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114289

March 20, 2002

Mr. Glenn Pearce-Oroz, Housing Team Leader
U. S. Agency for International Development
Apartado Postal 3453
Tegucigalpa, M.D.C., Honduras

**Re: CHF International Final Report for
Programa Hondureño de Gestión de Actividades de Reconstrucción (HOGAR),
CA # 522-A-00-00-00207-00**

Dear Mr. Pearce-Oroz:

Attached please find a copy of CHF's final report for the HOGAR Program covering the length of the project, from October 29, 1999 to December 31, 2001.

We have also sent an original copy of the report through the mail. A provisional version of the final financial report, Standard Form 269A, was submitted on February 15, 2002. The final version of this financial report will be presented within the allotted timeframe.

Please feel free to contact me should you have any questions or concerns. Thank you for your attention to this matter.

Regards,

Franck Daphnis, Jr., Director
Field Program Management

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**Programa Hondureño de Gestión de Actividades de
Reconstrucción**

HOGAR



FINAL PERFORMANCE REPORT

SUBMITTED TO USAID

MARCH 31, 2002

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**CHF International
Final Performance Report**

**Programa Hondureño de Gestión de Actividades de Reconstrucción (HOGAR)
Honduras**

Grantee: Cooperative Housing Foundation, d.b.a. CHF International
Cooperative Agreement: 522-A-00-00-00207-00
Reporting Period: October 29, 1999 to December 31, 2001
Submission Date: March 31, 2002

A. Background

CHF was awarded a Cooperative Agreement (CA) by USAID for the Management of the Housing Reconstruction Program in Honduras pursuant to Hurricane Mitch in late October 1998. The Cooperative Agreement was effective October 29, 1999, and the Project Assistance Completion Date (PACD) was December 31, 2001. The HOGAR program was designed to make recognizable, significant and measurable contributions to the achievement of USAID/Honduras' Hurricane Reconstruction Special Objective, and to directly contribute to the Intermediate Result, "Permanent Housing Developed for Dislocated Families." CHF was contracted to coordinate the building efforts through NGO sub-awards to permanently house more than 3,000 dislocated families on land with access to basic services and away from potential natural disasters.

The program was funded with a \$7,808,057 grant from USAID. CHF committed to provide matching funds and counterpart contributions in excess of 32% of the total program budget, or a minimum of \$3,700,000.

B. Expected Results

As with other CHF projects, the goal for this program was to follow a comprehensive approach to housing that includes not only sound and appropriate house construction, but also, community involvement, community strengthening, economic stimulation, risk mitigation, environmental protection, infrastructure development, and the provision of education and health facilities. Using this approach, CHF was to ensure that all projects funded under this program addressed each community's basic needs and went beyond that to strengthen the community's capacity, ensuring sustainable long-term development.

Specific objectives of HOGAR include:

- More than 3,000 families with upgraded or constructed permanent homes on titled and serviced land.
- Broad geographic coverage to meet the housing needs of unserved families in hurricane affected regions of the country.
- Newly resettled communities with sound urban planning and access to comprehensive community development services including schools, health services, and economic opportunity.
- At least five NGOs implementing housing credit programs with reflow committed to future housing needs in the communities.
- Fifteen NGOs and municipalities with improved capacity to address housing and other community development needs on a significant scale.

To respond to the enormous need for housing in post-Hurricane Honduras, the CHF HOGAR Program was designed to include the following key elements:

- Grants to Honduran and international NGOs/PVOs to directly assist families and communities to construct basic core houses.
- A technical guidance and assistance program using CHF technical staff, materials, and part-time consultations by Honduran housing professionals.
- Management of HOGAR with the advice of a working group that includes USAID staff.
- The issuance of RFAs with clear and transparent criteria to allow the maximum number of NGOs/PVOs to access the housing funds.
- Technical supervision to ensure proper management of U.S. Government finances by all sub-awardees.
- Training in the management of housing lending programs to enable NGOs to recover and reinvest reflow funds into future housing efforts.
- Internal monitoring to ensure proper progress using a management by measurable objectives format reported on a monthly basis to CHF/HQ.

C. Core Program Activities

1. OVERVIEW

The havoc wreaked by Hurricane Mitch in 1998 exacerbated an already acute housing crisis, exposing the serious structural inequalities in Honduran society. The poor families of Honduras who were already living a precarious daily existence and were crowded in unsafe, marginal lands, hillsides, and riverbanks were left in even worse living conditions.

In the wake of the Hurricane Mitch disaster many communities organized themselves and pulled together to confront the challenge of rebuilding their lives. Because these emergency efforts required a speedy response, in many cases the result was poor planning and substandard construction. In addition, during the early phase of the emergency, many organizations did not require beneficiary participation, hindering the ultimate goal of promoting the self-reliance and sense of ownership that are integral to long-term sustainability.

CHF maintained a strong presence during this first phase through its emergency operations, which were necessary to save lives in the short term. Once the initial emergency had been addressed, CHF began to focus on the long-term needs of a devastated population. This new endeavor required a reorientation of the initial emergency efforts and a mobilization of organizational resources.

Implementation of the HOGAR program began with a clear delineation of objectives and procedures, which were expressed in the RFA issued to recruit NGO sub-awardees. The RFA was presented in a widely advertised workshop, in which a broad and diverse group of NGOs participated. The selection of NGOs followed, through a transparent and thorough process of evaluation based on specific criteria.

CHF's first priority during each stage of implementation was quality assurance. HOGAR staff made regular visits to the sites to monitor project activities, offer timely technical assistance when necessary, ensure that objectives were being pursued, and that project agreements were respected. Close attention was also paid to the social aspects of the program, and communication channels were kept open at all times. Throughout the program, CHF intentionally remained flexible regarding NGO procedures and techniques in order to allow for the most effective and appropriate ideas and systems to prevail.

Over the course of HOGAR's implementation, 23 communities were impacted through 33 sub-awards that were distributed to fourteen (14) NGOs and one (1) private organization. CHF awarded a total of US

\$6,125,641.52, and accumulated a total counterpart contribution of US \$5,376,837.78. Tables 1 and 2 provide details on how the sub-awards were distributed.

Annex A contains a detailed report on each individual project.

2. SELECTION PROCESS

CHF distributed \$6,125,641.52 in sub-awards and contracts to local and international organizations to carry out the construction required to permanently house displaced Mitch victims. The approval of each project followed a transparent and thorough process.

2.1 RFA Announcement and Workshops

Project qualification criteria and an RFA were announced through national newspapers to encourage the participation of a broad and diverse group of organizations. Individual invitations were also extended to organizations that had previously contacted CHF for support or financing. The terms of reference were provided in both English and Spanish.

After the announcement of each RFA, CHF held a workshop to explain the requirements of the program and to answer any questions. CHF emphasized that this was a gap-filling program and HOGAR would only fund comprehensive projects with 32% or greater counterpart. CHF also took this opportunity to stress USAID and CHF requirements regarding topics such as beneficiary selection, bonding, and environmental procedures. A list of the information required for proposal submission, including construction components, community development initiatives, and financing details, was one component of the RFA.

2.2 Selection Criteria

Project applications were evaluated based on the following:

1. Legal status of land tenure
2. Beneficiaries selection
3. Environmental aspects
4. Sound and economically feasible technical solution with a comprehensive approach to housing
5. Organization and institutional capacity
6. Minimum of 32 % counterpart contribution
7. Implementation plan

2.3 Application/Proposal Review

The RFA announcements and workshops resulted in 70 organizations indicating interest in the HOGAR program, of which approximately 75% submitted a proposal. The final selection of 33 sub-awardees and contracts was a difficult task that required the involvement of the entire CHF staff. Each application was reviewed thoroughly to ensure that the pre-established criteria were met. HOGAR staff worked with IOM and Samaritan's Purse to coordinate project sites to avoid duplication of efforts.

Once CHF completed the first initial review of a proposal, a list of questions and/or a list of required information not submitted was sent to each organization. Unfortunately, many of the missing items were required items as stated in the RFA, and this initial review process slowed down the approval process. This added initial review step was needed since no proposal was submitted to CHF that did not require clarification, modification of project terms or additional information.

Some projects were immediately rejected by CHF as the organization or project obviously did not meet the program's requirements.

Some of the main reasons that proposals were rejected include:

- Lack of experience in community development AND housing
- Missing or negative components like social and environmental issues
- No provision for water or sanitation solutions showing an obvious lack of understanding for the development of quality housing projects
- Large or expensive (cost per m²) houses proposed
- Lack of counterpart
- Beneficiaries who were poor, but did not have houses affected by Hurricane Mitch or did not live in high-risk areas for natural disasters
- Discrimination in beneficiary selection

CHF worked closely with the organizations presenting the remaining projects to finalize project ideas for approval. Once projects met the basic publicized requirements and the internal CHF-approved ranges for cost per square meter (\$80-120), minimum number of houses built per month including preparation time (20) and cost per solution (\$2,800 to \$3600 or less), projects were approved. Two RFAs with deadlines were publicized and then a third open-ended RFA was issued. CHF worked to approve or reject proposals until all funds were obligated to the NGOs in September of 2001.

In addition to reviewing the project proposals on paper, the HOGAR technical staff made visits to the project sites to verify whether the chosen site was appropriate for housing construction, housing designs were appropriate for that particular region, potential risks such as landslides and flooding were considered, and the proposed site had or would have access to all basic services as required by the program.

All environmental aspects were also considered and analyzed utilizing the Environmental Guidelines questionnaire prepared by USAID/Honduras. Final approval by USAID of the Environmental Guidelines document was a major requirement in the selection process as well as coordination of the proposed site with the International Office of Migration (IOM) and Samaritan's Purse, two other recipients of USAID funding for reconstruction housing.

3. IMPLEMENTATION

CHF hired an experienced technical staff, including a Program Manager with a degree in civil engineering and more than 15 years of engineering and project management experience, three civil engineers with vast experience in water and sanitation, construction and environmental protection, and an architect with experience in urban designs and low-cost housing. Their overall responsibility was to ensure quality construction and adherence to USAID and CHF guidelines with respect to the environment, construction quality and risk mitigation.

During the program's implementation CHF hired experienced private companies to carry out discrete tasks such as soil studies, the design of a water system, a wastewater treatment plant and an urban development master plan. Private construction companies were also hired in some cases to complete construction activities such as well perforation and the construction of a sewage system and wastewater treatment plant.

3.1 Supervision and Technical Assistance

Once the NGOs were selected and construction had begun, CHF began monitoring all projects to assure that the construction was carried out in accordance with sound construction practices. The monitoring activities also included verification of the NGOs' compliance with their counterpart agreements, such as discounts on materials and beneficiaries' contributions.

3.2 External Supervision

USAID personnel also undertook independent inspections. These inspections were focused particularly on the quality and structural integrity of the housing units and environmental aspects. The inspections were conducted on a random basis within each selected site. The HOGAR projects that were inspected included Hato Nuevo, San Jerónimo, Renacer, Umaña de Santiago, Project Team-Work, and Colonia Japón. USAID personnel reported favorable results in every case, acknowledging the work done by each NGO and excellent supervision and follow up activities carried out by the HOGAR team.

3.3 Reports and Presentations

The HOGAR staff prepared monthly reports on the construction progress of all approved projects, the program activities planned for the following month, problems/situations identified, and recommendations and solutions.

Quarterly reports were also prepared, detailing each NGO's performance, compliance with environmental guidance, and the status of its counterpart contribution according to the approved budget. Other topics included in the quarterly reports included housing occupancy, lessons learned, titles status, as well as comments on key concerns and successes.

The HOGAR staff also gave two presentations to USAID personnel, in which the progress of each project was discussed.

4. RESULTS

One of the HOGAR program's goals was to fill the gaps of NGO reconstruction housing projects, supporting the provision of a basic and desirable house that responded to the needs of the maximum number of families possible. Only projects that adequately took into consideration local customs, climate, risk management, economic opportunities, basic services, sustainability and other important variables were considered. (Filling in the gaps meant that HOGAR funding could be used to provide for the actual houses, land, infrastructure, community development, schools and other needed infrastructure.) CHF measured its results on the gaps, which it filled. These are reported as solutions.

Though the primary focus of the program was housing and water and sanitation, special attention was also given to community development in order to ensure the sustainability of each project. The following information provides an overview of each component covered in the HOGAR program and the final results obtained.

Annex A includes more detailed information about each project.

4.1 Housing

Of the 4,617 solutions supported by the HOGAR program, 1,659 of these were home construction. (One housing solution equals one family receiving a house through HOGAR funds. The remaining solutions included a number of related areas of work such as infrastructure, land purchase, etc. See Table 2 for details of the solutions provided.

Table 3 shows that under HOGAR a total of 1,659 houses were built. Table 3 also includes the area of each house, which ranges from 30 to 48 m², and the area of each lot, ranging from 112 to 300 m². The average area of both the houses and lots is greater than the initial requirement which means CHF was able to utilize the funds more efficiently and effectively than proposed.

The houses' cost per square meter varied widely, as it depended on a number of variables including the cost and availability of construction materials, labor costs, beneficiary participation, and structural design. Table 3 summarizes the cost of the houses by project.

4.2 Environmental Results

Prior to the approval of funds for development and housing, the CHF HOGAR staff assured that all projects complied with the environmental policies and requirements of USAID 22 CFR 216. An Environmental Questionnaire and Checklist were filled out by each NGO and sent to CHF, where they were thoroughly reviewed and then submitted to USAID for evaluation and final approval.

The HOGAR staff monitored the projects, making sure that the families had access to potable water, sanitation facilities, waste collection and disposal, as well as environmental mitigation measures such as retaining walls and drainage channels for rain and waste waters. To control soil erosion, geo textile matting and gabions were implemented. The *Colonias Unidas* project had the longest drainage canals of any that were built under the HOGAR program, reaching almost 3000 meters in length.

At the start of the HOGAR Program, CHF had stated that no project could begin construction until the appropriate environmental license had been approved. Unfortunately, the licenses took several months to get approved even when all information was sent correctly to the Ministry of Natural Resources (SERNA). Realizing that these delays would severely jeopardize the success of the program, and knowing that only environmentally sound projects had been approved, CHF left it to each NGO to decide whether to begin without an approved license. In all cases, the submission of the licensing documents was completed before CHF's approval. In the end, several NGOs were fined by SERNA for starting projects without the final license.

In an attempt to support the NGOs, CHF also took the responsibility of learning in detail each step of the licensing process, identifying the most common errors as per the SERNA staff and building a good relationship with the SERNA technical staff to help facilitate the process. In addition, CHF reviewed the NGOs' project licensing documents in many cases before they were sent to SERNA to ensure that everything was in order for an expedient approval. At the end of the HOGAR program, 16 NGOs had reported receiving the actual license; the rest are in the final stages of approval.

4.3 Water

A comprehensive approach was implemented in each project to ensure that all basic needs of the communities were met. During the selection stage, it was emphasized that potable water was a must. It was

a major requirement that an existing water system or a dependable source, from which water demands of the community, could be met.

In some projects, an existing water system fulfilled the water demand of the new resettlement and only complementary works were necessary, while in other projects a complete water system was designed and built. Under the HOGAR program six electrical pumps, two de-sanding tanks, and eight storage tanks were installed. 2,775 house connections, 2,046 washtubs, and 60.7 km of piping were also completed to ensure that all projects funded under this grant had the benefit of potable water.

4.4 Sanitation

A sanitary solution was also included in all projects. The type of solution was chosen for technical reasons that involved mostly the type of soil and terrain of the projects sites. 1,946 sanitary solutions including pit and compost latrines, toilets, and water closets were installed, as well as 4.1 km of piping for conventional sewage systems.

The most important sanitation project was the construction of an Imhoff tank that serves 164 families. This solution consists of a biological filter as the primary treatment and a sludge drying bed as a secondary treatment. This solution was selected among others for its low cost maintenance and the fact that no electricity is needed for its operation. The supervision of the tank construction was carried out directly by the National Water and Sanitation Services of Honduras (SANAA). SANAA considers this a pilot project and will constantly monitor the tank's performance.

Additionally, SANAA's technical staff trained a select group of beneficiaries on the maintenance and operation of the water tank.

4.5 Social Aspects

A plan to involve and strengthen the community was considered a key factor in the success of each project in the HOGAR program. Each project included a training program, a beneficiary participation strategy, and a focus on the development of organizations within the community in order to encourage sustainability and self-reliance.

A social promoter was hired as part of the HOGAR team to provide support to the NGOs on the various social issues related to the beneficiaries and their community needs, as well as follow-up activities.

Cooperative Agreements were reached with institutions like INFOP (*Instituto Nacional de Formación Profesional*) and CENET (*Centro de Educación para el Trabajo*) to provide training in specific skills such as welding.

Other training components included pertinent topics such as community organization and administration, basic sanitation, gray water drainage, solid waste disposal, fuel efficient stoves, use and maintenance of latrines, emergency and health plans, creation of enterprise, credit and fund management, reforestation activities, and other environmental issues. In all, 1,598 people took part in these training activities, 56% of which were women and 44% men.

In addition, a water administration committee was created in all projects where a water system was built.

4.6 Beneficiary Participation

The beneficiaries' participation in the implementation of each project played a key role in both keeping costs down and ensuring the ongoing success of the HOGAR program. Each beneficiary was required to work a certain number of days in order to comply with the beneficiary selection criteria.

To ensure a successful resettlement of the families in their new locations and to guarantee the projects' sustainability, diverse committees, boards and associations were created. The identification of local leaders was not difficult because beneficiaries belonged to pre-existing communities, which had for the most part established their own local authorities.

Community leaders were identified in the first stage of the project and through them beneficiaries were assigned specific tasks that included: cleaning campaigns, transportation of materials, excavations and back filling, reforestation, manufacturing of tiles and adobe blocks, construction of drainage pits, floor compressing, plastering, painting, and elaboration of doors and windows.

A total of 2,958 beneficiaries were directly involved in various activities during the project execution, of which 59% were women and 41% men.

4.7 Counterpart

Table 4 shows the detailed final counterpart numbers, itemizing the different types of counterpart contribution and the total amounts provided. This final report indicates that CHF surpassed the 32% counterpart commitment by 9% for a total contribution of 41% of the program's total cost. In total, \$5,376,838 was provided as counterpart, \$1,576,837 more than originally proposed. These amounts are based on the total program cost which was \$13,104,895 including federal and recipient share of outlays.

The amount of counterpart provided clearly shows the active participation of the sub-grant recipients and the beneficiaries. CHF knew that there were large sums of counterpart to leverage and made a dedicated effort to motivate the organizations involved to seek additional counterpart for their projects. CHF also produced a detailed NGO Counterpart Manual that was provided to each NGO including USAID regulations on counterpart contribution as well as rules and forms to be used to deliver this information to CHF. The manual also includes a list of counterpart ideas to encourage the NGO to identify additional forms of counterpart. The range of counterpart provided by the sub grantees was 31.88% to 77.49% of the total cost of each of their projects. Achieving this high level of counterpart was a primary factor in CHF exceeding the number of proposed housing solutions by 53%.

5. FOLLOW-UP

Follow up activities were carried out after the projects' conclusion with the objective of assuring proper use and maintenance of all systems, house occupancy, and land tenure. Also during this period, all social and training (agreements were reviewed in order to ensure that the proper counterpart had been achieved. In some projects, additional funds were required to improve basic services. All these activities were initiated immediately after the projects were received and approved by the HOGAR technical staff. The minimum follow up period was three months.

5.1 House Occupancy

CHF knows from studying other post-disaster housing projects that occupancy rates for houses can be very low if needs are not understood or addressed properly by the donor or implementing organization. Aspects

such as beneficiary selection and understanding their needs and customs were considered in the initial stages of the project.

In the cases where NGOs did not request funds for the construction of basic services like water and sanitation, a compliance letter was required from the NGO to assure that these services were going to be provided as counterpart by another NGO or government institution before families moved into the new houses. However, when this kind of commitment was not accomplished on time, it clearly affected not only the housing occupancy, but also the projects' success and the overall impact.

HOGAR staff continues to monitor and assess these projects to ensure occupancy three months after the projects' completion. The average percentage of occupancy to this date is 93%. In the few incidences where occupancy rates remain low, the primary reason is that municipalities or other institutions that committed to provide basic services have not been able to complete their projects on time. Such is the case of the Amarateca Project, where the families are ready to move into their new homes as soon as the permanent water and sanitation systems are built.

The NGOs in charge of these projects will continue to monitor the housing occupancy rates and to follow up on the construction of the incomplete services.

Table 3 shows detailed information about house occupancy rates.

5.2 Land Titles

Prior to the approval of a project, all projects under HOGAR funding submitted a land title of the proposed site where construction works were planned. A real estate attorney was consulted to verify the legality of these documents and in cases where NGOs needed additional assistance.

One of the HOGAR program's goals is that all beneficiaries will eventually receive a legal title to their land. In all cases where credit programs are being implemented, the beneficiaries will obtain legal title to the land once they have paid off their loan.

5.3 Operation of Water and Sanitation Systems

Even after the projects had been finalized, HOGAR staff continued to work closely with the NGOs' technical personnel and the members of the Water Councils, providing technical assistance and making follow up visits to assure the efficiency, operation and maintenance of the water and sanitation systems.

5.4 Financial Performance

The total cost of each project is detailed in Table 1, separated into the total amount funded by USAID and the final counterpart contribution. The distribution of the funds was a function of the size of the project.

HOGAR was funded with US \$7,808,057.00. Of this, US \$6,125,642 was spent directly on construction costs, divided into 33 projects as shown in Table 1. Counterpart contributions totaled US \$5,376,837.78, which represents 46.7% of direct project costs, or 41% of the total program cost, surpassing the proposed goal of 32%.

5.5 Revolving Loan Funds

Though a credit component was not a requirement for sub award approval, CHF did encourage those organizations with experience in credit or with a desire to start working in credit to include cost recovery

mechanisms in their program. Overall, eight organizations included a credit component, and four of the eight had prior experience in managing credit. CHF provided the NGOs with support and training in developing and managing their credit programs, offering advice on such issues as establishing interest rates, loan terms, recovery mechanisms, legal issues and fraud detection.

All of the NGOs preferred subsidized interest rates and long loan terms to ensure payment capacity by the beneficiaries. The highest annual interest rate established was 15%, and the longest loan term was 10 years. CHF disagreed with the interest rates and the loan term, believing that the rate was not sustainable and the term too long, however, CHF allowed the NGOs to make the final decision on their loan program.

6. AUDITS

In view of the nature of the HOGAR program, the amount of the Cooperative Agreement (CA), and the numerous sub agreements signed with 15 organizations, continuous internal and external audits were an important part of the program, helping to ensure transparency and the proper use of funds.

CHF employed an Internal Auditor to support and review the NGO's activities, and external auditors hired by USAID conducted a concurrent audit of CHF. In addition, CHF underwent its annual external audit in September of both years. Through the HOGAR program, CHF contracted an external firm to audit the NGOs who spent more than \$300,000 of US government funds in one fiscal year.

During the 26 months of this CA, no objections or findings were made by any of the auditing firms with respect to the way CHF and the NGOs managed their accounting and internal controls.

6.1 Internal audit

CHF hired a full time auditor as part of the HOGAR program team to ensure efficient and transparent use of USAID's funds. The auditor was responsible for ensuring all parties' compliance with the clauses established in the Agreements and Regulations Manual, particularly in the area of financial and accounting practices.

Over a period of 14 months the auditor carried out 59 review visits to the implementing NGOs. During these visits, a number of deficiencies were identified and strengthened including: lack of knowledge of the agreement's contents and USAID regulations, little experience with international donor controls, and lack of understanding of the Counterpart Manual that CHF had prepared.

HOGAR's management assistance consisted of training and support in the following areas: a) accounting and internal control; b) budget liquidation; c) management and filing of information; d) training on accounting software and macros in Excel; e) payroll and overtime; f) management and evaluation of the counterpart; and g) permanent financial advising.

Through the permanent financial advising and training, the HOGAR program was able to strengthen the administrative, financial and accounting areas of the NGOs funded. Furthermore, CHF ensured that the NGOs adopted and followed the accounting regulations requested by USAID.

6.2 External Audit of NGOs

In coordination with CHF, Price Waterhouse Coopers conducted a formal A-133 local audit of the HOGAR sub awardees that spent over US \$300,000 of US government funds. There were some NGOs that had spent more than this limit, either through this program or others, but were covered under their own A-133 audit.

procedures, typically through their home offices. In these cases, CHF asked for proof that these audits had or would be taking place.

The NGOs that were audited locally were GOAL, Habitat for Humanity, AIEH, ADRA and Atlas Logistique. The results of these audits reported no relevant findings, assuring that the management of the funds was satisfactory.

6.3 External Technical Audit

CHF hired an independent civil engineer to make site visits to every project implemented under the HOGAR program. The purpose of these technical audits was to ensure quality construction and adherence to CHF guidelines. The results of these visits were positive, reporting situations that had been expected and/or already reported and addressed by the technical staff. There were no material findings.

USAID also conducted a separate external technical evaluation of several of the HOGAR projects. Again, no significant negative observations were made.

D. Performance

Now, more than three years after Hurricane Mitch, it can be said that HOGAR's specific objectives have been met and, in some cases, surpassed. The following are a few of the highlights of the final results:

- ✓ 4,617 families with up-graded or newly constructed core permanent homes on titled and serviced land.
- ✓ Broad geographic coverage to meet the housing needs of unserved families affected by Mitch in various regions of the country, which included 7 departments: Francisco Morazán, Yoro, El Paraíso, Comayagua, Cortés, Choluteca and Santa Bárbara. This coverage was achieved through 33 different sub awards.
- ✓ All newly resettled communities with sound urban planning and access to comprehensive community services, including 4 schools, 2 health centers, 2 civic centers, as well as basic services and economic opportunities.
- ✓ Eight NGOs implementing revolving fund housing credit programs, committed to supporting future housing and/or community development needs in their communities.
- ✓ Fifteen NGOs and other organizations with improved capacity to address housing and other community development needs on a significant scale.

The following table compares the program's original objectives with the detailed final results:

INDICATOR	TARGET	FINAL RESULTS
Housing and Infrastructure Projects	3,000 new and upgraded basic core houses with complete services.	4,617 solutions of which 1,659 are new houses and 2,608 were complemented with infrastructure to address basic needs.
Broad geographic coverage		Projects sites covered 23 communities in seven departments of Honduras: Francisco Morazán, Cortés, Yoro, Comayagua, Choluteca, El Paraíso and Santa Bárbara.
Community Development, Training and Education	<p>15 to 27 NGOs and 135 individuals trained.</p> <p>Project communities have access to elementary schools and health clinics.</p> <p>Plans for community projects and maintenance of infrastructure in all project communities.</p>	<p>14 NGOs and one private organization received sub-awards or contracts and 1,598 beneficiaries were trained, 56% women and 44% men. (Note: CHF considers the number of people trained as per the sub awardees reports to be understated, considering the number of families who benefited from the program.)</p> <p>All communities have access to health and education. 4 schools, 2 health clinics and 2 civic centers were built with HOGAR funding.</p> <p>22 communities established community boards, water administration boards, sanitation boards and other health and environmental committees.</p>
Occupancy Rates	100% occupancy of homes built under the program.	9 projects are 100% occupied while overall occupancy is of 93%.
Selection of beneficiaries	<p>No discrimination.</p> <p>One house per dislocated family.</p> <p>Homes for Mitch victims or families in high-risk areas.</p>	<p>No discrimination observed by CHF.</p> <p>Thorough beneficiary eligibility verification was undertaken in 100% of the cases and non-discrimination statements were signed by all participating NGOs.</p>
Determination of counterpart project financing	32%	A minimum of 32% was included in each individual project budget, while overall counterpart provided totals 41% of the total cost of the project, including recipient and federal share of outlays.

<p>Builders Performance</p>	<p>15 NGOs/Organizations receive sub-awards.</p> <p>15 NGOs/Organizations with improved housing construction management capabilities.</p>	<p>15 NGOs/Organizations received sub-awards/contracts.</p> <p>23 projects underwent performance evaluation and construction supervision for quality assurance.</p>
<p>Improved Credit Programs</p>	<p>3 NGOs with Improved management of existing credit programs.</p>	<p>8 organizations managed credit with the HOGAR program of which four had prior credit experience. All of these organizations received training in credit, and four of them received special attention, as well as group training.</p>
<p>Management and disbursement of program funds</p>	<p>15 to 27 sub awards disbursed on time according to project benchmarks.</p> <p>\$6.3 million disbursed in sub awards/contracts.</p>	<p>33 sub awards and contracts were disbursed after monitoring actual project progress, construction quality and compliance with agreements.</p> <p>\$6.2 million was obligated by CHF to sub awardees, and in the end a total of \$6,125,642 was spent on 33 sub-awards and contracts.</p>
<p>Effective democratic process</p>	<p>3,000 housing solutions with corresponding infrastructure.</p>	<p>All projects had existing infrastructure or were provided with necessary elements to satisfy basic needs. With HOGAR funding the following works were executed: 6 wells were drilled; 2 de-sanding tanks and 8 storage tanks built; 61 kilometers of piping and 2,775 house connections installed; 2,046 washbasins and 1,946 sanitary solutions built; 4.1 km of piping in 3 traditional sewage systems and a treatment plant built; a complete electrical system and 2 primary distribution lines installed.</p>
<p>Project Environmental Requirements</p>	<p>Reforestation of project sites and watershed protection plans as necessary.</p>	<p>All projects complied with environmental protection requirements and have implemented risk mitigation measures while 12 of them are implementing watershed protection and reforestation campaigns.</p>
<p>Verification of land House titles</p>	<p>3,000 families receive titles to land and house within 3 months of construction.</p>	<p>Prior to approval, NGOs submitted a land title of the proposed site, the legality of which was verified by CHF's attorney. 444 beneficiary families have received land titles to this date. In those projects where a credit program is being implemented, beneficiaries will obtain their titles once the loan payments are concluded.</p>

E. Lessons Learned and Final Conclusions

- Even with clear manuals, written contracts and detailed conversations, many NGOs did not share important information with all their project employees. The head of the organization would sign the contract, but in many cases, the construction supervisors or the accounting personnel never saw the contract and were not aware of the obligations. CHF had to constantly monitor all activities and follow up on contract clauses or special commitments established in the signed agreements to ensure compliance. In managing future Umbrella Grant Management programs, CHF will ensure upfront that the NGOs disseminate all information on commitments and regulations.
- The final selection of beneficiaries and the legalization of land tenure should be done prior to the implementation of the project, in order to assure the appropriate level of participation of the families. This is especially important with credit activities. Many organizations submitted large lists of potential beneficiaries to CHF for project approval, and then began to finalize the lists after the project was approved. Although this is acceptable to CHF, since it helps not to create false expectations, the final list is to be approved BEFORE construction begins. This is especially important for programs with a credit component, due to the time it takes to qualify loan recipients.
- In many cases, CHF provided a house to a family that was living in a high-risk area. The commitment of each family was to abandon their house in the high-risk area in exchange for a house in a safe area. It is the municipalities' responsibility to prohibit new families from moving into high-risk areas. Otherwise, the problem will simply be passed on to other families.
- It has been proven that even very formal commitments for the provision of basics services may sometimes not be possible during the life of a program. For this reason, it is better to provide these services with the same program funds, or only fund programs that can begin infrastructure immediately upon approval of a sub award and, preferably, before building the houses. The cases where the occupancy rates are the lowest in the HOGAR program are those where all basic services have not yet been provided, but are imminent.
- The implementation of a housing reconstruction program goes far beyond the physical and technical aspects involved in for-profit, large-scale construction projects. The social aspects, i.e. community development, environmental concerns, coordination with government entities, etc., add to the complexity of this type of housing program. For these reasons, it is important to have a staff that is knowledgeable in a variety of areas and that can easily cross over into areas that are not their primary concern. For example, an engineer should be able to understand community development issues just as a social promoter should understand basic concepts about construction and the environment.
- It is absolutely necessary that any housing project involved in building more than a few houses should have a skilled resident engineer on site. Many NGOs tried to manage the projects with an engineer as project manager involved in beneficiary issues, municipal permits, material purchases, etc. CHF's experience indicates that it is worth the added expenses, in the end, to pay for a full-time engineer who can dedicate 100% of his/her time to the daily supervision of construction activities. If this is not done, issues with quality construction, stolen materials and time delays will surely cost the project more in both time and money.
- Important achievements of this program were, among others: strong organizational foundations promoted in the involved communities; renewed sense of solidarity and commitment to common causes; transference of expertise in technical and social areas among local and international NGOs; gender representation in all project activities; consolidation of local structure, creating linkages with other governmental institutions and organizations; increasing awareness of environmental issues; and, most

important, the affirmation of CHF's main goal to not only build houses, but to support the creation of new self-sufficient communities in a more fair and equitable society.

- The sub grant management mechanism is an efficient way to manage this type of program, as well as others. It encouraged sharing among NGOs, carrying out best practices and quality projects. It also allowed CHF to share its experience in housing and credit, obtained through 50 years of working with similar programs with a large number of organizations, which, in some cases, had limited housing and/or credit experience. Many of the participating NGOs recognized the added value that CHF brought to the program.
- It is interesting to note that many construction companies had interest in participating in the program, and in the end, only one actually received a contract. These organizations publicly doubted the ability of NGOs to build quality houses in a reasonable amount of time. The results of the HOGAR program proved them wrong. In addition, and as mentioned above, the implementation of a housing program goes far beyond the physical and technical construction aspects. It was a huge challenge, but of great satisfaction to have achieved the success of the program through the selected NGOs, strengthening their ability and desire to work in housing in the future.

F. Evaluation

Evaluating the environmental impact of each project and requesting the environmental licenses, even though it was a difficult and time-consuming task, was an important aspect of the program. This ensured that the programs did not cause a negative impact on the environment or the surrounding communities, and that they would set a good example for future projects in Honduras.

G. Current Buy-Ins

None

H. Sub-Contracting Activities

Due to the nature of the Umbrella Grant Management Program, the majority of the HOGAR activities were performed under contracts to other organizations or sub grants. A detailed summary of these activities is in Section C, Core Program Activities.

I. Statement of Work

The statement of work was not changed.

J. TABLES

HOGAR Final Performance Report

Table 1 Program Summary

No.	NGO	Project	Location	Contract Date	Project Duration (months)	Solutions	Contract Amount US \$	Counterpart US \$	Total Project Cost US \$
1	CI/APAN	Niños Felices	La Guacamaya Yoro	05/30/00	2	34	80,575.00	40,101.04	120,676.04
2	NPH	Nueva Esperanza	Morocelí, El Paraíso	05/05/00	5	144	140,773.00	738,314.46	879,087.46
3	GOAL	Colonia Irlanda	San Jerónimo, Comayagua	06/16/00	7	75	202,350.00	315,591.33	517,941.33
4	GOAL	Flor del Campo	Morazán, Yoro	06/16/00	13	100	394,339.00	190,160.84	584,499.84
5	HABITAT	Residencial Habitat	Amarateca, Fco. Morazán	06/28/00	13	175	500,000.00	451,113.77	951,113.77
6	AIEH	Col. Japón	Choloma, Cortés	06/29/00	9	260	355,711.33	393,804.56	749,515.89
7	ADRA	Villa El Porvenir	Amarateca, Fco. Morazán	09/01/00	13	121	320,350.36	265,019.50	585,369.86
8	CRS	Colonias Unidas	Choluteca, Choluteca	09/26/00	12	749	793,468.07	504,094.98	1,297,563.05
9	GOAL	Casco Urbano (Rehabilitation)	Comayagua, Comayagua	10/18/00	7	132	290,400.00	218,551.89	508,951.89
10	GOAL	Las Liconas, (Rehabilitation)	Las Liconas, Comayagua	10/18/00	4.5	28	67,915.80	39,193.64	107,109.44
11	CI/APAN	Renacer	La Guacamaya, Yoro	11/01/00	10	110	334,540.00	169,881.83	504,421.83
12	Hermanos Maristas	Col. Marcelino Champagnat	Choluteca, Choluteca	11/20/00	5	620	181,976.67	96,742.55	278,719.22
13	Atlas Logistique	Hato Nuevo Phase I & II	Hato Nuevo, Choluteca	12/04/00	6	109	276,057.26	230,332.25	506,389.51
14	GOAL	Lazos de Amistad	Comayagua, Comayagua	12/12/00	9	89	105,666.00	351,661.00	457,327.00
15	CRWRC	Construyendo Sobre La Roca	Amarateca, Fco. Morazán	12/15/00	7	47	129,980.54	83,339.51	213,320.05
16	AIEH	La Lima	La Lima, Cortés	02/09/01	8	83	198,638.42	132,976.50	331,614.92
17	AIEH	Azacualpa	Azacualpa, Santa Bárbara	02/09/01	8	41	120,377.81	72,565.63	192,943.44
18	Project-Team-Work	Umaña de Santiago	Pimienta, Cortés	02/28/01	7	60	283,569.96	211,956.30	495,526.26
19	ADRA / INTEGRAL	Streets Grading	Amarateca, Fco. Morazán	02/07/01	3		18,773.58	*	18,773.58
20	Land, Yoro	Land	Agua Blanca Sur, Yoro	04/17/01	1	450	50,000.00	70,688.51	120,688.51
21	CAM	Municipality of Puerto Cortés	Puerto Cortés, Cortés	05/09/01	5	300	47,432.65	43,348.10	90,780.75
22	VLM Inversiones	Well Perforation and Pump	Villa Linda Miller, TGU.	03/05/01	1	164	24,913.29	*	24,913.29
23	Atlas Logistique	Hato Nuevo, La Redonda	Hato Nuevo, Choluteca	06/05/01	3	26	96,401.82	62,385.95	158,787.77
24	ADRA / INTEGRAL	Rock Mantle Removal	Amarateca, Fco. Morazán	05/29/01	0.5		3,454.19	*	3,454.19
25	CI/APAN	El Milagro	Villanueva, Cortés	06/18/01	4	200	725,903.00	390,013.64	1,115,916.64
26	VLM Ingenierfa Ortega	Sewage System	Villa Linda Miller, TGU	07/09/01	2.5		109,594.92	205,000.00	314,594.92
27	VLM	Topography	Villa Linda Miller, TGU	08/01/01	0.2		221.87	*	221.87
28	ADRA	Land Treatment Plant	Amarateca, Fco. Morazán	08/07/01	1.5	500	111,602.04	*	111,602.04
29	VLM GEOCONSULT	Soil Studies	Villa Linda Miller, TGU	08/22/01	0.5		1,756.14	*	1,756.14
30	VLM	Design of Treatment Plant (TP)	Villa Linda Miller, TGU	09/13/01	0.5		3,082.94	*	3,082.94
31	VLM	Construction Treatment Plant	Villa Linda Miller, TGU	09/03/01	4		55,442.31	*	55,442.31
32	Atlas Logistique	Hato Nuevo Water	Hato Nuevo, Choluteca	09/01/01	2	**	82,950.00	*	82,950.00
33	VLM	Monitoring (TP) and Training	Villa Linda Miller, TGU	09/03/01	2		3,580.54	*	3,580.54
34	CHF							100,000.00	100,000.00
35	Audit						13,843.01		13,843.01
	TOTAL					4,617	6,125,641.52	5,376,837.78	11,505,479.30

* The counterpart of these projects is included in the first phase of the project.

** Solutions included in previous phases.

HOGAR Final Performance Report
Table 2
Solutions Summary

No.	NGO	Project	Solutions	Total Solutions				
				Housing	Water	San.	Land	Other
1	CI/APAN	Niños Felices	34	34				
2	NPH	Nueva Esperanza	144	30				144
3	GOAL	Colonia Irlanda	75	75	75	75		
4	GOAL	Flor del Campo	100	100	100	100	100	
5	HABITAT	Residencial Habitat	175	175				
6	AIEH	Col. Japón	260	80		260		260
7	ADRA	Villa El Porvenir	121	121				121
8	CRS	Colonias Unidas	749	208	749			
9	GOAL	Casco Urbano (Rehabilitation)	132	132				
10	GOAL	Las Liconas (Rehabilitation)	28	28				
11	CI/APAN	Renacer	110	110				
12	Hermanos Maristas	Col. Marcelino Champagnat	620		620			
13	Atlas Logistique	Hato Nuevo Phase I & II	109	109				
14	GOAL	Lazos de Amistad	89		89			
15	CRWRC	Construyendo Sobre La Roca	47	47				
16	AIEH	La Lima	83	83	83	83		
17	AIEH	Azacualpa	41	41	41			
18	Project Team Work	Umaña de Santiago	60	60	60			
19	ADRA / INTEGRAL	Streets Grading						
20	Land, Yoro	Land	450				450	
21	CAM	Municipality of Puerto Cortés	300					300
22	Patronato Villa Linda Miller	Villa Linda Miller	164		164	164		164
23	Atlas Logistique	Hato Nuevo, La Redonda	26	26				
24	ADRA / INTEGRAL	Rock Mantle Removal	***					
25	CI/APAN	El Milagro	200	200	200	200		
26	VLM Ingeniería Ortega	Sewage System	***					
27	VLM	Topography	***					
28	ADRA	Land Treatment Plant	500				500	
29	VLM GEOCONSULT	Soil Studies	***					
30	VLM	Design Treatment Plant (TP)	***					
31	VLM	Construction Treatment Plant	***					
32	Atlas Logistique	Hato Nuevo Water	***		135			
33	VLM	Monitoring (TP) and Training	***					
		TOTAL	4617	1659	1414	180	950	414

Each Solution has been counted once.

*** Solutions and counterparts included in previous phases.

HOGAR Final Performance Report

Table 3

Housing Cost Summary

No	NGO	Project	Hosing Solutions	Direct Cost US \$	House Area M2	Cost/ M2 US \$	Area Lot M2	House Occupancy %
1	APAN	Niños Felices	34	1,906.00	30	64	120	97
2	NPH	Nueva Esperanza	30	1,971.48	40	49	151	100
3	GOAL	Colonia Irlanda	75	2,803.48	33	85	200	95
4	GOAL	Flor del Campo	100	3,123.52	42	74	300	94
5	HABITAT	Residencial Habitat	175	3,305.33	48	73	134	96
6	AIEH	Col. Japón	80	2,322.00	30	77	126	100
7	ADRA	Villa El Porvenir	121	1,555.00	30	52	140	56
8	CRS	Colonias Unidas	208	3,075.62	42	73	270	93
9	GOAL	Casco Urbano (Rehabilitation)	132	*	*	*	*	100
10	GOAL	Las Liconas (Rehabilitation)	28	*	*	*	*	100
11	APAN	Renacer	110	2,763.00	40	68	140	100
12	Hermanos Maristas	Col. Marcelino Champagnat	N/A					
13	Atlas Logistique	Hato Nuevo I & II	109	3,468.00	36	96	*	100
14	GOAL	Lazos de Amistad	N/A					
15	CRWRC	Construyendo Sobre La Roca	47	3,877.20	46	84	112	100
16	AIEH	La Lima	83	2,827.00	30	94	120	79
17	AIEH	Azacualpa	41	2,497.00	30	83	162	61
18	Project Team Work	Umaña de Santiago	60	3,200.00	36	89	162	100
19	ADRA / INTEGRAL	Streets Grading	N/A					
20	Land, Yoro	Land	N/A					
21	CAM	Municipality of Puerto Cortés	N/A					
22	Patronato Villa Linda Miller	Villa Linda Miller	N/A					
23	Atlas Logistique	Hato Nuevo, La Redonda	26	*	*	*	*	100
24	ADRA / INTEGRAL	Rock Mantle Removal	N/A					
25	APAN	El Milagro	200	2,854.29	40	71	40	95
26	VLM Ingeniería Ortega	Sewage System	N/A					
27	VLM	Topography	N/A					
28	ADRA	Land Treatment Plant	N/A					
29	VLM GEOCONSULT	Soil Studies	N/A					
30	VLM	Design Treatment Plant (TP)	N/A					
31	VLM	Construction Treatment Plant	N/A					
32	Atlas Logistique	Hato Nuevo Water	N/A					
33	VLM	Monitoring (TP) and Training	N/A					
		TOTAL	1659					

* These were rehabilitation projects, cost, lots and house sizes varied significantly according to needed repairs.

HOGAR Final Performance Report
Table 4
Counterpart Summary

No.	NGO	Project	Voluntary Services US \$	Services and Property US \$	Beneficiary Counterpart US \$	Materials and Supplies US \$	Economic Resources US \$	GRAND-TOTAL US \$
1	CI/APAN	Niños Felices		8,558.96	21,377.92	5,287.61	4,876.55	40,101.04
2	NPH	Nueva Esperanza		182,507.90	134,606.10	421,200.46		738,314.46
3	GOAL	Colonia Irlanda		65,458.00	106,513.33		143,620.00	315,591.33
4	GOAL	Flor del Campo			140,091.67		50,069.17	190,160.84
5	HABITAT	Residencial Hábitat	12,642.92	168,413.61	30,613.26	239,443.98		451,113.77
6	AIEH	Col. Japón	2,343.85	358,004.44	17,373.21	16,083.06		393,804.56
7	ADRA	Villa El Porvenir	1,288.57	98,953.58	9,811.21	154,966.14		265,019.50
8	CRS	Colonias Unidas		59,287.08	140,668.90	281,880.93	22,258.07	504,094.98
9	GOAL	Casco Urbano (Rehabilitation)		160,477.48	55,614.96	2,459.45		218,551.89
10	GOAL	Las Liconas, (Rehabilitation)		16,900.30	19,925.60	2,367.74		39,193.64
11	CI/APAN	Renacer	43,834.93	98,348.95		27,697.95		169,881.83
12	Hermanos Maristas	Col. Marcelino Champagnat	2,056.75	44,960.49	35,487.47	4,607.15	9,630.69	96,742.55
13	Atlas Logistique	Hato Nuevo I & II	20,183.00	73,725.73	122,968.52	13,455.00		230,332.25
14	GOAL	Lazos de Amistad		2,020.00	15,152.00	301,353.00	33,136.00	351,661.00
15	CRWRC	Construyendo Sobre La Roca	12,113.28	4,652.34		36,702.60	29,871.29	83,339.51
16	AIEH	La Lima	1,250.60	94,198.74	27,636.49	9,890.67		132,976.50
17	AIEH	Azacualpa	571.14	54,465.48	15,194.61	2,334.40		72,565.63
18	Project Team Work	Umaña de Santiago	52,472.28		8,000.00	51,875.30	99,608.72	211,956.30
19	ADRA / INTEGRAL	Streets Grading	***					
20	Land, Yoro	Land		70,688.51				70,688.51
21	CAM	Municipalidad Puerto Cortés		43,348.10				43,348.10
22	VLM Inversiones Diversas	Villa Linda Miller				205,000.00		205,000.00
23	Atlas Logistique	Hato Nuevo, La Redonda	7,500.00	30,267.00	19,594.95	5,024.00		62,385.95
24	ADRA / INTEGRAL	Rock Mantle Removal	***					
25	CI/APAN	El Milagro	12,113.28	212,003.95	157,441.76	8,454.65		390,013.64
26	VLM Ingeniería Ortega	Sewage System	***					
27	VLM	Topography	***					
28	ADRA	Land Treatment Plant	***					
29	VLM GEOCONSULT	Soil Studies	***					
30	VLM	Design Treatment Plant (TP)	***					
31	VLM	Construction Treatment Plant	***					
32	Atlas Logistique	Hato Nuevo Water	***					
33	VLM	Monitoring (TP) and Training	***					
34	CHF					100,000.00		100,000.00
		TOTAL	168,370.60	1,847,240.64	1,078,071.96	1,890,084.09	393,070.49	5,376,837.78

K. ANNEX "A"

CI-APAN, Niños Felices

Project	Niños Felices
NGO	Children International / APAN
Project Location	La Guacamaya, El Progreso, Yoro
Project Duration	2 months
Total Project Cost	US \$120,676.04
HOGAR Program Funding	US \$ 80,575.00
NGO Counterpart	US \$ 40,101.04
Number of Solutions	34



Project Objectives

- Construct 34 houses for families displaced by Hurricane Mitch that lived in the neighboring communities of Las Minas, La Sarrosa and El Bálsamo.
- Build safe houses that can withstand future natural disasters.
- Complete CI / APAN Pilot Housing Project in partnership with CHF/Honduras.
- Increase the income-generation capacity of beneficiaries and skilled workers that work on the project.

Technical Aspects

Housing

The house design incorporates recommendations of the *Instituto Hondureño de Formación Profesional (INFOP)* and includes considerations to guard against the effects of high winds, minor flooding, seismic movement, proper drainage, etc. All houses are equipped for electrical and indoor water services. The design allows future expansion of the house.



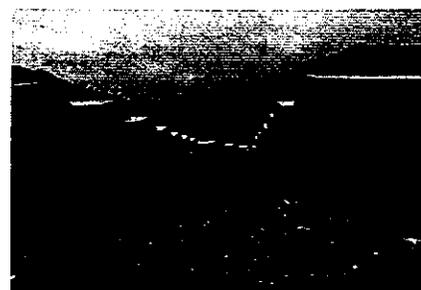
Water

The *Fondo Hondureño de Inversión Social (FHIS)* funded a new water system for the Guacamaya community. The community took an active roll in the negotiation, approval and construction phases of the project. A local Water Board now operates and manages the system. The new residents from Niños Felices pay Lps.835.00 for connection costs. A monthly fee is charged by the Water Board to assure proper function.



Sanitation

The indoor bathroom with a shower and a tank-less toilet, draining into a septic pit, provide an environmentally sound and hygienic sanitary solution for the project beneficiaries. Wastewater from showers and washbasins drain into an absorption pit located on each lot allowing a natural treatment process. For the beneficiary's families, this new sanitary solution represents an important improvement in their quality of living and will help them have a healthy community.



Environmental Aspects

Project Impact

In order to ensure that this housing project did not have a significant negative effect on the Guacamaya community, CI / APAN complied with USAID and Honduran environmental regulations. An environmental assessment (EA) was carried out by SERNA, with the proper mitigation measures already taken into consideration in the project design. SERNA granted the environmental licenses for the project beneficiaries.

Mitigation Measures

The mitigation measures proposed as a result of the EA included the use of fuel-efficient stoves for cooking purposes, ensure the quality of the water supply, proper infrastructure for wastewater disposal and a reforestation program. The Environment Unit from the El Progreso Municipality is responsible for the application of these measures on the long run.

Social Aspects

Background

The target group for CI / APAN housing program are low-income families that were displaced by Hurricane Mitch and families living in high-risk areas of flooding or landslides. Beneficiaries for this project lived in the neighboring communities of Las Minas, La Sarrosa and El Bálsamo.

Community Strengthening

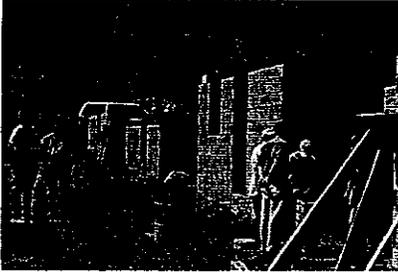
Community participation is a fundamental element in CI / APAN housing program. The community is organized under a *Patronato*, which oversees and manages all of the community's social aspects. Training of beneficiaries has been carried out since the beginning of the project, highlighting aspects such as the use of fuel-efficient stoves, reforestation, wastewater and solid waste disposal.

Project Sustainability

La Guacamaya is an area of ongoing CI / APAN sponsorship operations. To support their child sponsorship program, CI / APAN operates a clinic and a multi-purpose center in which medical care, nutritional aid and educational assistance is provided. The community has worked with APAN to develop a strategic plan to ensure project sustainability. This plan encouraged beneficiaries to protect their environment and to look for better opportunities in terms of employment and education.



Project Highlights



- Pilot project for the HOGAR program and first Cooperative Agreement granted.
- Good communication and cooperation between NGO and CHF.
- Use of excellent quality materials throughout the duration of the project.
- Important beneficiary participation through the project construction.

CHF Technical Assistance and Project Supervision



This was a project programmed to conclude in just one month according to the time line presented by APAN. This meant a lot of work and logistical support in the form of material purchases, skill labor negotiations, and site preparation, in order to ensure good quality standards and productivity. During the execution period, CHF's technical personnel made frequent inspections to the site. During these visits, quality of materials, labor and construction procedures were monitored, all with good results.

NGO Performance

The good performance of CI / APAN lead to the approval of the next two project proposals submitted by CI / APAN to the HOGAR Program. APAN proved to be an efficient and proactive Honduran NGO in their direct construction of the housing project. Their accomplishments in the construction of Niños Felices gave them the confidence needed to pursue higher goals for their future housing programs.

Comments

This was the first project for the HOGAR Program. Being the pilot project for the program, special attention was given to its execution. CI / APAN committed themselves to building an excellent project, one that could be seen as an example for future projects. For CHF's technical personnel it was a valuable experience, which helped them prepare for the work ahead.

Nuestros Pequeños Hermanos, Nueva Esperanza

Project	Nueva Esperanza
NGO	Nuestros Pequeños Hermanos
Project Location	Morocelí, El Paraíso
Project Duration	5 months
Total Project Cost	US \$879,087.46
HOGAR Program Funding	US \$140,773.00
NGO Counterpart	US \$738,314.46
Number of Solutions	144



Project Objectives

- To road grade an area of their site so that 144 houses could be constructed.
- To extend the main electrical conduction lines and public light posts, to provide electricity to the entire community
- To create and strengthen a self-sustained community,

Technical Aspects

Housing

As with other projects, NPH's houses are made out of concrete block with reinforced concrete columns and foundations. HOGAR contributed with construction materials to repair 31 of the 144 homes in Nueva Esperanza..



Water

The Nueva Esperanza Project has a complete water system recently built by USAID/FHIS. During its second stage and with savings from the site-grading contract they went ahead and added a second 1,500 gallon elevated water tank to supply construction activities. From the start, all families have been required to pay a monthly fee for water services. A permanent 40,000-gallon water tank has been installed by USAID/FHIS.



Sanitation

During construction, NPH built several clusters of latrines, one latrine for every 5 families. Families were in charge of their individual maintenance. The Nueva Esperanza project used funds from USAID/FHIS to construct a sewage system that discharges directly into a treatment facility consisting of two oxidation lagoons. The system is capable of treating all wastewater from the existing population and could be easily expanded if necessary.



Environmental Aspects

Project Impact

This development is located in an area not known for being forested, but this was a main goal in NPH's proposal. NPH put special emphasis and effort to establish a working relationship with *Fundación Vida*, an ecological foundation working for the environment. *Fundación Vida* has been providing training through workshops for the beneficiaries, mainly in reforestation and recycling.

Mitigation Measures

The core of this contract was the grading of 15,274.91 square meters of terrain to prepare the lots for future house and road construction. The works included carved out storm drainage channels. Additionally, the existing electrical system was improved and expanded with the installation of 1,300 meters of wiring and electrical posts. This has reduced considerably the use of wood for cooking.

Social Aspects

Background

95 percent of the beneficiaries in the project have been relocated from Tegucigalpa, mainly from the macro shelters located in Tegucigalpa and some neighborhoods located in high-risk areas. All selected families went through a process that included a mandatory participation in eight different workshops held by NPH and other cooperating organizations.

Community Strengthening

From the very start NPH has been organizing and training the beneficiaries to manage their own community, encouraging the organization of community boards and *Patronatos*. The community is already organized in *Patronatos* and has three very strong committees, the security committee, the sanitation committee and the education committee.

Project Sustainability

The community, with the help from NPH, has already established several micro enterprises like a shoe factory and training school, a welder's school, upholstery, a community store, a carpentry shop, a chicken farm and several small individual enterprises. The community has all the tools and training needed to strive as a successful independent group.



Project Highlights



- NPH has provided the beneficiaries with the right training and tools to endure a sustainable environment.
- Excellent beneficiary selection process.
- NPH has achieved a great deal of cooperation from many governmental and non-governmental institutions, which has helped to improve the project's infrastructure and development.

CHF Technical Assistance and Project Supervision



One of the main areas where CHF provided significant assistance was obtaining the environmental license. CHF closely monitored this procedure and was in direct contact with DECA, providing logistical support to coordinate with other institutions to obtain their approval. Within three weeks, CHF helped NPH obtain the environmental license. A process that had initiated 2 years prior.

NGO Performance

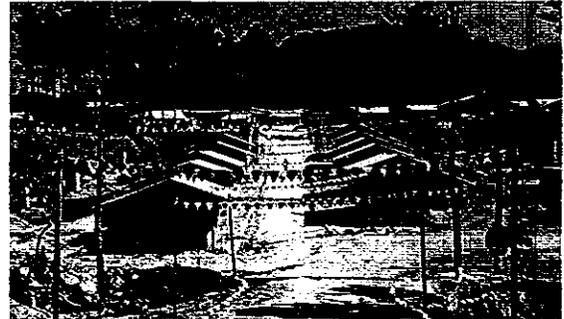
NPH has at all times been an extremely responsible and productive counterpart, continuously trying to learn and improve upon their already excellent skills with the sole purpose of truly helping a community.

Comments

Nueva Esperanza can be considered an example of a self-sustained community, strong and ready to grow as an independent entity.

GOAL, Colonia Irlanda

Project	Colonia Irlanda
NGO	GOAL
Project Location	San Jerónimo, Comayagua
Project Duration	7 months
Total Project Cost	US \$517,941.33
HOGAR Program Funding	US \$202,350.00
NGO Counterpart	US \$315,591.33
Number of Solutions	75



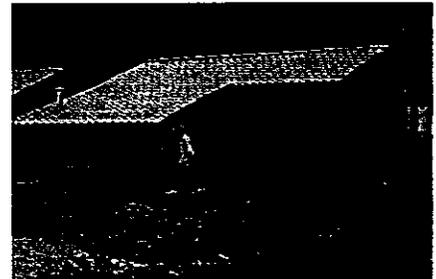
Project Objectives

- To improve 75 houses with potable water supply, latrines, and 75 washbasins.
- To enlarge the 75 houses with a rear kitchen extension and provide each one with a fuel-efficient stove.
- To improve the community with road construction, superficial drainage channels and a two-classroom school.
- To train beneficiaries in the construction of low-cost housing thus providing employment opportunities. Set up a Water Committee for the project.

Technical Aspects

Housing

The house design used was suited to the terrain and environmental conditions of the site with construction techniques and materials from the region. Foundations were of reinforced concrete, walls were made of concrete blocks, and roofs were from micro cement tiles. Doors and windows were made of wood.



Water

The water system consists of a 550-meter conduction line that derives from the San Jerónimo existing system, which was extensively checked and repaired to ensure the efficiency of the system. Additionally, a 5,000-gallon tank with chlorinating system was constructed as well as 75 house connections.



Sanitation

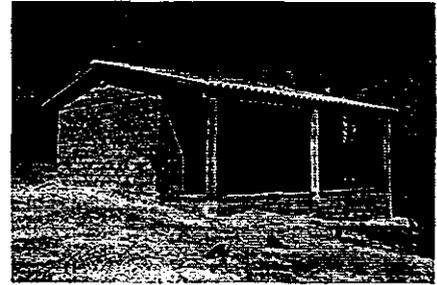
Given the type of soil of the site, GOAL proposed compost latrines to address the sanitation problem. Because of the time saving advantages and simplified maintenance, fiberglass latrines were implemented. Nevertheless these were not fully accepted by beneficiaries, GOAL is currently analyzing new permanent solutions to this problem. New ideas and technology, which involve a change of attitude in the people, require extensive training.



Environmental Aspects

Project Impact

The positive impact of a permanent water supply system in any community can be felt in other ways. Roads were improved and protected with a storm drainage system that channels rainwater into natural ditches. The *Colonia Irlanda* School built with HOGAR funding has simplified the life of children, bringing knowledge closer to their homes and making a big difference in their attitude towards learning.



Mitigation Measures

To protect the surrounding forest, reforestation initiatives have been implemented, and women constructed fuel-efficient stoves. An energetic plot has also been implemented. Other mitigation measures may be observed in the construction of the house where wire was used to secure the tiles exposed to the strong winds of the area. Deforestation was minimized during construction and wastewater was addressed with absorption pits and drainage channels.



Social Aspects

Background

The 75 families selected were previously investigated to determine their specific circumstances after Hurricane Mitch. They were from the communities of La Cuesta and San Jerónimo, Comayagua . Of these, 129 are women, 156 men and 147 are children for a total of 432 beneficiaries.



Community Strengthening

GOAL seeks to train beneficiaries through their involvement in the project in skills that will be helpful once the project is completed. Beneficiaries participated in the production of tiles, construction of stoves, block layering and excavation. Other training is taking place in organizational skills and creation of small enterprises.



Project Sustainability

With the help of GOAL's social staff and CENET, committees for health and environmental protection have been established. CENET is currently running a program of social development and guidance. CENET and GOAL continue to monitor results



Project Highlights



- Enthusiastic beneficiary participation.
- Highly professional committed staff.
- Excellent communication with beneficiaries and CHF staff.

CHF Technical Assistance and Project Supervision



HOGAR's technical staff was in constant communication with GOAL's technicians. The final design for the kitchen extension was modified from the original following recommendations from HOGAR personnel. Furthermore, CHF had significant participation in solving the numerous problems encountered, especially in the water system, due to design and construction errors in San Jerónimo's existing conduction line.

NGO Performance

The *Colonia Irlanda* Project was CHF's first experience with GOAL marking the beginning of a very good working relationship characterized by excellent communication and coordination between the two organizations. GOAL has effectively addressed all problems encountered.

Comments

GOAL's commitment to improve the life of the poor and displaced victims of Hurricane Mitch and their dedicated and highly professional staff have made *Colonia Irlanda* a successful project targeting the most vulnerable of the Honduran society and making a difference in their lives.

HABITAT, Residencial Hábitat

Project	Residencial Hábitat
NGO	HABITAT
Project Location	Amarateca, Fco. Morazán
Project Duration	13 months
Total Project Cost	US \$951,113.77
HOGAR Program Funding	US \$500,000.00
NGO Counterpart	US \$451,113.77
Number of Solutions	175



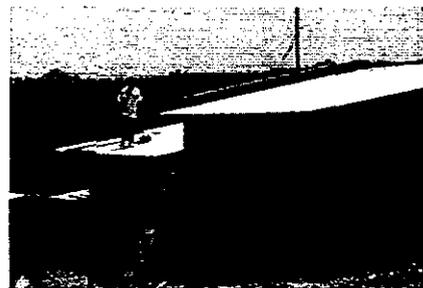
Project Objectives

- To build 175 houses for families from Tegucigalpa displaced by Hurricane Mitch whom lived in the macro shelters *El Molino I, Molino II and Trébol II*.
- To implement a Credit Program for the housing project.
- To implement a comprehensive training program with the beneficiaries, focusing in areas such as education, community management, environmental and health issues.

Technical Aspects

Housing

Habitat designed the house taking into consideration the results of inquiries made to the potential homeowners. The materials are those commonly used in Honduras such as concrete block walls. The design incorporates a kitchen and a bathroom inside the house and also includes two bedrooms and a small living room. Habitat uses the Duplex concept to build their houses allowing cost reductions.



Water

Habitat's project will be benefited with a permanent water system that is currently being developed by USAID/FHIS. This water project will meet the demand for all four housing projects in the area: HABITAT, CRWRC, CARITAS and ADRA. At the time, the source of water for the project is a well with a limited production capacity. This system will be used until the permanent solution is completed in approximately one year.



Sanitation

USAID/FHIS are currently sponsoring the construction of a traditional sewage system that will be connected to treatment lagoons located about one mile away from the site. The system will collect all wastewater from the four projects mentioned previously and is scheduled to be completed by the end of 2002. Currently, Habitat's beneficiaries are using individual compost latrines.



Environmental Aspects

Project Impact

To put into perspective the impact that this new human settlement will have on the local environment, one must not think about it as an individual project, but as a whole community that includes the projects of ADRA and CRWCR. They have already merged into one big community with more than 800 families confronting the same environmental and social issues, as well as sharing the same source of water and will eventually be connected by the same sewer system.



Mitigation Measures

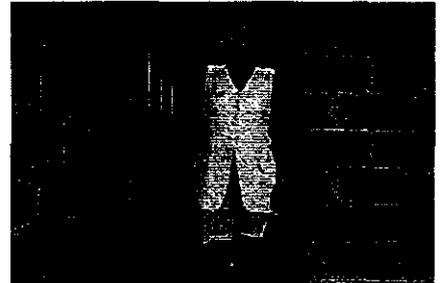
Issues such as solid waste disposal, transportation and delinquency are being addressed jointly by the three projects. One step toward dealing with those issues was the organization of local committees or community boards. They already have programs for waste collection and final disposal as well as reforestation of the area.



Social Aspects

Background

The 175 target families that compose this project have been selected from the temporary shelters *Molino I, Molino II and Trebol II*. Important factors for the final selection were the ability of the families to participate in the project's construction, employment and income.



Community Strengthening

The community organized themselves under a local board or *Patronato*, divided into water committees, security committees, solid waste collection committees, education committees and others, to establish a self-sustained governing body for the community.



Project Sustainability

The ability of the community to manage the social issues, water and sanitation facilities and the maintenance of other infrastructure will be the key to assure the project's sustainability.

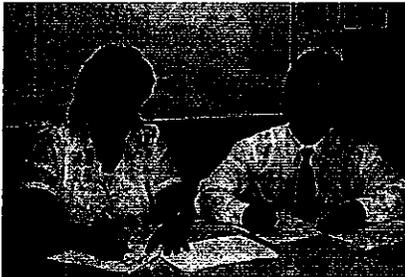


Project Highlights



- Implementing a credit program with the homeowners.
- Good construction techniques and quality observed throughout the project's lifetime.
- Implementation of a comprehensive training program with the beneficiaries.

CHF Technical Assistance and Project Supervision



Periodic technical inspections were made during the construction of the project to oversee overall quality. Habitat's technical personnel and in particular their site engineer, always took into consideration the suggestions made by CHF's technical staff. This disposition helped maintain a good working relationship throughout the project's lifetime.

NGO Performance

HABITAT for Humanity/Honduras is part of a well-known international organization and as an international NGO they have worked in more than 69 countries around the world. Locally in Honduras and since 1993 they have built 1,800 new houses throughout the country. This 175 housing project, funded in part by the HOGAR program, speaks just a little about the good work carried out by HABITAT in Honduras.

Comments

This project in particular is proof that good project planning and selection of good technical personnel can achieve satisfactory results in the most complicated situations.

AIEH, Colonia Japón

Project	Colonia Japón
NGO	AIEH
Project Location	Choloma, Cortés
Project Duration	9 months
Total Project Cost	US \$749,515.89
HOGAR Program Funding	US \$355,711.33
NGO Counterpart	US \$393,804.56
Number of Solutions	260



Project Objectives

- To build 80 houses for families living in areas of high-risk of flooding from the river banks of the Choloma River.
- To build a sewer system for the new *Colonia Japón*, providing an adequate sanitation solution for the 260 families living in the neighborhood.
- To support the Municipality of Choloma by building social infrastructure in the new neighborhood (3 classrooms for an elementary school, a clinic, and a multi-purpose center).

Technical Aspects

Housing

The house design used by AIEH included one bedroom, a bathroom and a living room. The materials used are concrete blocks and zinc sheeting roof. The design allows for future expansion of the house. All houses were equipped with a toilet, shower and washing basin. 80 houses were built with HOGAR funds, while 180 were built with funds from other organizations.



Water

The water system was a donation from the government of Japan. This independent system supplies water to 254 houses, the school, clinic and the multi-purpose center. The community's *Patronato* manages the water system.



Sanitation

AIEH presented individual septic tanks as the sanitary solution for the project. After visiting the site, CHF's technical personnel reported that in this particular area of the project, the underground water levels were high, just 9 to 6 feet from the surface. Taking that and other important aspects into consideration, CHF decided to grant the funds to build a formal sewer system instead of septic tanks.



Environmental Aspects

Project Impact

The construction of a sewer system in *Colonia Japón* was a needed service, which definitely changed the face of the community. It created a more environmentally aware community. Beneficiaries are currently working on their own in street improvements and are already working towards new goals such as the electrical system installation.



Mitigation Measures

The area in which the project is located is a non-flooding area and is free of risks such as landslides or seismic movements. During the construction of the project there were environmental issues to be addressed such as gray water final disposal. The solution came with the construction of the sewer system. All houses were connected to the system, eliminating the running of contaminated water through the playgrounds and street gutters.



Social Aspects

Background

The beneficiaries of *Colonia Japón* were all families living in the banks of the Choloma River, whose houses were destroyed during the hurricane. The municipality of Choloma listed all the affected families in the area. The beneficiaries of the project were chosen from that list. AIEH also conducted an extensive verification and analysis of that data.



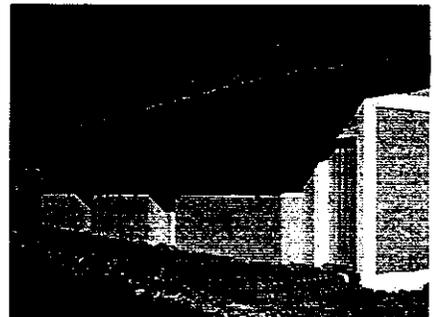
Community Strengthening

In order to ensure the project's sustainability of its community development programs, AIEH is supporting training in solid waste disposal management, reforestation initiatives and workshops in credit programs. The municipality of Choloma will be in charge of the sewage system's operation and maintenance.

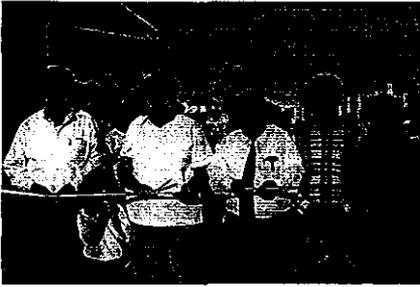


Project Sustainability

Colonia Japón is located within the urban perimeter of the city of Choloma. Currently Choloma is experimenting an important economic growth situation that has forced the local government to catch up with the development of the city by expanding their infrastructure and managing the demand for public services such a water supply, solid waste disposal, medical care, housing and education. *Colonia Japón* can take advantage of this situation by using the municipality to supports its projects.



Project Highlights



- 80 Houses built with high quality standards.
- Construction of a sewer system for *Colonia Japón*.
- Construction of an elementary school, a clinic and a multi-purpose center.

CHF Technical Assistance and Project Supervision



Periodic technical inspections were made to oversee the project progress. A good working relationship with the site engineer helped maintain good communication throughout the project's lifetime. Emphasis was made in the quality control of materials and labor.

NGO Performance

AIEH is a Honduran NGO with more than 30 years of experience and have been working on housing projects since 1992. They have built 20 housing projects, more than 2,300 houses in the northern departments of Cortés, Yoro and Santa Bárbara. With this background, a good performance was expected. In the technical aspect of the project, AIEH did good work, but they did show weakness in their administrative capacity. In order to comply with USAID and CHF administrative regulations, AIEH received proper consulting and guidelines from CHF.

Comments

It was CHF's intention to work together with AIEH and support their project initiatives in order to help them develop their institutional capacity. As one of the institutions with a credit program, it is expected that with the cost recovery from their credit program an important fund will be available for future housing projects.

GOAL, Las Liconas

Project	Las Liconas (Rehabilitation)
NGO	GOAL
Project Location	Las Liconas, Comayagua
Project Duration	4.5 Months
Total Project Cost	US \$107,109.44
HOGAR Program Funding	US \$ 67,915.80
NGO Counterpart	US \$ 39,193.64
Number of Solutions	28



Project Objectives

- To rehabilitate or replace houses damaged during Hurricane Mitch.
- To target families considered the poorest of the area where little if not any aid was provided.

Technical Aspects

Housing

Las Liconas's rehabilitation project can be considered Casco Urbano's twin project with technical similarities as well as similar social aspects. Rehabilitation varied according to work required in each case, but in most cases concrete floors, wooden doors and windows and micro-concrete roofing was applied.



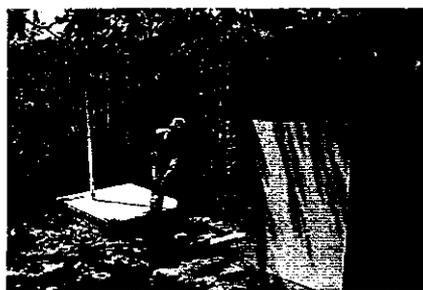
Water

In order to comply with the program's regulations, each applicant family had to have access to a water connection. Either the connection would already exist, or a connection to the main distribution system. All new connections had to be previously approved by the local municipal authorities.



Sanitation

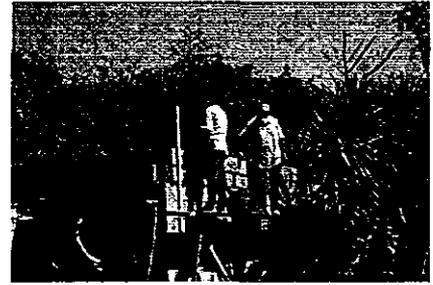
As many of the families already had deteriorated latrines installed in their houses, GOAL went about repairing each damaged latrine, replacing walls, re-digging holes and fitting the pits with concrete covers. Latrines that needed no replacement were only refitted with new doors or walls, as needed.



Environmental Aspects

Project Impact

The project's implementation became an effective tool to mitigate many of the existing environmental issues. Some issues addressed were the use of large quantities of wood in the *bahareque* construction, wastewater filtration and other sanitation issues derived from the lack of proper floors and water connections.



Mitigation Measures

Concrete block homes will eliminate the family's need to chop wood for construction and maintenance of their *bahareque* homes, which will also improve the health of family members significantly. Bacteria and insects known to hatch in the mud walls will thus be eliminated with the improved air circulation. Latrine rehabilitations will prevent hazardous infiltrations.



Social Aspects

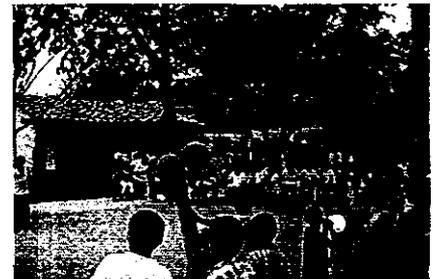
Background

The 28 participating families were selected from Las Liconas Village, about 2 miles from Comayagua. Most of these families are dedicated to agriculture. It was a requirement that one family member participated in the construction of all 28 houses.



Community Strengthening

The need for the beneficiaries to work on all 28 houses helped strengthen this community significantly. Even though it is a small village, houses are spread well apart from each other. Goal's methodology has proven to be very effective in bringing this community together.



Project Sustainability

This is the first time many of these families have owned any property of real value; now their houses have become equity and can serve as bank guarantees that make them eligible for loans for future improvement. It is expected that through the municipal authorities further improvements will follow. Proud owners are already planning to expand and improve their homes.



Project Highlights



- Though difficult at first, logistics were effectively handled.
- Final positive results in spite of initial difficulties of integration of beneficiaries into the work ethic.
- Decision-making skills were crucial in this project specifically in the choice of materials.
- Great experience for the Casco Urbano Rehabilitation project which followed shortly after.

CHF Technical Assistance and Project Supervision



CHF's constant supervision of this project brought about significant changes to the project's management, use of materials and overall building quality. During the project execution, it was constantly stressed that any problem found on this project would not be expected or admitted in the Casco Urbano Project. Several improvement lists were drawn up before this project could be approved.

NGO Performance

GOAL, as in previous projects, carried out a successful project plan. Close attention was paid to logistics, since this was a determining factor in completing the project under a tight schedule. GOAL had a difficult task in identifying the right quality of materials for the project and also setting up logistics for distribution, which led to a change in procedures and policies for the Casco Urbano Project. With constant effort and a positive attitude, GOAL managed to successfully complete this project.

Comments

The beneficiaries of this project helped in the construction of their own houses. They were housed in temporary shelters near the construction site which significantly aided in the completion of the construction. They were able to witness on a day to day basis the advances made, which kept their spirits high.

CI-APAN, Renacer de Guacamaya

Project	Renacer de Guacamaya
NGO	Children International / APAN
Project Location	La Guacamaya, El Progreso, Yoro
Project Duration	10 Months
Total Project Cost	US \$504,421.83
HOGAR Program Funding	US \$334,540.00
NGO Counterpart	US \$169,881.83
Number of Solutions	110



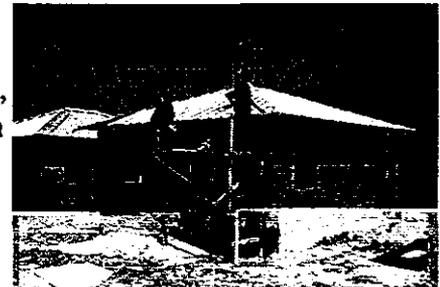
Project Objectives

- To build 110 houses for families displaced by Hurricane Mitch that lived in the neighboring communities of Las Minas, La Sarrosa, El Bálsamo and the river banks of El Progreso.
- To increase the income generating capacity of beneficiaries and skilled workers that participated in the construction of the project.
- To increase leadership skills in the community by having a Construction Committee composed of program beneficiaries to operate the housing program along with the APAN staff.

Technical Aspects

Housing

The design used by APAN suits the actual semi-urban development of La Guacamaya community. The house distribution consists of two bedrooms, a living room and a bathroom. The purpose of the open space of the porch is so that it can be used for cooking. The materials used are common in Honduras: concrete floors, walls of concrete block and corrugated tin roofs. The house design includes technical recommendations to guard against the effects of high winds, minor flooding and seismic movement.



Water

The water system supplying potable water for the RENACER project was built by FHIS in the year 2000 as part of the government effort to replace vital infrastructure damaged by Hurricane Mitch. This water system is also serving the community of Guacamaya with whom Renacer inhabitants are sharing not only the benefits but the responsibilities of the system.



Sanitation

For most of the beneficiary families, the indoor bathroom (shower and a tank-less toilet bowl) represents a change for the better in their hygienic customs, since the majority of the families' sanitary solutions were pit latrines. The toilet drains into a septic tank and absorption pit for liquids. A drainage system was built just for wastes from the washing basin and shower to assure an optimal use of the septic pit and avoid the exposure and running of wastewater in patios and streets.



Environmental Aspects

Project Impact

CHF's technical personnel consider that appropriate environmental safeguards were adopted to assure a sustainable new community. APAN took into consideration the most important environmental impacts caused by this housing project. APAN confirmed that the water system to be used for the project is capable of fulfilling the community's present and future water requirements.



Mitigation Measures

The site development took into consideration the existing landscape, which allows a coherent integration with the existing vegetation. For the disposal of the wastewater, an independent system was built which drains into a municipal collector. Reforestation for the open areas within the new community will be accomplished through the *Cervecería Hondureña* reforestation program. The storm drainage system consists of concrete gutters built along each street. Currently, the beneficiaries use fuel-efficient stoves for cooking, although grid power will be available in the near future.



Social Aspects

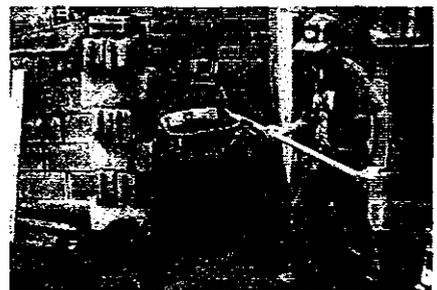
Background

After Hurricane Mitch, the majority of the displaced families were in the north of Honduras. CI-APAN, a child-sponsoring institution, came in contact with many of these families from El Progreso, San Pedro Sula, Santa Rita, Villanueva and San Manuel. CI-APAN selected the final list of beneficiaries with the collaboration of development committees of these municipalities..



Community Strengthening

In order to ensure sustainability of the systems, to create health awareness, and to improve their quality of life, CI-APAN is implementing a training program that includes sensibilization towards garbage disposal, human relations, construction and use of fuel-efficient stoves.



Project Sustainability

The water system is operated and maintained by a community board. In order to have access to the water service each families pays a single connection fee of 835 *Lempiras*. Additionally, monthly payments are requested by the Water Board to maintain a fund that assures the system's operation, maintenance and management. The community also has committees for organized development security and sanitation.



Project Highlights



- Use of a new improved house design.
- Use of excellent quality materials through the project.
- Good communication and cooperation between NGO and CHF.
- Honduran President and USA Ambassador were present at the inauguration ceremony on May 5, 2001.

CHF Technical Assistance and Project Supervision



HOGAR technical personnel worked together with APAN's Project Director to improve the site development for the Renacer Project. Suggestions were made as early as the evaluation process to correct turn radius on all streets and to comply with local zoning laws, which included recreation and public areas. CHF recommended that an independent drainage system for the wastewater be built to allow a more hygienic and safe waste disposal system.

NGO Performance

As in their previous project, Niños Felices, APAN's performance was exemplary. Considering that the housing program of CI-APAN began in Honduras just after Hurricane Mitch, their results do not reflect this matter at all. Their logistical capacity and administration skills helped manage this half a million-dollar housing project smoothly and efficiently. CI-APAN's major strength is their institutional capacity, built through the Child Sponsorship Program that they have been operating in Honduras since 1981.

Comments

CI-APAN showed a genuine interest in executing challenging projects in a most professional and technically efficient manner, continuously demonstrating their personal interest in expanding their established capabilities and fields of action. Their constant professionalism and ethics has made a Child Sponsorship institution into an accomplished homebuilder and project developer.

Hermanos Maristas, Colonia Marcelino Champagnat

Project	Colonia Marcelino Champagnat
NGO	Hermanos Maristas
Project Location	Choluteca, Choluteca
Project Duration	5 months
Total Project Cost	US \$278,719.22
HOGAR Program Funding	US \$181,976.67
NGO Counterpart	US \$ 96,742.55
Number of Solutions	620



Project Objectives

- To build a potable water system that will serve the entire community through house connections.
- To construct 3 extra classrooms and a community library in the Saúl Juárez School in Col. Marcelino Champagnat.
- To provide training in community development and environmental initiatives.
- To ensure the beneficiaries are trained in the use, maintenance and management of the system.

Technical Aspects

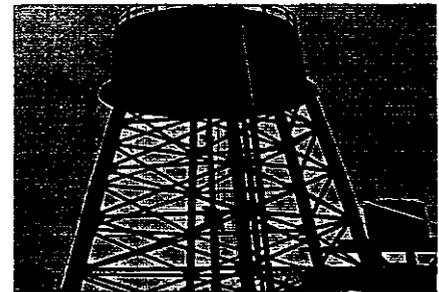
Housing

This community was created in 1999 and consists of 620 houses constructed by different organizations such as CARE, Hermanos Maristas and Spanish CARITAS. Designs vary as well as materials used, but mostly concrete blocks and zinc sheets were used in the constructions.



Water

The permanent water system consists of a perforated well, electrically generated pump, pump line, 15 kilometers of main distribution network, 620 house connections, and a metallic elevated tank with a capacity for 50,000 gallons. The system was tested after final inspection, proving its efficiency and with excellent water pressure throughout the community.



Sanitation

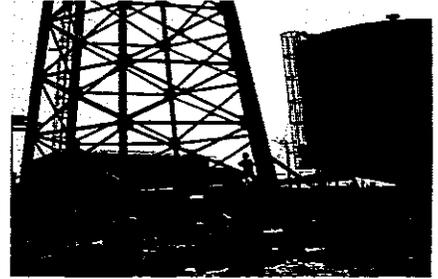
The houses were originally provided with pit latrines as a provisional sanitary solution. With the construction of the water system, Hermanos Maristas added washbasins and bathing facilities to the houses. Shortly after concluding the water system, Hermanos Maristas with Spanish funding started the construction of the sewage system, which includes a treatment plant that is expected to conclude at the end of this year.



Environmental Aspects

Project Impact

The permanent water system is only part of the development scheme, which is being implemented in the community. HOGAR program also contributed with the construction of three extra classrooms and a library in the community's school *Saúl Juárez*. The Spanish government will donate equipment and books.



Mitigation Measures

Beneficiaries were trained by CHF staff in the construction of absorption pits in order to address the wastewater disposal issue. Many beneficiaries have implemented this temporary solution to minimize the flow of wastewater while the water system and sewage systems are being constructed. .



Social Aspects

Background

The 620 families that currently live in *Colonia Marcelino Champagnat* were victims that lost their homes during Hurricane Mitch. These people formerly lived in 32 communities from neighboring towns and Choluteca City neighborhoods.



Community Strengthening

Beneficiaries were involved in the project, mainly in the excavation of the pipeline trenches and the construction of the concrete boxes for the house connections. They have received extensive training in different skills and environmental issues, such as disposal of solid wastes and community organization.



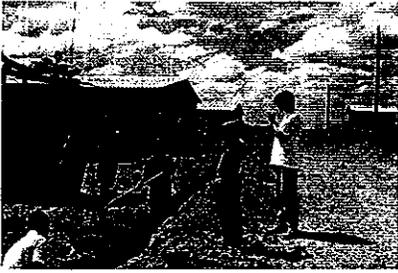
Project Sustainability

With the support of CARITAS' social workers, beneficiaries have organized a Water Management Committee that will manage and give maintenance to the system. An environmental committee, a welding shop and a community store have also been organized.



15

Project Highlights



- Strong social component.
- Excellent organizational skills.
- Execution was within proposed schedule and good quality standards.

CHF Technical Assistance and Project Supervision



The Technical staff of CHF-HOGAR was involved in the design and construction stage of the project proposing recommendations to maximize the efficiency of the system. Contractors were very open to suggestions and the communication with them was very good.

NGO Performance

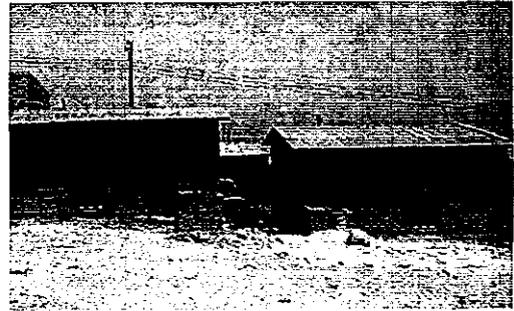
The Hermanos Maristas organization possesses an admirable commitment to social causes and a commendable desire to make a difference in the lives of the people in this community. They have proved honesty and responsibility in the execution of this project as well as excellent fund raising abilities.

Comments

This project was executed by a private construction firm, which ensured quality and speed in the works. Though Hermanos Maristas do not have a technical staff of their own, they have gained valuable experience through the different companies working for the development of this community.

CRWRC-MEVAS, Construyendo Sobre La Roca

Project	Construyendo Sobre La Roca
NGO	CRWRC/MEVAS
Project Location	Amarateca, Fco. Morazán
Project Duration	7 months
Total Project Cost	US \$213,320.05
HOGAR Program Funding	US \$129,980.54
NGO Counterpart	US \$ 83,339.51
Number of Solutions	47



Project Objectives

Construyendo Sobre La Roca is a project that attended to 78 families from the beneficiary list supplied by the International Organization of Migrations, IOM. CRWRC, with their Honduran counterpart Ministerios Evangélicos Ven A Servir (MEVAS), requested CHF funding to complete the project with the construction of 47 houses.

Technical Aspects

Housing

This housing solution consists of two bedrooms, 1 bathroom, and one living room, a total of 46 square meters. The walls are made out of masonry bricks, and the doors and windows are made out of steel. Concrete columns and a ring beam tying the columns together marked the structural reinforcements. The roof uses wooden rafters and zinc laminate sheeting. The structure and foundations of the house are prepared for a second floor.



Water

The Construyendo Sobre La Roca project will be benefited with a permanent water system that will be developed by USAID/FHIS (*Fondo Hondureño de Inversión Social*). This water project will meet the demand for all four housing projects in the area, HABITAT, CRWRC, CARITAS and ADRA. Currently, the families are using a temporary communal system and collect water daily. This system will be used until the permanent solution is completed in approximately one year.



Sanitation

USAID/FHIS are currently sponsoring the construction of a traditional sewage system that will be connected with treatment lagoons located about one mile away from the site. The system will collect all wastewater from the four projects mentioned previously and is scheduled to be completed by the end of 2002. The families already inhabiting the project are currently using individual compost latrines.



Environmental Aspects

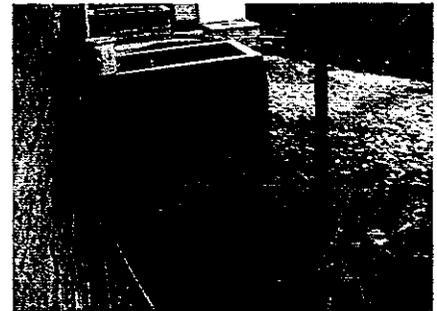
Project Impact

In order to treat all wastewater from the various projects in the area, wastewater treatment oxidation lagoons will be built about a mile away from the project. Another of the main concerns in the area is a permanent solid waste collection system.



Mitigation Measures

The project's beneficiaries have organized sanitation committees, which now charges Lps. 5.00 per family per month for regular weekly waste collection. All waste is then transported to the municipal landfill. As with the other projects in the area, beneficiaries are being trained in reforestation and preservation of plants.



Social Aspects

Background

CRWRC and Ven a Servir concentrated their efforts on relocating families that lived in areas deemed high-risk areas. Many neighborhoods in Tegucigalpa are prone to landslides but still are very densely populated. Structurally, most of these houses were damaged during Hurricane Mitch making an already shaky situation, critical. Participating families were required to work on their homes, mainly on filling and compacting the floors.



Community

As with the other projects in the area, the Construyendo Sobre La Roca community is required to be a member of a regional board to seek additional funding or support to address the various needs that these communities will encounter. As members of the regional board, it is also required for the community to organize local committees in their community such as a water and sanitation board and a security board.



Project Sustainability

The Construyendo Sobre La Roca Project community will be directly benefited from the achievements of its neighboring communities. They have formed a regional board that will concentrate its efforts on the improvement of the area. Furthermore, to ensure its sustainability, CRWRC has trained the families on how to organize micro enterprises providing them with new skills for potential employment opportunities.



Project Highlights



This has been the only project in which the proposed housing solution is made out of clay brick and future expansion is vertical, a second floor. Also, this has been one of the best thought out site plans of all the projects sponsored by HOGAR. For its implementation CRWRC prepared a clear set of urban plans.

CHF Technical Assistance and Project Supervision



CHF's inspections were constant and concise; many annotations with recommendations and direct instructions were made in each visit on the project's log. The inspections helped suggest additional structural reinforcements to the houses; construction of retaining walls and a list of repairs were drawn up before the project's conclusion.

NGO Performance

CRWRC can be considered a very responsible and capable institution. Its Honduran counterpart, Ven a Servir had some difficulties on the technical implementation of the construction project of this magnitude.

Comments

After the constant technical assistance provided to CRWRC, the project can be considered a success. At the conclusion of this project, a total of 78 families now have the opportunity to improve their living conditions and look forward to a better future.

Atlas Logistique, Hato Nuevo I y II y La Redonda

Project	Hato Nuevo I y II y La Redonda
NGO	Atlas Logistique
Project Location	Choluteca, Choluteca
Project Duration	11 months
Total Project Cost	US \$ 748,127.28
HOGAR Program Funding	US \$ 455,409.08
NGO Counterpart	US \$ 292,718.20
Number of Solutions	135



Project Objectives

- To build 113 new low cost houses and rehabilitate 22 existing houses for displaced families from Choluteca, providing them with a potable water system and house connections, sanitary solutions, wastewater disposal system, health care center, communal center and access to electricity.
- To give necessary training in health related issues as well as other areas that will provide them with new skills for potential employment opportunities.

Technical Aspects

Housing

The house design consists of two bedrooms, dining-living room area, and an external hall where washing basin, bathroom and stoves are located. Materials used in the houses are 15 cm blocks, concrete floors with reinforced foundations and tiles. The use of tiles and the hallway ensured nice cool temperatures inside the homes.



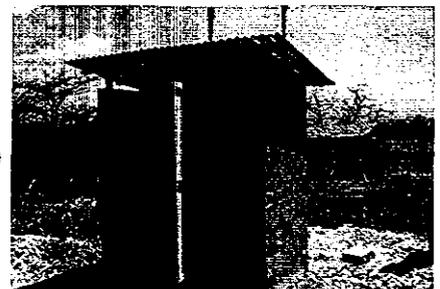
Water

The water system consists of 2 electrical pumps in 2 different wells from which two 15,000 g tanks are fed, one for Hato Nuevo I and for Hato Nuevo II. A total of 5,600 kilometers of piping were installed for the main lines as well as 133 house connections. 2 kilometers of electrical energy to generate the pumps was installed.



Sanitation

Every house constructed in this project included a pit latrine. To maximize space and reduce costs, modules of 4 latrines were constructed in adjacent areas of the plots. A bathing space with washing basin was also included. Wastewater from these sanitation facilities is then channeled to absorption pits, which have proved very efficient.



Environmental Aspects

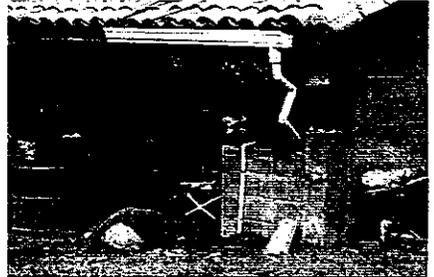
Project Impact

Water availability has been a major positive impact in the life of beneficiaries, who before were hauling water needs from two highly contaminated manual wells. The sanitation facilities elicited a change in attitude towards a cleaner and healthier environment. The construction of the clinic has brought health care closer to 9 neighboring towns and 434 families, with a major impact in morbidity and mortality rates.



Mitigation Measures

The structural design used in this project used house foundations with anti-seismic properties, which is highly recommended in the Choluteca region. Other risk mitigation measures implemented entirely by beneficiaries include reforestation of the area, small retaining walls where necessary, fences, drainage channels and garbage containers, which are later, emptied in the city dump.



Social Aspects

Background

Beneficiaries of this project were all victims of Hurricane Mitch, formerly living in the surrounding areas of the Iztoca River. These people who were left homeless built temporary houses made of twigs, cardboard, plywood and whatever material they found in the debris after the disaster.



Community Strengthening

Because this impoverished community was in great need of help, their involvement in the project was immediate, constant and always enthusiastic. The project itself provided work for most of them who learned construction skills, which may provide them with future jobs. Work in the project included excavation, scaffold fabrication and block layering.



Project Sustainability

With the help of ATLAS Logistique and INFOP, the community has been able to organize community boards, which have been receiving training in establishing priorities, project formulation and fund raising activities. The communal center has proved very useful as a training center as well as a place for social gatherings.



Project Highlights



The most notable characteristics of this project were a 100% enthusiastic beneficiary participation, excellent quality standards, innovative technology and qualified technical staff, immediate occupancy, and excellent coordination with various organizations involved in the development of the project.

CHF Technical Assistance and Project Supervision



Communication between ATLAS Logistique staff and CHF was highly effective which led to joint analysis of solutions for technical problems encountered. Different NGOs, through CHF mediation, were able to share ideas and information.

NGO Performance

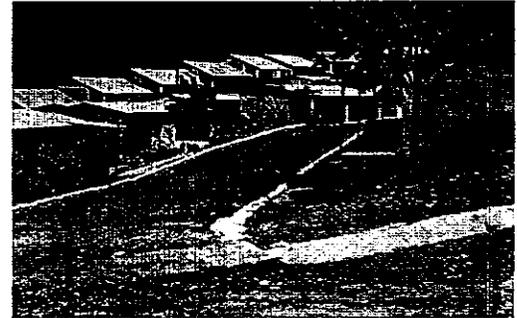
The performance of ATLAS Logistique in this project may be classified as excellent, because of their high quality standards, efficiency, honesty and use of innovative technology in the search of new solutions. Their heartfelt commitment has made the difference in this successful project; with a social impact that has created a whole new attitude in a community that today works together towards a new life.

Comments

The success of a project is the outcome of joint forces, which, in this case, was the desire of a few to help the most needy and a community's wish for a better life: the ingredients that make dreams come true.

GOAL, Lazos de Amistad

Project	Colonia Lazos de Amistad
NGO	GOAL
Project Location	Comayagua, Comayagua
Project Duration	9 months
Total Project Cost	US \$457,327.00
HOGAR Program Funding	US \$105,666.00
NGO Counterpart	US \$351,661.00
Number of Solutions	89



Project Objectives

- To construct a potable water system serving the whole population in the community.
- To ensure beneficiaries are trained in the use, maintenance and management of the system.
- To provide each house with a washbasin or *pila*, with an associated drainage system for wastewaters.
- To construct a drainage system for rainwater and improve and repair existing latrines.
- To provide a range of community development and environmental initiatives and workshops to ensure sustainability.

Technical Aspects

Housing

The community originally consisted of 75 houses built by GOAL in Feb.1999 with the same house design used by them in all its projects, suited to the terrain and environmental conditions of the site. Houses are made of bricks and concrete blocks, micro cement tiles and some with corrugated zinc sheets, materials mostly used in the area.



Water

The water system consists of remedial work on an already existing intake, which is shared by a neighboring town, a de-sanding chamber, a 7.9 kilometer conduction line, a 10,000 g brick tank with chlorinator, 286 m of distribution line, 428 m of main distribution network and 75 house connections. The system was thoroughly tested and it is working efficiently to this date.



Sanitation

When the houses were constructed in 1999, FHIS provided each of them with a compost latrine, which was considered the best solution for the type of soil found in the site. Since these latrines were not entirely functional, GOAL improved them with a tube for the liquids and added and extra covering to the containers to avoid rainwater leakage. *Pilas* were also added to each household, as well as drainage system.



Environmental Aspects

Project Impact

GOAL provided each household with washing basins with the associated wastewater drainage system, which channels the waters into the city system. The beneficiaries completed soon after all other infrastructure works; they built a rainwater drainage system to channel the waters into a natural drain and thereby protecting the roads.

Mitigation Measures

Reforestation of the area surrounding the source was also implemented, as well as a general program of micro-watershed protection, which will be carried out with the participation of all communities sharing the source. A noticeable social impact was the migration of new people into the community. This situation had been previously contemplated and population considerations were included in the design.

Social Aspects

Background

The 75 families composed by 338 beneficiaries selected were previously investigated to determine their specific circumstances after Hurricane Mitch. These families were from a community called Las Tejas in the Comayagua area, which was severely affected and all their prior homes were destroyed.

Community

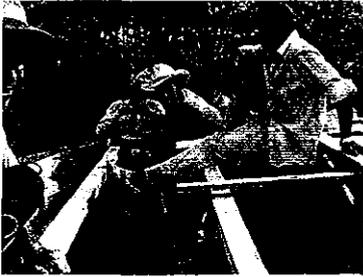
Beneficiaries were involved in the infrastructure of the community mainly in the excavation phase and reforestation activities. The 170 days they invested in the construction of their homes, provided them with new income generating skills.

Project Sustainability

In order to ensure organizational capacity of the community and sustainability of the systems, GOAL is providing full training on the effective and efficient use of water. Workshops and other guidance is being provided by CENET in a community development program. Additionally, SANAA is supporting the community in setting up a Water Board and training in maintenance and management of the system.



Project Highlights



- Beneficiary involvement was more than expected, minimizing costs and making it possible to carry out the additional sanitary and risk mitigation works.
- Professional and very committed staff always in search of most adequate technical solutions.
- Very good relations with neighboring communities with whom it was possible to share the water source as well as responsibility in its protection.

CHF Technical Assistance and Project Supervision



CHF/HOGAR's technical staff was directly involved in the design phase of the water system, establishing criteria to minimize risks of the system. The system was supervised from the source to every house tap ensuring its efficiency.

NGO Performance

As in all of their projects executed through CHF's program, GOAL's performance was once again exemplary with high quality standards, administrative skills, honesty and, most of all, the desire to do a job well done.

Comments

The impacts of a potable water system in a community are numerous and of a life changing quality. The migration phenomenon that occurred in Lazos de Amistad is frequent and was properly addressed by GOAL. These aspects must be considered not only in the design phase of the project, but must be adequately addressed by community officials to avoid future conflicts.

GOAL, Flor del Campo

Project	Flor del Campo
NGO	GOAL
Project Location	La Cruz, Morazán, Yoro
Project Duration	13 months
Total Project Cost	US \$584,499.85
HOGAR Program Funding	US \$394,339.00
NGO Counterpart	US \$190,160.84
Number of Solutions	100



Project Objectives

- To build 100 low cost homes for families in Morazán displaced following Hurricane Mitch.
- To provide 100 sanitary solutions appropriate to the area and terrain and provide training in latrine maintenance.
- To implement a potable water system with house connections.
- Set up a patronato for the project and provide appropriate training and capacity building for the group.

Technical Aspects

Housing

Use of materials and construction techniques which were common throughout the area. This facilitated the construction process and ensured the beneficiaries' confidence in the project. All houses have reinforced concrete foundations, columns and a ring beam to ensure their structural rigidity and durability. Walls were made with concrete blocks. Plots sizes provided sufficient room for future house expansion.



Water

The water system includes a 10,000-gallon tank with chlorinating system, 7.6 km of conduction line, 100 individual house connections, and a settling tank for sand removal, as well as improvements at the intake. GOAL has implemented a combination of screen and underwater-perforated PVC pipe to ensure the collection of the water even when the intake is full of silt.



Sanitation

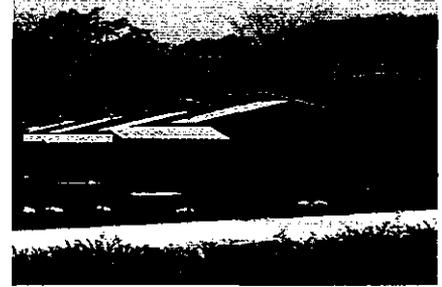
A mayor objective for GOAL in this project was the construction of a proper sanitary system to ensure the community's general welfare. Thus, GOAL included in their project a sanitary model, which consisted of a sanitary unit with an enclosed area for bathing and an external washbasin for storage purposes. The pour flush latrine is connected to a septic tank.



Environmental Aspects

Project Impact

One of the main concerns in this project was the availability of potable water, since the existing community of Flor del Campo was not capable of providing water for another 100 families with their present system. The lack of electricity for the project would raise the demand on the already scarce fuel sources in the area since wood was the most common cooking fuel among the beneficiaries.



Mitigation Measures

The Flor del Campo project has received its environmental license and all environmental impact issues have been addressed. A new water system was built and water brought from 7 kms, eliminating the need to tap into the local system and providing the needed capacity. Fuel-efficient stoves were built for each home as well as a reforestation campaign carried out.



Social Aspects

Background

The main beneficiary pool was drawn from the villages of Las Casitas, Chancaya, Cataguana, Chililenga and spotted settlements along the bed of the Cataguana river, all within the municipality of Morazán, Yoro. Initially, 180 potential families were pre-selected from which the final 100 were selected. The selected families were required to work in the construction of their homes.



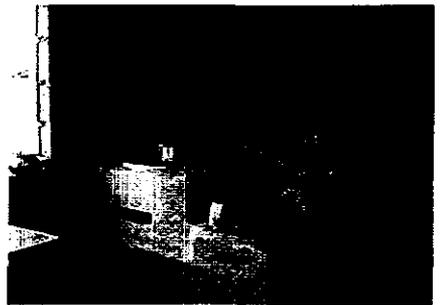
Community Strengthening

GOAL made it one of its priorities to involve the local community in the housing project, initially providing construction jobs and later purchasing materials locally. A local technical school was awarded a contract for 50 doors and windows while another group of beneficiaries were trained in scaffold fabrication.



Project Sustainability

With the help of CETY, the community has already been organized in a Patronato, Disciplinary Council, Administration Board and two groups in charge of micro enterprise. A development plan is being drawn out with the community to cover areas as education, health, employment and security. GOAL has recently signed an agreement with FHIS to build a technical school in the area.



Project Highlights



- Significant beneficiary involvement through the project's duration.
- Use of excellent quality materials through the project.
- Good integration of neighboring communities in project activities.
- Use of highly professional and specialized staff.
- Good communication and cooperation between NGO and CHF.

CHF Technical Assistance and Project Supervision



Close involvement during the design process of both the housing solutions and water system. The final housing solution changed dramatically from the original proposal, adopting many design criteria from the CHF Starter Home Program. In addition to our involvement in the design phase for the houses, we also had significant participation on the final design for the water system.

NGO Performance

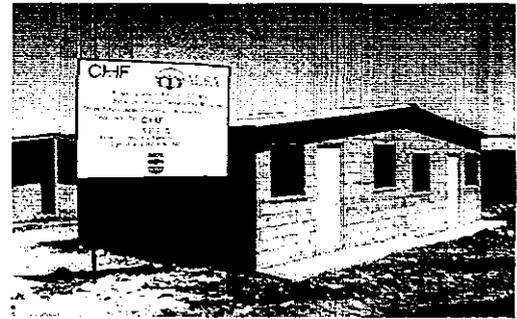
Throughout the project's execution GOAL proved to be a very committed and creative counterpart, resulting in a very fruitful collaboration. Their attention to detail and willingness to go the extra mile to provide technically sound solutions and constant involvement with the local community and beneficiaries, made this project a success. The excellent participation by the beneficiary families was a direct result of GOAL's commitment to the community's needs.

Comments

It is our consensus that this can be considered a model project, one to be emulated and used as a guideline for beneficiary involvement. GOAL's use of a highly qualified staff was critical to obtain accurate solutions to the many obstacles encountered during the project's development. The latter can be considered a key factor for the success of any project of similar characteristics.

ADRA, Villa El Porvenir

Project	Villa El Porvenir
NGO	ADRA
Project Location	Amarateca, Fco. Morazán
Project Duration	13 months
Total Project Cost	US \$585,369.86
HOGAR Program Funding	US \$320,350.36
NGO Counterpart	US \$265,019.50
Number of Solutions	500



Project Objectives

- To unify and strengthen the community empowering its inhabitants to be self-reliant.
- To provide the community with an elementary school that will give children the opportunity for a better future.
- To provide a safe permanent housing solution to 121 displaced families.
- To provide these families with the social infrastructure needed to thrive as an independent community.
- To ensure adequate land for a treatment plant for the Amaratéca Resettlement Housing Projects, benefiting 500 families.

Technical Aspects

Housing

ADRA's housing unit consists of a 30-m² unit that includes two bedrooms, a single bathroom unit and kitchen-living-dining area. The house was built with 4-inch concrete blocks with steel reinforcements in every corner. The unit is part of a duplex, each duplex having a 140-m² plot.



Water

The Villa El Porvenir project will receive the benefit of a permanent water system that will be constructed through USAID/FHIS. This water project will meet the demand for all four housing projects in the area, HABITAT, CRWRC, CARITAS and ADRA. Families are currently using a temporary communal system where they collect water on a daily basis.



Sanitation

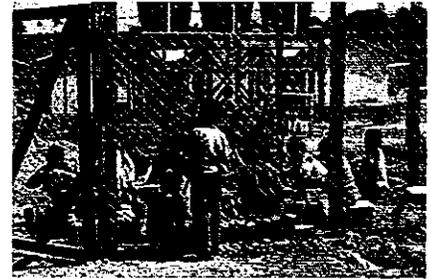
USAID/FHIS are currently sponsoring the construction of a sewage system that will be connected to the treatment lagoons located about one mile away from the site. The system will collect all wastewater from the four projects mentioned above and is scheduled to be completed by the end of 2002. Compost latrines are currently being used at the project.



Environmental Aspects

Project Impact

Amarateca has traditionally been considered a barren valley, which is why ADRA has carefully planned out a reforestation campaign, starting with a small green house on site. The key population being trained for this effort is the project's children. This strategy helps bring the children up with a culture of preservation and respect for the environment.



Mitigation Measures

A significant aspect of this project was the location of the treatment lagoons. The site approved by CHF technical staff and the national environmental agency DECA is located about a mile away from the housing projects. These treatment lagoons will receive all wastewater from the 4 Amaratoca projects - ADRA, HABITAT, CARITAS and CRWRC.



Social Aspects

Background

The 121 target families taking part in this project have been selected from the macro shelters Trébol 1 and Trébol 2, as well as families from many neighborhoods that are considered high-risk settlements. The average family is made up of seven members with one income generated by the head of family. Each family was required to have one of its members participate in the project's construction.



Community Strengthening

The Villa El Porvenir community has quickly become an important asset in the area, being part of the regional board composed of members from the other three projects in Amaratoca. A local board or *Patronato* has also been organized, divided into a water committee, security committees, solid waste collection committees, education committees and others.

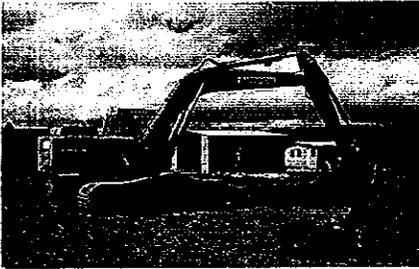


Project Sustainability

This project has benefited from ADRA's initiative to continue seeking funds for the improvement of the community. An elementary school was constructed with HOGAR funding, while funds from other organizations paid for a technical school, a church, and a health center. This focus on educational facilities will provide the children of the community with the necessary tools to further develop and support their community in the future.



Project Highlights



- Frequent detailed inspections and input from HOGAR's technical staff led to a noticeable improvement in ADRA's construction techniques. Observing ADRA's improvement until it met CHF's standards was an immeasurably rewarding experience.
- Excellent quality standards in the school construction was possible due to experience gained during the execution of the housing project.

CHF Technical Assistance and Project Supervision



CHF's inspections were carried out regularly. Approximately 32 site inspections were carried out throughout the project's execution. Constant assistance was provided to ADRA's field personnel, ranging from technical advice to material selection. CHF was closely involved with the preparation of a new set of construction plans to ensure all designs and structural aspects were correctly elaborated for future use.

NGO Performance

The NGO's performance improved considerably in construction quality, observed through CHF field assessments.

Comments

The project can be considered a success. This is one of the few projects that will benefit from a school, community center, and health center. The beneficiaries of Villa El Porvenir will harvest the fruits of a project with a very sound social infrastructure and are in a position to become leaders in this new community that is made up of the new projects in Amaratoca.

CRS, Colonias Unidas

Project	Colonias Unidas
NGO	Catholic Relief Services
Project Location	Choluteca, Choluteca
Project Duration	12 months
Total Project Cost	US \$1,297,563.05
HOGAR Program Funding	US \$ 793,468.07
NGO Counterpart	US \$ 504,094.98
Number of Solutions	749



Project Objectives

- To construct permanent housing for 208 Hurricane Mitch victim families in a quality conscious manner.
- To provide the community with a permanent water system serving beneficiaries through house connections.
- To provide a sanitary solution for 450 houses in Colonias Unidas.
- To consolidate community development organizations to promote sustainable progress.
- To strengthen community through participatory methodologies, fund planning, and management.

Technical Aspects

Housing

Houses built with HOGAR funding consist of 2 bedrooms, a dining-living room and kitchen made of concrete blocks and roofed with fiberglass/cement sheets. House design took into consideration the extreme heat of the south of Honduras with the use of high ceilings. Ventilation and natural lighting were ensured by locating windows on the east and west sides of the house.



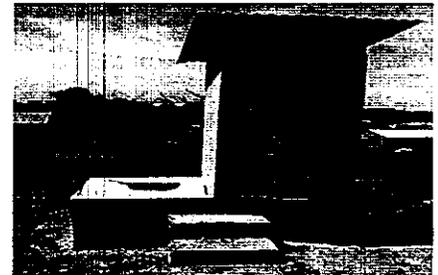
Water

With HOGAR funding it was possible to provide a permanent system that consists of 2 electrical pumps, 2 pump lines extending 380 m and 500 m, a 65,000 gallon tank constructed by *Acción Contra el Hambre (ACH)*, 15,000 m of main network piping, and 749 house connections. All houses include a washbasin and water tap that connects to the system. 342 more washbasins were also installed for a total of 550.



Sanitation

All new houses built under the HOGAR program include a compost latrine. 242 more houses were equipped with this sanitary solution, making a total of 450 latrines. Other solutions such as a hydraulic latrine or septic tank were considered, but the low permeability of the soil made them inappropriate for implementation on this site.



Environmental Aspects

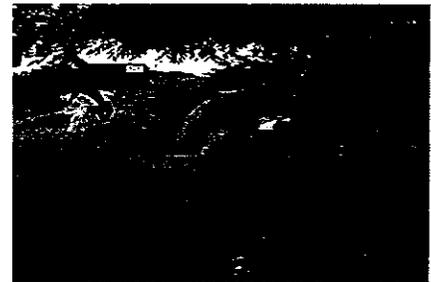
Project Impact

Several areas have been designated as green areas to be developed with tree planting by the community with CRS support. Additionally, a 2000 m rainwater drainage system was constructed according to design specifications, which considered water flows and permeability of the soil thus protecting areas prone to flooding.



Mitigation Measures

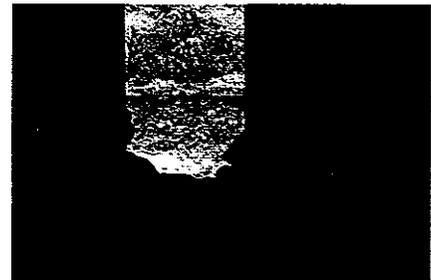
Houses were built according to specifications that made them resistant to seismic tremors and high winds, and were located in areas that were considered secure from landslides and flooding. Drainage ditches were also dug to minimize flooding in low-lying areas of the site. Wastewater was channeled to absorption pits located in places where the soil had adequate permeability. Reforestation during construction was strictly monitored. All cut trees were replaced according to previous agreements.



Social Aspects

Background

Families were selected from 5 Choluteca neighborhoods: Iztoca, Bella Vista, Pacífico, Canadá, 20 de Mayo; all located on the west bank of the river, which was completely destroyed by Hurricane Mitch. Different organizations donated homes, while others chose to finance their own houses.



Community Strengthening

The housing project as well as the water system was participatory in order to emphasize the development of a sustainable community. Beneficiary involvement included block making, trench excavation, donation and transportation of local materials, foundation excavation and reforestation measures that included the planting of 14,000 trees. Extensive training programs were also implemented.



Project Sustainability

Training in the organization of local institutions has been emphasized by CRS in Colonias Unidas. A water committee has been organized to manage, maintain and operate the system. Additionally, an environmental committee proposes to develop the community's green areas, and an energy plot. The development program includes awareness training on solid waste management.



Project Highlights



- Qualified and experienced technical staff.
- Excellent coordination with the various organizations involved.
- Strong social development programs.
- Good communication between CHF and CRS.

CHF Technical Assistance and Project Supervision



CHF's technical staff carried out regular inspections to the site during execution. Assistance provided included site inspection of the selected lots, material selection, and design considerations and recommendations, particularly in the construction of the compost latrines.

NGO Performance

The Colonias Unidas Project was from the start a major challenge to all those involved, particularly CRS who was in charge of its execution. The physical dimensions of the project, the funds involved and the population to be benefited, made this HOGAR's biggest project. CRS has reached its many goals for this community through the hard work and commitment of all involved, and has in the process obtained invaluable experience.

Comments

As a natural phenomenon, Hurricane Mitch could not have been avoided, but the overwhelming degree to which the country's poor suffered was the direct consequence of the already precarious existence of families who out of need have crowded in structurally unsafe homes located in marginal lands in river banks and steep hillsides with high risk characteristics. Reconstruction efforts must go beyond building homes to create a safer environment for the country as a whole and particularly for those most at risk.

GOAL, Casco Urbano

Project	Casco Urbano (Rehabilitation)
NGO	GOAL
Project Location	Comayagua, Comayagua
Project Duration	7 months
Total Project Cost	US \$508,951.89
HOGAR Program Funding	US \$290,400.00
NGO Counterpart	US \$218,551.89
Number of Solutions	132



Project Objectives

- To rehabilitate or replace the houses of those families whose houses were damaged during Hurricane Mitch.
- To target the poorest families in the area to whom no aid was provided by other organizations.
- To rehabilitate homes that were damaged or to reconstruct those with weakened structural integrity.
- To ensure that each house has a working sanitary solution and access to the water system through a house connection.

Technical Aspects

Housing

Rehabilitation varied according to work required in each case, but in most cases concrete floors, wooden doors and windows and micro-concrete roofing was applied.



Water

In order to comply with the program's regulations, each applicant family was required to have ready access to a water connection or a main distribution system to which the family could connect. All new connections had to be previously approved by the local municipal authorities.



Sanitation

As many of the families already had latrines installed in their houses but were severely deteriorated, GOAL went about repairing each damaged latrine, replacing walls, re-digging holes and fitting the pits with concrete covers. Latrines that needed no replacement were only refitted with new doors or walls, as needed.



Environmental Aspects

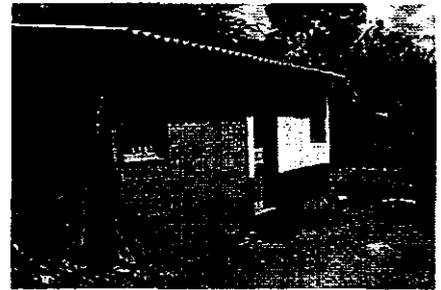
Project Impact

The project's implementation became an effective tool to mitigate many of the existing environmental issues. Some issues addressed were use of large quantities of wood in the *bahareque* construction, wastewater filtration, and other sanitation issues arising from the lack of proper floors and water connections.



Mitigation Measures

Concrete block homes will eliminate the family's need to chop wood for construction and maintenance of their *bahareque* homes, and will also improve the health of family members significantly. Bacteria and insects known to hatch in the earth walls will thus be eliminated with the improved air circulation. Latrine rehabilitations will prevent hazardous infiltrations.



Social Aspects

Background

Families were selected from 6 different neighborhoods in Comayagua. They were selected on the basis that their homes were damaged during the hurricane mainly due to the use of poor quality materials. All families were required to have legal titles to their land and working water connections.



Community Strengthening

The characteristics of such a project have led to unification between the families in each neighborhood. As the inhabitants of Comayagua learned about the project, families organized themselves and applied for housing in committees. Now, families are no longer segregated from the community because of their dwelling, instead they are seen as equal neighbors by their community.



Project Sustainability

This is the first time that many of these families have owned property of any real value. They now have equity in a house that can serve as a bank guarantee, making these families eligible for loans for future improvement. It is expected that through the municipal authorities further improvements will follow. Proud owners are already planning to expand and improve their homes.



Project Highlights



- Significant beneficiary involvement throughout the duration of the project.
- Use of excellent quality materials.
- Great logistics, attending to six different neighborhoods in different areas of Comayagua.
- Use of highly professional and specialized staff.
- Good communication and cooperation between NGO and CHF.

CHF Technical Assistance and Project Supervision



CHF supervised this project in a very conscientious manner. The technical staff was determined to inspect each of the 132 housing solutions to ensure that CHF's standards were met, despite the great disparity between solutions. The supervision included not only information collection but also technical evaluation and advice on subjects ranging from project management to material selection.

NGO Performance

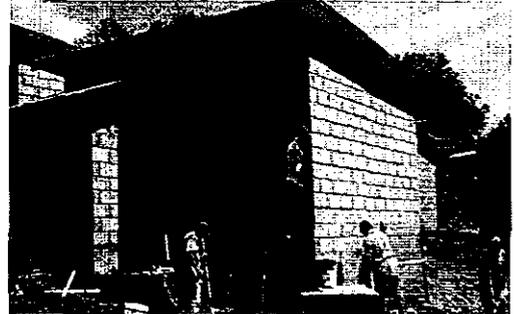
GOAL, as in previous projects, carried out a successful project plan. Close attention was paid to logistics since this would be a determining factor in completing the project under a tight schedule. GOAL was able to supply materials and personnel to six different sites throughout Comayagua, sites in which the houses were dispersed. More than 60 skilled masons were hired during the project's execution, as well as three civil engineers and a significant number of social promoters.

Comments

Even when Hurricane Mitch displaced thousands of families all over Honduras, GOAL was able to identify that thousands more families were already displaced by their own poverty. These beneficiaries never had a well constructed house or land title previously. Ironically, Hurricane Mitch provided these families with something they would never have had. This is one of the most significant projects sponsored under the HOGAR program, and its success can only be truly measured by the faces of those who for the first time in their life will sleep under a safe and dignified roof. The true extent of such a project can not be measured; we can only imagine the impact that a project of these characteristics could have in many of the cities and villages of Honduras. It is commendable that GOAL was willing to make such an enormous effort; this project fulfilled many of CHF's main goals and has brought new hope to many families.

AIEH, Azacualpa

Project	Azacualpa
NGO	AIEH
Project Location	Azacualpa, Santa Bárbara
Project Duration	8 months
Total Project Cost	US \$192,943.44
HOGAR Program Funding	US \$120,377.81
NGO Counterpart	US \$ 72,565.53
Number of Solutions	41



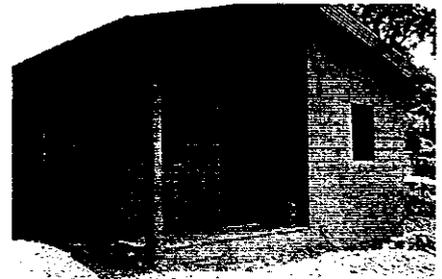
Project Objectives

To give 41 families from Azacualpa, Santa Bárbara access to a permanent housing solution with all basic services.

Technical Aspects

Housing

AIEH came up with two designs, one of 30 sq. meters and another of 22 sq. meters. Both designs involve concrete block construction with steel reinforcements both vertically and horizontally. The roof structure is made of steel and zinc laminate. The largest house consists of one bedroom and one living and cooking area with a bathroom. The smallest solution includes a single living space with a complete bathroom.



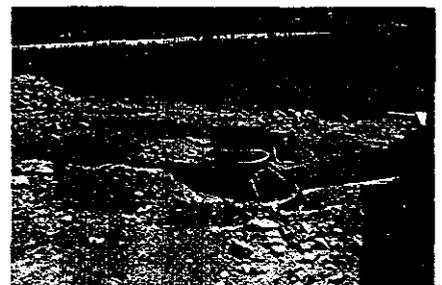
Water

The Azacualpa project will be benefited by a water project sponsored by the *Servicio Autonomo de Acueductos y Alcantarillados (SANAA)*, which includes a 20,000-gallon water tank and distribution net that will run through the project. All families will have an independent water tap. A water board consisting of residents from the various neighborhoods will manage the water.



Sanitation

Each house has a full bathroom, including both shower and toilet, connected to a septic tank and absorption well. The tank has a capacity of 1,100 liters and only needs maintenance every 12 or 18 months. Liquid wastes flow into an absorption pit located about 2 meters from the tank, where wastewater will slowly filtrate.



Environmental Aspects

Project Impact

The main environmental issues surrounding the Azacualpa project were erosion control and wastewater filtration. The first was addressed by installing reinforced concrete block retaining walls in three specific areas. In addition to the walls it was necessary to construct a storm drainage canal that collects 80% of the runoff from the surrounding hills.



Mitigation Measures

Additional drainage in the form of culverts was installed throughout the project. The wastewater filtration was addressed by installing self-contained septic tanks with filtration pits on every house. AIEH has also contemplated for each of its projects a reforestation campaign, consisting of community training and orientation.



Social Aspects

Background

The vast majority of the beneficiary families are dedicated to agriculture, working on different private farms throughout the region, ranging from coffee to banana plantations. Their economic capacity is minimal, which is why they have been living in temporary shelters for more than two years. All beneficiary families formerly lived in the Azacualpa municipality.



Community Strengthening

This project has significantly contributed to community integration. The requirement to work on all houses has made the community members better neighbors and more aware of each other's needs. One clear example is the case of an elderly couple that was physically not able to contribute with manual labor. Different community members took turns in helping them cover their work.

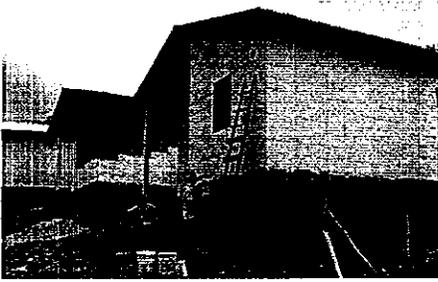


Project Sustainability

The project will become a part of AIEH's credit program, which will in the long run benefit the community with future credit opportunities. This project has brought about the construction of a new elementary school in the vicinity of the site. Additionally, through SANAA's technical assistance beneficiaries have been trained to manage, operate and maintain the water system.



Project Highlights



- Two separate housing designs were developed for different economic backgrounds, making it possible to offer a solution to the entire community.
- Learning experience with new technology, specifically Rotoplas septic tanks.

CHF Technical Assistance and Project Supervision



CHF's participation in this project was significant. Design options were provided for the second type of house needed to accommodate the low-income families. Constant supervision and assistance was given to AIEH site engineers. Careful and routine inspections proved helpful in identifying needed repairs and specifically the need to reinstall all septic tanks according to the manufacturer's specifications.

NGO Performance

AIEH's performance in this project was not as expected especially after the first positive experience in project Colonia Japón. The various technical issues that continuously arose throughout the project's execution, including significant loss of materials and labor, deteriorated the relationship between the beneficiaries and AIEH, causing significant setbacks in the project's time line.

Comments

After much effort this project was finally concluded satisfactorily. Genuine interest in a project, as well as qualified personnel, can make a big difference in its execution. These are important aspects to take into account for every project's success.

Villa Linda Miller

Project	Villa Linda Miller
NGO	Patronato Villa Linda Miller
Project Location	10.5 km from Tegucigalpa
Project Duration	8 months
Total Project Cost	US \$403,592.20
HOGAR Program Funding	US \$198,592.20
NGO Counterpart	US \$205,000.00
Number of Solutions	164



Project Objectives

- To build a new community for the 164 families formerly living in Colonia Miramesí of Tegucigalpa who lost their homes in the Hurricane Mitch disaster.
- To provide the community with the needed infrastructure to ensure basic services.
- To provide training to ensure sustainability of the system, as well as to learn new income raising skills.
- To emphasize participation and organization to encourage the growth of the community through collective efforts.

Technical Aspects

Housing

The houses were built with concrete blocks, micro-cement roofs and metallic doors. The materials for the houses were donated by the Honduran Red Cross and constructed by trained beneficiaries with the help of qualified builders. Houses consist of three bedrooms, kitchen/dining room, living room and porch. All houses are equipped with a complete bathroom that includes a toilet, washing basin and sink.



Water

In 1999, CARE built a 64,000 gallon brick tank with the involvement of the community, but a new source was required to meet the population's demand. A permanent water system has now been completed with the installation of 3,336 mts. of piping, funded by SANAA-UNICEF. HOGAR's funding completed the system with a well perforation pump, electrical equipment, and a pump line.



Sanitation

Sanitation was ensured in the community with the construction of a sewage system consisting of 2,809 m of piping, 42 manholes and 164 house connections. Wastewaters drain into a treatment plant that includes an Imhoff tank, an anaerobic filter to treat liquid effluents, a sludge drying bed, and de-sanding tank, designed and executed by experienced professionals. The treatment plant and Phase 2 of the system were constructed with HOGAR funding.



Environmental Aspects

Project Impact

The Linda Miller Development Committee has developed a 10 year Strategy Plan that goes beyond risk mitigation by setting goals that promote improvement of the surroundings and quality of life in general. The strategy includes reforestation, garbage disposal systems and botanical gardens.



Mitigation Measures

Following infrastructure works, Villa Linda Miller beneficiaries have been working on road improvements as well as a rainwater drainage system. Waters will be channeled to natural drains, as well as treated effluents from the treatment plant reducing odor production if any. Furthermore, the Imhoff tank, as well as the filters will be provided with a covering to minimize air pollution.



Social Aspects

Background

Colonia Miramesí was located on the right bank of the Choluteca River to the north of Tegucigalpa. When Hurricane Mitch hit, the river washed away 220 homes the first night. Three days later, a group of disoriented victims formed the Comité Pro Construcción Villa Linda Miller with the help and guidance of Michael Miller. All beneficiaries of this project are members of this committee.



Community Strengthening

One of the reasons for the success of this project is the attendance of the community at the Strategic Planning Workshops. All beneficiaries have worked directly in the construction of their homes and have collaborated in all infrastructure works. They have also received training in many topics such as administration and accounting, water management, operation and maintenance of treatment plants and protection of micro watersheds.



Project Sustainability

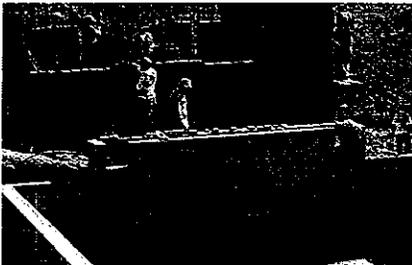
The Strategic Plan that is being followed by the Villa Linda Miller community already contemplates the active participation of all beneficiaries. Sixteen different committees have been established with the required participation of 100% of the community who will be in charge of garbage disposal, reforestation, internal security, operation and management of the systems, and fencing of the properties, among other things.



Project Highlights

- High quality standards.
- Professional design with emphasis on environmental protection.
- Training on maintenance and monitoring of the treatment plant to ensure efficiency of the systems.

CHF Technical Assistance and Project Supervision



The Technical staff of CHF-HOGAR was involved in the design stage as well as the construction stage of the project, proposing recommendations to maximize the efficiency of the system. Contractors were very open to suggestions and communication with them was very good.

NGO Performance

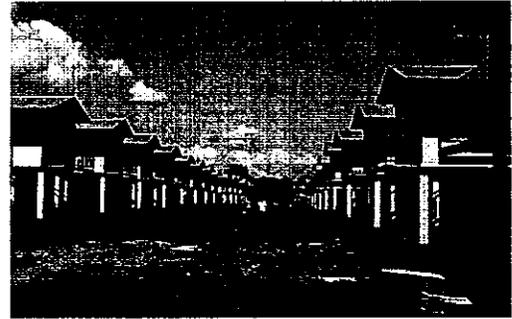
The Villa Linda Miller Development Committee has admirable organizational skills, as well as fund procurement abilities that have made this project possible. The unifying force elicited by the tragedy has given its members the spirit to work towards new goals.

Comments

Many have contributed to making the Colonia Villa Linda Miller a dream come true. No quantity of money can replace the work of a group of people with a sense of solidarity and commitment and the desire to struggle against all odds.

AIEH, La Lima

Project	La Lima
NGO	AIEH
Project Location	La Lima, Cortés
Project Duration	8 months
Total Project Cost	US \$331,614.92
HOGAR Program Funding	US \$198,638.42
NGO Counterpart	US \$132,976.50
Number of Solutions	83



Project Objectives

- To directly benefit 83 displaced families in need of permanent housing that were still living in the municipal shelters two years after the hurricane.
- To address flooding and other environmental risks in order to ensure the safety of the new houses.

Technical Aspects

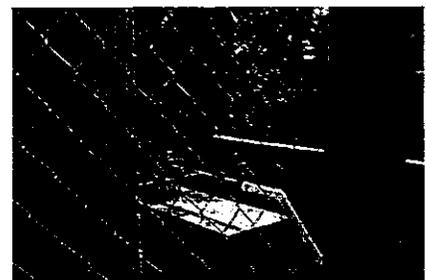
Housing

It is a fact that there is virtually no land in La Lima that is immune to floods, so AIEH adopted the house design first brought to the region by the United Fruit Company, a house on pylons. The design was modified to use concrete pylons, steel under floor for the elevated living quarters, steel stairs and the use of micro concrete panels for walls. The lower floor is an open area with a bathroom/shower enclosure.



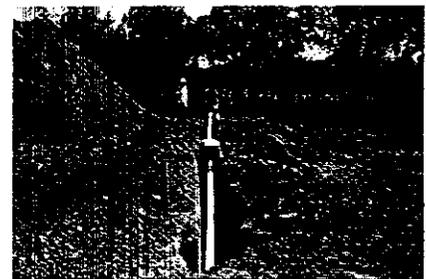
Water

Water shortage has never been an issue in La Lima. However, adjacent neighborhoods were concerned with the impact the new demand of this project would produce on their own systems. Foreseeing future problems, AIEH drilled a well on the project site and installed a completely independent water system for the site. The water source yields 120 gpm, which is considered more than enough water for the project where a future storage tank will be installed.



Sanitation

Each housing solution is equipped with a standard shower, toilet and wash basin, all connected to a sewage collection line that will be drawn directly into a pumping station from which waste waters will drain into the adjacent municipal collectors.



Environmental Aspects

Project Impact

The availability of water was the main concern during project planning. To ensure that the houses would be provided with this basic service, AIEH drilled a well on site and installed a pump to supply all 83 houses. This is an independent system with no connection to municipal supply lines and will be directly managed by the community. In addition, a reforestation campaign took place.



Mitigation Measures

See Project Impact above.



Social Aspects

Background

A large percentage of the beneficiaries in La Lima are dedicated to either agriculture or manufacturing, in the banana plantations and the maquilas. Most of these beneficiaries were displaced by the constant floods in La Lima and were previously living in La Mesa, La Fraternidad and La Guadalupe, all on the riverbanks of the Chamelecón River. After Hurricane Mitch, they were relocated to temporary shelters.



Community Strengthening

The community has already begun to form different committees with the special purpose of managing their new infrastructure. The project has been equipped with an independent water system and the inhabitants will have to manage it by themselves. The sewage system has a certain degree of sophistication so it will also need to be managed properly.



Project Sustainability

The project will enter into AIEH's credit program, which will in the long run benefit the community with future credit opportunities.



Project Highlights



- Project withstood the first year's flooding with flying colors, both its location and its building type helped keep the project completely dry.
- Excellent beneficiary participation, the best so far in AIEH's projects.

CHF Technical Assistance and Project Supervision



CHF was closely involved with the design phase of this development, ensuring that all municipal codes were respected. Special emphasis was placed on public and green areas. To guarantee that all norms were met, the site was changed and only 83 housing solutions from the original 120 were approved. CHF also closely monitored the sewage system design to guarantee its proper operation.

NGO Performance

AIEH worked efficiently during the initial stages, proving to have the technical capacity and qualified personnel necessary for success. The project's management began to slip, however, causing material deliveries and payments to be delayed. Still, despite the obstacles the project was completed satisfactorily and can be considered a significant contribution to the HOGAR program.

Comments

The coordination between an institution's technical staff and the administrative staff and their procedures is an important factor to be considered in the planning and execution of a successful project.

Project Teamwork, Umaña de Santiago

Project	Umaña de Santiago
NGO	Project Teamwork
Project Location	Pimienta, Cortés
Project Duration	7 months
Total Project Cost	US \$495,526.26
HOGAR Program Funding	US \$283,569.96
NGO Counterpart	US \$211,956.30
Number of Solutions	60



Project Objectives

- To build 60 houses and the basic infrastructure for families displaced by Hurricane Mitch.
- To implement a mortgage system of repayment for the housing project.
- To build a wastewater treatment plant that incorporates new technology (Air-Jection System) into low-cost housing projects in Honduras.

Technical Aspects

Housing

PTW's design incorporates both a kitchen and bathroom inside the house, thus addressing critical sanitation issues. An outdoor washbasin is also connected into the sewer system. This approach provides a large enough unit to meet permanent housing needs and to satisfy sanitation issues. Each unit is 36 m² in size; the design solution takes advantage of the Duplex concept with one shared wall separating 2 units along the property line. This simple layout allows for cost reduction savings.



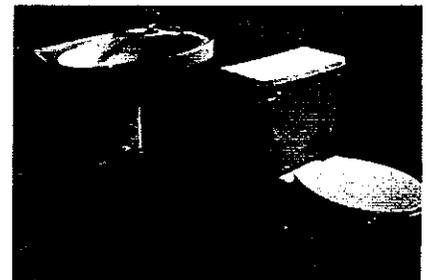
Water

The water system depends on a well perforated exclusively for this project. An electrically generated pump will be installed in order to fill the 30,000-gallon storage tank, which is also outfitted with a chlorination system built at the highest point in the community. Potable water will be gravity fed to each house or service connection.



Sanitation

PTW focused on building the best possible sanitation solution for the Umaña de Santiago Housing Project. Although the Santiago community doesn't have a sewer system yet, an independent sewer system was built for the 60 houses of the project. To treat the effluents of the sewage system, PTW built a wastewater treatment plant that incorporates an aeration system, which has a proven performance record in rural locations throughout the world. The liquid effluent is then discharged into a natural drainage canal in permissible levels.



Environmental Aspects

Project Impact

Careful design and planning is crucial to ensure minimal impact on the local environment. PTW worked with a professional staff to provide the most comprehensive, appropriate and functional design. One important issue was the natural average slope of the site, between 10% - 30%. The local zoning and USAID regulations restrict constructions in sites with a slope greater than 20%.



Mitigation Measures

The use of different technologies to limit potential erosion and stability problems is evident throughout the site. A storm drainage system including concrete channels, concrete pipelines, gutters and culverts carry run-off water into natural drainage canals. The independent water and sewer system will help this new community to have a more harmonious and sustainable relationship with their environment.



Social Aspects

Background

Beneficiaries for this project are displaced families from nearby communities, such as Pimienta, Rivera Hernandez and Chamelecón, all in the Northern region of Honduras. The final selection of beneficiaries was made taking into consideration factors such as number of family members, the extent of individual/family loss, land ownership, present accommodations, the ability to help with construction, employment and income.



Community Strengthening

The beneficiaries, as an autonomous system of community management and sustainability, organized a development committee or patronato. Inhabitants of the project have been receiving training in organizational skills. PROPAR, a branch of the Honduran Health Department, will be in charge of other training in health and water protection issues.



Project Sustainability

The innovative technologies to be implemented in Umaña de Santiago, which include a treatment plant, water system and water purification system are all electrically generated and will require skilled workers to operate, manage and maintain in order to ensure their effectiveness and sustainability. PTW has expressed their intentions to train selected beneficiaries to be in charge of these systems.



Project Highlights



- Emphasis on providing the best possible sanitation solution for the beneficiary families.
- Use of slope stabilization and erosion control technology.
- Implementation of a credit program with the new homeowners, designed to produce significant revenue to be reinvested into the community.

CHF Technical Assistance and Project Supervision



CHF worked together with PTW throughout the project lifetime giving guidelines and technical support in different areas. Special attention was given to the design of necessary mitigation infrastructure, such as gabion and stonewalls, drainage channels and use of geo-textile matting for erosion control. Suggestions made by CHF, like the use of a high quality concrete block and the permanent presence of a civil engineer at the site, produced a significant positive impact on the project overall quality.

NGO Performance

The approach that Project Teamwork used to made this project possible is remarkable. They promoted and used the concept of collaborating with other organizations and individuals to find all resources needed. With assistance from the Pimienta municipality, SOPTRAVI, ENEE and AMHON, PTW coordinated the development of the site, infrastructure systems and all required utilities and services to coincide with the housing construction.

Comments

This could be considered the most technically challenging project in the program, but at the same time one that offered a great learning experience, which has generated multiple lessons to be applied in future projects. The Umaña de Santiago project is proof that mutual cooperation between organizations can yield good results.

CI-APAN, El Milagro

Project	El Milagro
NGO	Children International/ APAN
Project Location	Villanueva, Cortés
Project Duration	4 months
Total Project Cost	US \$1,115,916.64
HOGAR Program Funding	US \$ 725,903.00
NGO Counterpart	US \$ 390,013.64
Number of Solutions	200



Project Objectives

- Build 200 houses for families displaced by Hurricane Mitch, in the Village of El Milagro.
- Increase the income-generating capacity of beneficiaries and skilled workers participating in the construction of the project.
- Improve leadership skills in the community with the organization of a Construction Committee composed of program beneficiaries to operate the housing program together with the APAN staff.

Technical Aspects

Housing

The design used by APAN consists of 2 bedrooms, a dining-living room, bathroom and porch. Floors are made of poured concrete, walls are made of concrete blocks and roofs of corrugated tin sheeting. The design includes technical recommendations to guard against the effects of high winds, minor flooding and seismic movement.



Water

An independent water system was built; the water source is a deep well from which the water is pumped through a 1.5 km pipeline into a 30,000 gallon metallic tank, installed on a small hill close to the site. From the water tank, potable water is then distributed into the new neighborhood. The area where the project is located is rich in ground water.



Sanitation

Each house has an indoor bathroom, a shower and a tank-less toilet. The toilet drains directly into a septic pit. Wastewater from the shower and washing basin or Pila are collected in a separate drainage system to assure an optimal use of the septic pit and eliminate the run-offs in patios and streets.



Environmental Aspects

Project Impact

This project is the second largest housing project built under the HOGAR Program, consisting of 200 new houses. The environmental guidelines for USAID-financed housing projects helped identify vulnerable areas in all the stages of the project so as to be able to incorporate mitigation measures in the design as well as in the implementation of the project.



Mitigation Measures

APAN built the adequate infrastructure for the Colonia El Milagro to ensure a sustainable new community. The water system for this new neighborhood will not compromise the El Milagro community water supply since it is completely independent. Wastewater disposal will be through a drainage system, which will connect to the existing system of the municipality. The beneficiaries will collect solid wastes and send weekly to the municipal landfill as well. A reforestation program is soon to be implemented by the Villanueva Municipality.



Social Aspects

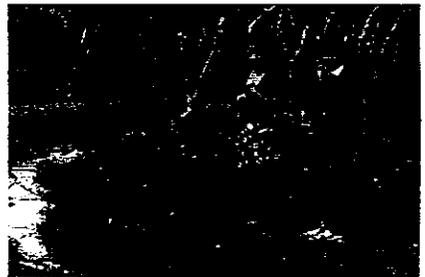
Background

The target group for the CI / APAN housing program are low-income families that were displaced by Hurricane Mitch and families living in areas of high risk of flooding or landslides. Sixty four of the families previously lived in the village of El Milagro, the rest come from different locations such as El Progreso, San Pedro Sula, and Río Lindo.



Community Strengthening

Community participation is a fundamental element in this housing program. The 1,845 trained community volunteers make most of APAN's work throughout Honduras possible. The majority of these are women who volunteer to take an active leadership role in their community. A construction committee formed by the beneficiaries was involved in the planning and implementation of the project.



Project Sustainability

El Milagro is an area of ongoing CI / APAN sponsorship operations to support their child sponsorship program. CI / APAN operate a clinic and a multi-purpose center in which medical care, nutritional aid, and educational assistance are provided. This indicates their long-term commitment to the sustainability of their target communities.



Project Highlights



- Use of a new improved house design.
- Use of excellent quality materials.
- Good communication and cooperation between the NGO and CHF.
- Construction of 200 houses, electrical, water and sanitation systems in just 4.5 months.

CHF Technical Assistance and Project Supervision



CHF technical personnel provided specific assistance upon APAN's request, especially in areas such as water and sanitation. Periodic inspections were made to keep up to date on the project's progress. When needed, CHF technical personnel made suggestions to the site engineer, focusing on maintaining good quality standards and complying with the construction schedule.

NGO Performance

During the execution of the project, CI / APAN did encounter difficulties such as theft of materials, bad weather and over running the budget. But, as they had done in their two previous projects under the HOGAR program, they managed to build an excellent housing project that meets high quality standards.

Comments

To APAN and Children International's long line of successful child sponsorship programs can now be added their growing track record with successful housing projects. The experience gained by CI / APAN in the past three housing projects under CHF-HOGAR has prompted them to expand their housing program to achieve a goal of 2,000 homes a goal they are sure to accomplish with excellent results.