatives sending remittances from abroad, were most common in rural areas, while it appears that in urban areas families went at it alone to survive.

At the community level, affected people joined together to form a community bank out of an existing local organization. This was considered an important initiative to finance risk reduction projects in agriculture, livestock, fishing, or crafts. Forest control rules and vigilance committees were some of the products of training in disaster mitigation, while cleaning up campaigns took place in urban areas. Some NGOs and agencies did provide assistance in the recovery of production in agriculture, and one institution is developing an agricultural insurance program.

While institutions provided little psychological recovery assistance, the responsibility fell on local parishes not always prepared to treat post traumatic stress.

### ***Gender***

Gender policies of national and international NGOs helped improve the presence of women in community institutions and recovery projects. In the special case of El Trébol shelter, women became the heads of committees, empowering them and even changing gender relations in the home. In the aftermath of Mitch, women's community councils in the Maya Chorti communities were created during the last 4 years. This has given them further opportunities to represent their interests and be more equally involved in community politics. But gender equality appears to need further improvement.

### ***Impact***

As reported by households and community leaders, the impact on the housing sector was of mixed results. Although it is clear that housing reconstruction improved living conditions beyond what existed prior to Mitch, housing programs also produced greater inequalities among beneficiary groups. Some households received a full subsidy or a complete house, while others had mortgage payments for a partial house. In addition, there was little attention paid to the preparation of socio-economic and environmental impact assessments of the larger housing projects, particularly around Tegucigalpa, to address important issues such as longer transport time for beneficiaries or lack of critical infrastructure for the new communities.

Some roads and bridges remained under construction, and the lack of adequate research and design destroyed fords and bridges during tropical storm Michelle in October 2001.

In some cases, new water and electricity supply systems were developed in areas that did not have those services previously. On the other hand, there were cases where households were required to pay for the repair of existing services that were damaged. In the area of communications, the donation of equipment in many of the rural areas significantly decreased the isolation and provided early warning systems for tropical storm Michelle in October 2001. On the other hand, there were some bridges and roads rebuilt after Mitch that were damaged again by Michelle. This appears to be the result of inadequate assessment in the new designs.

Economic recovery assistance was characterized in rural areas by the development of new community-based business initiatives, particularly agriculture, livestock, and fishing. However, this assistance is contrasted with the neglect of livelihood support in Tegucigalpa.

With the exception of some pastoral groups, no assistance was provided to mitigate the impact of psychological recovery. A survey conducted in Tegucigalpa a year after Mitch reported 22% of those surveyed experienced depression and 10% experienced post traumatic stress. In some cases, the longer term impact was detected by studies such as in the El Trébol temporary shelter in Tegucigalpa.

The training courses given for some institutions improved people's skills. But in some cases these and other projects developed by NGOs delegitimized municipal institutions while in other cases strengthened the municipality's role within the community.

### ***Good practice***

The following good practices have been identified through the community and institutional surveys:

- Involving communities and households in the housing recovery process strengthens local organizations, ensures more timely construction, is more tailored to people's needs, and enhances the skills of those trained in construction trades.
- Similarly, the involvement of community organizations or local water boards in the rehabilitation of water systems reduces costs and appears to improve the quality of service.
- Community-based banks formed from the repayment of recovery loans can help finance long-term risk reduction and development projects.
- "Food for work" programs achieved two parallel objectives: recovery works were carried out by local labor and, at the same time, helped create a source of family income.

### ***Lessons learned***

- *Coordinate and set standards.* Closer coordination between institutions avoids duplicity of efforts and provides for greater efficiency, which leads to the achievement of recovery goals. Common standards ensures more equitable assistance.
- *Tap local resources.* Make better use of local leaders, organizations, and community assessments.
- *Comprehensive recovery.* Recovery programs should not only include physical recovery projects but also socio-economic and psychological recovery.
- *Accountability.* Disasters are political; therefore there is a greater need for transparency through accountability systems within recovery institutions, especially for large disbursements of funds.
- *Decentralization.* Greater emphasis should to be placed on the quick decentralization of assistance to better match needs and ensure that all communities are addressed.
- *Participation.* At the local level, the participation of the affected population throughout the project cycle helps develop project ownership by the community.
- *Warning and prevention.* The distribution of communication systems and motor boats in flood-prone areas and the provision of courses in prevention and mitigation at the local level develop greater consciousness of risk and help prepare the population for future disasters.



## Chapter 4.

# Honduras Community Survey

### 4.1 Institutions

The communities interviewed recognized three main sets of actors in the recovery phase: community organizations, national public institutions, and national and international NGOs, including churches.

#### *Community organizations*

These institutions included water boards, community councils, and emergency committees, many of which already had a role in the community. These were mentioned as the most successful in helping the affected population. For instance, the Community Council of Limón de La Cerca, after discussions with an NGO, decided on the type of materials to be used to build the new houses (including roofs), the number of houses to be built, and what land should be kept for cultivation or livestock in each individual plot. As a result of their interactions with national and international NGOs, community organizations involved in project management and resource coordination also strengthened their organizational capacity which, in some cases, has been sustained for years.

Another example comes from leaders interviewed in the Betania community in Tegucigalpa, who expressed that being involved in housing reconstruction taught them leadership and administrative skills. However, they expressed that lack of financial resources and time to follow up projects diminished the possibilities of the community leaders in working beyond their geographical area.<sup>61</sup> Another interesting example was in Colonias Unidas, where they held a raffle to raise money in order for their community leaders to travel to Tegucigalpa to advocate with national agencies for electricity supply. In Travesía a contact person was elected to follow up the projects of the community.

#### *National public institutions*

#### **Box 4.1: Infrastructure damage**

The greatest damages in the infrastructure sector was in the road network (highways, roads, and bridges). The damages were of enormous proportions, severely affecting transportation and communications. Over two thousand meters of concrete bridges were completely destroyed. The overall damage was estimated to at US \$525.2 million. In addition, ports and airports were also severely impacted.

*Source:* Informe de Avance, La Reconstrucción y Transformación de Honduras, Tegucigalpa, junio 2000.

In addition to bridges and roads, the communities interviewed, however, were affected most immediately by the total loss or severe damages to the existing water systems. The initial clean-up and follow up reconstruction supported by public institutions was effective when it was done through the “food for work” program. Communities reported that this was helpful in mitigating the impact of income loss and, at the same time, helped to repair rural infrastructure. On the other hand, although National Public Institutions gave priority to infrastructure recovery, there are some cases, such as that of the Oloman Bridge, which

<sup>61</sup> Member of the community of Travesía: “...There must be found a way to prepare leaders... leadership is very important in the community, trained leadership. In the case of leadership, there are people who have the training but not enough time to dedicate to it... It would be better for the leaders in the community to have salaries and dedicate themselves full-time to solving the problems of the community.” Tape #16, Side A.

have still has not been rebuilt four years after Hurricane Mitch. Other examples were observed in the community of El Chile, where the bridge was only recently reopened, and La Mohaga and Rincon del Buey, communities that are still waiting for reconstruction.

### ***National and international NGOs***

#### **Box 4.2: Housing damage**

In the year 2000, a total of 35,000 housing units were totally destroyed and another 50,000 were partially damaged, affecting a total population of 441,150. This impacted social structures and the environment. By 2001, 59,000 housing units were in the process of being rebuilt, of which 30% have been completed, 44% were under construction and 26% still in the planning stage. Of the housing units built, 35% have electricity installed, 51% have water and 69% have adequate waste disposal systems.

Source: Informe de Reconstrucción y Transformación Nacional, Reunión de Seguimiento 28-29 marzo 2001, Gobierno de Honduras.

Housing reconstruction supported by national and international NGOs was characterized by a lack of policy with respect to processes, construction standards and rules, and financing mechanisms.<sup>62</sup> For instance, some NGOs built the houses directly, with no community participation, then donated them to beneficiaries. This led to some community leaders interviewed denouncing corruption in the selection of beneficiaries.<sup>63</sup> In Colonias Unidas, for example, many of the housing units were unoccupied years later, as the selected beneficiaries lived nearer to Choluteca. Others simply had rented their houses or sold them, both of which were forbidden in the housing contract. Others NGOs coordinated their efforts adequately with national or international agencies, as in Ciudad España, but failed to agree on housing standards and design, or to involve the community in implementation.

In some cases, such as in El Triunfo, there was no cost recovery. The agency supporting reconstruction donated all the construction materials and the municipality granted all the land. However, the National Institute of Professional Training (INFOP) provided free courses in masonry construction, and beneficiaries provided the labor input. An interesting example was the case of Waller Bordo, where the municipality granted the land, INFOP provided training, and an agency donated all the materials to a community bank. The condition was that beneficiaries repay the bank 60% of the cost over 10 years as a condition to obtain the property deed. The cost recovered through household payments was then to be reinvested in projects benefiting the community.

There were considerable losses in rural family income. These were mostly due to the loss of harvests, land damaged by floods and landslides, the loss of the productive layer of earth itself, and the salinization of land adjacent to river watersheds. The harvests most affected were corn, beans, coffee, banana, and melons. In rural areas, national and international NGOs donated basic grains for consumption and planting. The community of Rincón del Buey, for instance, was given chickens and cows. In La Estansuela, eleven cows

<sup>62</sup> Of the 16 communities interviewed, 7 had housing projects, of which three (Limón de la Cerca, El Triunfo and Waller Bordo) were self-constructed. Betania, El Trebol and El Chile were constructed by an International NGO with some financial support from the beneficiaries, and in the case of Colonias Unidas, the houses were donated by the NGO to the beneficiaries.

<sup>63</sup> Member of the community of Colonias Unidas: "...that woman from over there, her husband is a millionaire, he has good land, he has cattle... the majority of the people who have houses...do not live here... finally, they took control away from the community, they would do it themselves, the people in charge at [organization]. They gave houses without authorization, just because perhaps they liked a girl..." Tape #9, Side A.

were donated on the condition that each calf born would be given to another neighbor; there are now forty cows.<sup>64</sup>

In urban areas, there was a severe unemployment crisis, since the disaster affected the poorest sectors and medium-size businesses. One leader in El Chile lost all of his assets, such as his watch repair shop's tools, and never recovered them. National and international NGOs seem to have concentrated training in several areas, such as crafts, sewing, and automotive electronics, in coordination with INFOP.<sup>65</sup>

## 4.2 Livelihoods

Inter-family support within the affected communities was commendable during the emergency and recovery phases. For instance, those living in Colonias Unidas provided temporary shelter for family members while the reconstruction of their new houses took place. Another example is Travesia, where significant remittances were sent by family members residing outside the country. These contributed greatly to the reduction of short-term economic vulnerability. It appears that these experiences were more common in rural areas. In contrast, urban communities such as El Chile, Betania, and El T rébol, each family was left to vie for themselves for survival. It appears that in rural areas, community ties were strengthened while in urban areas, social networks ruptured due to the relocation of a number of affected communities to new areas.

In El Triunfo, families affected by floods created a community council in order to find financial support to acquire land to build new housing. In contrast, as one interviewee expressed, the arrival of people from outside the Betania community affected community cohesion and diminished community participation. Successful experiences include those of the community of La Asomada that worked together with other communities to repair its water system, thus reducing costs and improving the quality and efficiency of the service. In San Jose del Alto, a fee of eight lempiras was charged in order to repair and maintain the water system. Those who defaulted were cut off.

Hurricane Mitch caused significant economic losses, especially for the poorest of the population. Some of those who lost their jobs took sand from the riverbeds and sold it to construction companies. In this they found a new source of income, especially in Betania neighborhood near the riverside. The lack of resources to insure assets through the purchase of private insurance diminished people's ability to reduce risk. Many who had contracted loans to improve their harvests had to face the loss of their crops as well as the payment of the loan, which implied a loss of current capital and a debt incurred for the payment of the loan. For this reason initiatives such as the establishment of rural community banks have been an important success in this respect. In the case of Waller Bordo, the community bank is considered as a reserve fund to face future disasters and a source of financing for risk reduction initiatives at community levels. In other cases like La Mohaga and Yaruchel, the people took loans from national NGOs to recover losses.

Training courses raised consciousness at the local level with respect to risk assessment, prevention, and mitigation in certain communities. For instance, in La Asomada a committee was created to oversee and control the use of the forest and tree felling. In La Mohaga, trees and *izote* shrubs were planted to create natural barriers.<sup>66</sup> In urban areas, trash pick up campaigns were organized and trash cans provided. In contrast, the trash in the Bentania community is still thrown into the river, creating a significant source of contamination. It was reported that clean-up campaigns carried out by youth only had a short-term effect during the campaign itself; afterwards people resumed their previous habits.

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<sup>64</sup> Tape # 25, Side B.

<sup>65</sup> Tape #4, Side A.

<sup>66</sup> Tape #22, Side A.

### Box 4.3: Psychological recovery

The following summarizes the results from a survey of the adult population in Tegucigalpa. Serious depression was present in 19.5% of the population. The areas of highest exposure had a rate of 24.2%, compared to a rate of 14.2% in the least exposed neighborhoods. The presence of post-traumatic stress (PTS) was found in 10.6% of the population; 7.9% in the low-exposure group, and 13.4% in the high-exposure group. However, the rate of symptoms of PTS related to the hurricane itself was much higher (23.0%) with the exclusion of the variables of duration and incapacitation. The rate of comorbidity (PTS and severe depression) was 6.9%; 8.9% in the high-exposure groups, and 4.9% in the low-exposure groups.

Problems related to alcohol significantly increased in the low socio-economic strata and in groups living in temporary shelters. Risk factors included female gender, low socio-economic strata, marital status, low educational level, and having had "previous nervous problems."

After Hurricane Mitch, some 26.5% sought assistance in health centers. And 8.9% of the sample reported that they consulted someone or solicited help for nervous problems. Women visited health centers at a greater rate than men, and they sought help more often for nervous problems.

Exposure to violence after the Hurricane occurred in approximately a third of the sample and 6.2% reported having been assaulted. Some 7% of those interviewed admitted to having perpetrated violent acts. The most affected were the poor.

*Source:* Protección de la Salud Mental en situaciones de Desastres y Emergencias, Pan-American Health Organization / 1998-1999 (19) (23) 2002, P. 18.

These and other daily activities helped the affected people bear the traumatic impact of the disaster or the loss of a family member, but in most of the interviewed communities, no program for addressing this theme in the long term has been identified. The church is the only institution that treats the problems of Post Traumatic Stress. Workshops on self-esteem with the presence of psychologists only took place in El Trébol Shelter. Comments from a Betania neighbor like "one remains traumatized and does not sleep in winter, thinking about what could happen" shows that the trauma has not yet been overcome.<sup>67</sup>

### 4.3 Gender equality

It appears that in some cases gender policies of national and international NGOs helped increase the presence of women in community institutions. In El Caracol and Waller Bordo communities, women held such positions as the president of the Community Council and the Local Emergency Committee. As a special case, in El Trébol, women headed almost all committees including health, logistics, and education. One agency supporting the construction of new housing required that all titles should be registered under the female head, with the aim of ensuring the units would remain as family property.

Since women spent most of the time in the home, they attended most of the community meetings and training courses. They believed that this helped empower them in both their private and public life. They were more in control of assets and played a more important role in community decision making. Courses in self-esteem seemed to have helped them. Given the degree of vulnerability of women in Honduras, many recovery programs targeted women to promote their community participation and activism. In the case of the Maya Chorti community of Rincon del Buey, NGOs helped train women in the production of confectionary goods. The NGO also helped create a cooperative to commercialize their products since it considered women to be the more vulnerable group.<sup>68</sup> In the four years after Mitch, women's community

<sup>67</sup> Tape #3, Side B.

<sup>68</sup> Tape #25, Side B.

councils have been created in both of the Maya Chorti communities, giving women the possibility to have their interests better represented and become more equally involved in community politics. However, the main decisions were made by the men's community council.

Empowerment appears to be an evolving, long-term process as it requires changes in attitudes, values, and behavior. In Limon de La Cerca, for instance, despite the fact that twelve men and twelve women formed a cooperative and that women were as involved in housing construction as much as men, key community council decisions were still made by men. However, some men interviewed said that women and men were equally considered in community taking decisions. On the other hand, women said that lack of education and homemaking responsibilities diminished their chances in participating in community meetings. Overall however, the record was not so positive, in 14 out of 16 communities interviewed men presided the community organization.

#### 4.4 Impact

##### *Housing*

Housing recovery improved living conditions and helped reduce physical vulnerability. The majority of people interviewed identified housing acquisition as one of the most positive experiences of the recovery process.

Organized, small rural communities such as Limón de la Cerca and El Triunfo, which helped build and design their houses themselves, claimed that the houses matched their needs better. Through training in masonry they learned new skills. While those reconstruction efforts were executed within the planned time, bigger urban communities such as El Trébol Shelter and Betania have spent the last 4 years living in provisional accommodations waiting for their new houses to be built by the NGO.

A lack of agreed standards between NGOs, national construction regulations, poor targeting, and diversity of beneficiary participation produced great inequalities and as many types of houses as NGOs. Some houses have basic services (water supply, electricity, sanitation systems), are painted, have more than one room, and are brick-built; others are built from cement block, have metal roofs, and have only one large room.<sup>69</sup>

While in El Triunfo, beneficiaries only supplied the manual labor for housing construction, in El Chile they had to pay an initial fee to take part in the housing project. In Waller Bordo, El Triunfo, and Limón de la Cerca, houses are registered under of both the woman and the man of family. In El Trébol Shelter and Betania, houses were entitled under the woman's name.

Some housing projects lacked socio-economic and environmental impact assessments. In Betania an interviewed leader pointed out that due to the location of their new houses, they will have to spend their daily income paying for public transport to go Tegucigalpa because there are no sources of income near the settlement. Many of those who received a new house consider moving into their new houses to be a luxury that they can not afford.

For some people, living in a community represented a problem as they were not used to living in a closed space. Social discrimination between youth groups, due to the bad reputation of those living in El Trébol Shelter following continuous murders and violence, was a problem that surfaced in the housing project of a certain institution.<sup>70</sup> NGOs faced the problem in weekend workshops. They tried to adjust incorrect stereotypes between the youth of different neighborhoods that were to live together in Ciudad España.

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<sup>69</sup> The first are those of Ciudad España, the second are those from Colonias Unidas.

<sup>70</sup> A member of the El Trebol 1 Shelter, referring the problems in the community expressed, "...the problems were crime... not knowing each other... creating a new life with new neighbors." Tape #3, Side B.

### ***Infrastructure***

It appears that the construction of new infrastructure, such as electricity and water, did benefit communities (such as Limón de la Cerca, Waller Bordo and El Triunfo) that did not have the services prior to Mitch. They were supported by NGOs and national public institutions. But some communities whose systems were damaged had to repair them on their own, with no assistance. This was the case in El Chile, Betania, and San Jose del Alto.

Despite significant investments made in road and bridge reconstruction overall, there are still some instances where works have not been completed. In some cases, bridges rebuilt after Mitch were destroyed by tropical storm Michelle in October, 2002. It was reported that this was caused by the lack of research or inappropriate design standards, coupled with the use of low quality construction materials. In Betania and El Chile, interviewees reported that some retaining walls were not built due to mismanagement of funds by the funding agency. On the positive side, the development of training courses and the donation of communication equipment (radios and motor boats) by COPECO significantly decreased the isolation of some communities interviewed, especially those which suffered from roads that were frequently cut due to floods or landslides.

### ***Economic recovery***

There were many instances where NGOs promoted economic recovery through the development of community businesses. For instance, a fish farm was developed in the Waller Bordo community to take advantage of a natural lagoon that was formed by the floods after Mitch where the previous settlement existed. The opposite appears to have occurred in the urban areas visited, NGOs and national agencies seemed to have neglected economic support initiatives.

### ***Psychological recovery***

In the case of El Trébol shelter, psychological recovery appears to have been slow. Over the past four years, this overcrowded temporary shelter has provided sub-standard living conditions coupled by a paternalistic approach by an agency which provided continued assistance without community involvement, rather than having the community face the disaster. Some of those interviewed expressed that the agency has the population "suckling" at any opportunity, and that it has become their "mommy" to whom they go to solve their problems. Some interviewees recognized that the paternalism adopted was not beneficial to the community since the agency would not always be there to protect them. Those policies generated the "damnificado syndrome" in which the affected convince themselves that they are powerless and dependent on charity for survival. These attitudes appeared to be especially common among the 2000 inhabitants of El Trébol, due to their extended dependency over the last 4 years.

### ***Social recovery***

Training courses run by NGOs often improved the skills of the target population. For instance, it was reported that those who received training as health workers considered such courses as a great benefit to the community. In some cases, aid provided to communities by NGOs delegitimized some municipal government institutions. Some NGOs rationalized direct execution of governmental functions due to the lack of resources in the municipalities. In other situations, the NGOs' work aimed at strengthening municipal roles and community relations. In other cases, the historical presence of the NGO and a strong mayor made things run more smoothly.<sup>71</sup>

## **4.5 Good practices and lessons learned**

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<sup>71</sup> In the community of Waller Bordo, the neighbors identify a non-governmental institution as the main source of resources for the solution to their problems, since the Municipality is lacking in resources. Tape #13, Side A.

### ***Effective institutional coordination***

It was clear from the interviews that serious duplication of efforts and resources, as well as inequalities in the aid received by beneficiaries, was due to a serious lack of coordination between institutions working at the local level.

To provide greater equity, more effective policy coordination in the housing sector, for instance, requires a priori agreement on several fronts: minimum construction standards; ways of contracting and supervising works; maximum housing unit costs; agreement on what are recoverable and non recoverable costs; and the participation of beneficiaries in the design and implementation of their units.

Along with the respective sector ministry, the lead coordination agency at the national level is COPECO. Equally important, the mayor and city council should lead coordination at the local level. A national policy is needed that requires the various actors involved in aid clearly inform and closely coordinate with local authorities, institutions, and community organizations for a more effective recovery.

### ***Systematization and sharing of data***

In addition to coordination, the interviews confirmed that after Hurricane Mitch, little useful information was produced at the national and local levels to help gauge the location, type, and amount of aid necessary. For the most part, what little information was produced, the data gathering process did not include confirmation by local authorities and communities. Also, the process did not provide for systematic monitoring of the recovery process.

It should be a matter of policy that government agencies, donors, and NGOs ensure the quality of assessment data with communities. This would help community and households confirm actual needs on the ground. The systematization of data and the provision for public access would also increase efficiency by avoiding the duplication of efforts and avoid the under or overestimation of the amount and type of aid required. In addition, the monitoring of the recovery process, including impact studies, should also be open to the public to allow sharing and learning from experience.<sup>72</sup>

### ***Recovery planning***

In addition to lack of data and coordination, the lack of recovery planning to ensure the continuum between relief and recovery appears as a major gap in most institutions, especially with respect to economic recovery.

Holistic recovery programs with short- and long-term projects oriented not only towards physical recovery but also socioeconomic and psychological recovery should be emphasized. Approved local development plans should be taken into account to allow closer attention to individual community needs.

### ***Accountability***

During the interviews, some communities denounced cases of corruption, particularly in the infrastructure sectors that involved typically large scale disbursements.<sup>73</sup> As a result, there was some sense that aid may have been misused in these projects.

Due to the political nature of disasters, more transparent systems and policies for contracting and disbursement of works should be instituted. A system of accountability, which would include some form of community participation such as community audits, should be established for all agencies, national and local as well as donors and NGOs.

### ***Decentralization of aid***

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<sup>72</sup> In the community of Betania, the unnamed institution had had meetings with other institutions that had managed previous housing projects, in order to share experiences acquired, problems and weaknesses that came up, as well as ways to face these situations.

<sup>73</sup> Tape #2, Side A.

Because top-down disbursement of aid is easier, it appears that assistance focused more where agencies or NGOs already had a presence. This discriminated against communities located in isolated areas where impact of the disaster was less visible or where there was no history of NGO assistance.<sup>74</sup> In other cases, it was reported that institutions aiming for broader geographical coverage had problems with the quality of their work. Better coordination and data collection at the national level should be complemented by a policy that ensures more equitable assistance through the decentralization of aid, particularly in areas where less aid was available.

### ***Community participation***

The interviews confirmed the importance of giving priority to the participation of the affected population throughout the project cycle. It is clear from the interviews that community participation contributed to the success of projects and conversely the lack of involvement often contributed to project failure. Treating beneficiaries as actors with rights and obligations and not as passive recipients of aid marked differences in the project ownership by the community. As expressed by a leader in the community of el Caracol, "when something does not cost any effort, often one does not even take care of it."<sup>75</sup>

### ***Risk reduction***

Although Honduras has a history of recurrent disasters, particularly droughts and hurricanes, almost all institutions confessed to total surprise and lack of preparedness when Hurricane Mitch arrived. Raising public awareness with respect to risks at the community level did not seem to be given high priority by national policymakers. With few exceptions, communities did not report participating in training courses or school programs that helped prepare them for mitigating disaster impacts.

The creation of a sustainable culture of risk reduction should be at the center of national policy, given the frequency of hurricanes in Honduras. This involves the implementation of school programs and training courses at the community level to sustain the culture of risk reduction.

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<sup>74</sup> In most cases, the aid was focused on those communities that were easily accessible, or where the institution already had a presence. Despite the fact that there is a greater visibility of aid destined for recovery in the urban area of Valle de Sula than in the rural areas of Western Honduras, there cannot be identified a pattern of preference for the recovery of urban areas compared to rural areas, since cities such as Tegucigalpa were forgotten in the recovery process beyond the construction of houses.

<sup>75</sup> Tape # 12, Side A.



## Annex C.

## List of Persons Interviewed

N.	COMMUNITY	MUNICIPALITY/AREA	NAME	OCCUPATION
1	Betania	Comayaguela / Centro	Herminia Munguia	Homemaker
2			Santos Solozano	Homemaker
3			Ernesto Acosta	Homemaker
4			Faustino Sierra	Local Council Secretary
5			Susana Flores	Community Leader
6			Marlon Zúñiga	Red Cross social worker
7			Tony Sierra	Community Leader
8	El Chile	Tegucigalpa / Centro	Trinidad Efraín López	Homemaker
9			Elvia Estrada	Homemaker
10			Oscar Fernández	Homemaker
11			Alfonso Ramón López	Community Leader
12			Maria Elena Zúñiga	Community Leader
13			Kiven Jeromy Arguela	Social worker of the Health Center
14			Elsi Dinora Sandoval	Member of the Catholic Church
15	Albergue El Trébol	Comayaguela / Centro	Eulalia Hernández	Shelter Block Coordinator
16			Antonio de Jesús López	Member of the Light of the World Church
17			Sonia Patricio Salgado	Homemaker
18			Ely Rosa Rivera	Homemaker
19			Maritza Madariaga	Homemaker

20			Oscar Orlando Galea	Shelter Block Coordinator
21			Marina Isabel Castejon	Education Committee President
21	Colonias Unidas	Choluluta / Sur	Juan de Dios Sandres Álvarez	President of the Development Board
23			Blacina López Santos	Homemaker
24			Ana Cecilia Corrales	Homemaker
25			Fausto Cerrato	Homemaker
26	Limón de la Cerca		Santos Catalino	President of the Development Board
27			Cornelia Espinal	Homemaker
28			Félix Gómez	Local Council member
29			Sonia Álvarez	Homemaker
30	El Triunfo	Potreriillos/ Norte	Nelson Fiallos Paz	Area Coordinator of OCDIH
31			Marcel	President of the Local Council
32			Gilberto	Homemaker
33			Helena Marquez	Homemaker
34	Caracol	Potreriillos / Norte	Lucila Castillo	President of the Local Council
35			Benito	Homemaker
36			Orbelina Lara	Secretary of the Local Council
37	Waller Bordo	Choloma / Norte	Delfina Rivera	Homemaker
38			Maribel Torres	Member of the CODEL
39			Carlos Albero Guevara	Homemaker
40			Lorenzo Membreño	Community Leader
41			Jessina Alvarado	President of CODEL
42	La Unión		Nancy Jiménez	Emergency worker CASM
43			Felipe Benítez Lorenzo	Member of the Evangelist Church
44			Angélica Maria Villanueva	Homemaker

			Villanueva	
45			Merary Ayala	Homemaker
46			Albadina López	Homemaker
47			Maria de Jesús Chavarria	Community Leader
48	Travesía	Puerto Cortes / Norte	Basilio Thomas	President of the Local Council
49			Constanza Arsu	Member of the Catholic Church
50			Hipólito Ávila	Homemaker
51			Tesla Thomas Ávila	Pastoral support group member
52	La Asomada	Gracias / Occidente	David Mateo	Treasury of the Water Board
53			Manuel de Jesús de Castañeda	Homemaker
54			Mauro Rene Castañeda	Member of the Parents Association
55			Luciano Mateo	Secretary of the Water Board
56			Berta Alicia Espinosa	Community Leader
57	San José del Alto	Gracias / Occidente	Felicia Guerra	Homemaker
58			Erminia Alvarado	Homemaker
59			Carmen Alvarado	Homemaker
60			Julio Alvarado	President of the Local Council
61			Elisabeth Canales	Community Leader
62	La Mohaga	Belén Gualcho / Occidente	Efraín Pacheco	Treasury of the Local Council
63			Delmy Esperanza Reyes	Homemaker
64			Dalila Rodozno	Homemaker
65			Maria Rosario Sánchez	Homemaker
66			Arcadio Pacheco	Community Leader
67			Irma Santos	Community Leader
68	Yaruchel	Belén Gualcho / Occidente	Santos Ortega	Catholic Church member

69			Maria Suyapa Amador	Catholic Church member
70			Timoteo Hernández	Catholic Church member
71			Pablo Ortega Martínez	President of the Water Board
72			Rosendo Trébol	Vice President of the Local Council
73			Raúl Campos Ortega	Secretary of the Local Council
74			Silveria Ortega	Member of the Evangelist Church
75			Jacobo Campos	Health Committee member
76			Emilio Duarte	Security Committee member
77			María Elda Campos	Nurse
78			Daniel Campo Trébol	President of the agricultural committee Hermandad
79			Ricardo Ortega	Homemaker
80	Rincón del Buey	Copán Ruinas / Occidente	Lucila Quino	High Adviser of the women (Maya-Chortí)
81			Marcos Pérez	Low Adviser (Maya-Chortí)
82			Milagros Ramos	Homemaker
83			Andrés Flores	Homemaker
84			José Melardo García	Local Council assistant
85	La Estansuela	Copán Ruinas / Occidente	Tomasa Pérez	High Adviser of the women (Maya-Chortí)
86			Francisco Ramírez	Treasury of the Local Council
87			Rodolfo García	High Adviser of the men (Maya-Chortí)
88			Felipe Pérez	Rural Education Adviser
89			Marcelino Alonso	Homemaker
90			Rufino Pérez	Homemaker
91			Delmy Paz	Coordinator APSO

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## Terminology

INSTITUTION refers to formal and informal organizations and the norms, rules and values associated with them. Institutions can include associations, groups, networks and individuals, both within and outside the community, with whom the people have some relations. Some examples are a bank, a shop, the church, school, hospital, police, government department, an NGO, farmer's groups, women's groups etc. It can also include individuals such as the village priest, the headman, a village-level worker or a doctor. *Voices of the Poor* (World Bank 1999 p.34).

MITIGATION refers to policies and actions taken before an event which are intended to minimize the extent of damage when an event does occur. Such measures include: land-use regulations; decisions about where to locate particular facilities, settlements and activities; the application of design and engineering principles to make structures disaster-resistant; and other policies and activities enacted before disasters.

PREPAREDNESS measures are the second line of defense against disaster; their objective is to enhance the ability to respond when a disaster occurs. Preparedness activities include: formulating emergency plans; providing training for disaster responders and the general public; communicating with the public, government officials and other audiences about levels of disaster vulnerability and what to do to reduce vulnerability. The preparedness process involves attempting to anticipate what problems are likely to emerge in future disaster situations and to devise ways to address those problems.

RESPONSE activities are actions taken at the time a disaster strikes (or prior to impact, if the event is predicted or forecasted), that are intended to reduce threats to life-safety, secondary hazards, and losses occasioned by the event. These include: warning, evacuation, protection of lives and property, search and rescue; care of those who are injured; the provision of emergency shelter for victims; damage assessment; debris removal; and other activities that take place during the post-impact emergency period. In our reports we should refer to this as relief.

RECOVERY is defined as longer-term efforts to (1) reconstruct and restore the disaster-stricken area through repairing or replacing homes, businesses, public works, and other structures; (2) deal with the disruption that the disaster has caused in community life and meet the recovery-related needs of victims; and (3) mitigate future hazards. That is, recovery equals rehabilitation plus reconstruction.

## Annex E.

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**Method****1. Questionnaires for Institutions**

ProVention-Honduras

Questionnaire # \_\_\_\_\_

Date \_\_\_\_\_ dd/mm/yy

Learning Lessons in the Post-Mitch Recovery Phase  
Honduras Case Study

## IDENTIFICATION

Name of interviewee:		Name of institution:
		Position:
Department:	Municipality	Area:
Male	Community	Contact information (telephone #):
Female		
Ethnicity:		

Good morning/afternoon. My name is \_\_\_\_\_ and I represent ProVention Consortium, a group of institutions that study the relations between disasters, poverty and the environment.

We are performing interviews for this group on lessons learned and improvements experienced in the Post-Mitch recovery phase in Honduras.

The results of the study will be used to provide some suggestions and recommendations to communities and institutions.

You have been selected to take part in this interview.

We would like to ask you to collaborate with us in responding to the questions.

The interview will take approximately 45 minutes. Your name and the information that you give us are completely confidential, but the results of the survey will be available for public access.

## **QUESTIONNAIRE**

### GENERAL OBJECTIVE

What lessons did you learn after Hurricane Mitch that will help you to face future disasters?

Which experiences have been the most successful for you, and in what sense? (The facilitator will explain that the recovery process includes the phases of reconstruction and rehabilitation which start about six months after the disaster.)

### 1. INSTITUTIONS

What role have institutions played in the community during the Post-Mitch recovery phase?

Do you believe that your institution has responded to the needs of the affected population, and if so, in what sense?

What was the most positive experience realized by your institution in the recovery phase, and why?

Did your institution include the affected population throughout the different phases of the project? Did your institution perform lobbying work that improved access resources for the affected population? Give specific examples.

Do you believe that the interventions performed by external agencies (international NGOs, finance agencies) contributed to the strengthening of local capacities?

What could be done to improve the functioning of your institution in matters relating to the recovery phase?

### 2. LIVELIHOOD

What have been the main problems that the community has had during the recovery phase? Which of these problems have been solved by the people themselves, and which have required external aid?

Do you think that the livelihoods of the affected population reached the same levels that they were at before Hurricane Mitch? Give examples.

What do you think the community will need in order to be able to better face a disaster?

What do you believe was the response of the affected population, with respect to the level of participation, in the activities performed by the institution in the recovery phase?

### 3. GENDER AND ETHNIC EQUALITY

Did your institution adopt policies that kept in mind gender and ethnic equality in the activities performed in the recovery phase? Give examples.

Do you think that your institution could have benefited certain groups (ethnic, religious, or economic groups) during the recovery phase? How? Why? What measures were taken to avoid this?

Do you think that the participation of men and women in the recovery phase was different due to their belonging to certain ethnic groups?

#### 4. IMPACT

Did the aid arrive on time and respond to the needs of the affected persons? Do you believe that your institution managed the available resources in an efficient and effective manner in the recovery phase?

Did the activities performed by your institution in recovery phase have a long or short term approach? Why?

In which way did the policies adopted by your institution reduce community vulnerability? Give examples.

Did these interventions have an impact on the local environment? How so?

#### 5. POSITIVE LESSONS

Indicate 2 positive actions performed by your institution that particularly helped the community to recovery from the disaster. How and why?

Which actions, in which the institution took part, had a great impact in the community? Which organizations participated in these actions?

#### 6. OTHER COMMENTS

Would you like to added any other comment?

*Thank you very much for your cooperation.*

## **2. Questionnaire for households and community leaders**

ProVention-Honduras

Questionnaire # \_\_\_\_\_

Date \_\_\_\_\_ dd/mm/yy

Learning Lessons in the Post-Mitch Recovery Phase

Honduras Case Study



## IDENTIFICATION

Name of interviewee:		Charge
Department:	Municipality	Area:
Male	Community	Contact information (telephone #):
Female		
Ethnicity:		

Good morning/afternoon. My name is \_\_\_\_\_ and I represent ProVention Consortium, a group of institutions that study the relations between disasters, poverty and the environment.

We are performing interviews for this group on lessons learned and improvements experienced in the Post-Mitch recovery phase in Honduras.

The results of the study will be used to provide some suggestions and recommendations to communities and institutions.

You have been selected to take part in this interview.

We would like to ask you to collaborate with us in responding to the questions.

The interview will take approximately 45 minutes. Your name and the information that you give us are completely confidential, but the results of the survey will be available for public access.

#### I. OBSERVATIONS OF THE PHYSICAL CAPITAL

Type of material of the external walls of the home:

	Before	Now
Permanent (Block, brick, concrete, adobe)	1	01
Not permanent (stem, metal sheeting or cardboard)	2	02

This home is:

	Before	Now
Rented	1	01
Self-owned	2	02
Other	3	03

Could you tell me which are the main sources of water for this home?

<i>Before</i>	<i>Now</i>

## II. OBSERVATIONS ON FINANCIAL CAPITAL

Is your income higher or lower than before Hurricane Mitch?

## III. OBSERVATIONS ON NATURAL CAPITAL

What are the main products cultivated in the community (beans, maize, vegetables, fruits etc.)? How was the production of these crops affected by Hurricane Mitch, and what measures did you have to take in this respect?

## IV. OBSERVATIONS ON SOCIAL CAPITAL

Did the presence of institutions in the community increase, decrease, or remain the same after Hurricane Mitch? What kind of support do most of these organizations provide?

## V. OBSERVATIONS ON HUMAN CAPITAL

How many household members are working? Did this situation change during the post-Mitch recovery phase?

## VI. QUESTIONNAIRE

### GENERAL OBJECTIVE

What lessons did you learn after Hurricane Mitch that will help you to face future disasters?

Which experiences have been the most successful for you, and in what sense? *(The facilitator will explain that the recovery process includes the phases of reconstruction and rehabilitation which start about six months after the disaster.)*

### 1. INSTITUTIONS

Which community institutions have participated the most in the recovery phase, and in what manner?

How do you think these institutions have benefited the community in the post-Mitch recovery phase?

In which phase of the implementation of the recovery projects did the community participate?

What do you think you learned from the post-Mitch experience to reduce the impact of future hurricanes?

What should be done in order to improve the response of institutions in the recovery phase?

## 2. LIVELIHOODS

How do you think your personal abilities have improved in order to face a new disaster?

What were the main problems faced by the community in the recovery phase, and what measures were taken in this respect?

Were these decisions supported by the institutions?

## 3. GENDER AND ETHNIC EQUALITY

What has been the role of men and women to face disasters? Do you think these roles have changed after the experience with Mitch?

Who manages the money in the family? Did this situation change after Hurricane Mitch?

Do you think that the institutions that participated in the recovery phase kept in mind the equal participation of men and women?

Do you think that the participation of men and women in the recovery phase was different due to their belonging to certain ethnic groups?

## 4. IMPACT

Do you think that there were ethnic, religious or economic groups that were more benefited by the aid given in the recovery phase? How and why?

Do you think that the aid arrived on time and responded to the people's needs? Do you think that the institutions properly managed the available resources in the recovery phase?

Do you think that the activities that were performed during the recovery phase will be maintained in the long term?

Did these interventions have an impact on the local environment?

## 5. POSITIVE LESSONS

Indicate 2 positive actions that particularly helped the community to recover from the disaster. How and why?

Which actions in which you participated had a great impact in the community? Were these actions supported by any organization?

## 6. OTHERS

Would you like to add any other comment?

*Thank you very much for your cooperation.*

## Annex F.

## Communities Selected

DEPARTMENT	COMMUNITY	Nº OF INHABITANTS	ETHNIC GROUP	AREA
FRANCISCO MORAZAN	EL CHILE	7959 <sup>a</sup>	Mestizos	Urban
	BETANIA	1489	Mestizos	Urban
	EL TRÉBOL	2000	Mestizos	Urban
CHOLUTECA	LIMON DE LA CERCA	227	Mestizos	Rural
	COLONIAS UNIDAS	7500	Mestizos	Urban/ Rural
CORTES	EL TRIUNFO	236	Mestizos	Urban/ Rural
	CARACOL	120	Mestizos	Urban/ Rural
	WALLER BORDO	1500	Mestizos	Urban/ Rural
	LA UNION	600	Mestizos	Urban/ Rural
	TRAVESIA	1104	Garifunas	Urban/ Rural
LEMPIRA	SAN JOSE DEL ALTO	382	Mestizos	Rural
	LA ASOMADA	2577	Mestizos	Rural
OCOTEPEQUE	LA MOHAGA	500	Lencas	Rural
	YARUCHEL	1410	Lencas	Rural
COPAN	RINCÓN DEL BUEY	509	Maya Chorties	Rural
	LA ESTANSUELA	229	Maya Chorties	Rural

a. Exact figures are lacking in this respect.

Table F.1: Number of men and women interviewed

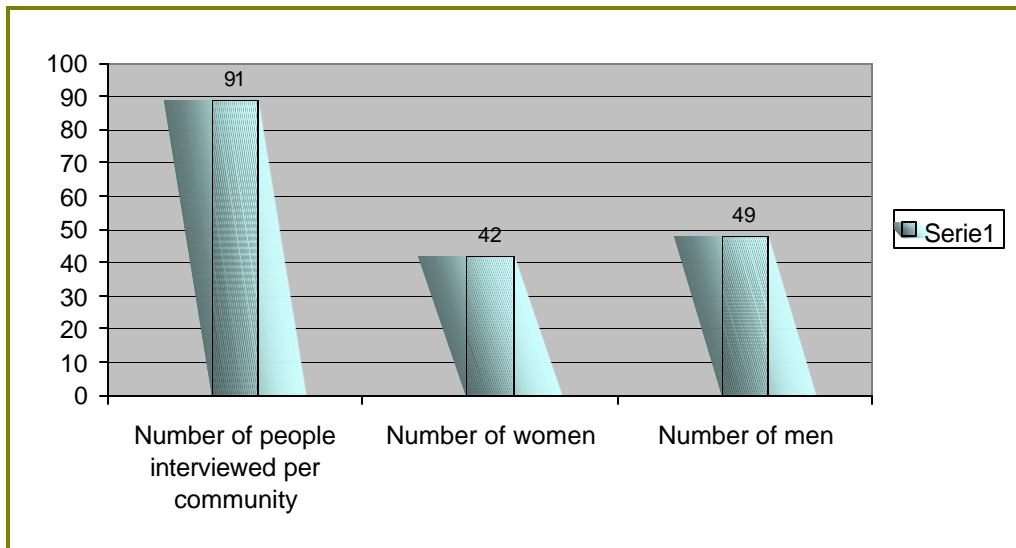


Table F.2: Percentage of leaders of institutions and households interviewed

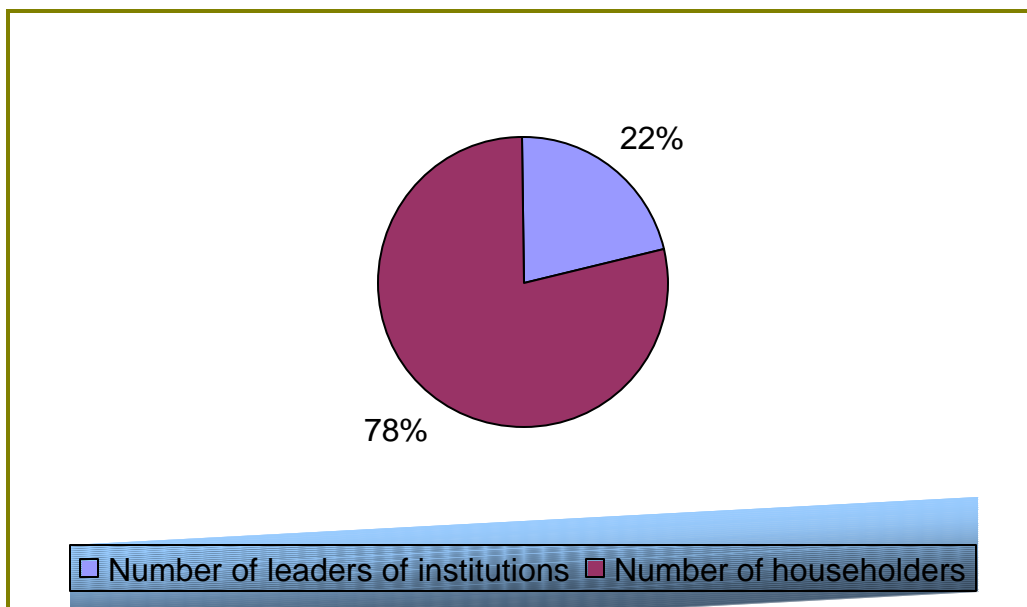


Table F.3: Number of people interviewed, by community

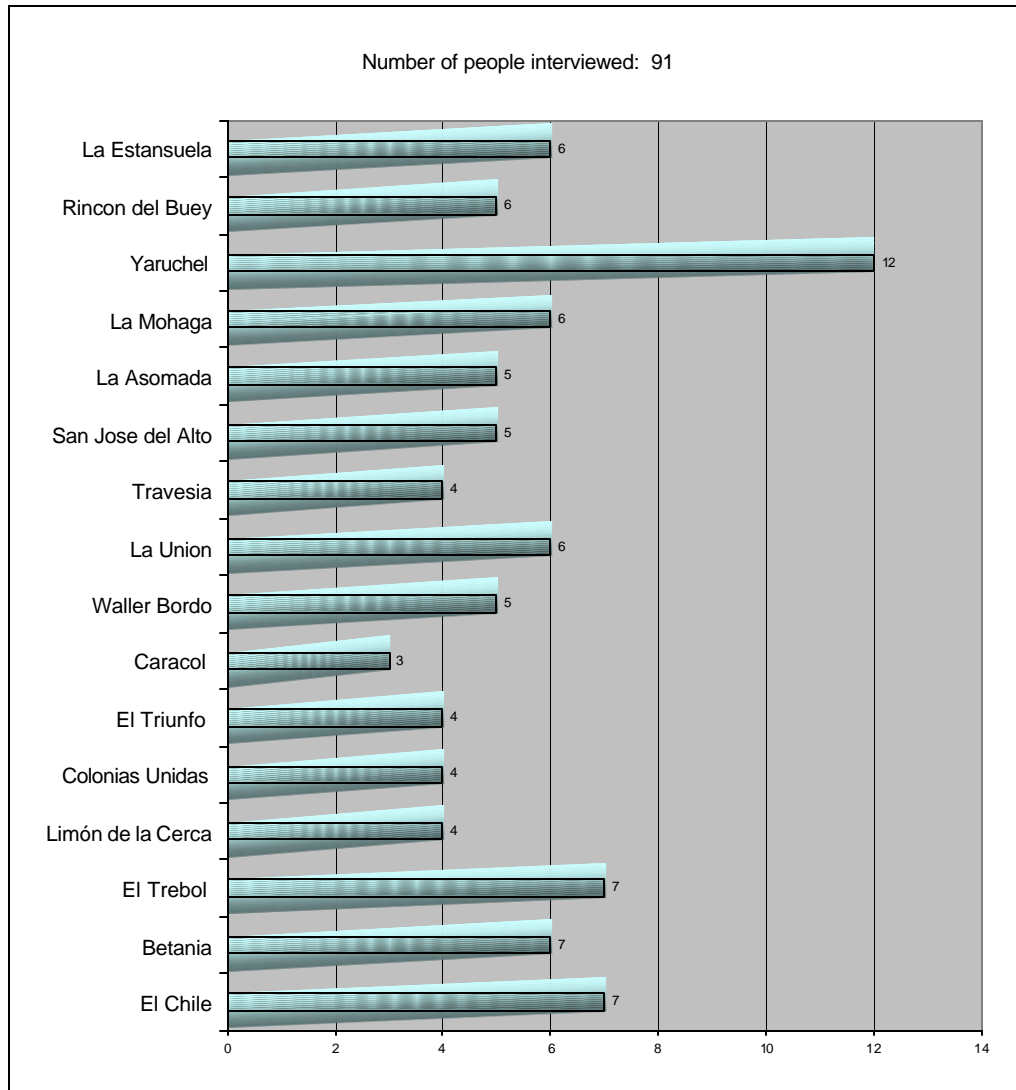


Table F.4: Ethnicities of the people interviewed

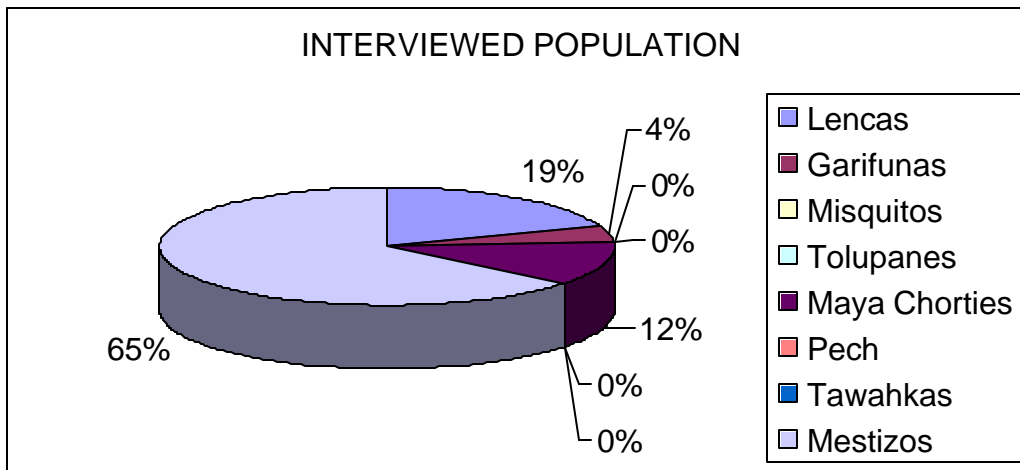


Table F.5: Impact of Hurricane Mitch in Honduras

Sector <sup>a</sup>	SOUTH	NORTH	WEST
<b>Agriculture</b>			
Loss of crops	2 <sup>b</sup>	5	6
Lost of productivity of land	2	5	6
<b>Employment</b>			
Lost of employment or trade	4	..	..
<b>Services</b>			
Water supply	3 / 1 n.a.	4	6
Electricity	3 / 1 n.a.	4	6 n.a.
<b>Infrastructure</b>			
Housing	5	2	..

a. The Southern, Northern and Western sectors include the following communities:  
*South:* Limón de La Cerca, Colonias Unidas, El Chile, La Betania and El Trebol 1 Shelter.  
*North:* El Triunfo, El Caracol, Waller Bordo, La Unión and Travesía.  
*West:* San José del Alto, La Asomada, La Mohaga, Yaruchel, Rincón del Buey and La Estansuela.

b. Number of affected communities

## References

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- Angel Augusto Juarez B., El Mitch y Yo, Comayagua, MDC, Nov. de 1998 (primera edición, 2001)
- Charvériat, C. 2001. *Natural Disaster in Latin America and the Caribbean: An Overview of Risk*, Washington, D.C., IDB.
- Charvériat, C., Caroline Clarke and Sergio Mora-Castro, 1999. *Facing the Challenge of Natural Disasters in Latin America and the Caribbean: and IDB action plan*, Washington, D.C., IDB.
- Colectivo Feminista Mujeres Universitarias, 1999. *Situación de la población en Comunidades Habitacionales Transitorias (CHATs) con énfasis en las mujeres, diagnostico preliminar*, Tegucigalpa, Honduras.
- DFID, "The livelihoods framework" in [www.livelihoods.org/info/info\\_guidanceSheets.html](http://www.livelihoods.org/info/info_guidanceSheets.html)
- Ernesto Schaltegger, Tulum SA, Moderador del Evento, Mitch – UN ANIO DESPUES, Taller de Reflexión en Managua, Nicaragua, octubre 27-28, 1999
- Honduras, Departamento de Comunicaciones, Casa Presidencial, 2000. *La Reconstrucción y Transformación de Honduras, Informe de Avance*, Tegucigalpa, Honduras.
- Honduras, Departamento de Comunicaciones, Casa Presidencial, 2001. *Estrategia para La Reducción de la Pobreza, un compromiso de todos por Honduras*, Tegucigalpa, Honduras.
- IOM, July 2000. Evaluation of IOM Project for Shelter Construction and Emergency Assistance for Victims of Mitch
- Lavell, A. 1998. *Decision Making and Risk Management*, paper prepared for the conference, "Furthering Cooperation in Science and Technology for the Caribbean," Port of Spain.
- Lavell, A. 2000. *Desastres y Desarrollo: Hacia un entendimiento de las formas de construcción social de un desastre: El caso del Huracán Mitch en Centroamérica*, En Garita, Nora y Jorge Nowalsiki, "Del Desastre al Desarrollo Sostenible: Huracán Mitch en Centroamérica," San José, Costa Rica, BID/IDB.
- OPS/PAHO 2002. *Protección de la Salud Mental en situaciones de Desastre y emergencias*, Washington, D.C.
- OPS/PAHO, 1994. *A world safe from Natural Disasters: The Journey of Latin America and the Caribbean*, Washington, D.C.
- Ordóñez, A., Monica Trujillo y Rafael Hernández, 1999. *Mapeo de Riesgos y Vulnerabilidad en Centroamérica y México; Estudio de Capacidades locales para trabajar en situaciones de emergencia*, Managua, Nicaragua, Imprimatur.
- Tierney, K. 1993. *Disaster Preparedness and Response: Research Findings and Guidance from the Social Science Literature*; Paper Prepared for the US- ROC, Workshop on Natural Disaster Reduction, Taipei, Taiwan.
- Varios Autores, 2001. *Diccionario de la Acción Humanitaria y la Cooperación al Desarrollo*, Instituto de Estudios sobre Desarrollo y Cooperación Internacional de la Universidad del País Vasco, España: Icaria.
- Wilches-Chaux, G. 1989. "La vulnerabilidad global," en Maskrey, A., *Los Desastres no son naturales*, Bogotá, Colombia: LA RED.
- Wilches-Chaux, G. 1995. *Desastres y el medio ambiente*, PNUD, DAH.
- World Bank, "Voices of the Poor" in [www.worldbank.org/poverty/voices/reports.htm](http://www.worldbank.org/poverty/voices/reports.htm)
- Zilbert Soto, L. 1998. *Guía de LA RED para la gestión local del riesgo, Módulos para la capacitación*, Quito, Ecuador, Ed. Delta.





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