

HONDURAS

Building Resilience

Community Disaster Risk Management in the Poorest Neighborhoods of Tegucigalpa

Honduras is one of the poorest countries in Latin America with a per capita income of around US\$1,829 (CIA World Factbook, 2009). Due principally to its geography, Tegucigalpa, the capital city, is exposed to a variety of natural hazards, most notably hurricanes, landslides and flooding. The impact caused by these periodic events is exacerbated by deficient infrastructure, limited land-use planning, the proliferation of squatter developments, and inadequate sanitation and solid waste management systems.

'Natural Disaster Mitigation Project', (*PMDN - Proyecto Mitigación de Desastres Naturales, P064913*). Despite these efforts, the country has been continuously hit by natural hazards and the vicious circle of inefficient risk management and economic weaknesses have left a social and economic 'scar' that is difficult to heal.

In 2004 the Japan Social Development Fund (JSDF) provided a grant of US\$1.9 million to support the "Community Disaster Management" project.

Communities at Risk

The JSDF grant directly benefitted poor and physically vulnerable households and communities living in 114 of the most marginal neighborhoods in Tegucigalpa. These high risk settlements were identified through a vulnerability assessment that considered not just physical variables such as environmental deterioration, or physical exposure to natural hazards such as floods and landslides, but also social and economic variables such as poverty level, population growth rates, infrastructure, investment, and so on.

The target population was situated mainly in the Central District, including communities located at the periphery of Tegucigalpa, near the Choluteca river, that winds through the city. These squatter areas have grown up largely as a result of rural-urban migration, seeking employment in the "maquilas" (manufacturing plants) around the Capital.

The Project

The project helped communities develop a



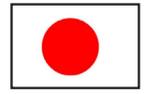
Photo: © Yuri Cortez

In 1998, Hurricane Mitch, impacted Honduras Guatemala and Nicaragua causing over nineteen thousand deaths and leaving an estimated 2.7 million people homeless. The associated flooding caused damage estimated at over US\$5 billion. This catastrophe served as an unfortunate reminder of the growing physical vulnerability of the poor and the urgent need for disaster mitigation measures. Up until this time, poverty reduction efforts in Honduras had not explicitly included consideration of risk reduction and/or physical vulnerability.

In 2000, a new law restructured the Permanent Commission of Contingencies (COPECO) and the government was able to make significant progress towards the development of an efficient disaster response system through the IDA-financed



The Japan Social Development Fund (JSDF) was established in June 2000 by the Government of Japan and the World Bank as a mechanism for providing direct assistance to the poorest and most vulnerable groups in eligible World Bank group member countries.



Project Data

- Implementation Agency: *Ministerio de Gobernación y Justicia-Unidad Técnica Coordinadora (UTC)/Permanent Commission of Contingencies (COPECO)*
- Grant (TF052879) Amount: *US\$ 1.9 million*
- Implementation Period: *03/09/2004-03/09/2008*

demand-driven preparedness strategy that mapped previous disasters, identified vulnerabilities and pointed to ways that these could be mitigated, potentially reducing their impact.

The project had three major components:

- 1. Building community and local government capacity to manage and mitigate disasters**
- The project mobilized the community and established several Community-based Organizations (CBOs) called CODELS (local committees for disaster prevention) to focus on disaster mitigation and management, relying on the existing local system in Tegucigalpa named CODEM (Operations Center for Disaster Emergency) linked to the Municipality. The CODEM acted as a facilitator and provided CODELS technical know-how, analysis, vulnerability mapping and early warning support.
- 2. Implementing new and participatory, demand-driven disaster mitigation and management activities** - The project supported technical assistance, studies and public consultations that complemented community knowledge of disaster risks. These activities were selected on a cost-benefit basis, and were tailored according to the needs of the population. Training included risk prevention, environmental management and disaster response (including first aid, search and rescue and purchasing of specialized equipment), civil works - including drainage channel cleaning.
- 3. Strengthening the partnership between targeted poor communities, NGOs and local government** - The grant not only strengthened the relationship between communities and local government but also provided inputs needed for the future development of a testable methodology for community-led disaster management.

A unique methodology

The JSDF project adopted a fully participatory risk reduction methodology that engaged all key stakeholders. Bringing together vulnerable communities and the local government in this way was innovative in the Honduran context - it had previously been tested in the context of an earlier JSDF project in Managua (Nicaragua), the first such use of the methodology in Latin America. Replication of the model to Tegucigalpa was greatly

aided by the many similarities between the two locations (see Box 1).

This grant gave considerable support to the CODEM including a 'CODE' (Operations Center) for disaster emergency and mobile units. It also helped the Municipality of Tegucigalpa maintain an open communication channel with the communities.

Results

While working in a major city such as Tegucigalpa with informal squatter settlements, poor infrastructure and vulnerable areas presented quite a challenge, the project was able to build on the experiences gained under the PMDN and shared lessons from the other Municipalities. The involvement of the CODEM and its willingness to work "hand in hand" with the CODELS, was key to strengthening the ties between the National Government and the community and to building trust in the capabilities of the local authorities.

In order to make preventive actions work, a series of simple principles were established:

i) Empowering communities and building ownership - The project reached and trained **more than 100 high risk neighborhoods** (instead of

Box 1 - Pioneering a Model: The Managua JSDF project

Managua is the capital city of Nicaragua and is the largest city in terms of population and geographic size. Located on the southwestern shore of Lake Managua, it has suffered devastating earthquakes in 1931 and 1972. Since the 1972 earthquake, residential and business areas have developed on the outskirts of Managua. (CIA World Factbook 2009). Most of these areas are vulnerable to natural disasters and are typically inhabited by the poorest communities who lack even basic services. To address this problem, a JSDF grant was approved in March, 2001 as a complement to the IDA-financed "National Vulnerability Reduction Project". The Managua project was implemented by the Social Investment Emergency Fund, FISE - *Fondo de Inversión Social de Emergencia*. Supported by donors operating in the country, FISE handled donor funds and channeled these to the communities. The FISE implementation method required a commitment in writing from the community, ensuring monitoring and evaluation and increased ownership of investments (and as a consequence, improved maintenance and sustainability). This process empowered communities, through Neighborhood Improvement Committees (NICs), to take part in the decision making associated with Vulnerability Reduction Action Plans.

The teams working on the Honduras and Nicaragua grants exchanged experiences. For example, the Honduras grant financed four workshops, two in Tegucigalpa and two in Managua to promote exchange between both municipalities regarding their experiences in areas such as community driven disaster and environmental risk management.



the 20 originally planned) through the CODEM/ CODELS, blending technical expertise with grassroots know-how, allowing a higher level of involvement and collaboration to identify risks.

The CODELS organized meetings, interactive workshops and the dissemination of information kits to all members of their respective neighborhoods and designated volunteers from each community to be in charge of warning systems and monitoring vulnerable points. The project aimed to make communities aware of, and alert for, disasters, able to identify and assess the risks, use the proper equipment, and react appropriately in case of an emergency. More than 300 community members and 57 instructors were trained in risk management and prevention techniques. The CODEM created training manuals and didactic materials for schools, to sensitize the communities on risk reduction and provide the basis for awareness campaigns.

ii) Mapping areas at risk, and Emergency plans - Emergency plans were developed and tested through drills in 30 neighborhoods and settlements in high risk areas. These plans pre-screened for environmental impact through a revamped local disaster risk information management system (20 computer-based information units and network connections that enabled transparency, accessibility and information-sharing). The Emergency response system was updated through the addition of an integrated database management system, emergency response software, and a website. The action plans were prioritized using participatory micro-planning techniques. This enabled the local government to identify high risk areas and increase the safety of the communities, to better control urban growth and prevent the development of new settlements in vulnerable areas.

“In each Municipality, local committees are not only formally established but are also very active and enthusiastic about the project. (...) In Ajuterique, the committee includes a ten-year-old boy, who reportedly adds a lot to discussions in terms of energy, receptivity and originality. He is expected to disseminate what he learns among children of the Municipality. In Santa Ana, the committee has spontaneously proposed to form subcommittees to spread knowledge, capacity, and work results at the local level. (...)”

Diagnostic and planning activities built awareness among the participating communities that natural disasters are not simply acts of God or the result of bad luck, but a mix of human activities and natural conditions, which can be mitigated with careful planning and management.”

- Tova Ma. Solo
Task Team Leader

iii) Managing and mitigating the existing risk - A series of civil works aimed at preventing disasters were identified and carried out by the communities who were also given the responsibility for maintenance of the resulting infrastructure. These civil works complemented the IDA PMDN project and represented tangible improvements in community security and confidence. Community involvement in the identification, planning and construction of a total of 35 infrastructure improvements strengthened ownership and contributed to the sustainability of these efforts. Investments were focused mainly on landslide stabilization, the building of retaining walls, drainage channels, and aqueduct improvements.

iv) Putting vulnerable areas into innovative community land uses - The JSDF grant financed a study to turn ‘El Berrinche’, a very dangerous hillside in Tegucigalpa - evacuated following Mitch, but under pressure from squatters - into community gardens and other non-residential uses. In other squatter areas, crops were planted, football fields laid out and clear signage posted. This discouraged squatters from occupying the high risk areas. The Japanese government has also expressed interest in supporting plans to transform ‘El Berrinche’ into a risk-free zone.

The success of this approach to disaster risk management has led to its adoption in a number of other Latin American countries, including Colombia, Costa Rica, Guatemala and El Salvador. The Honduran government has internalized many of the outcomes of the JSDF Project/PMDN. Mayors are now sufficiently sensitized to allocate some of their local budgets to prevention activities. This represents a substantial change from the situation pre-Mitch where there was no system of support to local governments for disaster management.

Lessons Learned

Some of the key lessons emerging from this project include:

- 1. Focus on prevention rather than solely on reconstruction** - The CODEM played a key role as a technical knowledge disseminator. During implementation they acquired the experience to organize, convene, and motivate community members and assist with the identification and prioritization of civil works. Local volunteers were hired to carry out basic construction and

maintenance tasks. As well as job creation, this helped generate ownership.

2. Community-based or community-directed disaster management works - The Tegucigalpa program showed that **involving and fully engaging with communities can lead to long-term sustainability and scale-up**.

Through patience, knowledge-sharing, locally managed resources, and capacity building, the participating community groups can grow to effectively sustain and manage their own processes and activities. In addition, the development or strengthening of trust between poor communities and local municipal government authorities is essential for positive and sustainable outcomes.

3. Technical expertise complemented community knowledge - Analyzing risk and mapping vulnerabilities are not easy tasks, but merging local experts ideas with community needs and past crisis experience can result in a more solid and community-driven plan.

4. Build on Cross-Country Lessons Learned - The JSDF Honduras project learned from, and complemented, the earlier Nicaraguan project. Both used the empowerment of the community through capacity building and social inclusion. The incremental experience gained and validation of results has set a precedent which other Latin-American countries have followed.

5. Crises provide opportunities to bring people together and effect change - By their nature, disasters mobilize communities and can provide an environment that is open to change and focused on mitigation and the prevention of repeated disruption. In Honduras and Nicaragua the post-Mitch crisis left emotional scars on people's memories that made awareness raising and capacity building an active exercise in collective goodwill and sharing.

6. Working with local governments - The JSDF project facilitated coordination of the different stakeholders and fostered an environment conducive to on-going collaboration. While the civil works provided under the project were

important preventative measures, the changes in mentality that took place in the Municipal authorities and community were arguably just as significant. Similarly, transparency of disaster risk information has been greatly improved, enabling local government to better map high risk areas, plan and control urban growth.



Small steps-Big impact

The Bank rated this project as highly successful, largely because of its innovative community-driven approach. The impact of the project has been felt not only in Tegucigalpa and Managua but also in several other countries in Latin America where the model has been applied. This project has

undoubtedly contributed to the wider discussion on emergency preparedness and the potential role of communities in managing risk. Nevertheless, there remain opportunities, and perhaps some urgency, for geographical expansion of these approaches to other municipalities and sectors.

The Government of Honduras has requested a follow-on project, and the Bank is assisting with the help of the **Climate Exchange Adaptation Fund**. This provides grants to support adaptation to climate change, since rising sea temperatures are leading to increased intensities of tropical storms affecting Central America.

In recent years Tegucigalpa has been hit by Tropical Storm #16 (2009) and more recently by TS "Matthew" (2010), and has handled them well, thanks in part to the training, equipment and disaster mitigation strategies and partnerships developed under the JSDF project.

"Showing communities how to help themselves and how to prevent and reduce risks is worth more than sophisticated equipment for disaster management agencies when it comes to saving lives and property".

- Task Team Leader

Key Resources/Notes

This note has been enriched by the input of the Task Team Leaders: Maria Tova Solo and Enrique Pantoja -Sr. Land Administration Specialist, LCSAR at the World Bank.

The Japan Social Development Fund -- The JSDF is a partnership between the Government of Japan and the World Bank that supports innovative social programs in developing countries. JSDF grants are executed by NGOs/CSOs and local governments and implemented at the community level. JSDF projects meet four basic requirements: (i) they target and respond to the needs of poor, vulnerable, and disadvantaged groups, and aim to achieve rapid results, (ii) they are innovative and pilot alternative approaches or partnerships, (iv) they use participatory designs and stakeholder consultation to design inputs and as an integral part of monitoring and evaluation, (iii) they empower local communities, local governments, NGOs/CSOs through capacity building and rapid feedback of lessons learned, and (v) they focus on scale-up potential, replication and the sustainability of interventions.

