

EMERGING STRONGER

FIVE YEARS AFTER THE INDIAN OCEAN TSUNAMI



A Perspective on Habitat for Humanity's Work with Tsunami-Affected Communities in
Indonesia, Sri Lanka, India and Thailand



FOREWORD

On any given day, low-income families cope with a constant series of challenges as they confront the hardships of life in substandard housing. Habitat for Humanity's mission is to reach out to help families in need of shelter and help them to acquire a simple, decent place in which to live. After a natural disaster — which heaps on more chaos — Habitat helps families become an essential part of their own enduring recovery, development and security.

The scale and intensity of the 2004 Indian Ocean tsunami was unprecedented in our 30 years of partnering with families around the world — including responding to many natural disasters such as earthquakes, hurricanes and tornadoes. Now nearly five years after the tsunami, it is both inspiring to see the reconstruction that has taken place and troubling to consider the immense need that remains. Habitat for Humanity is more committed than ever to address that need.

After half a decade of work in India, Indonesia, Sri Lanka and Thailand, we have learned a great deal about rebuilding after disasters. We have woven those lessons into our long-term plan for growth, and we have increased our expertise about disaster response. We have applied much of what we learned in the tsunami countries to our programs in such places as earthquake-ravaged southwestern China or flood-inundated Metro Manila.

We have been reminded that building and repairing homes can be challenging under normal circumstances, to say nothing of the crisis environment following a disaster. We have been reminded, particularly under extraordinary disaster conditions, that we must approach our work humbly, respectfully and earnestly, because — in many cases — those efforts can mean saving lives.

In spite of the vastly difficult challenges a disaster setting can impose on our efforts, we also have learned that we must adhere soundly to our mission and honor the core principles that shape Habitat for Humanity's ministry. So while our approach

may change, our purpose does not: We will work hand-in-hand with families and like-minded partner groups in need of shelter to create long-term access to safe, solid, permanent homes that are affordable to those with meager incomes.

We know a strong community must integrate a seemingly endless array of factors from proper sanitation, clean water and improved hygiene to access to education, employment opportunities and training. We must work with families to be part of those community successes and continue to promote the concept that housing is a fundamental need on which families can plan and hope for the future.

So as we seek more partners in the public, private and non-profit sectors, we do so focused on quality housing as a firm foundation for the diverse needs of families and communities.

Thanks to so many of those partnerships — and to the resolve and contribution of the families most affected — we have been able to accomplish a great deal in our reconstruction work in the years since the tsunami. Yet as we reflect on those achievements, we must redouble our efforts to reach even more families. Habitat for Humanity will continue to learn, adapt, grow and partner so that more families can look beyond calamity to find a new day in decent shelter they can afford.

Jonathan T. M. Reckford
Chief Executive Officer
Habitat for Humanity International



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AT A GLANCE

SCALE

- The Indian Ocean tsunami was one of the worst natural disasters in recent history. Upwards of 225,000 people died or disappeared and more than one million more were displaced.
- Indonesia, Sri Lanka, India and Thailand were the hardest hit among 14 affected countries; the scale and extent of the destruction of housing was unprecedented.

CHALLENGES

- Relief and reconstruction efforts were complicated by difficulties reaching remote communities, dealing with high levels of existing poverty, coordinating the unprecedented scale of the response, and working within changing government policies and regulations.
- Land tenure issues — and lack of documentation proving legal ownership — created additional hurdles.
- Changing policies and regulations on resettlement and rebuilding close to the shoreline delayed reconstruction in some locations.
- The response in Indonesia and Sri Lanka required working in areas plagued by political tension and civil conflict.

RESPONSE

- The international community was generous, producing a commitment worth at least US\$13.5 billion in a matter of months.
- In many places, the response to shelter needs was to focus on providing temporary accommodation in the first year, postponing the construction of permanent housing.
- The global Habitat for Humanity donor community raised the equivalent of more than US\$78 million for Indonesia, India, Sri Lanka and Thailand.
- Habitat for Humanity responded quickly, beginning with on-the-ground assessments of shelter needs and focusing on creating permanent housing solutions.
- In Indonesia, Thailand and parts of India, Habitat for Humanity's response included creating capacity in areas where local national programs had no presence prior to December 2004.

STRATEGIES

- Habitat's response emphasized:
 - community-based strategies involving local people in decision making;
 - encouraging families to rebuild their homes on site within their original communities;
 - a preference for a simple core house design that could be extended later;
 - using economies of scale by establishing Habitat Resource Centers;
 - working with partners to reach more families;
 - a focus on the poor;
 - mobilizing Habitat's network of volunteers to assist; and
 - planning to assist others in need in neighboring areas who had not been directly affected by the tsunami and those likely to be affected by future natural disasters.

PROGRESS

- By September 2009, Habitat for Humanity had built, rehabilitated or repaired homes for around 22,500 families and was on course for assisting an estimated 25,000 families by the end of 2010 when Habitat expects to have completed its post-tsunami reconstruction work.
- A successful pilot disaster-mitigation and preparedness program on the east coast of India has been extended to benefit a further 27,000 families.
- Programs in Thailand, Indonesia, India and Sri Lanka have built up significant capabilities in and around tsunami-affected areas, and are operating regular Habitat repayment-based programs reaching other impoverished families and communities.
- Habitat's work has received recognition including awards from the Indonesian and Sri Lanka governments and the US-based Fritz Institute.



INDONESIA PROGRAM AT A GLANCE

- The tsunami hit Indonesia harder than any other country.
- Some 97 percent of those families in Aceh helped by Habitat for Humanity had previously owned a home that was completely destroyed by the tsunami.
- The force of the wave exacerbated deprivations caused by three decades of conflict between government and insurgency forces.
- Habitat for Humanity worked out of resource centers in Banda Aceh, Sigli, Meulaboh and the remote west coast.
- Upwards of 95 percent of all Habitat construction was on-site, rather than in new resettlement areas.
- Habitat supported livelihood and cash-for-work programs with partner non-governmental organizations.
- Habitat for Humanity has built, rehabilitated or repaired homes for some 5,970 families (as of September 2009), making it one of the largest producers of houses in Aceh.
- Habitat's post-tsunami rebuilding and regular programs in Aceh are now based out of a resource center in Medan that aims to serve 4,000 families annually in Medan, Lampung and the Riau Islands as well as tsunami-afflicted Aceh.
- In 2008, HFH Indonesia's post-tsunami reconstruction work was recognized by Indonesia's President Susilo Bambang Yudhoyono. Earlier Habitat was one of only two international NGOs to receive a special government award for its work.

SRI LANKA PROGRAM AT A GLANCE

- The tsunami damaged or destroyed 100,000 homes in Sri Lanka.
- A government ban on living or building close to the shoreline meant an additional 45,000 families had to be relocated.
- The government required houses built on public land to be at least 46.5 sq. m. in size, driving up construction costs.
- Habitat established resource centers in Batticaloa, Trincomalee and Galle, and also worked from the national office in Colombo.
- Habitat worked with Tearfund, Christian Aid, World Concern and other NGOs to support housing and livelihood development in Sri Lanka.
- Habitat for Humanity has built, rehabilitated or repaired homes for more than 2,880 families (as of September 2009) and is on course to reach close to 3,100 families by the end of 2010.
- Habitat was the only international NGO to be honored by the Fritz Institute with an award based on beneficiaries' feedback.
- Habitat's work in Batticaloa in the east received a government commendation from the Minister of Disaster Relief Services.





INDIA PROGRAM AT A GLANCE

- The tsunami displaced more than 150,000 families.
- Regulations restricted rebuilding near the shore, and there were controls on house sizes.
- New houses were often built in resettlement locations so Habitat developed partnerships with NGOs to share the costs of land development and provide holistic services to these new communities.
- Habitat based its operations out of a resource center in Chennai with satellite centers in Kanyakumari, Pondicherry and Vijayawada.
- In July 2007, Habitat transitioned into a repayment-based program from a grant-based program, allowing more families to be reached.
- Habitat has built, rehabilitated or repaired homes for more than 11,700 families (as of September 2009) and is on course to reach close to 14,000 families by the time the program ends in early 2010.
- A successful pilot disaster-mitigation and preparedness program on the east coast of India has been extended to benefit 27,000 families by the end of 2009. The program is continuing in Kanyakumari, Tamil Nadu state, where more than 13,000 families have been trained to date. A similar program is set to benefit families in Andhra Pradesh state.
- The reconstruction program has assisted HFH India's regular programs and became part of its *IndiaBUILDS* campaign to provide 250,000 people living in poverty with decent housing.

THAILAND PROGRAM AT A GLANCE

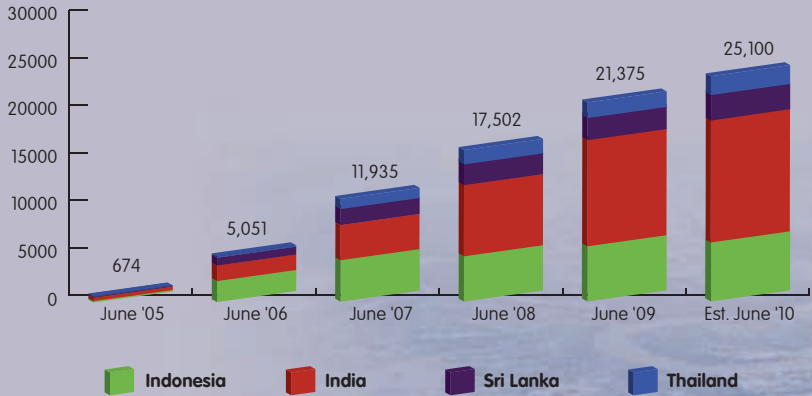
- The tsunami killed over 8,000 people in Thailand and damaged or destroyed more than 4,800 homes.
- Over 150,000 people lost their jobs in tourism and fisheries.
- The poorest, especially in *Moken* fishing communities, suffered the most, even if their homes were not directly affected.
- Habitat for Humanity focused on poor fishing communities that were indirectly affected by the tsunami, but in great need of improved shelter.
- Habitat realized its highest levels of homeowners' contribution of their own labor, or sweat equity, in Thailand, particularly in remote villages.
- Habitat based much of its response out of a resource center in Khao Lak, Phang Nga province, and built three types of core houses: raised stilt; soil interlocking block; and cinder block construction.
- Habitat worked with World Concern on livelihood development, training people in the production of such building materials as interlocking blocks.
- Habitat transitioned into a regular repayment-based program after building and rehabilitating homes for nearly 2,000 families.
- Many beneficiary homeowners have adapted their core houses over time. Some have funded these improvements through Habitat's Save & Build microfinance and mortgage-based programs.



HABITAT'S RESPONSE IN NUMBERS

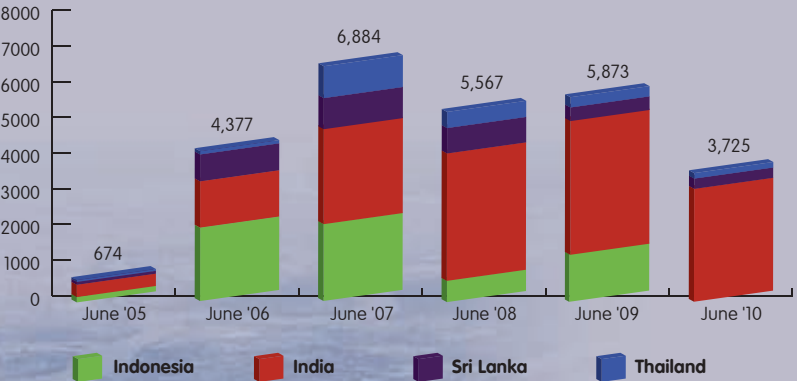
Cumulative Number of Families Served by Habitat for Humanity's Post-Tsunami Reconstruction Programs

(As of 30th June)



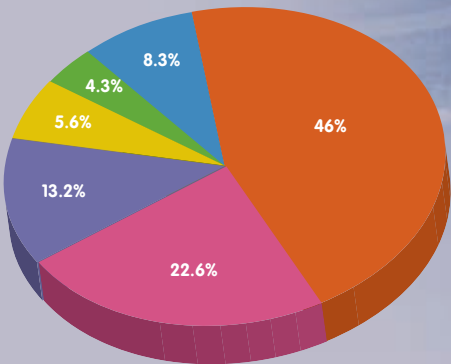
Annual Number of Families Served by Habitat for Humanity's Post-Tsunami Reconstruction Programs

(Year to 30th June)

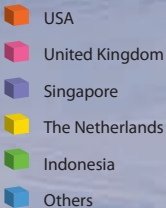


Top Six Sources of Donations for Habitat for Humanity's Post-Tsunami Reconstruction Programs

((US dollars and other currencies at US dollar equivalent at October 2009 exchange rates))

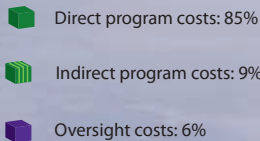
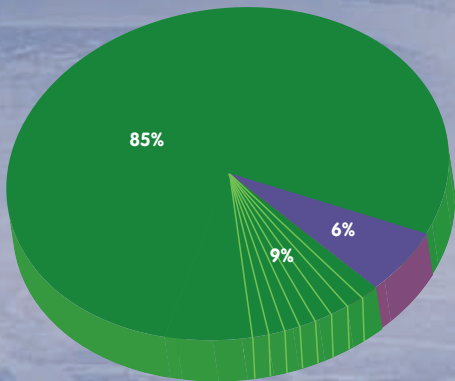


**Total funds raised:
US\$78,000,000**



Estimated Expenditure by Habitat for Humanity on Post-Tsunami Reconstruction Programs

(Percentages based on expenditure to September 2009)



- Direct program costs represent construction costs for building new houses, repairs and rehabilitations plus project management costs.
- Indirect program costs represent costs associated with establishing and operating Habitat Resource Centers, and technology support.
- Oversight costs represent costs associated with support by Habitat for Humanity International and national offices.



PART I: INTRODUCTION

On December 26, 2004, an underwater earthquake deep in the Indian Ocean, off the coast of western Indonesia, set off a series of waves that became known as a tsunami. The result was one of the largest disasters of modern times. The tsunami struck the coastlines of 14 countries; upwards of an estimated 225,000 people perished or disappeared and more than one million more were displaced.¹

In the immediate aftermath, local people carried out most of the recovery work, tending to the injured, feeding and sheltering the homeless, and recovering bodies. However, the scope of the damage was overwhelming and dealing with it was beyond the capacity of many local authorities. Many of the hardest-hit areas were remote and already suffering from high rates of poverty. In some of the worst affected parts of Indonesia and Sri Lanka, people already lived impoverished lives in fractured communities with poor infrastructure due to decades of insurgencies and violence.

By January 2005, Habitat for Humanity had joined other international non-governmental organizations in responding to

the shelter needs of the survivors. Habitat's response quickly became an ongoing commitment that is now due to be completed by the end of 2010, to be superseded by regular Habitat programs.

Historically, Habitat for Humanity viewed itself as a development organization, rather than a relief agency. It sought — and continues to seek — to break the cycle of poverty by offering affordable, good quality, permanent housing solutions. Increasingly, Habitat was asked to respond after natural disasters, such as Hurricane Andrew which hit Florida in 1992 and the aftermath of earthquakes in Gujarat, India, and Afghanistan in 2001 and 2002. The provision of decent housing in the wake of a disaster had to mean more than responding to immediate shelter needs. A permanent home was seen to provide relief to survivors while better protecting them against potential future disasters.

In responding to the Indian Ocean tsunami, Habitat employed strategies designed to leave communities stronger than before, with access to the many benefits that safe and

decent housing brings. These benefits include better health, education and employment opportunities.

Habitat's approach for post-tsunami reconstruction emphasized:

Community-based strategies: Local people were at the heart of decision-making about rebuilding as well as about planning to reduce risks associated with future disasters.

On-site reconstruction: Most families with whom Habitat worked rebuilt "on-site" — either elsewhere within their immediate neighborhood or sometimes on the foundations of their former houses. Staying within their communities strengthened the ability of those communities to respond and helped people return to employment more quickly.

Core house model: The preference was for a low-cost house of about 36 sq. m. that could be expanded or



improved upon once families had additional resources. While the governments of both India and Sri Lanka dictated larger house sizes, Habitat's core house model became widely accepted.

Habitat Resource Centers: These specialized centers provided facilities for planning, designing and managing building projects, making and storing construction materials such as window frames, blocks and roof tiles, and training local people in the building trades.

Strong partnerships: Working with other organizations, particularly other local or international NGOs, helped maximize resources, allowed houses to be built more quickly and efficiently, strengthened communities, and created educational and employment opportunities.

Focus on need: In tsunami-affected countries, Habitat for Humanity provided aid according to the affected families' need for housing, depending on whether their former houses were destroyed or damaged by the disaster. As

assistance for the poor was a priority, Habitat sometimes supported low-income communities that had been indirectly affected, such as those whose members had lost their jobs in tourist areas.

Using volunteers: Habitat leveraged its ability to mobilize volunteers. Local and international teams of volunteers provided useful labor while cutting costs.

Planning for the future: From early on, Habitat planned for the long-term, looking at how the experience could strengthen local Habitat capabilities. It thereby laid the foundation for Habitat to assist ever greater numbers of those in need through more conventional Habitat repayment programs. Habitat also built the disaster response capabilities of local Habitat operations in each country, helped families to expand or improve on core houses, boosted their employment prospects through livelihood training, and better prepared the communities for surviving future disasters through mitigation and preparedness courses.²

The unprecedented scale of the Indian Ocean tsunami and the response that followed provided a platform for Habitat to work with partners and families in building safe, solid, permanent houses. In the course of its work, Habitat forged new alliances with donors, governments, agencies and other NGOs while strengthening old ones. Habitat for Humanity's country programs in India, Indonesia and Thailand in particular established a long-term presence in areas where they had not worked prior to December 2004. Organizationally, Habitat increased its capacity and expertise in disaster response.

Half a decade on, Habitat's work has helped transform the lives of hundreds of thousands of people and hundreds of communities. The transformation has included better access to education, employment and social development, as well as permanent shelter solutions.

In this report, Habitat for Humanity shares its work and the strategies used in its response to the tsunami. The experiences of individual families, partners, donors and communities demonstrate the impact of solid housing and the value of partnerships. ▢





PART II: OVERVIEW

A. REGIONAL IMPACT

The Indian Ocean tsunami was the result of an earthquake measuring 8.9 on the Richter scale on the seabed off the coast of Northern Sumatra, Indonesia. The earthquake triggered a series of tsunami waves travelling up to 500 kilometers per hour that struck the coastlines of 14 countries. Some of the waves were more than 20 meters high on impact.

Some 227,898 people are thought to have died and 1,126,900 more were displaced or left homeless. Economic losses were originally estimated at US\$9.9 billion.³ The hardest hit countries were Indonesia, Sri Lanka, India and Thailand.

Pre-existing economic, social and political circumstances further defined the tsunami's impact. Many countries were already dealing with chronic poverty, conflict, environmental degradation, displacement, poor governance, dense bureaucracies, inequality, caste systems and weak respect for human rights. The poorest groups — the sick and the elderly,

those in remote locations, migrant workers and the landless — were the hardest hit by the effects of the tsunami.⁴

The tsunami affected some groups more than others. Many more women were killed than men as women were in their houses or near beaches when the tsunami struck.⁵ Many men were out in fishing boats and so were saved: the waves became deadly only when they reached shallower waters. Other men used their greater strength to escape the waves or knew how to swim. The tsunami also disproportionately affected children and elderly people: death tolls for these groups were often double or triple those for working-age adults.⁶

Indonesia

Indonesia was hardest hit by the tsunami, accounting for over 73 percent of all deaths and nearly half the region's economic loss. The physical force of the tsunami was the strongest in Indonesia, the existing infrastructure was the weakest and the population the most concentrated. The

tsunami travelled up to six kilometers inland, laying waste entire towns and villages, and destroying infrastructure, commerce, government offices and agricultural land.⁷

An estimated 167,540 people were killed, and some 141,000 houses were destroyed, leaving 500,000 people displaced.⁸ The government estimated that only 120,000 new homes were needed because so many families had been lost. In Aceh, the worst hit province, the estimated damage of US\$4.5 billion was equivalent to nearly the entire annual gross domestic product of the province, and over 600,000 people lost their livelihoods for several months or more.⁹

The deaths of community leaders and local government staff on top of extensive damage to land administrative services and facilities left a void in the capacity for re-development and rebuilding. In Aceh, for example, 80 percent of land documents were lost, including almost all cadastre maps. The tsunami literally swept away physical property boundaries for individual including most cadastre maps. The tsunami literally swept away physical property boundaries for individual



lots. The high death toll made it difficult to find witnesses to provide evidence of property boundaries.¹⁰

Sri Lanka

The tsunami struck 1,600 kilometers of Sri Lanka's coastline. In some places, the waters surged up to one kilometer inland.

An estimated 35,322 people were killed, an additional 21,441 injured and 1,599 children orphaned. The tsunami displaced approximately 500,000 people and left another 500,000 people without safe drinking water. Approximately 100,000 houses were affected; of these, 41,393 were completely destroyed.¹¹ In addition, a further 45,000 affected homes were located in a government-declared Coastal Regulation Zone where rebuilding was supposed to be banned. After the tsunami, the government banned construction within 100 meters of the coastline in the south, and within 200 meters in the north and east.¹²

As in Indonesia, the high loss of life meant that fewer new houses were needed than were destroyed. Estimates for new house numbers varied between 80,000 and 100,000.¹³ This proved a significant challenge for a country where, on aver-

age, only 5,000 houses were built each year.¹⁴

The World Bank estimated the cost of reconstruction at US\$1.5-1.6 billion. Of this, US\$500 million was needed for housing.

India

More than 16,000 people perished when the tsunami hit southeastern India. Waves up to 10 meters high struck over 2,260 kilometers of coastline, surging up to three kilometers inland.

Tamil Nadu was the hardest hit state, but the Union Territory of the Andaman and Nicobar Islands, and the coastal areas of Andhra Pradesh, Kerala and the Union Territory of Pondicherry (also known as Puducherry) also suffered. The tsunami destroyed approximately 153,585 houses, causing nearly US\$200 million worth of damage. The cost of replacing the 104,500 houses destroyed just in Tamil Nadu and Pondicherry was estimated at US\$329 million.¹⁵

Many thousands more were displaced when, as in Sri Lanka, the government established and enforced a coastal buffer

zone where people could not live. The buffer zone was set at 500 meters but reduced later to 200 meters.

Living conditions prior to the tsunami varied greatly. Extreme poverty was, and is, widespread in Tamil Nadu and Andhra Pradesh. Only 13 percent of the houses damaged in Tamil Nadu were considered *pukka*, i.e., were built of permanent materials; the remainder were *kachcha*, or huts made of thatch or houses made with mud walls and thatch roofs. In Andhra Pradesh, approximately half of the houses were *pukka*, in Kerala, nearly all were.¹⁶

Preliminary cost estimates for replacing a *pukka* house were between 120,000 and 180,000 rupees (US\$2,322-4,160), depending on the location.

In fishing villages, the value of homes derived from their proximity to the sea. A family's house and fishing equipment were its prime assets. To relocate a family away from the shoreline involved difficult decisions about future employment.

To further complicate matters, few people whose houses were damaged or destroyed held any formal title to their land. Even before the tsunami, many families were living il-



legally within coastal strips where construction was restricted or prohibited under regulations established in 1991.

Thailand

An estimated 8,212 people died when the tsunami surged into six southern provinces along Thailand's Andaman coastline. Among them were 2,448 foreigners from 37 countries. An estimated 1,480 children lost one or both parents. The waves destroyed 3,302 houses and partially damaged 1,504 others, leaving 6,000 people displaced.¹⁷

The area hit by the tsunami supported a diverse population and economy. There were wealthy Thai and foreign tourists and residents, working- and middle-class families serving the tourist industry, and very poor families relying on fisheries, farmland, orchards and rubber plantations for their livelihoods. The tsunami impacted all of these.

An estimated 120,000 jobs were lost in the tourism sector and 30,000 jobs in the fishing industry. Overall economic losses were estimated at US\$1.6 billion, with the cost of repairing damaged homes put at US\$480 million.¹⁸ Some of the poorest and most marginalized to be affected were Moken "sea gyp-

sies" and undocumented Burmese migrants; members of both groups lacked tenure rights to their land, making it difficult, if not impossible, for them to receive shelter assistance.¹⁹

B. RESPONSE

Local people were the first to respond to the disaster, providing search and rescue, initial health care, food and shelter as well as recovering bodies. National militaries and rescue organizations followed quickly. International groups such as the United Nations, the Red Cross and various international non-governmental organizations arrived over the following days and weeks.²⁰

Donations poured in from individuals, business corporations, civic and religious groups, organizations and governments. The response was generous and fast, producing at least US\$13.5 billion in commitments within the first several months.²¹ Most of this was spent on housing. At least 25 agencies and donors committed to building 50,000 homes in the first year. Ironically, the unprecedented size of response gave rise to difficulties. NGOs and donors duplicated efforts and competed for beneficiaries and supplies.

The most urgent need was shelter for survivors. Temporary tent camps and barracks were constructed, usually at a distance from peoples' original homes. Sometimes this was necessary, for example, when the tsunami had destroyed survivors' homes and the land underneath, or when authorities prohibited rebuilding within a certain distance from the coast.

But in the long run, tents and barracks may have delayed recovery. According to some observers, "traditional refugee camps serve as a disincentive to rebuild community and family structures, especially in cases where food and financial aid are discontinued when a family returns to their own home site."²² Tents and barracks could be small, unhygienic and lacking in privacy. And people living away from their villages were less able to participate in reconstruction, find new jobs, protect their land rights or recover a sense of community.²³

There were alternatives such as moving in with other families or building makeshift shelters on or near the site of their former homes.²⁴ The latter meant people channeled their efforts into transitional shelter that could become permanent later with improvements and additions. People who stayed



close to their former homes were often able to resume working faster, and were able to contribute to the healing and re-development of their communities.

After a year, only one in five of those displaced by the tsunami had permanent shelter.²⁵ In Aceh alone, some 15,000 people still lived in tents 13 months after the tsunami.²⁶ Three years after the disaster, the number was still 5,000.

The average length of time in temporary shelter was 11 months; in Sri Lanka, the average was 21.5 months.²⁷

Of the 50,000 houses NGOs and donors had promised in the first year, only 500 had been started by late 2005.²⁸ This picked up over the next two years, as planned projects were implemented. By the end of 2007, over 100,000 houses had been built.²⁹

C. CHALLENGES

Scale of the disaster: The sheer scale of the tsunami and

the number of countries it affected were unprecedented in recent times. In the best of circumstances, the international community would have had trouble responding.

Pre-existing conditions: Existing levels of poverty and the lack of basic physical, social and economic infrastructure frequently proved overwhelming to both residents and governments, and to international organizations trying to respond.³⁰

Scale of response: The scale of response was impressive but also proved a handicap in the short term, creating a series of bottlenecks and a general environment of haste and competition among donors and NGOs. "The large number of actors both significantly increased the costs of coordination (as there were so many more agencies to coordinate with) and reduced the effectiveness of coordination (as there were large numbers of agencies falling outside any coordination mechanism)."³¹ This increased the burden on residents, local authorities and organizations trying to marshal the response. Residents felt over-assessed, but "under-listened to". Local authorities had to sort through all the offers of assistance to

find legitimate partners. Management and resources that should have been used for construction went instead to co-ordination.³² Especially in Indonesia, scarcity of construction materials and skilled labor in the hardest hit areas impeded reconstruction and caused costs to soar.

Time needed for building permanent shelter: Even in normal conditions, successful housing takes planning and time. Careful planning is even more important after a disaster. "Shelter reconstruction, poverty alleviation, risk reduction and livelihood recovery are slow, highly complex undertakings that frequently involve factors outside the control (and competence) of international humanitarian relief agencies."³³ The World Bank noted that it was "no surprise" that significant housing construction did not appear in Indonesia until September 2005, due in part to the initial attention on temporary shelter and to the fact that community preparation activities, such as damage needs assessments, community mapping and site planning, for a single project could take more than two months.³⁴



Government policies after a disaster: The complexity and scale of the disaster and ensuing response meant effective government policy making was difficult in the early months. Habitat for Humanity sought to work within official policies and, in many cases, provided valuable input into the development policy process, especially in technical areas. Government policies and regulations on resettlement and rebuilding close to the shoreline affected many groups involved with reconstruction. In particular, though communities were told they could not rebuild close to the shore, the process of acquiring alternative sites inland was often complex and time-consuming.

War and violence: The decades-long insurgencies in Aceh, Indonesia, and northeastern Sri Lanka contributed to pre-existing levels of poverty and lack of infrastructure. They also made it difficult to respond after the tsunami. In Aceh, for example, the government had long kept out NGOs and the media so there was little international understanding of the landscape or the levels of services and infrastructure in what were already remote and hard-to-reach areas. Police

check-points in both Aceh and Sri Lanka made delivering supplies costly. Sporadic violence made construction difficult and drove up costs.

Land issues: Land tenure problems added complexity and delayed the shelter sector response.³⁵ Problems included a lack of documentation prior to the disaster and the fact that much of the paperwork that did exist was lost during the tsunami. Often women were not listed on tenure documents. Difficulties resolving who owned land and securing legal tenure led to delays in starting construction of permanent houses. These obstacles led some NGOs and governments to prolong their focus on temporary shelter. □



PART III: HABITAT'S RESPONSE

Habitat for Humanity focused its response on the four countries most affected: Indonesia, Sri Lanka, India and Thailand. To create the greatest possible impact among families and to make the best use of donors' generosity, Habitat used a strategy built around several basic elements and concepts. The elements were adapted by each country and even by specific location in some circumstances. Over time, many lessons were learned for improving the post-tsunami reconstruction program as well as other Habitat operations and programs.

The basic program elements:

- A. Use community-based strategies
- B. Build on-site whenever possible
- C. Use a core house design
- D. Work through Habitat Resource Centers
- E. Build strong partnerships
- F. Consistently focus on need
- G. Work with volunteers
- H. Plan for the future

A. USE COMMUNITY-BASED STRATEGIES

If provided with adequate resources and expertise, the people most affected by a disaster are in the best position to help lead the reconstruction of their homes and livelihoods. Encouraging people to participate in rebuilding their lives has two specific benefits: it helps communities heal in the wake of a disaster, and it increases the ability and capacity of the community, even those previously living in poverty, to address other challenges.

In Indonesia, Sri Lanka, India and Thailand, Habitat for Humanity worked with existing local governance systems, and both formal and informal village and neighborhood networks to plan and implement projects. This approach, ranging from input on redesigning whole communities to house designs and construction processes, encouraged a sense of community ownership of the result. Participation also strengthened people's ability and capacity to address other challenges, such as demanding improvements in services from government authorities and resolving land tenure claims.

Encouraging people to be involved in the planning of rebuilding their communities was closely linked to individual families' willingness to physically work on the construction of their own homes, contributing Habitat's "sweat equity". The more involvement communities had in project design and governance, the more individual families were motivated to contribute their own labor to the project.

Both the Indonesian government and the Fritz Institute acknowledged Habitat's commitment to community-based shelter assistance with their public awards for Habitat's work in Aceh Jaya district, Aceh, and Sri Lanka.

Community involvement in Indonesia

Habitat for Humanity conducted its work in Aceh, Indonesia, through community channels. It focused on surviving stakeholders at the local, municipal and provincial levels instead of operating through the national government. This approach required more involvement by senior Habitat personnel, but it also meant that Habitat was more likely to be accepted in

Rebuilding communities through tenure mapping

In Aceh, few people possessed secure, registered land tenure documents prior to the tsunami. The tsunami destroyed not only the few documents that did exist, but also many physical landmarks that marked off individual land plots. This delayed Habitat for Humanity's efforts to begin construction.

To address the problem, Habitat worked with residents of affected communities to create community maps of tenure rights. Habitat followed guidelines for what was known as "community-driven tenure adjudication," laid down by the Badan Rehabilitasi dan Rekonstruksi (BRR, the agency handling rehabilitation and reconstruction in Aceh and Nias) and Badan Pertanahan Nasional (BPN, Indonesia's national land agency).

For Habitat the work involved creating or re-affirming physical boundary markers and a process of written verification by neighbors with regard to who owned or had occupied which plots. The information on these maps was then approved and recorded by various levels of government. Habitat often helped communities to access appropriate officials so the paperwork could be authorized. Once families held official land rights documents, Habitat could begin building permanent houses.



An additional benefit of community mapping was that the process itself involved many individuals and families in a community, and that helped to organize and empower those communities. Also, families emerged from the mapping exercise with secure personal and family identification cards. After 30 years of conflict in Aceh, such documents had not existed at the time of the tsunami.

Later, the World Bank stepped in with a US\$28.5 million project to systematically map community tenure rights and issue formal titles in Aceh and Nias. The project, entitled Reconstruction of Aceh Land Administration, was initiated by the BPN.

local communities. Once accepted, projects could be implemented and scaled-up quickly.

During the first few months, Habitat worked with village headmen to design and implement projects. The headman (always male), generally became the chairperson of a village committee that helped to procure labor and building materials for construction. Most importantly, headmen provided lists of beneficiary names, verified by other village leaders.

Headmen also proved to be important channels for dealing with often traumatized families and connecting to survivors who had been dispersed to live in barracks located far away. Because people were slow in returning to their villages, it was initially difficult to establish individual land boundaries. Those who did return to their land did so only partially, retaining their claim to their homestead with a temporary shelter, while spending nights in the barracks to receive food, water and a government stipend which was offered for two years.³⁶

From February 2006, Habitat began working with *panitia*, local committees elected from among villagers. The *panitia* and Habitat determined construction design, house orientation on a plot, materials to be used and even the location of doors and windows.

Many families participated directly in construction and design through the practice of *swakelola*, which translates as "self management". *Swakelola* has a broader meaning than Habitat's sweat equity. It included families attending meetings and taking part in mutual self-help projects, so that community members were involved in construction, logistics and decision-making about their own houses.

For example, in Ujung Besar, Aceh Barat, Meulaboh, and the villages in Jangka Buya, Sigli, local committees mobilized families to help repair roads, build bridges to transport construction materials and provide storage space for construction materials and shelter for workers.³⁷

Community involvement in Thailand

Habitat for Humanity worked with groups of families in Thailand as this encouraged more community involvement. This replaced an initial system of asking community leaders to identify individual families who needed help which made it difficult to respond with sufficient scale or impact in a community.

In one location in Thailand, Habitat staff worked closely with the existing community leader to encourage involvement by the rest of the community. The leader compiled a preliminary list of families for the project, which was cross-referenced with Habitat's family selection criteria. He organized beneficiary families into groups and kept track of sweat equity hours. The people proved highly committed to the project and its various elements, including housing construction, the development of a warehouse, the hosting of volunteers and the production of building materials. With this high level of community involvement, Habitat was able to build



new houses for nearly all inhabitants of the village. Habitat adopted the community-wide approach for the bulk of its other post-tsunami reconstruction projects in Thailand, with consistently high levels of community participation.

Soon, Habitat started to assess the overall needs of each affected community, not just the needs of those seemingly directly affected by the tsunami. Assessments took into account the amount of government and other assistance available. It looked at what housing needs were unmet and which families were most affected. This required a high degree of interaction with local families and community leaders.

B. BUILD ON-SITE WHENEVER POSSIBLE

Approximately 95 percent of the families Habitat worked with rebuilt their houses “on-site” — on their own land, often on the foundations of their former homes.³⁸ By working on their own land and rebuilding their own homes, families were able to begin rebuilding their lives and communities. This approach provided a host of benefits and aligned with internationally-accepted Sphere Standards on shelter.

Sphere advises that “affected households return to the site of their original dwellings where possible ... Shelter provision through the repair of damaged dwellings supports communal coping strategies, retains established settlement patterns and enables the use of existing infrastructure.”³⁹

Building on-site allowed a faster return to normalcy. Families were able to return to earning a living more quickly, sometimes at their old job, again accelerating community-wide recovery. On-site construction projects tended to invest in local labor and materials, further helping heal affected communities. And families were better able to contribute labor (“sweat equity”) through demolishing damaged structures, clearing away debris, digging trenches and foundations, waterproofing wooden roof rafters and providing other forms of unskilled and skilled labor. In one project in Sri Lanka, families shouldered the costs of filling swampy land with gravel so that Habitat would be able to build for them.

By not moving lives were less complicated. Families who moved to homes built on new, resettlement sites often faced difficulties accessing employment opportunities, transport links and sometimes basic services.⁴⁰ For on-site projects,

Habitat was usually able to customize construction, adjusting the new house to fit the old footprint and take advantage of any existing structure remaining from the original dwelling.

In some cases, rebuilding on-site had the added advantage of helping families to protect their land tenure claims.

In Aceh, Indonesia, Habitat mostly rebuilt houses on-site. It intentionally sought out communities that were open to the idea of building on-site in order to facilitate community participation and development and to achieve efficiency in construction. However, finding such communities took time at first because large numbers of people had been dispersed, living with relatives and in temporary shelter.⁴¹

Moratuwa, a village just south of the capital Colombo, Sri Lanka, illustrates a typical on-site cluster project, where Habitat helped 22 families rebuild their houses. Families were highly motivated to contribute sweat equity to the project in part because Habitat’s on-site construction foreman incorporated the community’s suggestion to design and build an outdoor kitchen space.⁴²



C. USE A CORE HOUSE DESIGN

Habitat for Humanity's success in on-site reconstruction in many locations was closely linked to using the concept of a core house design. Habitat developed its core house model in its regular program as a way to serve poorer families who found it impossible to afford even a no-profit Habitat mortgage loan for a whole house. It proved a good model to use after the tsunami.

A core design is effectively a starter house, providing a basic structure that meets immediate and/or medium-term shelter needs after a disaster. It can be constructed quickly and cost-effectively. At the same time, it provides longer-term benefits. In particular, it meets Sphere guidelines by "... enabl[ing] affected households to incrementally upgrade from emergency to durable shelter solutions within a reasonably short time and with regard to the constraints on acquiring the additional resources required."⁴³

After the tsunami, Habitat worked with a core house design of around 36 sq. m. that provided beneficiaries with safe, quality shelter that could be expanded or otherwise improved

later, once families had the money, resources and inclination to make these improvements. This approach thus balanced the shelter needs of disaster survivors with long-term community development goals. Habitat tailored the design to meet different community customs and needs, and frequently presented families with a choice of at least two designs.

Though the approach was successful, there were pressures for building larger houses. Pressure came from other organizations and government regulations on housing specifications.

In many tsunami-affected areas, high funding levels and donor competition produced an environment where the size, quality and cost of houses on offer — often for free — expanded. Some groups vied to "win" communities over to their designs, and beneficiary families weighed their options for the best offer. In some areas, social pressures pushed families to ratchet up their demands. This was the case in highly developed tourist areas of Thailand and India, for example, where families who lived close to the coast made comparisons with wealthier neighboring communities. Government rules on house sizes were adapted over time.

It took time for some communities and government officials to accept the Habitat concept, which called for generally smaller structures with fewer rooms and facilities. In Sri Lanka, where the government required a minimum 45 sq. m. house size, the authorities grew to recognize the benefits and high quality of Habitat's core housing model, giving first tacit and then official approval to its use.

In Indonesia, for example, one local government authority mandated a minimum house size of 45 sq. m. and insisted that buildings be earthquake resilient and include toilets. Two factors led to support for the Habitat model house. First, the BRR and many NGOs recognized the scale of the need and offered house blueprints similar to Habitat's. Second, the more time people spent in temporary shelters or barracks, the more interested they became in even modestly-sized permanent housing. In Aceh, Habitat core houses were oriented on each site in ways that would allow future improvements and additions, either for living in or for business activities. This aspect proved attractive to many beneficiary families, since Acehese people have a strong tradition of home-based, small-scale business and trade.



In Thailand, Habitat offered three types of core house design, all with an area of 36 sq. m., each a well-constructed, modestly-sized starter home that homeowners could improve and expand as resources allowed. Many families subsequently enrolled in Habitat's regular programs to finance improvements and extensions, including space for small businesses.

In a subsequent survey of Habitat beneficiaries around the region, nearly all said that they were happy with their house design. Families recognized the high quality construction involved in the core house, and many subsequently added rooms, covered terraces and made other improvements — as intended in the concept.

D. WORK THROUGH HABITAT RESOURCE CENTERS

Increasingly throughout the Asia-Pacific region, Habitat national programs use resource centers, known as Habitat Resource Centers or HRCs, to concentrate expertise, experience and resources. HRCs allow Habitat to implement large projects cost-effectively. HRCs were a key component in Habitat's post-tsunami reconstruction program, serving

as hubs for Habitat's community-based programs in each of the disaster-affected areas. The centers offered project management, budgeting and planning for all new construction and house repairs, as well as project design services for Habitat and for other NGOs. Habitat saved significant sums by buying construction supplies in bulk and storing them at the centers.

In addition the centers housed livelihood programs for making materials such as window and door frames, cement blocks and roof tiles, as well as for training local people for jobs in construction, as masons and in other building trades. HRCs also acted as vendors, supporting social business ventures, such as the production of building materials, and contractors geared to supplying and building affordable housing.

As one researcher noted: "One of the early key objectives for the centers was to develop a flexible transition strategy that moves support from disaster response coordination and construction management into social business venture development and training as the recovery phase progresses. The HRC's focus on small business incubation and vocational training coupled with researching and developing sustain-

able shelter solutions that engage local business can jump-start a local economy."⁴⁴

HRCs were established in all four tsunami-affected countries. At one time, there were up to a dozen active HRCs of one type or another in operation. They were as effective in urban settings like Banda Aceh as they were in rural ones, such as the remote west coast of Aceh. Crucially, the centers became a vehicle by which local and national Habitat programs could consolidate the increased capacity created by the post-tsunami reconstruction program. As the response progressed, Habitat introduced regular programs in and around tsunami-affected areas, individual centers were closed or moved and staff and functions transferred or centralized into larger units capable of serving wider areas.

One consequence of the success of the HRC concept was to prompt the leadership of several Habitat programs, including those in Thailand and Sri Lanka, to rethink the structure of their regular national programs. Stand-alone and often semi-autonomous affiliates were replaced with nationally-directed HRCs.



Habitat Resource Centers in Indonesia

In Indonesia, Habitat established four HRCs: in Banda Aceh; on the north coast, in Sigli; to the southwest, in Meulaboh; and on the isolated west coast. The latter also operated a satellite construction center that was established in Riga.⁴⁵ On average, the centers employed nearly 1,200 people, a number that rose to around 1,500 at the height of construction.

The Indonesia program director and more than 30 people worked in the Banda Aceh HRC, handling relations with government authorities, donors and Habitat entities, providing back-office financial services and general management oversight.⁴⁶ The smaller centers worked primarily on project implementation, working with families and communities, and getting houses to people.⁴⁷ They were led by local Habitat staff. When Yogyakarta on Java was struck by an earthquake in May 2006, Habitat for Humanity Indonesia quickly established a resource center using staff and lessons from the work in Aceh to efficiently provide shelter assistance to survivors of the earthquake.

As the post-tsunami construction program started to wind down, HRCs were gradually closed starting with the final one,

Meulaboh, shutting its doors at the end of 2008. At about the same time, in December, a new larger facility was opened in Medan, the capital of the North Sumatra province. HRC Sumatra aims to serve 4,000 families a year through services such as construction technology, Habitat's Save & Build housing microfinance model, and implementing disaster-mitigation and -preparedness training. Some post-tsunami building is continuing, but much of the work is aimed at supporting regular repayment-based building in projects spanning Medan, Lampung and the Riau Islands as well as tsunami-afflicted Aceh.

Habitat Resource Centers in Sri Lanka

In Sri Lanka, Habitat based its post-tsunami reconstruction operations out of two Habitat Resource Centers: in Batticaloa, on the east coast; and in Galle, on the south coast. A satellite center was also established in Trincomalee, further north from Batticaloa.

The three centers housed production facilities for making window frames, door frames and cement blocks. Using three block-making machines, the center in Batticaloa produced approximately 3,000 blocks a day in the summer of 2006.

This provided income and training opportunities for local people. By early 2009, the facility was supporting Habitat's regular programs.

The Trincomalee satellite supported the rebuilding or rehabilitating of houses for 680 tsunami-affected families from May 2005 to January 2009. By mid 2009, it was implementing a Habitat Save & Build program and, in a project supported by the UK's Tearfund, training 200 families to start home gardens and use compost bins and solar cookers.

Habitat Resource Centers in India

The Indian program was directed from an HRC in Chennai with satellite centers in Kanyakumari, Pondicherry and Vijayawada. About 35 local people worked in the Chennai center, which handled overall project management. The satellite centers housed the production and storage of construction materials, supported a broad array of building activities and provided training to villagers in different facets of the building industry.

A key role was training local people, staff of local NGOs, and families served by these partner groups. As an example, the



Justus Gregory Anthony Pillia had a dream, and after nearly five years at the Habitat Resource Center in Batticaloa, he is reaping the fruits of that dream — literally. The HRC is a combined factory, farm and recycling center all rolled into one. A low trellis is covered with passionfruit, chili, eggplant, tamarind, tomatoes and papaya, just a few among the 2,000 plants that thrive at the center.

Each Habitat home partner in Batticaloa is given five tree saplings to plant near his or her new house. Said Justus: “In 20 years, one of the five trees can be sold and the amount donated to Habitat. The rest of the trees can be sold to provide dowries for daughters.” Similarly, tamarind plants are given to home partners to be grown as a cash crop.

The center features an array of livestock, from ducks, chickens, guinea fowls and turkeys to rabbits, goats and

turtles. The animals provide organic compost for the fruit and vegetable garden. The compost is packed and given to home partners.

There is also a 12-meter deep pond that houses 2,000 fish. A wind pump supplies water to the pond from a well.

The vegetable garden and pond serve a practical purpose. “Home partners can buy vegetables from the garden at half the market price,” said Justus. “They can also come to the pond, fish and buy the catch at half the market price.”

“The farm motivates home partners to show that they can do it themselves.”⁴⁸

At the other side of the center, people work, welding, painting and producing items such as ventilation blocks for house walls. Since 2005, the center has produced 130 different items for house construction. More than 100 people

worked at the center at the peak of production. Now, there are 30 workers, more than half of whom are home partners.

T. Sakthirajan is among them. Nine years ago, he worked at a Habitat facility at Thirukovil, south of Batticaloa, and earned about 3,000 rupees a month (about US\$27.80) as an ordinary worker. These days he runs the machinery and earns five times as much.

Little goes to waste. Plastic containers used to store oil for treating timber are washed, cut and re-used for plants. Discarded cardboard forms the outer layer of a simple solar cooker. Aluminum foil lines the inside of the cooker, topped with a sheet of glass. The solar cookers, at less than US\$8 each, allow families to leave food under the sun to cook. “They can go to tend to the garden or work on income-generating projects,” said Justus.

Kanyakumari center helped nearly 500 workers to upgrade their skills and ran a training program on construction supervision. In early 2007, local women and youths were trained to produce and sell cement blocks, bricks, tiles, flooring tiles, Ferro-cement slabs, windows and doors. The goal was that 75 percent of these people would finish the course successfully and that 50 percent would find outside employment in five years or less.⁴⁹ It also trained 22 site engineers from 10 partner organizations in damage assessment, cost estimations, time management, material procurement, project management, monitoring and evaluation. In late 2005, it helped CADRE (Center for Action, Development, Research and Education India) to deliver livelihood development opportunities. Habitat helped train 50 women to become professional masons. The goals included mitigating the stigma about women working in construction, imparting new skills to better ensure economic stability and helping women to develop self-reliance and self-confidence. Thirty-five women completed the four-month program and 25 became actively engaged in construction work. These women regularly advise families about how to repair or construct their houses.

Habitat Resource Centers in Thailand

Habitat established a project office in Khao Lak, Phang Nga province, in April 2005. By the following summer — July 2006 — the office had evolved into a Habitat Resource Center. The facility moved locations several times as the program expanded and more space was needed.

The center served all tsunami-reconstruction activities in Thailand, providing livelihood development training, storage space for building materials — allowing Habitat to save costs by buying in bulk — and construction and administrative support.

More than 40 people worked at the center over the five years. More than half were locally hired, while several others were seconded from other Habitat programs in Thailand and overseas. The center also hosted six long-term international volunteers.

By 2007, Habitat was also providing a regular repayment-based program. The Khao Lak center was closed and the entire operation moved to Surat Thani, on the eastern side of the peninsula, an area not affected by the tsunami. From Surat Thani, Habitat began serving a range of families and communities across southern Thailand, including working in communities still considered to be rebuilding after the tsunami.

E. BUILD STRONG PARTNERSHIPS

The scale of the tsunami elicited a huge response by donors of every type. Yet the magnitude of the response in turn created difficulties as governments and multilateral development organizations sought to effectively organize and coordinate this generosity. Habitat for Humanity navigated this often “difficult” environment: acquiring sufficient quantities of affordable construction materials, for instance, often proved a challenge in the first couple of years as some organizations bought up entire stocks of supplies.⁵⁰

Types of strategic alliance

Habitat for Humanity created strategic alliances with other NGOs including other shelter providers. In some cases this meant agreeing with another NGO to focus on specific communities in order to avoid competition and duplication. In others, Habitat worked directly with local NGOs to provide houses.

Within these partnerships, Habitat sometimes provided supervision for another NGO’s construction efforts or offered information and guidance to NGOs less experienced in the shelter-sector. In several instances, Habitat agreed to take over the uncompleted portion of another organization’s housing project. Habitat also worked with fellow NGOs to provide job training to tsunami victims. In resettlement locations, Habitat coordinated with other NGOs to ensure these new communities had a broad range of services, including water, sanitation, electricity, health clinics and schools.

Plan International’s approach emphasizes quality housing

In rebuilding homes for tsunami-affected families in Aceh, international development agency Plan International chose to work with organizations with housing expertise. Sixty-one houses were built in Leupung, Aceh Besar, in partnership with Habitat for Humanity Indonesia.

With its child and family focus Plan had an integrated approach covering health, education, child protection, livelihoods and habitat. Tony Hutabarat, then communication officer at Plan’s office in Banda Aceh, explained: “House reconstruction falls under Habitat. The objective is increased access to water, better environment and sanitation, and housing for children and families.”

Hutabarat said collaboration with organizations that had expertise in construction guaranteed the quality and safety of the work.

A Plan monitoring report supported “a standard house model for survivors. Such a standard will not cause social jealousy and/or unhealthy competition among support providers, or among beneficiaries. The house design should be in line with local wisdom (or local culture) and practices.”

Ultimately, according to Plan, the reconstruction of homes plays a key role in children’s development. Nono Sumarsono, program support manager of Plan International in Aceh, said: “Plan believes that healthy behavior starts from home, and a healthy home helps children to grow up healthy.”

The Singapore Red Cross “Meulaboh Project”

Habitat for Humanity Singapore secured the single largest donation from Asia for Habitat’s India Ocean tsunami reconstruction program, from the Singapore Red Cross’s Tidal Waves Asia Fund (TWAF). The Singapore Red Cross made a commitment of S\$14.3 million (US\$9.5 million) toward the construction of 1,700 homes in 18 villages spread over two districts in Meulaboh, one of the worst hit areas in Aceh, Indonesia.

Habitat for Humanity Singapore raised additional funds — S\$830,000 (US\$553,000) — from corporations, foundations and churches. And the Singapore Catholic Church’s Archdiocesan Crisis Coordination Team sent three volunteer teams to build in Meulaboh.

The sheer size of the project, which came to be known as the Meulaboh Project, required three parties to work together. The Singapore Red Cross wanted to ensure the public’s donations were being spent properly. The Habitat for Humanity Indonesia team was responsible for actually building the houses while representatives from Habitat for Humanity Singapore acted as facilitators and supported the development of local capabilities.

The Singapore-funded projects faced the same challenges as elsewhere: poor roads and infrastructure, rising costs and limited supplies of materials and skilled workers. A particular challenge was the quantity of information that a donor of such a large amount required at every stage.

“As with all our partners, our biggest project partner, Habitat for Humanity, was required to submit detailed plans, progress reports and financial information at regular intervals, to ensure projects were on track and to receive progress payments,” said Christopher Chua, Secretary-General, Singapore Red Cross Society.

To relieve pressure on local Habitat teams and workers,



HFH Singapore posted one staff member to Meulaboh on a long-term basis, supported by other staff members who made periodic visits, to provide liaison and coordination between the donor and Habitat for Humanity Indonesia’s reconstruction program.

At a basic level, the liaison role involved the collection and processing of data about beneficiary families and other information on how the project was proceeding. The staff monitored progress directly and hosted visits from the Singapore Red Cross representatives.

The Singapore team had a specific role in fund management and budgetary control, ensuring a flow of donor funds to pay suppliers and construction workers while maintaining the pace and level of construction needed to meet target dates. At its height, S\$300,000 (about US\$200,000) was passing through the project on a weekly basis.

Most of the houses were 45 sq. m. with two bedrooms, a living room, toilet and kitchen. The project was completed on schedule in 20 months and handed over in June 2007.

Habitat for Humanity’s liaison and coordinating role, along with constant communication with the donor, resulted in substantial cost savings. At the end of the official project, some S\$3 million (US\$2 million) of the Singapore Red Cross’s commitment was unspent. The donor and Habitat carried out another project, building homes for 200 more families along with water-treatment facilities for five villages.

Singapore’s community development, youth and sports minister, Dr. Vivian Balakrishnan, said: “It is a good example of how non-profits can and should meet the greater public demands for transparency and accountability.”

In India, more than in any other country, Habitat's work was built around alliances with local NGOs and community-based organizations. Whether building new resettlement sites or on-site, Habitat worked with organizations that often had relationships with local families and communities stretching back many years before the tsunami.

Habitat benefited from gaining speedy and effective access to communities in need of shelter. Partners gained experience in housing construction, financial systems and project management.⁵¹ Working with partners helped foster strong community ownership and the integration of recovery efforts into long-term development goals.

Habitat frequently partnered with other NGOs to deliver a holistic approach especially in the construction of new communities in resettlement areas. Habitat contributed the houses while partners provided services, infrastructure, community centers, schools and livelihood initiatives such as micro-financing.

The number and type of NGOs who worked with Habitat was large and varied. In India, for example, they ranged from church groups such as ESAF (Evangelical Social Action Forum) to women's collectives, such as WEED in Tamil Nadu, to child-focused groups such as Nesakaram in Chennai, as well as local Habitat affiliates. The partners included specialists in micro-credit and microfinance, community development, community health, legal aid and social advocacy on housing rights.

In southern Thailand, Habitat partnered with World Concern, an international Christian NGO which specializes in community development, to address both housing needs and improving income without diverting resources from its (Habitat's) core mission. Habitat received more than US\$300,000 from World Concern to build and repair nearly 600 houses over three years. As well as providing funds for building, the partner established a series of community-based facilities to make interlocking blocks and roof tiles. These provided

REAL benefits in India

For nearly two decades, REAL (Rural Education and Action for Liberation), a Pondicherry, India-based NGO, has focused on development issues concerning women, children, health and the environment. It now oversees 1,500 self-help groups in over 300 villages in Villupuram and Cuddalore districts, Tamil Nadu. Its programs benefit about 30,000 people including members of *Dalit*, the lowest caste in India, as well as marginalized women and the very poor people.

REAL had constructed 276 permanent houses for tsunami-affected families in projects funded by Plan International and KKS, a German foundation. The NGO also built nearly 900 houses for flood-affected families in a project supported by World Concern. REAL's approach was to seek support in funding labor and the purchase or production of local construction materials.

REAL and Habitat came together when Habitat started the transition to a regular repayment program in October 2007. The partnership involved building and repairing 400 houses in more than 10 villages. The cost of constructing a new house is about 80,000 rupees (around US\$1,600). HFH India's contribution is 25,000 and is repaid by families over five years. To repair or retrofit a house, for example, changing doors or windows, replacing shutters, plastering or building a new toilet, each family had to contribute US\$50, to be repaid over two years.

The 300-house project was completed in mid-2008. Another 65 houses were completed between January 2008 and June 2009 under the Habitat-REAL partnership. There are plans for a new integrated project based on Habitat's repayment model. The plan is to build a total of 500 houses with livelihood, water and sanitation, roads and other infrastructure.

Matthew Maria, REAL's project manager, said: "We worked with many other donors and NGOs. Habitat was the first to listen to NGOs, enquiring at every stage into what the problems might be. Habitat is willing to participate. That was really encouraging. It was the true development of a partnership."

Maria also applauded Habitat's understanding of building-site realities. When rains delayed part of the first project, Habitat agreed to a one-month extension to complete the project. Maria said: "Habitat doesn't keep a distance. At every stage, whenever we are facing issues, Habitat enables us to solve them."



Adding value to a major partnership

International development charity Christian Aid and Habitat for Humanity worked together rebuilding houses in India, Indonesia and Sri Lanka. By 2009, Christian Aid had effectively become the largest single donor to Habitat's program, contributing the equivalent of US\$11.8 million.

London-headquartered Christian Aid works with more than 600 overseas partner organizations to fight poverty. It is supported by a network of 41 sponsoring churches in Britain and Ireland. Habitat for Humanity was one of six partners Christian Aid worked with after the tsunami.

It's been a "very worthwhile partnership", said Anthony Morton-King, head of Christian Aid's tsunami-response program. "No new relationship is ever without its ups and downs, but it is an unarguable fact that Habitat used the funding that we provided to build just under 2,500 houses for families in desperate need, having lost family members, goods and chattels and, of course, the houses themselves in which they were living. We think this is a significant contribution to the overall shelter effort."

He added: "The strategy behind choosing Habitat was simple – there was a massive need to rebuild housing. We wanted to make sure that we could contribute heavily to this rebuilding program as rapidly as possible, building back better than before. This type of program [is] Habitat's *raison d'être*."

Christian Aid's approach was to develop a close bond with its partners through regular field visits. Morton-King said: "The value of this relationship can be seen from the differences in the program in each country. In Indonesia, contact was fast and regular and the program was well ahead even by the end of the first year, when we were able to top up the funding so more houses could be built."

In an independently-conducted report dated October 2007, Christian Aid's impact in Indonesia was cited as "remarkably positive".⁵² It described Habitat's approach as "systematic, well-organized and focused". Christian Aid's total support reached some 3,027 families by early 2009, and involved building 2,760 new houses, nearly 1,370 of them in Indonesia. There was also funding for renovations, a water project, and community facilities.

Progress was slower elsewhere. In Sri Lanka and in India, contact between Christian Aid and the Habitat programs on the ground took time to get established. Getting



relationships right also took time in the United Kingdom. Habitat for Humanity Great Britain worked with Christian Aid's head office and was the conduit for disbursing funding, reporting back and project monitoring.

Said Morton-King: "Contact in the first year was insufficient as neither of us really understood how best to manage our relationship. This led to a lack of clarity in program and finance-reporting and some last-minute, late-night candle-burning to ensure that accountability standards were fully met."

Christian Aid was impressed by the way Habitat worked in communities so that each beneficiary had an increasing level of influence and choice in the design of his or her own house, and the way people contributed sweat equity. The provision of training in masonry and carpentry provided family breadwinners with different sets of skills to fall back on in order to keep their families fed and housed.

After a 2008 visit to Habitat projects in Indonesia, Nick Guttman, Christian Aid's head of humanitarian division, said: "This program has brought together the skills of our two organizations to provide such high quality housing for so many tsunami-affected people. I saw some excellent work by Habitat and was very impressed with the way the communities were involved in all stages of planning through to construction, and are now living happily in the houses they helped design and build."

Morton-King concluded: "Despite some of the administrative difficulties, the results of the program speak for themselves. The positive impact on the lives of so many people is immeasurable — a secure home is a terrific place from which to rebuild a family's life!"



employment for local people and a source of good quality, low-cost materials for Habitat to use in its houses.

Collaborations in Indonesia

Indonesia was the most challenging environment for “donor competition”.⁵³ Habitat for Humanity collaborated formally with several other NGOs in Indonesia, both local and international, including Mercy Corps in a cash-for-work program, Obor Berkat Indonesia and Atlas Logistique in the delivery of materials, and with Opportunity International in a social business venture.

In resettlement projects, Habitat teamed up with NGOs to supply a wide range of shelter and community needs. In Peunaga Raya village, Meulaboh subdistrict, Aceh Barat, for example, a group of families communally bought the rights to a piece of land which the local committee helped to divide into 77 plots. Habitat worked to build the homes. The committee helped to bring in other organizations to round out the community's needs: the United Nations Development Program cleared the land, the Salvation Army supplied fences and Asia Little Ones provided a public health clinic.

In other cases, Habitat built houses in communities where

other donors provided water and sanitation facilities. In Jangka Buya subdistrict, Pidie, for example, Habitat built houses while Dow Chemical provided a water treatment facility, and other donors provided a clinic and community center. In Samatiga subdistrict, Aceh Barat, the French Red Cross provided water and sanitation facilities that benefited houses built by Habitat.

Alliances in Sri Lanka

Habitat also sought out alliances in Sri Lanka, particularly in resettlement projects. Land for the latter came from the government's National Housing Development Authority. Alliances again allowed Habitat to focus on housing while its partners helped to supply infrastructure and services such as water, sanitation, electricity, school and livelihood opportunities.

Tearfund, a UK Christian relief and development agency, and Christian Aid, an international development charity headquartered in London, were strong supporters. Between them, they contributed more than US\$4.9 million to post-tsunami rebuilding efforts in Sri Lanka. Habitat also worked with World Concern on projects, in which World Concern conducted job training programs and provided wells for safe drinking water.

F. CONSISTENTLY FOCUS ON NEED

Habitat for Humanity always provides according to need. This principle was at the heart of its work in post-tsunami reconstruction. The definition of need, however, was not always identical in each country or even each community.

A disaster can strike rich and poor alike wiping away assets and property of all classes and groups. But poor and lower-income families have a harder time rebuilding as they have fewer assets to begin with.

Habitat for Humanity sought out those in greatest need. These often proved to be people less obviously affected by the tsunami, such as those who lost their livelihoods but not their house or family members. Such families were often those neglected by government agencies and other groups. These and other beneficiary families were often not in a position to pay for their homes. But Habitat did require families to make commitments in areas such as community involvement and volunteer labor as outlined below.

Need for employment

Building job opportunities as well as homes

Helping people get back to work was an important aspect of recovery. Programs through which survivors earned money helped move communities from disaster relief through recovery to the development phase.⁵⁴ In Indonesia, Habitat for Humanity was involved in livelihood support in four distinct ways:

Training alliances: Habitat formed alliances with NGOs that focused on getting people jobs or training in the construction trades. It partnered with Opportunity International in a social business venture that produced wood-based construction supplies with a local company.⁵⁵ Christian Aid funded the Habitat Resource Center and block-making machine in Meulaboh.

Cash-for-work partnerships: Habitat partnered with other NGOs to offer a cash-for-work program — and later, an output-based payment system — made directly to beneficiary families working on homes in their community.⁵⁶ This differed from Habitat's traditional requirement that homeowners contribute sweat equity to the construction of their homes.

Direct employment: Habitat hired crews of local construction workers for many of its projects. Because of the shortage of skilled labor, Habitat ultimately imported crew supervisors from other parts of the country, but the majority of its paid workers were local. This combination allowed Habitat to build quickly and efficiently, while at the same time keeping its costs lower and honoring its commitment to invest in the local economy. In many cases, Habitat's investment in local crews helped them to improve their skills and capacity for future projects. Some subcontractors discounted their fees to Habitat in exchange for training that was not available locally.

Small businesses: By delivering permanent housing, Habitat also provided households with a physical space for home-based businesses. Habitat's core house design invited future improvements to the house for small-scale business and trade, a long-standing tradition amongst the Acehnese people.



Poor a priority

Thailand proved a prime example of how to assist those in real need. To start with, Habitat selected beneficiary families from those who had been directly affected. This proved difficult as staff discovered the worst-housed members of a community often had the greatest need, but were not “eligible” as they were deemed to have neither lost property nor family members. Habitat was most effective therefore when it helped communities that had been indirectly affected by the tsunami.

A family could be eligible for a Habitat home if family members had lost their livelihood, or the present home did not meet basic safety, security and health requirements. In villages along the Khao Lak coast, for example, Moken — “sea gypsies” — and others suffered greatly even though they were only indirectly impacted. Moken people generally worked on other people's boats and lost their only source of employment for up to a year after the tsunami.

Habitat still asked families to contribute. They had to own the land upon which the house would be built; be willing to invest time in sweat equity on their own houses and the houses belonging to other families in need of assistance; be certified by the local authorities as bona fide victims of the tsunami; have documentation to prove their place of residence, place and status of work, marital status and land ownership; and not be receiving housing assistance from any other government agency or organization.

Assessing need

In contrast to Thailand, 97 percent of families helped by Habitat for Humanity in Aceh, Indonesia, had lost their homes. To qualify for Habitat tsunami-response assistance, families had to: be legitimate residents of a community; have lost their home; be certified as tsunami victims by village and sub-district leaders; own their land; and have not accepted support from another shelter organization. Ensuring families



did not receive multiple homes from multiple sources was a key role for village headmen and committees. The lack of national identity cards or any other identification document sometimes made family selection and verification difficult.

In Sri Lanka In order to qualify for Habitat assistance, families had to: show that they were victims of the tsunami; accept the core house concept, where applicable; agree to a sweat equity commitment; and own their own land, with written documentation of tenure rights. In addition, they must not have received permanent housing assistance from another organization. Habitat staff conducted on-site interviews to verify information.

Assisting marginalized communities

In India, the government issued official lists of beneficiaries who qualified for assistance. However, some communities and families who had been indirectly affected were not included. Habitat worked in some of these marginalized communities which included people working in salt pan and brick works as well as people designated as Irula⁵⁷, a minority from Tamil Nadu, and Dalit castes.

In many cases, people from these communities had an acute need for adequate housing and had lost their sources of income, for example, when the salt pans were flooded after the tsunami. To qualify for Habitat assistance, families had to: have been affected directly or indirectly by the tsunami; not be receiving help from government housing programs; be marginalized and poor; have land occupancy title; and be willing to provide sweat equity.

G. WORK WITH VOLUNTEERS

Volunteers have always been essential to Habitat's work and mission. Volunteers help to cut costs and help spread the word about the need to combat substandard housing: they proved a key component of Habitat's post-tsunami response.

Volunteers and their contributions were widely acknowledged by local Habitat program staff and beneficiary families in follow-up surveys about the tsunami response. At the same time, the tsunami's aftermath presented new challenges that forced Habitat to review and strengthen its volunteer component. Habitat worked with several types of volunteers, partners and teams.

Local volunteers

The most important volunteers in Habitat's tsunami response were those from affected communities or regions. These people, including Habitat's own staff volunteering in their own time, were often those first on the scene, doing the brutal work of recovering and burying bodies, clearing wreckage, setting up emergency medical services and attending to the needs of survivors for food and shelter. This experience affirmed the importance of acknowledging and respecting the capacity of local people in disaster response.

In many communities, the concept of formal "volunteerism" was unknown. People might help each other in a myriad of informal ways, but there were no structured channels for charitable contributions or volunteering to assist others. Habitat found that by including volunteerism in its programs, it could raise awareness about the concept.

Beneficiary families often remarked on how surprised and inspired they were by the presence of volunteers, often from other countries, arriving in their communities to work.⁵⁸ Women were especially moved. Some remarked that seeing women

Confidence from the UK

In the days following the tsunami, offers of help came pouring in from around the world. The United Kingdom was no exception.

"We all wanted to do something. So many people and organizations were approaching us with offers of funding and volunteers," said Ian Pearce, operations manager, Habitat for Humanity Great Britain. "But we did not have the resources to scale up our volunteer program within the timeframe of need,"

The solution was an innovative three-way strategy that saw HFH Great Britain supporting Habitat's response in southern Sri Lanka in partnership with communitychallenge, a specialist UK adventure travel company which sends volunteers around the world to work with NGOs.

HFH Great Britain recruited teams while communitychallenge assisted with marketing the program and organizing local ground handling and international travel. This freed HFH Sri Lanka to concentrate on ensuring volunteers had a proper on-site work experience.

"We had our first meeting in early January 2005. For the next five months the three organizations worked hard on developing a robust program that would safely accommodate volunteers in a post-disaster situation and would provide them with the opportunity to make a worthwhile contribution," said Pearce. Sri Lanka hosted a total of 35 teams while another 13 teams went to India.

The first teams of volunteers arrived in Sri Lanka at the end of May. "The volunteer partnership program with HFH Great Britain was, in two simple words, absolutely fantastic," said Tony Senewiratne, HFH Sri Lanka's national director.

Teams of volunteers arrived about every fortnight for over a year. They included people from all sorts of professional and financial backgrounds. "They worked long and hard hours in the fields — provided great enthusiasm and motivation to the very depressed tsunami victims and built strong relationships with the community. They also made very generous donations toward the work," Senewiratne added.

Simon Albert, one of communitychallenge's founding directors, said: "We had never worked in Sri Lanka previously, so working with a well respected local NGO was key to the program's success.

"When travel companies were diverting their clients away from the region, we started a massive effort to bring tourists in, not only helping the reconstruction effort but supporting the local tourism industry. I can honestly say that the launch of this program at such a difficult time in Sri Lanka is the single biggest achievement of my career."

Companies that sent volunteers through the partnership included financial services company Credit Suisse, consumer goods company Diageo, law firm Freshfields Bruckhaus Deringer, financial products company GE Money, banking and insurance group HBOS, information company Reuters (now Thomson Reuters), advertising company Saatchi & Saatchi, Serco, a UK-based global management services company, asset management company Schroders, Martin Currie, an investment bank, and United Christian Broadcasters.

A flavor of the teams' response comes from Serco. Its staff wanted to help survivors in a tangible way. The company agreed to sponsor 60 members of staff to help in Sri Lanka. The sponsorship was repeated for 60 employees for a



second year, and in 2007, 40 more Serco staff members travelled to India to build with Habitat.

Serco's staff volunteers came from all over the world, ranging from Belgium to the Middle East. "Anyone could apply, so we had managing directors working alongside cleaners; and scientists working alongside train drivers," said Andy Lewis, Serco's director for health, safety and environment.

One employee volunteer said: "Thank you Serco for giving me the opportunity to be a volunteer — it's been challenging, rewarding and a real privilege. I've met new people, made new friends, I've laughed and I've cried, but what is significant is the real tangible difference we have made with our small contribution."

Since then, the HFH Great Britain-communitychallenge partnership has sent volunteer teams to India, China, Mexico and South Africa.

Dow rebuilds social hub and strengthens relationships

After the Indian Ocean tsunami struck in December 2004, The Dow Chemical Company and its employees around the world pooled together US\$5 million for disaster relief and rebuilding work. Dow's donations to Habitat's tsunami reconstruction programs in Indonesia, India and Sri Lanka reached about US\$700,000.

Dow also sent about 40 employees from Indonesia, Malaysia, Singapore and Thailand to work in four volunteer teams in two communities, where they built both houses and infrastructure. In Indonesia, a Dow team built a replacement community center in Emperom, Aceh, providing the community with a social hub and an important symbol of the return to normalcy. Teams also helped rebuild a village road in Jangka Buya as well as two water treatment plants in Pidie and Aceh Barat.

The multinational company has been a long-time Habitat supporter. Bo Miller, Global Director of Corporate Citizenship, said: "What began in 1983 as a modest, employee-led grassroots effort has grown into one of Dow's most significant service initiatives.

The Asian tsunami was another occasion in this relationship that showcased the personal commitment to Habitat shared by thousands of Dow employees around the world."

Dow's commitment is also driven by the levels of satisfaction and accomplishment its employees feel when they volunteer. This in turn helps to strengthen relations with communities where the company operates.



volunteers construct houses and lead teams altered their perception of the kinds of work that women could do.

International First Builder teams

The scale and immediacy of need in post-tsunami reconstruction required international volunteers with heightened skill sets. Beginning in March 2005, skilled international volunteers called First Builders supplemented Habitat's local staff and volunteers. Within six months, 30 teams of 12-15 people each had spent 1-2 weeks building permanent homes in tsunami-stricken areas. Within the first year, over 70 First Builder teams had worked on reconstruction sites. The most effective teams, and the ones needing the least supervision by already hard-pressed local Habitat construction staff, had a balance of one expert construction volunteer to three or four other unskilled volunteers.

Perhaps the most successful of these programs was conducted through a three-way approach with Habitat for Humanity Great Britain supporting Habitat's response in southern Sri Lanka in partnership with communitychallenge, a specialist UK adventure travel organization which sends volunteers around the world to work with NGOs.

Corporate teams

Corporations, both national and international, organized and funded some of the most effective volunteer teams. One of the key roles domestic corporate volunteers played was to raise awareness that reconstruction was ongoing in their countries. By talking to colleagues and friends beforehand and returning with reports from the field, corporate volunteers helped to keep people thinking about and supporting Habitat projects, even after news about the tsunami had receded from the media.

Celebrities

As always with Habitat programs, celebrity volunteers played an important role in post-tsunami construction projects. They helped draw media attention, organize and fund specific projects, and raise financial support for reconstruction. Popular celebrities included Oprah Winfrey, who increased awareness for projects in Sri Lanka. US singer Ricky Martin made a high profile visit to projects in Thailand, greeting families and volunteers. Like corporate volunteer teams, celebrities helped keep the spotlight on long-term reconstruction efforts and needs.

Corporate and celebrity volunteers exceed expectations

Corporate donors supplied both funding and volunteer teams to Thailand. Many teams were from Thai-based companies and served to broaden awareness about reconstruction needs within the country.

Among businesses sending volunteer teams were insurance company AIA Thailand, Ford Operations (Thailand) Co., Marriott hotels, the Cargill agricultural group, and the US's National Association of Realtors.

AIA Thailand, for example, sent more than 140 volunteers to build houses in Thachatchai, at the northern tip of Phuket island.

AIA's parent company AIG's Disaster Relief Fund contributed 16 million baht (more than US\$425,000) to fund a 36-house project in Thachatchai as well as 74 houses in Suksamran, Ranong province.

"The results of the project and volunteers' activities were over our expectations," said AIA Thailand spokesman Kan-chama Sri-aroon. "Even though this was the first project for our employees to be involved in, we were overwhelmed by their enthusiasm and energy to join the program. They still talk about it even now."

Thomas White, AIA Thailand's executive vice-president and general manager, added: "A Muslim woman told me that she didn't understand why AIA had helped her as she cannot buy AIA insurance, but she would pray for me and AIA each and every day."

Popular entertainer Ricky Martin proved a valuable and dedicated supporter, funding a 60-house settlement in Prew Tiew for which he volunteered, on-site. The Ricky Martin Foundation also partnered with Habitat to provide more than 200 houses in Kho Sirey, Phuket.

Former US president Jimmy Carter and his wife, Rosalynn, also visited house sites in Thachatchai, Phuket in November 2006.



Unique teams

Several unique volunteer teams proved highly effective. Many Singaporeans felt committed to helping tsunami-affected communities in Indonesia, mainly because the two countries are so geographically close. Singaporean volunteer teams were a frequent sight on Habitat sites in Aceh. Through the Singapore Red Cross, the people of Singapore also contributed substantial funding and became the primary donor for Habitat houses built in Meulaboh.

Another highly committed group of volunteers came from the US state of Kentucky. Over the first year, more than 70 volunteers visited India in two-week shifts. They worked alongside skilled local contractors to build 21 houses in the village of Muzhukkuthura, Cuddalore, and prepared 100 more homes to be built by contractors. International volunteer teams also came to India from Singapore, Australia, Japan, Qatar and other countries. In addition, volunteer teams from the local offices of HSBC and Citi banking groups joined Habitat for one-day builds, helping to advance building and generate enthusiasm and corporate commitment.

H. PLAN FOR THE FUTURE

Transition to regular Habitat programs and disaster preparedness

Habitat for Humanity sought to make its disaster-response program not just a means of meeting immediate housing needs, but a sound foundation for building stronger, safer communities over the long-term. Habitat's goals included transitioning from a grant-based response to serve communities through the introduction of regular, loan repayment-based development programs and ensuring that communities were better prepared for possible future disasters. These goals had effectively been achieved by 2009: all four Habitat country programs had transitioned into wider programs designed to serve a range of poor and low-income families as well as families who were considered "tsunami-affected".

Partnering for larger impact



Bank Indonesia, the country's central bank, gathered all the banks in Indonesia to help tsunami survivors by pooling funding which it then channeled to implementing organizations such as Habitat for Humanity.

For Habitat projects, the Bank Indonesia consortium supported Habitat rebuilding in two communities, Kampung Mulia and Tibang. Half of the 1,034 families in these communities were directly assisted by the consortium's efforts.

More than 80 volunteers, grouped in teams of 10, worked on Habitat build sites. During their week-long building forays, the teams transported building materials, tied steel reinforcements to make posts and beams, mixed concrete and built foundations.



Together they invested more than 3,200 volunteer hours to build 200 homes. Even during the Muslim fasting month, the teams continued to build. "We made a commitment to play an active role in the reconstruction and rebuilding of Aceh. Our employees enthusiastically signed up to lend a helping hand. They came away from the experience happy they were able to share genuine care and concern with families in Aceh," said Bank Danamon's president director, Sebastian Paredes.

Assessing long-term needs

As projects were implemented, Habitat developed a practice of assessing each community's ongoing shelter needs. This practice, which required high levels of engagement by local people, helped to ensure that no household in need was left out. The most effective time to conduct these assessments was either as a tsunami-related project reached its mid-point or once the project was completed. This was when gaps – individual and community needs – were more evident. One consequence of this approach was that Habitat was invited to "top off" projects, such as completing half-built houses, providing toilets and/or kitchens for houses built by other groups.

In many cases, communities that worked together to build their houses with Habitat emerged more united and more capable of dealing effectively with local authorities. Habitat's financial support and guidance to local NGOs and for-profit businesses helped them to expand and more aptly address future shelter-related challenges.

From grants to repayments

Habitat for Humanity Thailand was the first operation to transition to a regular Habitat program from post-tsunami reconstruction. Most grant-based construction projects were completed by September 2006, by which time more than 1,600 families had received assistance from Habitat.

Many families who had received a "free" core house under the grant-based post-tsunami reconstruction program were prepared to participate in regular Habitat programs. They were prepared to sign up for Save & Build housing micro-finance schemes and to take no-profit loans to expand or improve their premises. In the village of Ko Nok, for example, approximately 20 families funded house extensions this way. Once each extension was complete, the family was obliged to repay 1,300 baht (US\$40) a month for four years.

More than 800 families have applied to participate in a regular program either through Save & Build housing micro-finance or other lending programs.

Since 2007, Habitat's tsunami work has been integrated into a regular program for the south of Thailand. The wider program was served and supported by a Habitat Resource Center established in Surat Thani, on the eastern side of the peninsula, in an area unaffected by the tsunami.

Repayment components were introduced in India from mid-2007. More than 3,500 houses of about 4,733 that had been built or which were under construction at the end of 2007 involved repayments.

The Habitat Resource Center in Chennai, India, remains focused on families and communities affected by the tsunami, but the program has changed. All rebuilding involves a repayment component. There is also an emphasis on training and preparing communities to protect their lives and properties against future disasters.

Similarly, in Indonesia, the Habitat Resource Center in Medan, Sumatra, which opened in 2008, is providing services on a repayment basis across Medan, Lampung and the Riau Islands as well as tsunami-afflicted Aceh.

In Sri Lanka, Habitat is using its increased capacity to build permanent housing for families displaced by political tensions and civil conflict. Tens of thousands of these families have lived in primitive barracks for over 10 years. Most of these families need a grant-based housing program since they do not have income levels sufficient to qualify for a regular Habitat Save & Build or mortgage-based program.

With permission from its donors, Habitat also helped rebuild the houses of victims of the civil war who were affected by the tsunami. In the west of Sri Lanka, Habitat is working on topping-off projects. Tearfund is also supporting projects in the east, south and west to provide 1,000 tsunami-affected

families with training in the use of solar cookers, cultivating home gardens, compost bins and eco-toilets. In Batticaloa in the east, Habitat has plans to start its first repayment program for 40 tsunami-hit families with funds raised by a group of Singaporean photographers.

Readiness for future disasters

The tsunami was unique in its scale and the damage it wrought on concentrated human populations. It was not, however, an aberration: natural disasters are a part of life, especially in Asia, which accounts for 80 percent of all victims of natural disasters around the world every year.

One of the gravest lessons for the global community was that better readiness could have helped mitigate tragic consequences. As one report noted: "It is notable that disaster-risk reduction and preparedness, though demonstrably cost-effective and effective if correctly undertaken, receive only a small portion of international aid."⁵⁹

In assessing its post-tsunami reconstruction performance in Indonesia, the ADB concluded: "[I]t will be pivotal that communities will nurture and cultivate among [their] members disaster preparedness and that this be incorporated into routine activities of the young and old."⁶⁰

Habitat for Humanity and other groups learned that investing in disaster-risk management rather than just disaster response can protect lives and property. Preparedness and mitigation efforts include ideas such as community education; retrofitting properties; creating civil defense networks; establishing bio-fences; and building deepwater wells and latrines. The last two mitigate the damage to health that occurs alongside natural disasters.

Habitat's position as a provider of long-term housing in disaster-prone communities, as well as its ongoing presence in these communities, enabled the organization to promote and implement additional mitigation and preparedness programs.



Toward the end of 2007, Habitat launched a successful pilot program to train families in communities along India's eastern seaboard on how to protect themselves and their property in the face of natural disasters. By 2008, the pilot, based in Pondicherry, had assisted nearly 9,200 families in 41 villages and had trained over 2,600 students and teachers from 15 schools. Almost 800 houses were strengthened and retrofitted to protect against future hazards.

The program is being extended to Kanyakumari, Tamil Nadu state, where more than 3,850 families have been trained to date. The program has been extended to Tuticorin, Ramdan districts, Tamil Nadu. A similar program in Andhra Pradesh state is set to benefit 5,000 families in 2009.

By September 2009, the program had assisted some 20,500 families. The target is to assist around 27,000 families by the end of 2009.

Focus on safety

Disaster mitigation can be implemented for a small fraction of the cost of a post-disaster response and can therefore be delivered to a much larger number of people in at-risk areas. Making a house strong enough to withstand flooding, for

example, adds as little as 7 percent to costs if undertaken when the structure is first built.

Habitat's focus on durable, permanent housing in disaster reconstruction was, in itself, a tool for disaster mitigation. By building stronger, more disaster-resistant housing, Habitat provided what could be considered the strongest shelter-based hedge against future disasters.

In many cases, Habitat helped families to repair or reconstruct houses or build new homes that were safer and more durable than before. It often went beyond local governments' regulatory requirements in this regard. This type of building also brings economic savings to homeowners as well as environmental benefits. In India, for example, the annual costs per home of repairing mud walls and replacing a thatched roof is 5,000 rupees (about US\$116). A quality house may cost more initially, but it allows families to save more over time. □



Sweat equity in the context of disaster response

Sweat equity is a core Habitat for Humanity principle. In its regular programs, Habitat partners with families willing to make repayments for the cost of their houses and to contribute a specific amount of labor as sweat equity in building their houses. This is usually a formal commitment to contribute a set number of hours.

In this way Habitat encourages family ownership of the project and community empowerment, rather than a dependency based on handouts. It also helps keep construction costs down, which, in turn, allows Habitat to use its resources to assist more families.

In the context of various disasters, Habitat has had to shift its approach. It has had to drop or adjust its loan repayment and sweat equity requirements in order to reach those in greatest need. Loan repayments were not feasible in any of the affected areas in the first year or so after the tsunami. This was partly because so many NGOs provided “give away” houses, and partly because there was insufficient economic activity to generate adequate incomes.

Habitat therefore adopted “grant-based” programs where core houses were provided, where possible, for an investment of sweat equity rather than in return for financial repayments. Sweat equity was more possible in some places than others. In some fishing villages in Thailand, people willingly contributed to the construction of both their own house and to other houses in the community. In general, these communities were indirectly affected by the tsunami and had lost livelihood opportunities for a period of months or even years.

In Indonesia, the degree of sweat equity and community participation depended partly on timing. In the months immediately following the tsunami, Habitat found that many people were simply unable to participate in a meaningful way: their families were dispersed or dead, their homes, livelihoods and sometimes entire villages were gone. For these people, daily survival was the overwhelming priority. In this context, Habitat found that families became more involved and motivated as they saw houses begin to go up. Cash-for-work opportunities (rather than a sweat equity

requirement) also allowed beneficiary families to participate in the early stages, when procuring some form of income was vital.

An estimated 86 percent of Habitat homeowners voluntarily contributed to construction of their houses in Thailand, while this was true for only 22 percent of homeowners in Indonesia. Even more striking, 71 percent of homeowners in Thailand contributed voluntary labor to building other Habitat homes in their communities, according to a survey of beneficiaries.⁶¹

But not everyone could contribute. For example, sweat equity was not often feasible for beneficiaries who lived for an extended period in temporary accommodation located far from the building site for their new home. People resettled in a new location were less motivated and less able to contribute sweat equity. Finally, it was difficult to promote sweat equity in projects where construction was controlled by partner organizations or professional contractors.



PART IV: IMPACT STORIES

The main impact of Habitat for Humanity's post-tsunami reconstruction program was that tens of thousands of families secured new or rehabilitated or repaired physical structures. These secure dwellings allowed lives to be rebuilt. Habitat also created a variety of other impacts. For example, many families secured legal rights to their land and houses for the first time. Many had safer, better built houses for the first time. Security and safety allowed family life to flourish, whether in terms of better health or children enjoying more educational opportunities or more vibrant and integrated communities. The process of involvement in a Habitat project also had an impact through the provision of training and employment opportunities, especially for women.

In this selection of stories, individual families talk about the impact Habitat had on the lives of their families and their communities. □

Impact on one family in Thailand Part of Something Special

The family of fisherman Jood Chantima was one of the first to be helped by Habitat for Humanity in southern Thailand. When the tsunami hit, Jood was out at sea and did not see or feel the waves. Only when he returned to Thachatchai village, on the northeastern tip of Phuket Island, did he find his house was flooded. His wife and daughter had salvaged the remains of the bamboo shelter.

Like others in the community, Jood and his wife, Tiew, contributed to the construction of their Habitat house. They were involved from start to completion, carrying construction materials and assisting the carpenters in building the stilts.

"There were many people around, helping each other," said Jood. "That was good." In particular, he remembered the Thai volunteers, as well as those from the Marriott group of hotels which had a property nearby.

Jood said: "When I look at the other houses built by Habitat in the community, I feel that I am part of something special."

"Now, we have proper roads for transportation and electricity. With more light, there is less theft than before the tsunami," said Jood.



Impact on one family in India More Hygienic, Higher Aspirations



Rani remembers the American volunteers from Lexington, Kentucky who came to her village in Cuddalore, Tamil Nadu, to help build her new Habitat house. She kept a photo of them. These Habitat volunteers helped changed her family's lives.

The family used to live in a thatched hut with mud walls on an island opposite Killai village on the mainland. The tsunami came and swept away not

just their hut, but also their five cows and 10 goats, along with their fishing boat and nets. Their losses totaled more than 500,000 rupees (about US\$10,347).

The family's Habitat house has made an enormous difference. "I am happy to live in a good house," said Rani's fisherman husband, G. Sundharamoorthy. "If Habitat had not helped, we would have been forced to live in a tent because we did not have money to build a house."

Rani added: "Our Habitat house is good for health. It is a safer place. If the waters come, I can go up to the terrace. It is more hygienic too because of the attached toilet."

On a day when Sundharamoorthy and his eldest son have a good catch, they can expect to bring home 1,200 rupees (US\$25). Rani said: "We are working hard to eat well and enjoy this life."

The two younger children have high aspirations. Arul wants to become a doctor while his sister Meena aims to be a teacher. "I want to educate all the children in the village. My passion is to give everybody a good education," said Meena.

One of the volunteers who worked on the family's house back in 2005 was Pat Smith, a member of Habitat for Humanity International's board of directors. Smith died tragically in an air crash in 2006 while on his way to join other Habitat volunteers in rebuilding the houses of families affected by Hurricane Katrina in the USA. But for Rani and her family, Smith lives on in the way he helped transform their lives.

Impact on one family in Indonesia Improved Livelihood Opportunities

Formerly a tailor, Isniar has put her skills to good use in handicraft work while tending to her coffee shop in Jabi village, Calang, on the west coast of Aceh. Her life has changed dramatically since she acquired a Habitat home.

Since training in a USAID/Oxfam project, Isniar has been making traditional wedding ornaments, hand-sewn umbrellas and turning empty instant coffee and noodle packets into handbags for sale. She also teaches the craft to children once a week in the village's elementary school.



In addition, Isniar represented her village in another USAID project to train women to turn food waste into garden compost. The result, as she knows, from her own garden is flowers "that are *bagus* (good)", she said.

She sat on the village's water-sanitation committee for a Medair project. The Swiss-headquartered non-governmental organization was constructing water points and latrines alongside completed homes of tsunami-affected families.

A mother of four children ranging in age from 10 to 23, Isniar said before she had felt old and useless. "With all the training, I can share what I had learnt with others in the village and raise awareness of the environment."

Isniar has added a room to her Habitat house after her eldest daughter Linda's marriage in December 2008. As Linda is trained as a midwife, Isniar hopes to set up a clinic, within the coffee shop, for her daughter to run.

Impact on one family in Sri Lanka New Home, New Business, New Life

Il Salfiyar's world collapsed on December 26, 2004. He had returned to Arugam Bay, Pottuvil, on Sri Lanka's east coast, after working and earning good money in Saudi Arabia. He had built a brick and cement house, set up a grocery store, married, and



Il joined Habitat's project, working as a laborer and providing tea and snacks to the masons as they worked on a 300 sq. ft. Habitat house at a site two kilometers from the shoreline.

Il is now remarried to Shamila and the couple run a grocery shop which brings in 500 to 600 rupees (US\$4.40 to US\$5.20) a day. Il is pleased that his young daughter and adopted son are showing improvement in their studies now that the children have the privacy of a room. "Thanks to God for a new life," he said.

Impact on one family in Thailand New Businesses and Better Lives for the Children



20 kilometers by motorcycle to sell *roti* (flat bread) at a nearby village. Since early 2009, they have been working on a new business: growing hydroponic vegetables outside their house. Once their vegetables meet official quality standards, they can be sold to hotels and restaurants. For now, Ismaail and Komiah use their products in their small restaurant or sell them to neighbors.

had a one-year old son. The tsunami swept away all that he had worked so hard for — his family, his house and his shop.

Oprah Winfrey, the celebrated US talk show host, donated US\$330,000 through her Angel Network to build 150 houses at Arugam Bay. This project helped to change the life of Il Salfiyar and many others.

Il joined Habitat's project,

Ismaail Kulea and his family used to live off the 7,000 baht (about US\$200) he brought home each month working as a fisherman. Now, the family income is closer to 15,000 baht a month, thanks to their new businesses.

Komiah, Ismaail's wife, sells breakfast at a small eatery set up in front of their Habitat house in Thaidindaeng village, Phang Nga province. In the afternoons, the couple travel

Life has been marked by change for Ismaail, Komiah and their two children. When the tsunami hit, Ismaail lost his fishing boat and equipment, while the mussels that he had been cultivating were washed away. Although his old wooden house was not destroyed, Ismaail said he would not have been able to manage the repairs.

He welcomed Habitat's sweat equity requirement, helping lay cement bricks and assisting neighbors in building their houses. "It was a good idea to learn how to build my own house and those of others. I was happy too when others came to help me."

He is grateful for his Habitat house, which comes with a tube-well to provide fresh water and an outdoor toilet. "The condition of our old house was poor. Now, the children have space to play and study."

Komiah budgets her household expenditure carefully and therefore manages to save 100 to 200 baht (US\$3 to US\$5.90) a month. "The children are growing up. I have to take care of their education."

Impact on one family in Thailand Setting Up Shop

"Thrifty" could be Yamila Rutha's middle name. The grocery shop owner earns up to 2,000 baht a day (about US\$58) from her home-based business in Suksamran, Ranong province, southern Thailand. She sets aside 10 to 30 baht (US\$0.30 to US\$0.90) from the shop's daily takings toward her daughter Suda's education. Since she started two years ago, Yamila has saved 2,000 baht (US\$59) for Suda. Yamila is also setting aside 100 baht daily to repay a 10,000 baht loan which she took to stock up on goods for her grocery shop.



The need to take care of her young daughter is the main reason Yamila converted part of her home into a grocery shop. She used to be a laborer on fishing boats. Her fisherman husband died in the tsunami and their boat was also destroyed.

Yamila joined Habitat's Save & Renovate housing microfinance program by taking a 4,000 baht loan to improve her kitchen, which used to be in an open, low-lying area

and was prone to flooding. Now, it has wooden walls and a roof, and is elevated off the ground. "I could not possibly have done the kitchen renovation on my own," she said.

Business has been good as more people have started to settle in Suksamran. Yamila has extended the shop front and hopes to buy a bigger refrigerator so she can stock more items.

Impact on one family in Indonesia **Habitat as a Reliable Customer**



At the height of his furniture business during the post-tsunami reconstruction period, Saiful was supplying to non-governmental organizations such as Catholic Relief Services, Habitat for Humanity, Samaritan Purse and Spanish Red Cross.

He remembered well his partnership with HFH Indonesia. As a supplier of window and door frames and ventilation vents to Habitat's resource center in Meulaboh, he had to conform to Habitat's stringent quality

control requirements. He benefited from the experience. "Habitat has good management. Habitat always paid on time. It is a trustworthy partner."

When the majority of the NGOs left Meulaboh in October 2008 after reconstruction was completed, Saiful switched to running a food stall, a sundry goods shop and providing small orders of construction materials such as sand.

Before the tsunami, Saiful employed fewer than 10 staff. Now, he has 34 employees. His average monthly income is about 50 million rupiah (about US\$5,000).

Impact on one family in India **New Livelihood Skills for Women**

Mary, a slightly built, but fit-looking woman, used to be a construction laborer and was no stranger to physically demanding work. When she heard about a women's masonry training program from her self-help group, she approached local development organiza-

tion CADRE (Centre for Action, Development, Research and Education in India) and signed up.

Mary was among 25 women to attend the training at Habitat's satellite center in Kanyakumari. The course involved 15 days of theory lessons followed by three-and-a-half months of on-the-job training on Habitat repair and rehabilitation projects in Kottilpadu and Colachel villages. The women were each paid 140-190 rupees (about US\$2.90-3.90) a day for their efforts.



"The difference between my previous job and now is that before, I used to move (construction) materials and it was physically exerting. But now, as a mason, the materials are on the site and I just have to lay the bricks," said Mary. "Earlier, I was assisting the men. Now, I am on par with the men."

When the training was over, she constructed a wall at the request of some villagers from Alanchi village where she lives. In 2008, Mary built her own house with the help of her nephew and plans to build a toilet. Mary takes home about 250 rupees a day whenever she gets to work. "I am satisfied with life," she said.

Impact on one family in India **Training and Self Confidence**

For the past two decades, local NGO Kalvi Kendra had worked with local women's self-help groups in Tamil Nadu, India. After the tsunami, executive director S. Chinnappan had approached Habitat for Humanity to be a partner in rebuilding the water-logged village of Chinnakottakuppamin.

"Kalvi Kendra facilitated community development while Habitat built houses. When Habitat came in, community participation was very high. The self-help groups asked families to build their houses and village leaders motivated them," Chinnappan explained.

In April 2006, 20 women from the groups spent a week at a local center learning how



to make compressed stabilized earth blocks for building houses. After they returned to their village, their enthusiasm about the manual block production spurred young men in the village to form their own self-help groups and join the women in the village's block-making venture.

The women started by making 600 of the lighter and easier to handle interlocking blocks each day – a traditional house needs up to 10,000

blocks. They later switched to producing bigger blocks made of red soil, cement and river sand, making 350 blocks daily and supplying blocks to other villages.

The block-making training benefitted group members in several ways. "There was a

growing sense of self-confidence; hope was inculcated among the women," said Chinnappan. "Before, they were dependent on their husbands. Now, they have savings and they can mobilize money from the bank for their family, education and livelihood needs."

As well as supplying blocks for homes, the partnership has encouraged other changes in the village. The local authorities have built better roads and brought in water, electricity and street lights.

Group member Uma explained the improvements, especially for her children. Before Habitat's arrival, water used to stagnate in front of her house, leading to the problem of mosquitoes. People chose to sleep in the open instead of their waterlogged houses. With the laying of roads and a proper drainage system, "our safety and health have improved," said Uma. "Now we sleep and study safely indoors." Looking to the future, Uma added: "It is our responsibility to maintain this house."



PART V: LOOKING BACK TO MOVE FORWARD

Responding effectively to the 2004 tsunami was one of the most difficult challenges Habitat for Humanity had ever faced. The most important lesson to emerge from Habitat's efforts was the value of an integrated response. In all four countries, Habitat used eight central components: community-based strategies; on-site reconstruction; a core house model; resource centers as hubs to deliver housing; coordination with other groups; focusing on need; use of volunteers; and planning for the future.

The impact of Habitat for Humanity's interventions went beyond thousands of individual families securing proper houses and being able to start to rebuild their lives. There were other impacts such as investments in local economies; sourcing from local businesses; and developing livelihood programs especially in building trades. Habitat helped create building blocks for the future well-being of many communities and regions.

Through rebuilding after the tsunami, Habitat learnt that it was possible to offer grant-based funding on a large scale while encouraging sweat equity contributions from families.

Over the medium- and long-term, the transition to regular programs based on mortgages and housing microfinance has added a sustainability element to Habitat's work in and around tsunami-affected communities. Repayments from loans help Habitat to reach many more families over time.⁶²

Habitat's response created momentum and systems that became a springboard for growth in regular Habitat programs. In India, for example, Habitat for Humanity built some 4,500 houses between 2005 and 2007. Through scaling up in post-tsunami reconstruction, HFH India was able to commit to build some 3,700 houses for tsunami-affected families in 2008, 2,500 in 2009 and a further 3,300 in the year ending June 2010. On a larger scale, HFH India's success with tsunami response created the momentum for an expansive new national campaign called *IndiaBUILDS*. The goals of this program, promoted by Indian movie star John Abraham, are to mobilize contributions of US\$100 million from Indians living within and outside of the country, and to improve housing for 50,000 families, benefitting 250,000 of India's poorest people.

From its experiences after the tsunami, Habitat for Humanity has taken increasingly active roles in rebuilding after natural disasters, helping to redefine the relationship and links between short-term relief shelter needs and longer-term permanent housing solutions. More recently, in the autumn of 2009, Habitat's response to flooding in the Philippines and Vietnam, a tsunami in Samoa, and two earthquakes in Indonesia used strategies developed since December 2004.

The Indian Ocean tsunami left a permanent mark on the communities in its path. Engaging in the recovery compelled Habitat for Humanity, like many other organizations, to rethink and restructure its approach to rebuilding after disasters. To meet these challenges, Habitat prioritized flexibility, tailoring its program to the specific needs of each community and region in which it worked. It also stayed open to learning from mistakes, constantly weaving lessons learned into program improvements. By building its reconstruction experience into the fabric of community life, Habitat raised the odds that its impact will be felt for many generations to come. □



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