



Quarterly Performance Report

Accelerated Housing Reconstruction Activity (AHORA) El Salvador

Grantee: CHF International
Cooperative Agreement: 519-A-00-02-00078-00
Reporting Period: July 1 to September 30, 2004
Submission Date: October 31, 2004

1. Background

Earthquakes measuring 7.6 and 6.6 on the Richter scale devastated El Salvador on January 13th and February 13th 2001, respectively, causing 1,159 deaths and injuries to more than 8,122 individuals. In all, more than 1.5 million people nationwide or more than a quarter of the country's population was affected. According to the Economic Commission for Latin America (CEPAL), combined economic losses from the two earthquakes are placed around \$1.7 billion. The Departments of Ahuachapan, La Libertad, La Paz, San Vicente, Sonsonate, and Usulután received the brunt of the damage from the first earthquake. The second earthquake, centered approximately 20 miles east of San Salvador, severely affected the Departments of Cuscatlan, La Paz, and San Vicente. Social infrastructure was especially hard hit. For instance, the total housing damage reported by the Government of El Salvador (GOES) is 276,594 units, including 166,529 destroyed and 110,065 units damaged. Earthquake damage contributed to an already dire housing shortage. According to the UNDP, in 1997, El Salvador faced a housing deficit of 570,000 homes. With a national average of five persons per household, 48% of the country's population was either homeless or living in inadequate shelter. This deficit was exacerbated by the quakes and there is limited domestic capacity in the housing sector to meet the need.

During the emergency relief effort after the earthquakes, the GOES, through the country's Social Investment Fund (FISDL) and the military, focused its efforts on providing more than 218,000 temporary houses, food, medicine and water to earthquake affected families. The United States Agency for International Development's Office of Foreign Disaster Assistance (OFDA) supported this effort by providing more than 22,000 temporary houses units through grants to several PVOs, including 11,247 built by CHF.

The United States Government (USG) through USAID is implementing a total contribution of \$170 million for earthquake reconstruction in El Salvador. A Special Objective entitled "Lives of Targeted Earthquake Victims Improved" was approved and in order to accomplish this Special Objective, USAID/El Salvador is implementing the Earthquake Recovery Program. A key goal of the Program is to restore community infrastructure for the rural poor, emphasizing housing, schools, health facilities,

markets and potable water systems. A major and urgent problem to be addressed during the reconstruction stage is to provide permanent houses for 26,000 rural poor whose houses were destroyed by the earthquakes. The majority of the most affected families are living in small and fragile shelters, under high health risk conditions. To address this problem, USAID is expediting implementation of housing reconstruction. In phase one of the Earthquake Recovery Program, USAID signed cooperative agreements with six PVOs, to build more than 4,300 permanent houses for earthquake victims, including 1,315 built by CHF. Under phase two of the program, seven PVOs will build over 13,100 additional housing units.

USAID/El Salvador awarded \$20,075,769.61 to CHF International through Cooperative Agreement No. 517-A-00-02-00078-00 to implement the “Accelerated Housing Reconstruction Activities (AHORA)” in El Salvador. The AHORA Program originally contemplated the construction of 5,030 permanent housing units with their respective complementary and mitigation works for victims of the earthquakes in the departments of La Paz and Usulután. On July 1, 2004, Modification #5 was signed by USAID to reduce the housing target to 4,703 in order to redirect some housing investment into municipal City Halls and additional mitigation works.

2. Expected Results

The primary outputs of CHF’s AHORA Program are as follows:

- * 4,703 beneficiary families (more than 24,000 persons) approved in accordance with the USAID selection process in conjunction with the USACE, ILP and the CRLs.
- * 4,703 permanent, earthquake-resistant, 40 M² homes, including complementary water and sanitation works, built for victims of the 2001 earthquakes in 30 municipalities and 150 communities in the departments of Usulután and La Paz.
- Latrines built (including both pit latrines and dry composting latrines) as needed.
- Washbasins (pilas) installed as needed.
- Grease traps, soak pits, and leach fields constructed for gray water disposal as needed.
- Repair of latrines and potable water systems as needed.
- Mitigation works (retaining walls, elevated platforms, etc.) for individual family plots as needed.
- Preparation of local emergency plans in target communities as needed.
- Training of beneficiaries in basic sanitation and environmental management practices as needed.
- Develop improved earthquake-resistant house designs and construction techniques for use by local NGO/PVO housing providers and residents of targeted communities in order to mitigate the impact of future quakes.
- Strengthen the institutional capacity of NGO/PVO partners to provide affordable housing.
- ** Repair and reconstruction of up to eight municipal City Halls.

* Reflects a change from the original deliverables.

** Added in the June 2, 2003 modification.

3. Current Core Program Activities

PLANNING AND MOBILIZATION

Before the houses could be constructed, many different steps were required. Most importantly, beneficiaries needed to be selected rigorously to ensure that USAID criteria were adequately met. This 16 step process entails:

- A. Community selection
- B. Environmental impact assessment
- C. Individual beneficiary selection
 - i. Gender
 - ii. Land ownership
 - iii. USACE site inspection

A. Community Selection

CHF visited potential communities in coordination with municipal authorities, and established contacts with community leaders to organize community members and select beneficiaries. Communities were selected based on the level of damage suffered due to the earthquakes and on the levels of environmental and economic vulnerability facing the victims, as well as on the interest and organization of the local government and community leaders. CHF identified **189** communities in **36** municipalities and six (**6**) departments for inclusion in the AHORA Program. All beneficiary selection was finalized during the former quarter, with the last beneficiary approved by USAID and ILP on June 4, 2004.

B. Environmental Impact Assessment

Once the communities to be included in the reconstruction process were identified, an environmental assessment was carried out for each one. These assessments were completed by CHF technicians who analyzed the environmental risks facing each community (risk to flooding and landslides among others) using a guide designed and provided by USAID. These technicians had been trained and had acquired experience by visiting sites with USAID environmental staff. The completed guidelines were revised by the Program Manager and approved by the Associate Director of Programs.

If it had been determined that mitigation measures needed to be implemented in order to ensure the safety of a house and its inhabitants, then a program to implement these measures would be formulated. Only in cases where CHF was uncertain about a specific site, was USAID contacted to program a visit to verify the site in question.

As of September 30th, 2004, **197** environmental assessment guides have been developed in communities in the departments of La Paz, San Vicente, Usulután, and San Miguel (none during the quarter). All have been submitted to USAID for approval. USAID has formally approved all **197** guides. No more guides are pending preparation or approval.

C. Beneficiary Selection

The selection of beneficiaries under the AHORA Program centered on the need to ensure that families that receive a permanent home meet all the eligibility criteria set forth by USAID in RFA El Sal 519-02-A-003 and listed below:

- Be a permanent member of the target community;
- Have suffered the total loss of their only house during the earthquakes referenced herein. The total loss of a house is defined as: “A house which because of the damage caused by the earthquakes is in such condition that it represents a hazard for the family to continue living in the house, or one that was totally destroyed”;

- Have a combined family income not exceeding two minimum monthly salaries as established by the Government of El Salvador (This is currently \$316.80 total. At the beginning of the AHORA Program the minimum monthly salary was \$144. In June 2003, the GOES increased that rate by 10% to \$158.40).
- Have ownership of land with either a legally registered land title on file with the *Centro Nacional de Registros* (CNR) or a title that can be legalized by the *Instituto Libertad y Progreso* (ILP).
- Re-build their houses in areas with an acceptable level of risk of future earthquake damage, mud slides, etc. and reconstruct in non-environmentally sensitive areas.

In order to comply with USAID beneficiary requirements, a form was designed and utilized by CHF to collect information on the socio-economic circumstances of each family. This form collects information on damage from the earthquakes, monthly income, number of family members, and employment status of income-earners. This was done to target assistance to the neediest families, and to ensure that USAID criteria are met.

The legal documents and surveys collected were revised by a CHF Social Promoter, who was trained to sort documents based on legal and socio-economic criteria. After this initial screening, legal documents were submitted for revision to the *Instituto Libertad y Progreso* (ILP) – the Salvadoran government institution working with USAID support to validate land ownership status.

CHF worked with local partners to facilitate this process. CHF utilized agreements, approved by USAID, with ASALDI, OEF de El Salvador, and Camara Junior to assist in processing beneficiaries in the Departments of La Paz, San Miguel, Usulután, and San Vicente.

i. Gender

CHF's methodology is highly gender-sensitive. Single mothers were a priority target group in the beneficiary selection process, due to their greater economic vulnerability. In addition, women were encouraged to participate in beneficiary selection committees and in collective decision-making. Furthermore, they were encouraged to participate in the construction process, thus acquiring additional skills and capacity.

ii. Land ownership

Establishing land ownership was one of the key determinants in the beneficiary selection process. In order for a case to be qualified, the land title must be registered at the *Centro Nacional de Registros* (CNR). This procedure was carried out through the ILP. Once land ownership was verified, the ILP issued a certification of its legal status, qualifying the case. The situation regarding the remission of documents and responses from the ILP through June 30, 2004 is as follows:

Status of Beneficiary Selection Process

Documents submitted to ILP	6,963*
Documents rejected by ILP for legal non-compliance or because they were already submitted by another NGO	720*
Documents rejected by CRL for socioeconomic/technical non-compliance	520*
Documents rejected by USAID	101*
Documents rejected by CHF after technical inspections	682
Transfers to Samaritan's Purse and Salvation Army	168
Transferred to CHF's USDA funded PROMOVER Program	17
Documents with final ILP approval valid for construction	4,755

* *These numbers include 240 REDES beneficiaries that were given to CHF by USAID; 137 beneficiaries transferred from the Salvation Army; 31 beneficiaries transferred from Samaritan's Purse; and 272 taken from the census conducted under Phase I and the USDA Program.*

CHF developed an effective screening and processing mechanism for the selection of beneficiaries, with a minimal number of cases being rejected for legal non-compliance (**only 10.3%**). Nevertheless, due to the exceedingly lengthy period necessary to complete the selection process (five and a half month average), we encountered a higher drop out rate (**18.7%**) for socioeconomic and technical reasons. The most common reasons encountered were: the beneficiary built a house by his/her own means or received aid from another organization; beneficiary left the community or country looking for work; or the beneficiary refused to demolish his old adobe or wattle and daub house which was damaged in the quakes.

D. Challenges in the Beneficiary Selection Process

During Phase I of USAID's housing reconstruction program initiated in May 2001, the beneficiary selection process involved eight steps, including approvals by CHF, USAID, and the ILP, as described below:

Step 1: Municipality Visit and Environmental Assessment

CHF: Contact established with municipal authorities to define a preliminary list of potential beneficiaries and complete an environmental assessment then submitted to USAID.

Step 2: Contact with Community Leaders and Beneficiaries

CHF: Coordination with selected communities to prepare site maps and organize the collection of required beneficiary documentation.

Step 3: Collection and Review of Socio-Economic Data and Title Documentation

CHF: Collection of socio-economic and legal information including copies of legal documents.

Step 4: Processing Documentation

CHF: Review and submission of legal documents to the ILP.

Step 5: Legal Approval

ILP: Reviews and approves documentation and notifies CHF.

Step 6: Environmental Approval

USAID: Reviews and approves environmental assessment submitted by CHF.

Step 7: Engineering and Environmental Technical Visit

CHF and USACE: Site inspection of beneficiaries already approved by ILP, with a USACE trained engineer. Production of final list of approved beneficiaries.

Step 8: Selection Committee

CHF: Final screening by a community-based selection committee, under CHF coordination. Production of official list of beneficiaries for construction, coordinated by CHF with the municipality and the communities.

USAID's RFA El Sal 519-02-A-003 was based on the above beneficiary selection process, adding only the additional requirement of including the geodesic coordinates of each selected site. CHF's AHORA proposal, therefore, was formulated and submitted based on this selection process, carefully calculating time and budget needs to fit these beneficiary selection steps. However, within days after the signing of the AHORA Cooperative Agreement No. 519-A-00-02-00078-00 on June 13, 2002, USAID informed CHF of a number of changes to the beneficiary selection process that, while well-intentioned and in pursuit of improvements to the process, added or modified steps in a way that increased the time needed to reach the final approval of each beneficiary. The new process, formally approved by the ILP, VMVDU and USAID on July 23, 2002, involved 16 steps, as described below:

Step 1: CHF proposes to USAID the specific municipalities to be targeted within the Departments assigned by USAID.

Step 2: VMVDU reviews and approves municipalities to be targeted by CHF.

Step 3: VMVDU informs municipality and requests the formation of the Local Reconstruction Committee.

Step 4: CHF and ILP establish weekly coordination meetings to define municipalities where censuses are to be taken.

Step 5: CHF coordinates with ILP to inform Local Reconstruction Committee of program requirements.

Step 6: Local Reconstruction Committee produces a potential list of beneficiaries and gives it to CHF and ILP.

Step 7: CHF carries out the environmental assessment of selected communities.

Step 8: CHF produces a list of communities that meet environmental criteria.

Step 9: CHF and ILP coordinate meetings with communities to schedule censuses.

Step 10: CHF processes socioeconomic data and title documentation and gives its socioeconomic approval.

Step 11: CHF processes technical inspection data, produces risk maps and sends beneficiary matrix along with maps and environmental guide for USAID site approval.

Step 12: USAID sends a USACE engineer to review environmental site conditions and produce a list of beneficiaries that comply with environmental requirements and sends it to CHF and ILP.

Step 13: ILP revises list of beneficiaries complying with socioeconomic, environmental and legal requirements and produces a preliminary list of approved beneficiaries.

Step 14: CHF presents the preliminary list of ILP-approved beneficiaries to the Local Reconstruction Committee in coordination with the VMVDU.

Step 15: Local Reconstruction Committee reviews and ratifies the preliminary list of approved beneficiaries.

Step 16: CHF sends the preliminary list ratified by the Local Reconstruction Committee to ILP. After a review of the legal status of land titles to be sure they have not changed, ILP produces the final and official list of approved beneficiaries.

Comparing the original process with the new one, the impact on the timeline for beneficiary selection can be quantified as follows:

Steps 1- 9 include seven new steps added to steps 1-2 of the Phase I selection process, which previously were coordinated directly by CHF. These new steps involve additional actors, ILP and the VMVDU, which slows down the process by an estimated half month required to coordinate activities.

Steps 11-12 are new in the sense that they require the preparation of risk maps and also those USAID site inspections and environmental approvals be in place and submitted to ILP before the issue of preliminary legal approvals. The time required to submit beneficiaries for approval to USAID, complete the actual site visit and receive site approvals from USAID adds an estimated one month to the process.

Steps 14-16 are new and have an impact directly on the time required to receive the ILP's final approval since the preliminary list has to be ratified by the Local Reconstruction Committee, and then sent back to the ILP to obtain the final legal approval. This second review by the ILP often requires it to go back to the Title Registry (CRN) to check if land ownership has changed since the first review. Also, the preliminary list must be presented to the committee in the presence of a VMVDU delegate, which slows down the process due to the need to schedule meetings. These changes added an estimated time delay of 1.5 months.

Prior to the start of the AHORA Program, CHF had been collecting information concerning approximately four thousand prospective beneficiaries and had pre-screened them for presentation in June 2002 to the ILP. The ILP subsequently made a change to the format of the submission documents, so CHF had to re-write the documentation of all the pre-screened beneficiaries and furthermore, in cases where the census was older than 3 months, new signatures had to be collected on the beneficiary's documents. Despite the change, CHF was able to get batches of several hundred beneficiaries ready for the ILP before the end of June. Nonetheless, the ILP would not accept any beneficiaries from CHF until the former had completed some internal preparations. The ILP did not accept the first batch of beneficiaries from CHF until July 29, 2002, and then restricted the submissions to lots of 500 per week. CHF had presented in its accepted proposal timeline that 4,000 beneficiaries would be presented to the ILP in the first three weeks after signing the agreement, as these beneficiaries were already pre-screened. Due to the new ILP format changes and restrictions mentioned, this goal could not be accomplished until November 18, 2002, which represents a loss of four months in the timeline.

Once submitted to the ILP, its granting of final approvals could not keep pace with official timetables (see Appendix 2). In fact, during the period from December 20th, 2002 to June 30th, 2003, CHF only received 579 final approvals from the ILP though it had submitted 4,455 beneficiaries to the ILP throughout that same period. These same 579 approvals were also not geographically concentrated enough to build efficiently. More approvals were needed to escalate construction activities. Waiting for these ILP approvals delayed significant construction start-up by more than three months. In the quarter, CHF received final approval of 113 beneficiaries from ILP. It was not until June 4, 2004, that the ILP

approved the last beneficiary for which a house could be built, nearly two years after signing the Cooperative Agreement.

For more detailed information, see the attached bar chart in Appendix 1 which demonstrates the difficulties that CHF has had in receiving final approvals from ILP since the beginning of the Cooperative Agreement.

E. US Army Corps of Engineers Site Inspection

The environmental impact assessment and a list of the potential beneficiaries were sent to USAID. A site-by-site visit was programmed. On these occasions, each construction plot was visited to assess the environmental conditions and identify mitigation actions, if any, that need to be taken. This list was prepared beforehand and filled-in during the visit. This list was signed by the CHF and USAID representative and becomes the qualifying document for each site.

CONSTRUCTION PHASE

Once the legal status of each plot of land had been approved by the ILP and USAID, CHF began the construction process. The activities carried out included the following:

A. Technical inspections

An engineer or architect visited each one of the sites where construction is planned. A technical inspection of the characteristics of the terrain was carried out (accessibility, dimensions, access to basic services, environmental risk, and other elements are considered), as well as the home damaged by the earthquake. After this inspection process had been completed, construction could then be planned.

B. Housing Projects

After the technical approval of each site, the housing project was initiated. At the same time, the method of implementation was decided upon: direct construction by CHF, bidding out to private construction firms, or sub-awards with NGO partners.

1) CHF Direct Build

At the start of AHORA Program, CHF directly built 255 housing units. They were the first to break ground in September 2002. CHF chose to build a small number of homes themselves under the Program, in order to better understand the challenges of building these particular designs. To scale up production, CHF incorporated private sector builders and NGO partners. In this past quarter, a large number of general contractors that had actually already signed a contract, later declined to build due to the hyper inflation in the world steel market. CHF therefore built an additional 404 units directly to complete the 4,703 target.

2) Private Sector

Using CHF's in-house database of over 155 construction companies, including more than 30 qualified specifically for housing, CHF operated a proven, transparent bidding process to award contracts to private firms. Under the AHORA Program, the bidding process in some cases was handled by

Fundación Techo para un Hermano (FTPH) through a sub-award which was signed by CHF and FTPH on November 4, 2002. In addition to administering the bidding process, FTPH administered the construction and supervision contracts under strict CHF supervision. FTPH covered their own administrative costs, and for every \$5 that CHF spent to cover direct construction costs of the contracts, FTPH donated \$1 toward the same. This innovative arrangement helped FTPH raise funds among the Salvadoran business community as cost share for the AHORA Program. It also helped strengthen El Salvador's housing capacity within the NGO community. FTPH signed contracts with **15** different construction companies for a total of up to **1,625 homes**.

Besides those private sector companies that work on the AHORA Program under a contract administered by FTPH, CHF elected to sign contracts directly with certain other builders. These contracts allowed CHF to fill certain geographic gaps left by CHF direct builds or NGO partners without overburdening the institutional capacity of FTPH. Due to the random manner that beneficiaries were approved by the ILP, coverage gaps exist in certain municipalities and communities that were not contemplated in current contracts and sub-awards. This contracting mechanism has proven to be the most flexible and efficient in meeting those needs. We directly contracted **19** construction firms to build a total of up to **1,984 homes**.

3) NGO Partners

CHF actively incorporates a wide range of actors in the construction process, encompassing local NGOs and international PVOs. Since the beginning of the Cooperative Agreement, **28** NGOs/PVOs submitted proposals to CHF to participate in the AHORA Program as sub-awardees (based on terms of reference established by CHF). After extensive evaluation, CHF signed sub-award agreements with five NGO/PVO partners for a total of **480 homes**.

C. Organization of Housing Projects

In the field, one or more job foremen or site superintendents (*Maestro de Obra*) were hired per project, and he/she directly supervised the skilled labor (masons, plumbers, electricians, carpenters, etc.) and the beneficiary sweat equity. The resident engineer developed a schedule for the implementation of the construction project and informs material suppliers on the needs for materials, tools and equipment, and other elements. The social promoter organized work groups with the beneficiaries that supply unskilled, volunteer labor and coordinates with the foreman and resident engineer.

D. Quality Control and Construction Supervision

The AHORA Program implemented an 11 tiered construction supervision system that included the participation of CHF, general contractors/NGO partners subcontracted by CHF, and the USACE subcontracted by USAID. The system was designed to insure the maximum amount of quality control possible during the construction process.

CHF directly implemented and oversaw six tiers of the system, including:

- Soil and material testing labs. These labs not only test the type and capacity of the soils on each site, but also the materials used in the construction.
- External supervisors (engineers, architects, or *maestros de obra*).
- Technical monitors (engineers and architects).
- Coordinators.

- Managers.
- Associate Directors.

General contractors and NGO partners managed four tiers of the system, including:

- Maestros de obra.
- Resident engineer.
- Coordinator.
- Manager.

USAID contracted a third party to provide the final tier of the system:

- USACE field inspectors.

Though each step/position supervised a variable quantity of houses, each of the 11 steps were critical to providing strict oversight of construction in order to ensure that the houses complied with CHF/USACE standards and specifications. For instance, CHF external supervisors along with maestros de obra from the builders/NGOs, had a more permanent process in the construction of each and every house. However, their role was no more important than that of USACE. The roles and levels of control of each step differed, but they were all integral to the quality of the final product.

Quality control issues still existed depending on the housing project and the specific quality of the implementer and the tradesmen (particularly masons), however the construction supervision system described above greatly reduced the problems that could potentially exist.

E. Community Participation

Crucial to the construction process was the participation of the beneficiaries and communities. Since the houses were provided to the beneficiaries as a grant, the only ownership that they have in their future homes is through their sweat equity. An assisted self-help methodology would allow for the greatest participation on the part of the beneficiaries while still maintaining a high standard of quality control in the final product. It was of the utmost importance that the families feel pride and ownership in the process and the product, for then their pride in the home would lead to better maintenance and upkeep of the property. Under the AHORA Program, CHF's social promoters organized community labor at all phases of the housing project and ensure that PVO/NGO partners and private sector contractors fulfilled this requirement.

F. Housing Construction Progress to Date

The AHORA Program finished construction of its last house on August 28, 2004. House number **4,704** (one over the established deliverables) was finished in San Francisco Javier, Usulután.

During this quarter, CHF completed construction of the remaining **1,605** homes. CHF also completed a total of **4,575** washbasins (pilas), **4,518** latrines (combined total of pit latrines and dry composting latrines), **4,543** grease traps, soak pits, and leach fields, and **2,334** mitigation works.

During the quarter, the AHORA Program expanded its geographic scope to include the Departments of Ahuachapan and Sonsonate in the west of El Salvador. A small housing project of 54 homes was built in Ahuachapan and 25 units were built in Sonsonate.

G. Water and Sanitation

Through its work in hundreds of communities affected by the earthquakes, and in specific analyses that it had carried out, CHF assessed the pattern of damage and destruction to drinking water supplies. In particular, among the beneficiaries of the housing program, such damage included: collapse or contamination of wells, damage or destruction of pumping equipment, damage or destruction of water distribution systems, and damage or destruction of water storage facilities.

In response to these problems, CHF worked with housing beneficiaries as needed to guarantee safe access to potable water and sanitation services by building or repairing wells and water systems, as well as latrines.

In addition to the repair of water systems and latrines, CHF also conducted workshops on solid and liquid waste management in beneficiary communities as an integral component of the AHORA Program, running parallel to housing reconstruction. Through a series of participatory workshops, CHF environmental staff trained beneficiary families and community leaders in the proper use and maintenance of their new latrines (either pit or dry composting), grease traps, and soak pits. The following chart documents the results of these trainings during the quarter:

Training in Basic Sanitation

Indicator	Results 4th Qtr. FY04	Results Cumulative Totals
No. of Communities Attended	264	268
No. of Municipalities Attended	36	36
No. of Departments Attended	5	6
No. of Direct Beneficiary Families	4,415	4,698
No. of Indirect Beneficiary Families	882	955
No. of Training Workshops	154	166
No. of Persons Trained in Basic Sanitation	4,415	4,698
No. of Women Trained	2,134	2,324
No. of NGO Partners Strengthened in Basic Sanitation Training	7	8
No. of Cleaning Campaigns Completed	20	36
No. of Health Units Participating – coordination with the Ministry of Health	8	10
No. of Persons Trained in HIV/AIDS	399	399

H. Disaster Mitigation and Preparedness

By far the most important disaster mitigation undertaken in the Program was that the house designs and construction systems were earthquake-resistant and could withstand the impact of future minor and major tremors and quakes far better than the former housing occupied by the beneficiary families. The importance of having these mitigation measures incorporated into the designs cannot be understated for they insure the health, safety and welfare of the families and the general public.

In addition to resources for the construction of houses, funds were designated to carry out mitigation measures in areas where such measures are necessary for the houses' security. There are a range of mitigation measures that were planned, each tailored to the specific circumstances. Among those that can be mentioned are the following:

- Retaining walls and/or living (green) barriers to stabilize slopes;
- Raising the floor of the house in areas prone to flooding;
- Drainage channels (swales) around the perimeter of the house for storm water control;
- Protection of wall and foundations in buildings adjacent to those to be constructed; and
- Engineered fill in specific house lots where the soil type has a high organic or clay content.

The AHORA Program constructed **2,334** mitigation works among the 36 municipalities and 189 communities where the Program operates. These mitigation works were built through a variety of sources including USAID, FISDL, NGO partners, in-kind donations from the Mayors, and beneficiary sweat equity and material acquisition. In order to minimize the impact on the overall Program budget, all possible efforts were made to construct the needed mitigation works through cost share, so that USAID funding could be designated primarily to the construction of housing units.

One of the more important mitigation works that CHF performed under the AHORA Program was the planting of living (green) barriers or fences. These living barriers served to stabilize slopes and control erosion, as well as to improve and protect the overall environment. They were designed as a complement to other mitigation works like retaining walls, not in lieu of. To date, CHF has planted 17,454 lineal meters of grasses and plants around the various house sites where we build. On average, we have sown 15 lineal meters of barrier per family which will quickly reproduce in years to come so that the protected areas can be expanded. We employed beneficiaries from our USDA funded PROMOVER Program to harvest the grasses and plants which we use, and our agricultural engineers provided technical assistance to our homeowners regarding where and how to sow the barriers, as well as how to take care of them.

As a value added to the AHORA Program, CHF took the initiative to incorporate a reforestation component into the housing program. Tree seedlings serve to improve the environment in a country almost entirely deforested as well as serve as a symbol of returning to the earth what we use in the construction process. We encouraged the families to plant their seedlings the same day the house is inaugurated so that the tree can grow along side their family in their new home. CHF donated approximately 7,500 seedlings to our beneficiaries. The majority of the seedlings were fruit trees that provide the families with some extra food or income in addition to shade. The types of trees include: cashew, orange, lemon, mango, avocado, and papaya. We also produced a few shade trees such as "madrecacao," "chaquiro," "casia," and "cortez blanco." CHF established a small nursery in its Usulután field office to plant and care for the seedlings in their first months before they can be delivered to the families.

In the area of disaster preparedness, CHF strengthened the local capacity to respond to future natural disasters and promoted a new attitude of prevention and mitigation of risks in the communities. This effort included training in risk management, the organization of local emergency committees, and the development of risk mitigation and prevention plans in each community.

The objectives of this component of the AHORA Program were to a) organize local emergency committees and develop prevention and mitigation planes in the beneficiary communities, and b) strengthen the municipal emergency management network by means of linking the local/community level of emergency response with the municipal level in order to counteract the occurrence of a destructive event, natural or man-made.

Due to the use of distinct techniques and reflective group dynamics, complemented by site trips in and around the attended communities, the process of training and technical assistance of community leaders was highly participative. Disaster preparedness in the communities was taught through a series of three workshops with participation from local leaders and housing beneficiaries. The three workshops were structured as follows:

Workshop 1: Conceptualizing of risks and resources in the community, threats and vulnerabilities, map of risks and resources. This workshop also included a presentation and discussion on the threat of HIV/AIDS.

Workshop 2: Organization of the local emergency committee. National System of Emergencies (SISNAE – the organizational strategy of the Salvadoran government), types of organization, organizational structure of the committee, function of commissions of the committee.

Workshop 3: Planning of risk prevention and mitigation. Steps for the planning, managing the cycle of disasters and the reflection about steps that can eliminate or reduce risks in the short and medium term.

CHF promoters conducted **139** workshops on disaster preparedness in **16** communities in La Paz, Usulután, and San Miguel. Benefiting **1,195** people directly. As a result of these trainings, twenty one (**21**) local emergency committees were formed and twenty six (**16**) risk mitigation and prevention plans were developed. The following chart documents the complete results of the trainings:

Training in Disaster Preparedness

Indicator	Results Cumulative Totals
No. of Communities Attended	46
No. of Municipalities Attended	16
No. of Departments Attended	3
No. of Direct Beneficiaries	5,300
No. of Indirect Beneficiaries	61,428
No. of Men Trained	1,961
No. of Women Trained	1,663

No. of Disaster Preparation Workshops Conducted	139
No. of Local Emergency Committees Formed	46
No. of Prevention and Mitigation Plans Completed	36

I. Municipal Infrastructure Reconstruction Activity

The 2001 earthquakes also severely damaged municipal infrastructure (“Alcaldías” or City Halls) in all of the affected Departments. However, due to the emphasis placed on more urgent needs like housing and potable water, the municipal offices waited for up to two years after the quakes, to be incorporated into USAID’s Earthquake Recovery Program. A key goal of the Program was to restore community infrastructure for the rural poor. Included in this social infrastructure were the municipal offices that were damaged or destroyed by the quakes.

On June 2, 2003, USAID modified the scope of the AHORA Program to include a new programmatic activity for the reconstruction/repair of municipal buildings where CHF had ongoing reconstruction activities in a particular municipality or in a neighboring community. This \$845,000 activity was created to repair and/or build eight (8) Municipal Offices over a 15-month period, while effectively involving municipal authorities, and community leaders in the design and construction process. The proposal was made with estimated budgets, but when the design stage was finished and official construction budgets were completed, the amount required to finance the civil works resulted higher. A modification (number 4) to the Cooperative Agreement was signed to increase the budget to \$ 1,452,576 in order to be able to work on at least five municipal buildings. On July 1, 2004, modification #5 was signed, raising the budget for this component to \$1,559,009 to complete six municipal buildings and finish designs on two more.

The municipalities to be reconstructed were:

- 1) San Francisco Javier, Usulután
- 2) San Agustín, Usulután
- 3) San Juan Tepezontes, La Paz
- 4) Santo Tomas, San Salvador
- 5) San Carlos, Morazán
- 6) Chapeltique, San Miguel

The municipalities to reach the design stage only were:

- 7) Berlin, Usulután
- 8) Chinameca, San Miguel

During this quarter City Halls in San Juan Tepezontes, San Francisco Javier, San Agustín, and Chapeltique finished construction. The City Halls in Santo Tomas and San Carlos are 98% complete and the final pending ítems will be completed during October 2004.

J. Counterpart Investment

The AHORA Program leveraged counterpart resources from NGO partners, municipalities, communities, the private sector, the Ministry of Health, and the FISDL, among other donors. CHF International also invested a great deal of its own funds as cost share to the Program. No specific target is required under the Cooperative Agreement due to the fixed obligation cost structure. However, CHF includes counterpart in the quarterly report to demonstrate value added. Over **\$2 million** in match was recorded during the quarter from a variety of sources. The total estimated counterpart investment to date since the Program began is **\$3,666,359**.

K. Monitoring and Evaluation

CHF's monitoring and evaluation under the AHORA Program encompassed both financial and technical reviews. Regarding financial reviews, CHF internal auditors evaluated the accounting and financial procedures of each proposed NGO/PVO partner prior to signing a sub-award agreement. This was a critical step that assessed the institutional capacity of the organization to manage CHF/USAID funds with financial integrity and stewardship. In this quarter, as mentioned above, two local NGOs were disqualified from Program inclusion because their accounting and financial practices did not meet CHF/USAID standards for general accounting procedures. Once a sub-award agreement had been signed, CHF internal auditors regularly monitored the financial records and accounts related to the programs of partner organizations through monthly and quarterly financial reports and periodic site inspections. In addition, as per USAID regulations, an annual audit is conducted of all partner organizations that receive in excess of US\$300,000 in USG federal funding during the course of their fiscal year.

Regarding technical inspections, CHF engineering and architectural staff conducted regular office and site visits for both NGO/PVO partners as well as for private sector contractors, to assess construction progress and quality control. Regular training sessions were conducted to ensure that proper construction practices and safety measures were met. Training workshops will include participants from the USACE, CHF technical staff, NGO/PVO technical staff, private sector builders, and construction supervisors (Maestros de Obra). In addition to these internal monitoring measures, CHF plans to sub-contract a private engineering firm to provide supplemental external supervision for all housing construction and related infrastructure.

L. Changes to the Scope of Work

On June 2, 2003, USAID/El Salvador modified the Cooperative Agreement, adding \$845,000 and eight months to the award in order to add a new program component for the repair or reconstruction of up to eight municipal buildings in the areas affected by the earthquakes. The revised total LOP budget increased from \$19,230,769.61 to \$20,075,769.61. The end date of the municipal infrastructure component of the Program is August 31, 2004.

On December 30, 2003, USAID/El Salvador approved a modification to extend the end date of the housing component of the Program from December 31, 2003, to July 31, 2004. The modification also added two new products under the reimbursable cost of the environmental mitigation measures line

item, leach fields and gray water collection tanks, which will be built in sites where soak pits are not technically appropriate.

On April 12, 2004, USAID/El Salvador approved a modification to increase the cost reimbursable line item on the reconstruction of municipal buildings by \$607,576, from \$845,000 to \$1,452,576, reducing the deliverables in the housing component by 179 houses, from 5,030 to 4,851. The total LOP budget did not change.

On July 1, 2004, USAID/El Salvador approved a modification to increase the funding to municipal infrastructure and mitigation works, reducing the housing target to 4,703. The modification also classified all program activities under “fixed obligation” amounts, and extended the closing date to September 30, 2004.

M. Appendices

- Appendix 1: Sequence of Submissions and Approvals of Beneficiaries
- Appendix 2: Construction Progress Report
- Appendix 3: Geographic Coverage Map
- Appendix 4: Newspaper Articles
- Appendix 5: Photos
- Appendix 6: Success Stories