

Rebuilding after Hurricane Mitch: Housing reconstruction in Honduras and Nicaragua

Background

Hurricane Mitch struck Central America in October 1998, unleashing unprecedented levels of rainfall, which in turn triggered floods and landslides. It was the worst disaster the region had experienced in 200 years, killing nearly 10,000 people and leaving millions more homeless. Buildings, bridges, roads, health care and water and sanitation systems were destroyed or damaged. The devastation of vast tracts of agricultural land resulted in significant production losses and unemployment. While all the countries in the region were affected, Honduras and Nicaragua were the hardest hit. The poor and vulnerable suffered the brunt of the hurricane.

The generosity of the public response meant that the Red Cross and Red Crescent Movement was able not only to provide emergency assistance to the affected population in the immediate aftermath of the hurricane, but also to contribute to recovery activities.

As the greatest need was for housing, the Canadian Red Cross undertook a settlement construction project in collaboration with the United Nations Development Programme (UNDP) in Nicaragua and the International Organization for Migration (IOM) in Honduras. The project was completed in February 2002, enabling its longer-term impact to be assessed and valuable lessons to be drawn for future disaster recovery and reconstruction operations.



The project

The Canadian Red Cross's post-Mitch housing reconstruction project in Honduras and Nicaragua was part of its strategy to establish a presence in the region. The aim was to foster relations with and build the capacities of the National Societies of the two countries and to develop other programmes, particularly in the area of health care.

Recognizing its lack of experience in settlement development, the Canadian Red Cross decided not to take on the management risks involved in direct implementation of the reconstruction project. Rather, it chose to work in collaboration with UNDP in Nicaragua and IOM in Honduras, both of which had the technical and financial capacities to deliver housing combined with community development. Moreover, both organizations had already completed a number of post-Mitch projects and were well established in the countries concerned. The partnership allowed the Canadian Red Cross to focus on important strategic oversight needs and on the creation of complementary sustainable programming in health.

A primary health care project, funded jointly by the Canadian International Development Agency (CIDA) and the Canadian Red Cross, was linked to the settlement development. Its aim was to improve the health conditions of vulnerable families through health education, promotion and disease prevention, as well as to strengthen local capacities to respond to priority health needs. Local women made up the core of the Red Cross volunteers working on the project and, as such, were both its implementers and main beneficiaries.

Nicaragua

In Nicaragua, UNDP managed the project in collaboration with local authorities and other aid agencies such as Caritas, the Council of Protestant Churches of Nicaragua and the IOM. These organizations were to deliver jointly on an integrated settlement package including housing, water and sanitation, income generation and training.

Beneficiaries of the project were identified by the municipality. They had to be survivors of Hurricane Mitch. Among these, priority was given to the most vulnerable: single parents, of whom women constituted a significant number, and those living on marginal incomes. Any houses the beneficiaries owned in high-risk areas had to be demolished.

Land was donated or purchased by the communities, individuals, non-governmental organizations or

municipalities. The plots were sized to allow space for extensions, gardens and latrines. The allotted land was verified to be safe from potential volcanic activity and flooding. All new houses were designed to be earthquake resistant.

Title to land sometimes remained with the municipality or the community, while title to the houses was in the name of the family or the woman. Free transfer of ownership of the houses to the recipients was a condition of Canadian Red Cross financing. The only contribution required from them was their labour. A 10- to 20-year restriction was placed on resale.

The International Federation of Red Cross and Red Crescent Societies in collaboration with the United States Agency for International Development (USAID) provided the affected population with temporary on-site shelters (*champas*). Access to a temporary water supply and latrines was also ensured. The materials used in the *champas* were recyclable so that the beneficiaries were eventually able to re-use them to create interior partitions, additional porches and enclosed cooking areas in their permanent housing.

Materials were purchased with consideration to maximizing the positive impact on local micro-industries and cooperatives and minimizing additional stresses to the environment. Wood was excluded from construction (except in the *champas*) for environmental and cost reasons, since deforestation had aggravated flooding and landslides.

A permanent water supply was either provided by the national water and sanitation company or through local gravity-fed systems built by the community under the supervision of project technical staff. Maintenance committees either already existed or were established.

In each community, a special body or *junta* was formed to manage community affairs. UNDP conducted training for all *junta* members in participatory community development, needs prioritization and community organization. This was particularly important where families were brought together for the first time in a new community. UNDP also held training sessions for local authorities (mayors and staff) on land-use planning, site planning and settlement development.

Honduras

In Honduras, the Canadian Red Cross and the Honduran Red Cross signed an agreement with IOM, which had already been involved in building *macro albergues*, temporary collective structures to house people affected by Hurricane Mitch. The IOM was responsible for all aspects



of project delivery, while the Honduran Red Cross, in particular its local branches, and the Canadian Red Cross worked closely with it throughout the various phases of the project cycle.

The beneficiaries were chosen following a rigorous process of pre-selection and in-depth interviews conducted by Honduran Red Cross branch staff and volunteers. Since the selection process was based on vulnerability, some of those who benefited from the project had not necessarily been affected by Hurricane Mitch.

Beneficiaries signed an agreement stipulating that the houses were to be family property and prohibiting resale for 20 years. All previously owned houses in high-risk areas were to be demolished. It was also agreed that the beneficiaries would volunteer their labour and participate in the *patronato* (the formal body that manages community affairs).

Unlike in Nicaragua, beneficiaries were not provided with temporary shelters on-site but continued to live in their old houses or in other accommodation. In Honduras, the beneficiaries provided unskilled labour for various tasks and guarded the sites to protect the materials.

All houses were equipped with running water and sanitation. Water came from various sources. Wastewater was treated through septic tanks or drainage fields.

Outcomes

- **Planned settlements:** The Canadian Red Cross project led to the construction of 832 houses in Nicaragua and 150 houses in Honduras in 36 well-planned and safe settlements accompanied by a degree of social and economic development. In Nicaragua,

the provision of funds by the Canadian Red Cross funds created an opportunity for UNDP to pool funding contributed by other agencies. This increased the total of houses built to 1,300, thus benefiting a greater number of families.

- **Red Cross visibility:** The Movement's profile has been raised considerably in both countries as a result of the project. In Honduras, in particular, the project benefited the Red Cross branches, increasing staff and volunteer membership, putting them in contact with local authorities and other organizations and boosting their credibility within their communities.
- **Partnerships:** The Canadian Red Cross established effective partnerships with UNDP and IOM, both of which had relevant experience and were in a position to provide added value and resources. The partnerships enabled the Canadian Red Cross to concentrate on other complementary objectives including community health, while leaving the technical challenges to agencies with better expertise.
- **Beneficiary participation:** In Nicaragua, beneficiaries lived in temporary shelters on the settlement sites and were actively involved in the entire rebuilding process. They were able to use the skills they acquired during the construction phase to further improve the interiors of their new housing, i.e. to create partitions and extensions.
- **Health care:** In Honduras, the health care component of the project was directly linked to settlement development, ensuring long-term involvement of the local Red Cross branches. This provided an opportunity to monitor how the residents settled in and to deal with any problems that arose. This was less the case in Nicaragua, as only a few of the communities that benefited from the housing reconstruction project met the criteria to be part of the

health care component (e.g. number of women of reproductive age or of children under two years of age).

Eight years later

It has been eight years since Hurricane Mitch hit Central America and five years since the Canadian Red Cross housing reconstruction project in Nicaragua and Honduras was completed.

In Nicaragua, all the houses built by the project are still occupied, although not necessarily by the original beneficiaries. In peri-urban areas, some families have since moved on, less so in rural settlements. While the project had specified that the houses could not be resold for a minimum of 10 to 20 years, this has proved difficult to enforce. Land ownership is extremely complicated in Latin America, as elsewhere, and the registration of individual properties is a slow process. However, the process is ongoing and ultimately all the beneficiaries will have full title to their houses.

On the downside, the space allotted to each family was too small to allow for the extended family to move in together. In Central America, it is customary for several generations to live within the same area. However, when determining the beneficiaries for the project, the notion of “family” was confined to parent(s) and children, so houses were designed for up to six people. Inevitably, this meant that some members of the wider family, such as grandparents, stayed behind, often remaining in the risk area from which the rest of the family was relocated. Others stayed in order to retain ownership of their land. Nicaragua still has a large housing deficit that the government has not been able to resolve. Moreover the issue of land rights goes very deep. This has made it difficult to prevent people from remaining in or moving into risk areas.

The residents of the three settlements in Honduras have organized themselves to obtain a number of improvements such as access to electricity, which was not available at the time the houses were built, and road construction to provide access for public transportation. They have also set up a self-managed water project.

Lessons learned

- Settlement development can be an appropriate means to support disaster-affected populations and introduce better practices in areas such as site planning, house design, use and production of building materials, water supply and sanitation and environmental protection.
- The development of sustainable settlements involves more than just building houses. It requires careful site planning (including attention to soil suitability, road access, water and sanitation), availability of economic opportunities (which may include food production), social development and environmental protection.
- After many disasters, agencies and governments alike are faced with huge housing needs and constrained by finite resources. Since people can and do rebuild their own houses, agencies should support their efforts by doing for them what they cannot do themselves. This includes securing land, ensuring reliable access to water, installing sanitation systems and providing technical assistance and construction materials.
- Temporary on-site housing allows for greater beneficiary involvement in the design and construction of their new homes.
- Land plots allocated for housing should allow for house expansion and small gardens, as this considerably adds to the long-term benefits for the occupants.
- Restriction on the resale of houses should be no longer than is reasonable and consistent with the right and responsibility of families to make their own decisions. People have to move for all kinds of reasons and should be allowed to do so. With hindsight, 10 to 20 years was too lengthy to be enforceable.
- Red Cross branches should be closely involved in project delivery. Training should be offered to volunteers to further enhance their knowledge of various tools in community development.
- Project budgets should include a reasonable allocation for contingencies since costs are unpredictable and subject to inflation and delays.

This document is based primarily on an independent evaluation report produced by Rooftops Canada/Abri International (www.rooftops.ca) for the Canadian Red Cross in January 2002.

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The International Federation of Red Cross and Red Crescent Societies would like to express its gratitude for support of this publication to the Provention Consortium – a global partnership of governments, international organizations, academic institutions, the private sector and civil society dedicated to increasing the safety of vulnerable communities and to reducing the impacts of disasters in developing countries.