

10-YEAR TSUNAMI REPORT NOVEMBER 2014



95 million

Canadian dollars spent on emergency relief 2005-2006

216.2 million

Canadian dollars spent on recovery 2007-2009

79.8 million

Canadian dollars spent on long-term development 2010-2014

CANADIAN RED CROSS RESPONSE as of March 31, 2014

12 countries

supported in Asia and Africa

Canadian Red Cross aid workers involved in the response

183

MULTI-SECTORAL RECOVERY APPROACH



Rebuilding houses





Improving access to water and sanitation

Restoring basic community infrastructure

Creating new and improved livelihoods opportunities





Increasing community preparedness to respond to disasters and to reduce the risk of illness

Building safer institutions and communities



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WELCOME NOTE



↑ Women during a focus group discussion in Gundu Uppalavadi, Andhra Pradesh, India. Launched in 2010, the community-based disaster risk reduction program was implemented in 32 villages, with additional elements on health and hygiene promotion based on locally expressed needs.

 Community meeting in Krueng Raya, in Aceh, Indonesia. Ten years ago the devastating tsunami took more than 200,000 lives and shattered millions more. Rebuilding all that was lost seemed to many of us like an immense if not insurmountable task. Witnessing the unprecedented damage, it was clear that only unconditional commitment over a sustained period would meet the needs of those affected through what was sure to be a long and difficult journey to recovery.

Thanks to the overwhelming support of generous Canadian donors, our decade-long commitment has made a lasting impact. As a result of working side by side with the incredibly resilient people, communities and Red Cross and Red Crescent National Societies of the affected regions, thousands of families now live in safe and well-built houses, have improved access to water and sanitation, and have renewed opportunities to make a living.

The unprecedented scale of the disaster brought to the fore the importance of issues such as disaster risk reduction and violence prevention. Many communities have now taken their first steps in understanding disaster risks and are taking measures to mitigate their impact. Some of the region's Red Cross and Red Crescent Societies have begun to address interpersonal violence for the first time through their violence prevention work in schools and communities. In the Maldives, disaster recovery presented an opportunity to adopt environmentally sensitive approaches and to advocate for a national policy on waste management.

All of this work would not have been possible without the dedication and commitment of the local staff and volunteers with whom we worked side by side in each of the affected areas. Their dedication and understanding of local requirements, customs and cultures ensured we could most successfully meet the needs of affected populations. In addition, their ability to take on new responsibilities and learn new skills means progress will continue long after international teams have left the region.

We owe thanks to each of our donors and partners, both within and outside of Canada, whose generous contributions and collaboration enabled us to help when it was needed most.

Conrad Sauvé Secretary General of the Canadian Red Cross

MEMBANGUN KEMBALI ACEH



Pen/pal activity organized by the Canadian Red Cross, in partnership with the Indonesian Reconstruction and Rehabilitation Agency, in May 2006, in the district of Aceh Besar, Indonesia. Over 60 children from beneficiary communities were invited to write letters and make drawings that were later sent to their Canadian counterparts at the Alta Vista Public School in Ottawa. This initiative helped to create a dialogue between Acehnese children and children from one of the many Canadian schools who raised money to help them after the tsunami.

HOW TO READ THIS REPORT

This report provides an overview of the achievements and key lessons of the Canadian Red Cross response to the 2004 Indian Ocean tsunami. It is not meant to provide detailed information about individual programs, but rather showcases the difference that the Canadian Red Cross programs have made to the recovery and development of communities and Red Cross and Red Crescent Societies in the affected countries.

This report reflects the accomplishments achieved in collaboration with the Red Cross and Red Crescent National Societies of the affected countries, Partner National Societies, the International Federation of Red Cross and Red Crescent Societies (International Federation), the International Committee of the Red Cross, the Government of Canada, international organizations such as the World Bank and UN Habitat, and Canadian and international non-governmental organizations. The latter included the following implementing partners: the Canadian Co-operative Association, the World University Service of Canada, the Agency for Technical Cooperation and Development (ACTED) and Islamic Relief. Working with these partners in the area of livelihoods and other related programs allowed the Canadian Red Cross to better address the needs of affected populations through providing complementary expertise and resources.

The key lessons identified by the Canadian Red Cross are presented throughout this document, with lessons specific to the program areas outlined in each section and cross-cutting themes elaborated on at the end of the report.



 Sri Lanka Red Cross volunteers in Batticaloa, Sri Lanka.



The International Federation building a post-tsunami transitional shelter in Banda Aceh, Indonesia. More than 100 National Red Cross and Red Crescent Societies have supported the response to the Indian Ocean tsunami, demonstrating worldwide solidarity with the affected communities.



OVERVIEW OF TSUNAMI PROGRAMS

The date of 26 December 2004 is one stamped forever in the world's collective memory. It is the day a major 9.0 earthquake off the coast of Sumatra, Indonesia, caused a devastating and unprecedented tsunami that swept inland, killing an initial 100,000 before making its way across the Indian Ocean causing havoc and a total of more than 230,000 deaths in 14 countries, reaching as far as East Africa. Without a functioning early warning system, this catastrophic disaster occurred repeatedly within hours of it hitting each coastline with unwitting populations unaware of the massive wave heading in their direction. In addition to those killed, millions more were affected, with entire cities and villages washed away. In many villages all that was left was waste and scattered shards of concrete.

The tragedy of so many killed without a prior warning of the impending disaster as the tsunami travelled across the ocean, and the appalling scale and scope of loss and destruction resulted in unprecedented generosity throughout the world for one of the biggest recovery and reconstruction efforts to date. The Canadian Red Cross, as part of the global Red Cross and Red Crescent Movement, was in a position to deliver emergency relief and recovery assistance, building on its existing relationships with Red Cross and Red Crescent National Societies in the affected regions and its expertise in disaster response and recovery. The 373 million Canadian dollars¹ received from individual, corporate and governmental donors made it possible for the Canadian Red Cross to provide assistance to the most vulnerable, assisting them with their immediate needs as well as facilitating their longer-term recovery. The Canadian government made a significant contribution to both the emergency and the recovery phase, helping tens of thousands of people return to normalcy.

Supporting the millions of people affected by this humanitarian tragedy as they strived to rebuild lives and communities required complex

A village washed away in Indonesia. The trail of destruction left by the tsunami in many villages extended up to two kilometres inland from the coast.

^{1.} This amount does not include 29 million Canadian dollars of interest earned, which brings the total income of the Canadian Red Cross to 402 million Canadian dollars.

interventions. The Canadian Red Cross embarked on this enormous task with an open mind, ready to embrace new approaches and forge new partnerships to help communities to emerge from this devastating event more resilient than they were before.

Over the past 10 years, the Canadian Red Cross has implemented a variety of programs, from providing basic healthcare, water and sanitation to funding the reconstruction of homes, hospitals and much needed community infrastructure such as community and child care centres. The Canadian Red Cross was also dedicated to helping individuals regain their economic ability through training, loan assistance and small business development. Pursuing a multi-sectoral recovery approach was fundamental to the overall goal of rebuilding not only homes, but also entire communities. Taking into account the long-term impact of these interventions, the Canadian Red Cross has integrated a development-centred approach in many of its recovery programs, or linked the recovery efforts with development programs focused on strengthening community and institutional capacities.

The Canadian Red Cross placed special emphasis on emerging issues or topics that often are neglected in the aftermath of disasters. These included addressing the increasing risk of violence after a disaster, and helping communities and Red Cross and Red Crescent National Societies to mitigate disaster risks and to be better prepared to respond to future disasters.

The Canadian Red Cross programs extended across 12 countries and have made major contributions to the recovery and long-term development of thousands of families affected by the tsunami.

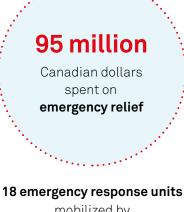


The district engineer and Sri Lanka Red Cross volunteers explain the housing project to the beneficiaries in Vaharai, Batticaloa, Sri Lanka.



Clean water. The water and sanitation program of the Canadian Red Cross is dedicated to improve the living conditions of internally displaced people residing in temporary living centres.

THE EMERGENCY RESPONSE



mobilized by the International Federation

More than 1 million kilograms

of urgently-needed relief items sent to the tsunami-affected countries within the first 3 months On the same day that the tsunami devastated coastal areas in the countries around the Indian Ocean rim, the International Federation activated its global response mechanism to provide assistance in the affected areas. This mechanism allowed for rapid response to the tsunami by the National Societies of the affected countries, and also allowed for the deployment of additional resources and expertise by Partner National Societies, including the Canadian Red Cross, to complement existing local capacities. Field assessment and coordination teams were deployed to assess emergency needs, along with a full range of emergency response units - self-contained specialized units, which provide essential services for fixed periods of time. Those deployed to the tsunami-affected countries included basic healthcare units, referral hospitals, water treatment plant providers, sanitation suppliers, logistics bases, telecommunications infrastructure providers and relief teams. The Canadian Red Cross has channelled its support to the emergency phase through this global response mechanism.

As National Red Cross and Red Crescent Societies in the affected areas were engaged in search and rescue activities and the treatment of the injured, the Canadian Red Cross, through the International Federation, within less than three months, sent more than one million kilograms of urgently-needed relief items to Indonesia, Sri Lanka, the Maldives, Myanmar and Malaysia. These contained water purification sachets, large water containers and pumps, portable warehouses, flashlights, batteries, blankets, pharmaceuticals, and medical supplies and equipment.

ISSUE #1

Based on evaluations by the International Federation

The early response, while successful in meeting the needs of millions of people for basic food, shelter and healthcare, failed to find a balance between the expectations of donors and the needs of communities. The inability to strike this balance at times led to compromised assessments, resulting in some overlaps and gaps in assistance.

Lesson: There is a need for improved coordination and a clearer appreciation of the importance of including assessment of and planning for recovery needs during initial relief operations. The Canadian Red Cross also supported the vital efforts of National Societies in restoring family links, which enabled thousands of survivors to locate their family members.

With over 95 million Canadian dollars used to meet the immediate needs of tsunami-affected populations, out of the 402 million Canadian dollars¹ available for the entire response, the Canadian Red Cross has played a significant role in the relief efforts. These early efforts were successful in addressing the urgent needs for survival and in providing emergency shelter to affected families.

^{1.} This includes 29 million Canadian dollars earned as interest over the years.







Ottawa resident and Canadian Red Cross aid worker Ms Pamela Davie, left, worked in tsunami-affected countries since the early days of the original disaster response.

→ A member of the Sri Lanka Red Cross collects water for distribution from a purification plant in eastern Sri Lanka.



Reconstruction project in Aceh Besar, Indonesia.

SUPPORTING RECOVERY AND LONG-TERM DEVELOPMENT

296 million

Canadian dollars spent on **recovery** and **long-term development**

> 216.2 million Canadian dollars on **recovery**

79.8 million Canadian dollars on **long-term development**



Peer educators in Alangadu, Tiruvarur, Tamil Nadu, India, demonstrate rescue approaches.

A MULTI-SECTORIAL RECOVERY APPROACH

While responding to the desperate and urgent emergency needs, the Canadian Red Cross was also assessing the medium and long-term requirements and planning for recovery interventions. The subsequent recovery programs focused on four priority countries: Indonesia, Sri Lanka, the Maldives and India. Later the development programs covered other tsunami-affected countries in Asia and Africa, with some of these programs still continuing on as we approach the tenth anniversary of the tsunami.

The Canadian Red Cross recovery interventions had the central aim of rebuilding and strengthening communities. To achieve this goal, the Canadian Red Cross adopted a multi-sectoral approach, looking at all the

ISSUE #2

In mega-disasters, people's lives are shattered, losing their livelihoods, housing, access to clean water and sanitation, and social networks. The experience in the tsunami-affected countries showed that to enable recovery, these multiple needs have to be addressed simultaneously rather than through singularly focused interventions.

Lesson: The Canadian Red Cross needs to use a multisectoral lens in supporting recovery operations by either (a) implementing a multi-sectoral intervention or (b) contributing to gaps in a multi-sectoral intervention, which is carried out by Red Cross and Red Crescent partners or other humanitarian agencies. services a community needs to thrive. In addition to rebuilding houses and improving access to water and sanitation, resources were allocated to also improving basic community infrastructure, creating new and improved livelihoods opportunities and ensuring that communities are better prepared to respond to disasters and to reduce the risk of illness.

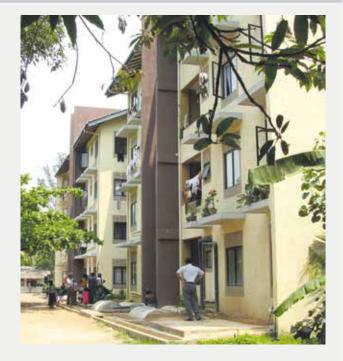
The Canadian Red Cross, together with its partners, has made an important contribution to the postdisaster reconstruction and recovery process. Program evaluations have demonstrated that, when the services complemented each other, the recovery process was faster and more sustainable. In Indonesia, during an impact evaluation of posttsunami programs conducted in 2011, communities

CASE STUDY Facilitating recovery in resettled communities in Sri Lanka

The social cohesion program implemented with the Sri Lanka Red Cross was a follow-up to the housing projects that provided families from fishing communities with housing in multiple-dwelling buildings in two resettlement sites in the Colombo district and single family units in Galle district.

The program was focused on assisting these communities to integrate within their new environments as the government had implemented a "no build" policy for the coastal land where they had formally lived. The Canadian Red Cross and the Sri Lanka Red Cross supported them to obtain basic household necessities, improved their sanitation, environmental health and safety, and facilitated the building of trust between communities from different backgrounds that now shared the same living complex or community. The program also helped to identify and address issues that arose during housing construction through ensuring proper rectification, design, quality construction and better maintenance. The program enabled individuals to make the transition to their new environment, to gain acceptance among the host communities and to settle significantly faster in their new residences.

Field visit by Canadian Red Cross Director Mr J.P. Tizi and Country Representative Mr Simon Jones (centre) to the housing project in Ratnamalana, Sri Lanka, in June 2007.



↑↓ The Canadian Red Cross-funded project in Ratnamalana, Colombo district, Sri Lanka, implemented by the Sri Lanka Red Cross and the International Federation, provided housing to 88 resettled families in multiple-dwelling buildings.





assisted by the Canadian Red Cross reported better socio-economic status compared with their situation before the tsunami. In Sri Lanka, the social cohesion program's final evaluation showed that the Red Cross assistance helped individuals to adapt to their new environment more quickly. These programs have clearly established the benefits of a holistic recovery approach compared to adopting a more sectoral strategy. The experience gained during the tsunami response has significantly shaped future programming methods, such as the integrated neighbourhood approach that became the cornerstone of the Red Cross recovery efforts in Haiti after the 2010 earthquake.

ISSUE #3

In a large-scale disaster, the structure of communities is likely to be adversely affected. Additionally, some communities may need to be relocated to safer areas. This requires attention to their resettlement including integration with existing communities.

Lesson: A shelter or a housing program is not only about rebuilding houses, but also involves rebuilding a community. In addition to being a the multi-sectoral approach, the intervention needs to also facilitate the communities to strengthen their sense of community among themselves and/or with the host community.

HOUSING AND COMMUNITY INFRASTRUCTURE

149.9 million Canadian dollars spent on housing and community infrastructure programs in Indonesia, Sri Lanka, and the Maldives

2,222 transitional shelters built in **Indonesia**

6,300 families received permanent houses in Indonesia (5,580) and Sri Lanka (720)

127 community infrastructure facilities built or repaired in Indonesia, Sri Lanka and the Maldives Rebuilding homes has been the main priority of tsunami-affected communities and, together with the reconstruction of community infrastructure, the biggest program area of recovery efforts by the Canadian Red Cross. The Canadian Red Cross supported the construction of safe and permanent houses for 6,300 families in Indonesia and Sri Lanka through various mechanisms and partners. As families awaited the construction of their permanent homes, the Canadian Red Cross helped build more than 2,200 transitional shelters in Aceh, Indonesia, in collaboration with the International Federation. After receiving permanent housing, many families converted their transitional shelter into additional space and/or used it as a kitchen or a small shop or food stall.

In an effort to build back better, housing reconstruction was undertaken with earthquake-resistant techniques, and by adopting a gender and environmentally sensitive approach. Both men and women were equally consulted and involved in the design of their houses and water supply and sanitation facilities. To ensure that women were also legal title holders of the donated land and houses, the Canadian Red Cross successfully advocated for joint land titling with the local authorities and issued joint house ownership certificates in Aceh and Nias, Indonesia.

To ensure community ownership, many of the permanent houses in Sri Lanka were built through an owner-driven approach. Affected families received a grant to build their homes by themselves on the site of their original home or on land allocated by the government. Some projects also provided grants to address infrastructure and livelihoods needs identified by the communities, such as the improvement of internal access roads and building of new playgrounds and community centres.



CASE STUDY "I never imagined in my lifetime I would have such a home for my family"



One of the permanent houses in Sri Lanka, funded by the Canadian Red Cross.

During a visit to the families who had completed building their new homes, with support from the Sri Lanka Red Cross and the Canadian Red Cross, Red Cross aid worker Ms Pamela Davie noticed an older man sitting in the entrance of his former dwelling, a tiny shack constructed from palm trees, which was still in the yard.

She asked Mohammed what was wrong, why he wasn't sitting on the lovely veranda of his new brick home. Did he not like it? He smiled and replied, "Every evening I choose to sit here because it allows for the best view of my new home. I never imagined in my lifetime I would have such a home for my family. I only dreamed that I could leave to my children a house with a roof that didn't leak during the monsoons."

House construction on the island of Nias, Indonesia. The Canadian government, through the Canadian International Development Agency, has funded 50% of the overall costs of the post-tsunami housing program in Indonesia, complementing the generous donations from the public.



Painted house in Nias, Indonesia. Due to the difficult terrain in which to construct, the situation in Nias required a different type of housing from that used in Aceh. Instead of a reinforced concrete construction, the Canadian Red Cross used an expanded transitional shelter approach (33m2) that allowed for stable construction on uneven ground, easy portability and maintenance of quality control. Each house took two to three days to build.



ISSUE #4

Permanent housing is a critical element of recovery. However, providing housing in a post-disaster context poses a range of significant challenges. These can include a shortage of qualified local builders, clarification of land tenure when records are often damaged or destroyed, identification of safe land, loss or fraudulent copies of identification cards and other legal documents for confirming eligible beneficiaries, and over-inflated costs of building materials and labour.

Lessons: Ensuring acceptable-quality housing and eligible beneficiaries entails: a) Provision of adequate time;

- b) Adequate quality control of construction that is disaster resistant;
- c) Beneficiary accountability process for the house recipients (e.g., information, complaint mechanisms for defects, participation in the key design features of the house);

d) Ability of the Canadian Red Cross to manage pressure and unrealistic expectations of internal and external stakeholders (Red Cross staff, recipients of the houses, the Canadian public) to complete them quickly; and

e) Ability of the Canadian Red Cross to provide temporary housing solutions in coordination with their stakeholders.

Permanent houses provided by the Canadian Red Cross in Aceh, Indonesia, were 44m², each consisting of four rooms and a kitchen. The houses were designed for construction in accordance with the requirements of earthquake zone 6 in the Indonesian design code. All housing was constructed to be 30cm above the high water mark.



↑ Some of the 5,580 permanent houses built by the Canadian Red Cross in Indonesia.



↑ Family who received a house from the Canadian Red Cross in Batticaloa, Sri Lanka. The Canadian Red Cross, in partnership with the Canadian Co-operative Association, funded the construction of 310 houses, together with provision of water supply and sanitation facilities, in Trincomalee, Batticaloa and Ampara, Sri Lanka.

OCCUPANCY AND OWNERSHIP OF PERMANENT HOUSES BUILT BY THE CANADIAN RED CROSS

Reconstruction program in Aceh and Nias, Indonesia:

- Original owners occupied **74%** of the houses as of 2011
- **57%** had secure land tenure or were registered with the Land Titles Office to receive land tenure with the remainder holding village-level land documentation

Reconstruction program implemented in partnership with Canadian Co-operative Association/ SANASA Development Bank in Sri Lanka:

- Original owners occupied **86%** of the houses as of 2014
- **89%** stated that they had legal documents of ownership to the houses

The Canadian Red Cross supported the building or rehabilitation of a number of community centres, youth centres, preschools, sports facilities, mosques, local government offices, as well as roads and bridges in

ISSUE #5

Women's access and entitlement to property can be a common concern in many developing countries due to issues of lower legal and social status in relation to men. Their lack of assets can adversely affect their immediate and long-term well-being. At the same time, in some matrilineal (based on kinship with the mother) communities, daughters may inherit property from their parents.

Lesson: The housing program is an opportunity to create or defend gender equity in property ownerships. It is critical to have knowledge of the laws and customs of ownership and inheritance when registering homeowners and working with governments on land entitlements. Advocacy with the government can also play a substantial role in protecting and/or promoting gender equity in housing. Indonesia, Sri Lanka and the Maldives.

While all sectors played an important role in facilitating a steady improvement in living standards, the housing projects provided the most significant contribution to the recovery of thousands of families affected by the tsunami. Housing offered families a platform through which they could restore their livelihoods, health, education and community life since it allowed them to shift their focus on other needs. The stability of a permanent house enabled individuals to plan their livelihoods and their family, to choose a permanent school for their children and encouraged them to be involved in community life. For children, a better house also meant an improved learning environment. Such is the story of a young boy in Nias, Indonesia, who explained, "Before living here I used to study on the floor, which was not cemented. Now I can study at a desk."



_IVELIHOODS

The devastating waves have not only taken lives and washed away homes, but also destroyed productive assets, infrastructure and other means of survival. It was the millions of fishermen and farmers living in coastal communities, and dependent on the fisheries and agriculture sectors, who were the most affected by the tsunami.

Livelihoods recovery was of prime concern for these communities as they strived to regain their social and economic stability after the tsunami. A permanent house provided the foundation for recovery; secure livelihoods were the key for sustainable recovery. The Canadian Red Cross, through its livelihoods and community engagement programs, contributed considerably to revitalizing individuals' livelihoods activities and supported the establishment of vibrant, sustainable communities.

Recognizing the complexity of restoring livelihoods, the Canadian Red Cross implemented a diverse array of projects and established partnerships with organizations that have experience in generating livelihoods opportunities. Partners included, for instance, the Canadian Co-operative Association that has a long history of working with SANASA, a micro-finance institution with grass-root level credit unions throughout Sri Lanka and with an established mechanism to reach the affected communities in emergency situations. Through this partnership the Canadian Red Cross embarked on a long-term assistance program that aimed at not only recovering livelihoods but also fostering long-term sustainable development.

The projects provided grants and loans, productive assets such as farming tools for farmers and boats for fishermen, and training on livelihoods, leadership and small business development. Gender and environment were

ISSUE #6

Improving livelihoods is a complex undertaking because it is closely tied to the specific needs and context of individuals.

Lessons: A successful livelihoods program requires:

- a) Flexibility of the program to tailor an intervention to the specific needs and context of its participants; and
- b) A procurement system that allows for both the participation of community members to implement their livelihoods activities as well as the management of risks related to fraud and corruption.

considered as underlying themes for all livelihoods and capacity-building activities; the majority of beneficiaries of a number of the training programs and loan schemes were women.

Through the Canadian Red Cross livelihoods support, newly resettled families could increase their potential to improve household income and to resume normal lives. Thousands of people, both men and women, have started new businesses or have increased their business output as a result of better access to credit and training. Creating an enabling environment for improved livelihoods opportunities was critical for the sustainability of the housing projects as well. Growing livelihoods

activities in the community has often been the main reason for families to decide to stay in their new relocation site.

Some livelihoods initiatives targeted the community as a whole, instead of individuals or groups. The community selected a committee that identified the village's needs and developed a proposal for a livelihoods project based on their priority. Projects that offered sustainable benefits to a large proportion of the community also tended to strengthen social cohesion. The community centre in Patek Bawah, in Aceh, Indonesia, provided a good example of how the project value affected social harmony. The project addressed the community's need for a place in which to carry out religious and social activities and helped to restore communal life.

CASE STUDY Fish landing in Pulo Raya: A revitalized fish market

Pulo Raya is a village in Aceh Jaya district, Indonesia. Before the tsunami, people of Pulo Raya lived on a small island located in the west of Sumatra mainland. After the tsunami, they relocated to the mainland.

The main livelihood of people in Pulo Raya is fishing. Before the tsunami, the community did not have a fish landing site. Fishermen sold fish at a few points along the coast. After the tsunami, the Canadian Red Cross assisted people in Pulo Raya with the construction of a fish landing centre, which was proposed by the local population.

The building consists of two small rooms, one open space and two latrines. One of the small rooms is used for the storage of fishing equipment and another one as a bedroom. Fishermen store fish in the open space and have access to fresh water for showering in the nearby latrines. The building also has a retaining wall to enable the men to secure their boats.

According to an impact evaluation conducted in 2011, the fish landing centre contributed to the economic recovery of the village. As a better, more concentrated fish market, it encouraged more people to visit. The availability of a private room attracted fishermen from other villages to stay overnight and sell their catch on the site. The access to fresh water enabled fishermen to wash their fish before selling them, and to therefore increase the price of the fish. The project reinforced the social network in the community too. The collective maintenance of the centre developed a sense of responsibility and solidarity among fishermen. Even fishermen from other villages started contributing to the maintenance fee of the fish landing centre.



Young girl stands by her community's new well in Batticaloa, Sri Lanka. In Sri Lanka, an astonishing 60% of rural populations did not have access to clean drinking water.

24.8 million

Canadian dollars spent on healthcare and environmental health programs in **Indonesia**, **Sri Lanka**, the **Maldives** and **India**

74 islands cleaned of waste in the Maldives

4 healthcare facilities reconstructed or renovated in Sri Lanka



HEALTHCARE AND ENVIRONMENTAL HEALTH

The tsunami left in its wake alarming public health challenges, putting millions of people at risk of disease. Water sources contaminated with salt water and debris, severely damaged sanitation infrastructure and extensively damaged healthcare facilities all contributed to the increased vulnerability of people to health-related risks. After providing basic medical care in the months following the tsunami, the Canadian Red Cross began supporting long-term solutions to improve the health status of tsunami-affected communities.

Canadian Red Cross programs focused on preventing and reducing the risk of disease through improved access to water and sanitation facilities, as well as by raising awareness about safe hygiene, sanitation and solid waste management practices. The Canadian Red Cross worked in communities, schools and public health clinics, with the ultimate aim of improving community practices and behaviours.

Availability of water and sanitation facilities played an important role in the recovery of tsunami-affected families. Newly resettled families were more



↑ In Pollaranuwa, Sri Lanka, the Red Cross works closely with a community wellness committee to determine who in their community is in the greatest need of assistance. The group also put together plans to ensure that facilities can be maintained once built. likely to stay in their relocation site and start rebuilding their lives if the water and sanitation facilities were adequate. The provision of household latrines and better access to water in many of the Acehnese villages in Indonesia contributed to changing people's sanitation habits and as a result improved health outcomes. As a senior officer in a public health centre in Patek Bawah in Aceh, Indonesia, pointed out, "Before the tsunami, many children suffered from diarrhea. Now, there are fewer parents who bring children to the centre for this problem, and even when parents bring children who suffer from diarrhea, the condition is not acute yet."

Continuing engagement by the Canadian Red Cross in health promotion activities in Sri Lanka and India over the years also showed substantial

ISSUE #7

A disaster's aftermath can present an opportunity to introduce improved technology in water, sanitation and waste management infrastructure. However, the acceptance of the new technology, its use and maintenance must be properly considered and addressed.

Lessons:

- a) Introduction of new water, sanitation and waste management infrastructure must be supported by increased knowledge and behavioural change interventions to ensure use and maintenance.
 - b) Behavioural change takes time and new infrastructure should be designed to allow for incremental change.

gains in knowledge and behavioural change. In Sri Lanka, community- and school-based health activities were complemented with support in health infrastructure development. The Canadian Red Cross has reconstructed or renovated four hospitals, and supported the building of oxygen storage facilities in six hospitals.

One of the most outstanding programs undertaken by the Canadian Red Cross was a joint venture with the Australian Red Cross to clean up tsunamirelated waste and debris and to establish waste management centres and practices on 74 of the most devastated islands in the Maldives, a country where 200 islands are inhabited. This project was critically important given the vast amount of debris, which was impeding recovery efforts.

CASE STUDY Combining disaster recovery and community development in the Maldives

The effort was unusual among Red Cross initiatives in a number of respects. Take two Red Cross National Societies working together, in a country without a National Society, engaging in solid waste management development, in the absence of a national policy, and on a large number of island communities across the breadth of an island nation. Ambitious. The outcome of this joint project of the Australian Red Cross and the Canadian Red Cross is 74 islands cleared of waste, 79 permanent waste centres constructed, and almost 1,500 community members and over 2,000 students trained in waste management practices, potentially enhancing the lives of approximately 100,000 people, or one third of the population.

Almost all islands involved in the program reported substantial improvements with their waste management. Waste separation was adopted and more effective methodologies for managing organic waste were incorporated into waste practices. These



tendencies are coupled with an increased understanding of waste management benefits and challenges that communities will need to resolve to ensure long-lasting results are achieved. The heightened level of awareness created by the program was illustrated by the fact that some communities, when approached by UNDP with a livelihoods program, expressed a desire to implement activities related to waste management. It has also been observed that there is some willingness across the communities to pay for waste management services on their islands, such as household collection systems and supervision of waste management centres. The program leaves a lasting legacy for the country, stimulating environmentally sound waste management across the nation.

↓↓ The island of Guraidhoo in the south of Male, the Maldives, before and after the clearing of waste. Over 37,000 m³ of potentially dangerous waste was cleared on 74 islands, enough to fill 2,000 garbage trucks.



CASE STUDY "Leaders of Tomorrow" school project

Launched in 2011 as a sub-program of the integrated program for community development in the southern state of Tamil Nadu, India, the school project referred to as "Leaders of Tomorrow" is an ideal example of integrating multiple sectors under one intervention. The project focuses on increasing knowledge and creating greater awareness on specific health-related issues and prevention strategies, various disasters and risk reduction strategies, and safe environments for children through peer education and other promotional activities. Peer educators are trained on healthcare, disaster risk reduction and violence prevention in one comprehensive training. Involving more than 5,000 students in 29 government and government-aided schools, the project has contributed to considerable behavioural changes in children, especially in the areas of personal hygiene, cleanliness and respect towards others.

Parents reported that now their children wash their hands, brush their teeth and take a bath without having to be told to do so. Students have also influenced change at home as a result of the peer education sessions. "My mother now cleans the house more often, and brushes her teeth twice a day because I told her what I have learned," said a student in Cuddalore, Tamil Nadu, India. "And my father now washes his hands properly."



Schoolchildren in Thazhanguda, Cuddalore, Andhra Pradesh, India, demonstrate how to carry somebody to safety.

VIOLENCE PREVENTION

3.6 million

Canadian dollars spent on violence prevention programs in **Indonesia**, **Sri Lanka**, the **Maldives**, **India** and **Myanmar**

More than 400,000 children and adults

reached by violence prevention messages in Sri Lanka and India

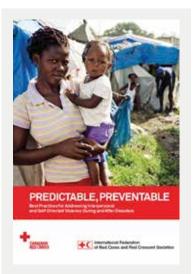
Over 30 National Red Cross and Red Crescent Societies have used the "Ten steps to creating safe environments" methodology developed during the post-tsunami response An often forgotten impact of disasters is the devastation caused by the violence that can follow. Violence is likely to increase in the wake of large-scale disasters due to a combination of human shocks: protective systems collapse, stress levels increase and people engage in harmful coping mechanisms. Crowded and insecure environments also present opportunities for interpersonal violence to occur. Groups already facing the highest risks, such as women and children, become even more threatened. The consequences of violence are harmful and distressing for individuals, families and whole societies.

The tsunami that swept across the Indian Ocean in 2004 left millions of people, especially women and children, vulnerable to violence. Various studies revealed that children experienced different forms of maltreatment as a result.

The Canadian Red Cross, having worked domestically for 30 years to spread violence prevention messages, introduced violence prevention programs across the tsunami-affected countries. This was the first time the International Federation and its National Societies had systematically addressed the issue of violence prevention in response to a disaster.

Sri Lanka and India were the first tsunami-affected countries where school-based violence prevention programs were implemented. In Sri Lanka the program targeted primary and secondary schools, while in India primary, middle, high schools and higher secondary schools were covered, making it the first project to target older children. Red Crosstrained teachers are now present in almost 20 per cent of Sri Lanka's government-managed schools and have been fundamental to the





The Predictable, Preventable advocacy report, jointly launched in 2012 by the Canadian Red Cross and the International Federation, outlines best practice for dealing with situations of violence and calls on all humanitarian organizations to adopt a public health approach to violence prevention before, during and after disasters. improvements observed in students' knowledge and attitude related to preventing violence against children.

India was the first location to integrate violence prevention in communitybased health programs. This experience has led to the development of a module within the International Federation's community-based health and first-aid toolkit, which has since been used by more than 15 National Societies around the world, including the tsunami-affected Myanmar, to prevent violence.

It was also in the context of the post-tsunami response that the Canadian Red Cross developed a methodology called "Ten Steps to Creating Safe Environments" to help organizations in the development, implementation and monitoring of concrete actions to ensure their staff, volunteers and clients are safe from violence. The methodology was first used in the Maldives, Myanmar and Indonesia to train Red Cross and Red Crescent staff and volunteers, and has been adopted by many more National Societies since then.

The efforts of the Canadian Red Cross in preventing violence after the tsunami have not only contributed to building safer institutions and communities in the affected countries, but have also been instrumental in forming a global approach to violence prevention within the Red Cross and Red Crescent network. As a leader on this theme in the International Federation, the Canadian Red Cross helped other National Societies and the Federation secretariat to frame their strategy on violence prevention in both disaster and non-disaster situations, and elevated the understanding of violence in the tsunami-affected regions and beyond.

← ↓ Violence prevention activities in Sri Lanka aim to reduce sexual, physical and family violence by involving parents, teachers, students and school administrators in creating environments where children and youth are safe.

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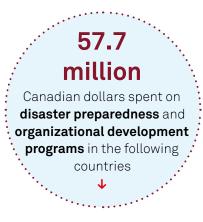
Violence prevention can have significant socioeconomic consequences on disaster-affected populations. However, the issue is often entrenched in the socio-cultural fabrics of the community, and takes time for the community to address.

Lessons:

- a. As a minimum standard in disaster response and recovery, it is important that violence prevention be prioritized and integrated across disaster relief, healthcare and organizational capacity-building initiatives.
- b. School-based violence prevention programming has shown to be effective and sustainable. It is effective because it allows youth to have a leadership role in finding solutions with their peers while being supported by teachers and parents. It is more sustainable when it becomes part of an ongoing curriculum.



STRENGTHENING CAPACITY FOR FUTURE RESPONSE



Indonesia, Sri Lanka, the Maldives, India, Bangladesh, Thailand, Mauritius, Madagascar, Comoros, Somalia and Kenya For people living along the affected coasts, the terrible after-effects of the tsunami – and especially the fear of another catastrophe occurring – remained a daily reality years after the disaster. The tsunami drew attention to the importance and urgency of reducing the impact of disasters, particularly among vulnerable communities.

While the houses and community buildings constructed with support from the Canadian Red Cross were built to be structurally stronger and earthquake resistant, building back better also meant being more readily prepared in the event of future disasters.

For this reason, the Canadian Red Cross has made disaster preparedness and risk reduction a key priority and has supported community-based disaster preparedness and risk reduction programs across the tsunamiaffected countries. Thanks to this support, a large number of communities now have disaster management committees, risk reduction plans, improved early warning systems and a team of respondents trained in disaster response and first aid. When put to the test, these communities were able to respond and mitigate the effects of a disaster effectively. In Indonesia, communities knew what to do when an 8.6 earthquake struck 500 kilometres off the coast of Sumatra in April 2011. Upon hearing the sirens and radio reports, they moved immediately to higher ground, gathering at chosen assembly points as they had practised. Similarly, in 2013, when three cyclonic storms hit the coastal areas of Andhra Pradesh, in India, the impact of the cyclones was minimized to a large extent due to the precautions taken and the support extended by community disaster management committees and relief teams.



 Emergency simulation drill in Malang district, East Java, Indonesia.

In addition to the efforts to increase community resilience, the Canadian Red Cross has supported the National Red Cross and Red Crescent Societies in the tsunami-affected countries to enhance their preparedness capacity. Understanding that a holistic view was required to boost organizational capability, the Canadian Red Cross programs also helped to strengthen the systems, skills and capacities of Red Cross and Red Crescent Societies in the areas of governance, human resource and volunteer management, financial management and community mobilization. As a result, several National Societies in the region have increased their ability to prepare for and respond to disasters.

CASE STUDY Recognition for community maps in Tamil Nadu and Andhra Pradesh

When Additional Joint Collector Mr B. Nageswara Rao and Mandal Revenue Officer Mrs P. Padmavathi visited Barripeta village in Vizianagaram district of Andhra Pradesh on November 27, 2013 to supervise the evacuation process for cyclone Leher, they could not help but praise the community map put up as a wall painting. "With the support of this map even any outsider can easily understand the village's vulnerabilities, hazards and resources," they remarked.

Similar was the case in West Godavari district where, during the government-led evacuations for cyclone Helen on November 21, 2013 in Vemuladevi East village, Mr Nagarjuna Sagar, chief executive officer of Zilla Parishad, called upon the district field officer at midnight to congratulate her on the relevance of these community maps. He pointed out that the map helped them in easily locating the low-lying areas for quick evacuations. Provision of community maps was an important component of the community-based disaster risk reduction activities implemented in village communities of Andhra Pradesh and Tamil Nadu by the Indian Red Cross with support from the Canadian Red Cross. Relying on information from community members and precedence from past disasters, these maps give clear indication about low-lying and vulnerable areas, evacuation routes and at-risk populations. During the evacuations for cyclones Leher and Helen, community maps became the main source to ensure an effective evacuation process.

A risk map painted on a wall in Chinnanagayyapalem, Andhra Pradesh, India, shows disaster risks, location of at-risk populations and safe shelters.



In the East African countries of Mauritius, Madagascar and Comoros, by 2010 a regional disaster response team was in place, and has already been deployed, drawing on the personnel of similar teams in eight National Societies and on prepositioned stocks in new or refurbished warehouses of the three Societies. In Indonesia, thanks to the establishment of disaster response teams and the completion of contingency plans, the Indonesian Red Cross sprang into action instantly when the 8.6 earthquake struck off the west coast of northern Sumatra in April 2011. A hundred volunteers were immediately mobilized, who set about alerting the

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Local organizations, including Red Cross and Red Crescent National Societies, cannot afford the time and space to systematically consider opportunities for building capacity while having to provide urgent services.

Lesson: There is a need to be clear about whether support to the National Society is to provide additional capacity to address the enormous needs of disasteraffected populations or to enable the expansion of sustainable services by a National Society.



Red Cross high school volunteers in Lampung, Indonesia.

Red Cross practising setting up an emergency medical tent in Lampung, Indonesia.

media, monitoring the conditions of the coast and helping people to flee to higher ground. Ambulances went on stand-by. The East Java chapter of the Indonesian Red Cross was also able to respond more effectively to a minor flooding that occurred in July 2013 in Malang district, with the Red Cross team assembling quicker at the scene and assessments and distributions completed earlier than usual.

While the focus was on building capacity to address recovery from the tsunami, in Sri Lanka the Canadian Red Cross support extended to preparedness actions to assist the population affected by the decades-long civil war. In the aftermath of the tsunami the population entered a period of heightened civilian deaths and loss of homes. In 2009, 200,000 internally displaced Tamils were placed in camps by the government. By scaling up its capacity, the Sri Lanka Red Cross supported their health and well-being through a large-scale relief response in the camps, providing community-based first aid and support for sanitation.

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Organizational development or capacity building of a National Society entails ownership by its leadership as well as allowing for the time and space to implement the required changes.

Lesson: There is a need to realistically assess the conditions required for organizational development prior to providing the support. If the conditions are not present, the support may focus on offering surge capacity only and potentially advocating for favourable conditions in the future.

In addition, the Canadian Red Cross projects in Indonesia have contributed to the recognition of the Red Cross as auxiliary to the government in disasters. Local government agencies have shown strong interest in future collaboration with the Red Cross, particularly the Provincial Disaster Management Agencies, and good relations have been formed with community leaders and the local government in several places. Also, the projects have contributed to the early development of newly created district branches, and the revitalization of some less active branches, helping the Red Cross to increase its outreach in several new communities.

CASE STUDY The Disaster Risk Reduction Initiative

The funds raised after the tsunami enabled the Canadian Red Cross to support a large number of tsunami-affected countries in Asia and Africa in reducing the impact of future disasters. For some National Societies, it was an opportunity to work on disaster risk reduction for the first time; for others, a possibility to develop innovative approaches.

Launched in 2009, the Disaster Risk Reduction Initiative has supported 10 disaster risk reduction projects in Indonesia, Sri Lanka, the Maldives, India, Bangladesh, Thailand, Somalia, Kenya and the Red Cross Red Crescent Climate Centre in the Netherlands with the ultimate goal of reducing the impact of disasters on targeted communities.

Among the National Societies supported by the Canadian Red Cross was the newly formed Maldivian Red Crescent, which has positioned itself in the country's strategic national action plan as a key partner in the implementation of disaster risk reduction and climate change adaptation-related activities at the community level.

The initiative also supported the development of new tools and approaches. For instance, the Red Cross Red Crescent Climate Centre in the Netherlands developed on-line learning tools and games aimed at increasing climate change awareness and adaptation practices. The Indonesian Red Cross developed processes for improving the provision of transitional shelters using local materials and methods, and the Bangladesh Red Crescent worked to integrate disaster risk reduction activities with their existing healthcare programs in an attempt to address the challenge of sustaining interest and awareness on disaster risk reduction issues as the memory of the previous disaster fades.



Collectively these projects increased preparedness and resilience and therefore reduced risks in some of the most vulnerable parts of the world.

Demonstration of flood marker in Huakua community in Bogra, Bangladesh. The Canadian Red Cross-supported climate change adaptation project has been the first initiative of the Bangladesh Red Crescent which focused particularly on climate change issues.





- Mitigation preparedness activity; wooden boat for communities. The community-based disaster risk reduction project in Thailand targeted 20 disaster-prone communities in three provinces, over a period of four years and with an estimated number of 12,000 beneficiaries.
- Climate change e-learning brochure. The work by the Red Cross Red Crescent Climate Centre has focused on three main pathways of building capacity to integrate climate change into disaster risk reduction programs: (1) the development of resource materials and on-line learning, (2) training courses to trial and improve the training approach developed, and (3) training of trainers (staff will be trained and empowered to provide national-level trainings and implement climate-smart programming).





ADDITIONAL LEARNING FROM THE TSUNAMI PROGRAMS

In addition to the key lessons highlighted in the previous sections, other significant learnings have been identified. The most important cross-cutting lessons are summarized below. This knowledge has been applied in more recent disaster responses and has contributed to more effective assistance to disaster-affected populations.

INFORM DONORS FROM THE OUTSET THAT RECOVERY TAKES YEARS.

Raising funds for emergency response is easier than for long-term development issues. Moreover, the recovery process of disaster-affected populations can take years. For instance, various studies from the Kobe earthquake in Japan in 1995 showed that it took 10 years before those affected had recovered to pre-earthquake conditions.

From the outset of the tsunami operation, the Canadian Red Cross made a commitment to allocate funds for the long term, connecting development interventions to emergency and recovery programs. This commitment was clearly communicated to key partners such as the Government of Canada, Canadian corporations and individual donors. The funds for long-term recovery and development were used to improve the capacity of local Red Cross and Red Crescent Societies for future disaster preparedness and response as well as to address the long-term needs of affected populations.

- In Sri Lanka, the Canadian Red Cross-supported violence prevention program has educated more than 100,000 children, 212,000 adults and almost 5,000 primary-school teachers across the country.
- House construction in Nias, Indonesia.

ENSURE ADEQUATE CAPACITY TO MANAGE LARGE-SCALE RECOVERY PROGRAMS.

A large-scale recovery program often has to face the challenges of:

 assisting affected populations as soon as possible while balancing the need to consult and to ensure appropriate solutions;

- ensuring accountability to various stakeholders with conflicting opinions or needs;
- managing competition in accessing human and material resources; and
- coordinating with a government that has weakened capacity to guide the recovery operation, inadequate government policy to enable the recovery process and has heightened security and/or access issues.

To meet these challenges, the Canadian Red Cross learned that it entails the following:

- strong corporate support systems, policies and procedures including finance, human resources, procurement, logistics and information technology, to support the start-up and ongoing management of recovery programs;
- building a recovery framework at the outset which defines scope, timeframe and exit strategies;
- a systematic and genuine assessment and provision of the resources and capacity required from the Canadian Red Cross and/or its partners to manage large-scale recovery programs in disasteraffected areas; and
- strong performance measurement as well as continuous improvement systems and practices at the corporate and country level to enable robust evidence of performance.
- Housing beneficiary and child in Indonesia, with Canadian Red Cross aid worker Mr Mohan Hewavithana.





A young girl in Sri Lanka with the "Be Safe" program's star attraction, Asha, the puppet elephant that the teachers use to deliver personal safety messages to children.

MECHANISMS TO ENSURE ACCOUNTABILITY TO BENEFICIARIES ARE CRITICAL TO SUCCESS.

During emergency and recovery activities, the principles of accountability to beneficiaries (e.g., informing and consulting with beneficiaries; involving them in project planning, implementation, monitoring and evaluation; and enabling beneficiaries to make complaints and seek redress) are critical given the pressure to serve disaster-affected populations immediately but also to help them to find solutions that can be sustainable. The tsunami recovery programs saw a focused effort to include these accountability principles into the action plans.

The lessons from the tsunami-related programs have now been incorporated into the Canadian Red Cross policies and practices. For example, the experience and learning on integrating accountability to beneficiaries as a cross-cutting theme has led to it being a critical component of new programming.

ALLOW FOR THE TIME AND APPROPRIATE SKILL SETS IN IMPLEMENTING COMMUNITY-BASED PROGRAMS.

The Red Cross and Red Crescent Movement is a volunteer-based organization with a large focus on community-based health and disaster risk reduction programs. Experience in many countries has shown that it takes advocacy of project staff or volunteers or other external momentum such as a disaster event for the community to be mobilized on the issues of healthcare, disaster preparedness and risk reduction.

The Canadian Red Cross learned that community-based interventions should have a minimum three years of implementation. Project staff and volunteers need to possess the necessary skills to undertake successful community mobilization at the outset of the intervention by hiring those with the required skill sets and/or providing appropriate training.

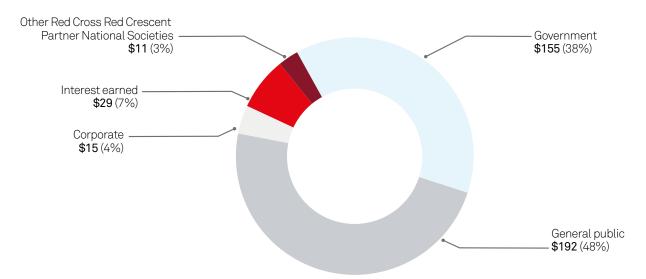


↑ Hand washing campaign at elementary school in Kajhu, Aceh Besar, Indonesia.

FINANCIAL OVERVIEW

The Canadian Red Cross has raised a total of 373 million Canadian dollars in support of its response to the Indian Ocean tsunami. Together with the interest earned, the total income amounts to 402 million Canadian dollars. Generous donations from the public account for 48 per cent of the overall funding. As of March 31, 2014, 391 million Canadian dollars, or 97 per cent of the total income, has been spent for relief, recovery and development programs in the tsunami-affected countries. The remaining 3 per cent will be spent on development programs in Indonesia, the Maldives, India and Myanmar by the end of 2017.

Figure 1: Total funds donated to the Canadian Red Cross by sources - in millions of Canadian dollars





↑ Woman with child in Nellore, Andhra Pradesh, India.

Figure 2 reflects expenditure by response phase through to March 31, 2014. Expenses were divided across three stages: emergency relief (first two years), recovery (subsequent three years) and development (last five years).

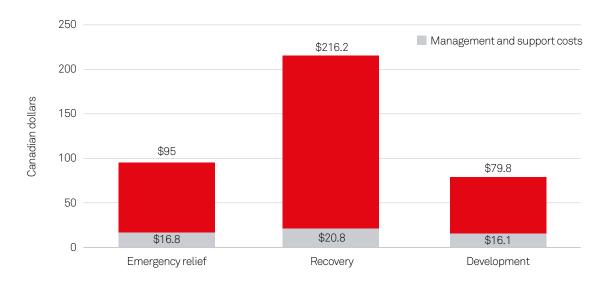
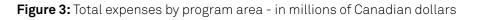


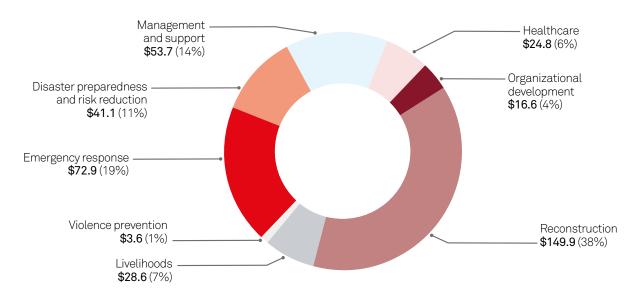
Figure 2: Total expenses by response phase - in millions of Canadian dollars



↑ Canadian Red Cross Country Representative Kenneth Baker hands over a permanent house in Indonesia.

Figure 3 reflects expenditure by program area through to March 31, 2014. The largest amounts spent by the Canadian Red Cross were in the areas of reconstruction (149.9 million Canadian dollars) and emergency response (72.9 million Canadian dollars).







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