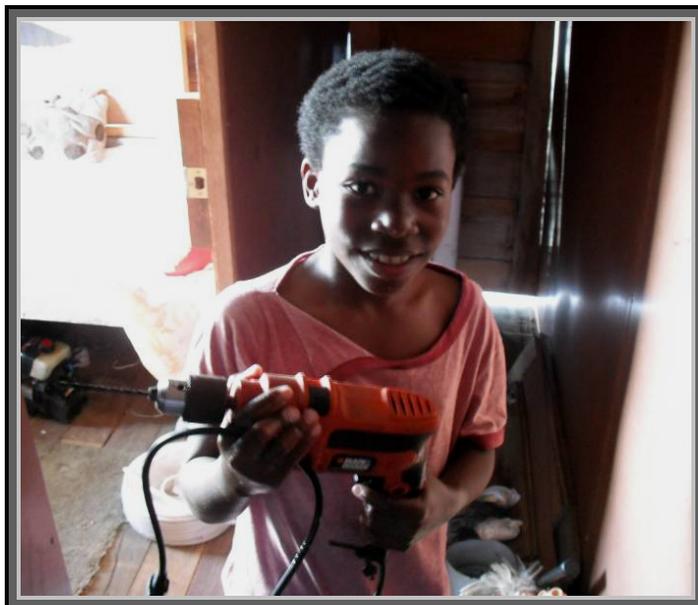


Cash for Shelter Program

HURRICANE RICHARD 2010

BELIZE



Child of beneficiary holding voucher purchased tool in newly re-constructed home

Beneficiary Satisfaction & Impact Evaluation

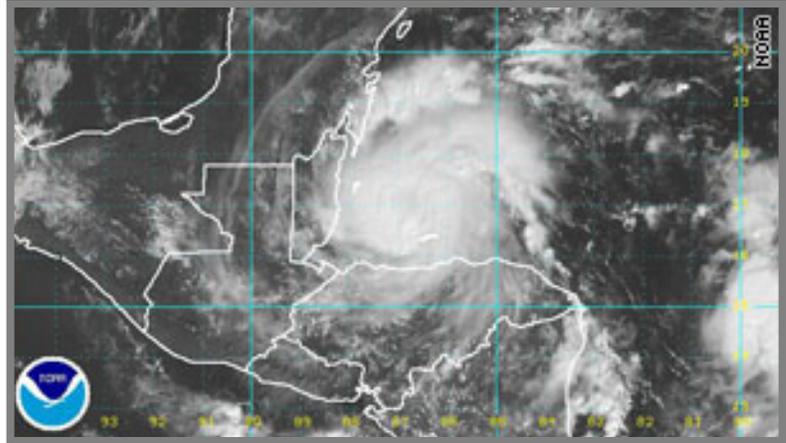
FEBRUARY 2011

Scott DiPretoro
Program Officer, Latin America & the Caribbean
American Red Cross

“Post disaster shelter response should be informed by an understanding of the pre-disaster approach to housing, whilst acknowledging and addressing the impact of the disaster on the established housing processes, resources and capacities at the household and community level.”¹

I. BACKGROUND

On October 24, 2010, the eye of category 2 Hurricane Richard made landfall 20 miles southwest of Belize City. With sustained winds of 90 mph, it damaged over 800 homes and was particularly destructive to local agriculture. Belize Red Cross (BRC) teams distributed relief supplies to 600 families, performed assessments and developed a plan of action to assist with longer term recovery needs. The IFRC released \$56,000 in Disaster Relief Emergency Funds to assist the Belize Red Cross with their procurement and distribution of emergency relief supplies. The American Red Cross (ARC) committed up to \$80,000 to support the early recovery Shelter component of the BRC Plan of Action. Approximately two weeks after the disaster, an ARC delegate deployed to Belize for a 5 week period to assist the BRC with assessments, design, and implementation of a shelter program, with a special focus, should the situation be suitable, for a cash transfer program utilizing cash vouchers redeemable for construction materials and tools. Dependent upon the needs assessment, there was also the flexibility to implement alternate types of recovery programming.



After coordination with the National Emergency Management Organization (NEMO) which was also implementing a shelter repair program, and conducting assessments in 5 communities to determine need and feasibility, Gracie Rock and Hattieville were selected by BRC as most in need and most appropriate for a shelter intervention. Hattieville is located 16 miles west of Belize City and adjacent to the Western Highway while Gracie Rock is an additional 8 miles southwest of Hattieville. In Gracie Rock community members live along an approximately 10 mile stretch of the Sibun River, with some home locations only having access via boat. There is regular public transportation along the Western Highway to Belize City’s commercial center. The communities are relatively impoverished with the majority of the beneficiary families earning below the minimum wage of ≈\$300USD/month. The predominant home construction type is wood framing with exterior plywood walls and zinc sheeting used as the roofing material.

The established goal of the BRC program was *a faster recovery of the most vulnerable and affected populations through the expedited repair and reconstruction process of hurricane damaged homes*. This would contribute to the sustainable quality of life for the affected families, promote productivity, and strengthen the BRC capacity for future early recovery activities. A 15 step work plan was formulated in order to achieve the goal, ranging from forming the program team and conducting damage, needs and market assessments to developing a communications strategy, distributing the vouchers and completing payments to the merchant. The program used community based targeting; working through village chairpersons and holding open community meetings in order to help identify all of the eligible families. The program was modeled after a similar cash voucher for home repair program that was implemented in Costa Rica in 2009 (DREF MDRCR005). One of the enhancements to this program was the provision of information on construction techniques for making homes more disaster resistant.

Household level assessments were completed by BRC volunteers in the two targeted communities. Damages to homes were evaluated based on pre-defined criteria that were established for the three levels (minor, major, destroyed) of assistance. Market assessments revealed that the nearest building supplies stores that supplied a full

¹ Plan 2009-10, *Global Shelter Program*, IFRC, p. 6

range of needed materials and tools were located in Belize City. The BRC has previously worked with a large, independent building supplies store in Belize City and was able to quickly partner with them and establish an MOU for participation in this program. Working with the building supplies store, and based on information from damage assessments in the field, a price list for certain basic materials that would be needed to complete repairs for each damage level was completed. The amounts of the voucher (*Annex 1*) were subsequently established at \$500, \$1,250 and \$2,000² for the aforementioned three damage classifications. The merchant provided a 20% discount off of regular prices to program beneficiaries.

The distributions of the cash vouchers, to 70 beneficiary families, occurred during the week of December 13, seven weeks after the disaster struck. As part of the program design, a monitoring and evaluation plan was developed. A BRC staff member who was the counterpart to the ARC delegate during the design and implementation of the program conducted follow-up visits to beneficiaries and the building supplies store in order to ensure the redemption of the vouchers, delivery of materials, and proper utilization of the vouchers by beneficiaries. 69 of the 70 beneficiaries redeemed their vouchers within the designated 30 days of validity. Follow-up communications with one beneficiary revealed that he had moved out of the region and thus would not be able to use the voucher and so it was voided. The final step for the program was an evaluation scheduled for the last week of January, providing beneficiaries with 6 weeks in which to purchase their needed construction materials and/or tools and begin repairing their hurricane damaged homes.

II. EVALUATION OBJECTIVES & METHODOLOGY

The objectives of the evaluation were the following:

- **Determine utilization of cash vouchers for shelter repairs and reconstruction 6 weeks post-distribution**
- **Assess the effectiveness and impact of the program**
- **Analyze the implementation strategy of the program**
- **Identify best practices and areas of learning opportunity**

The methodology for completing the evaluation included a review of program documentation, interviews with BRC personnel (staff and volunteers), the ARC delegate, and management of the selected building supplies store. A survey



of project beneficiaries in both project sites (Gracie Rock and Hattieville) was also conducted. A sample of 59 beneficiaries (out of a total population of 69 actual beneficiaries) was calculated at the 95% confidence level with 5% margin of error³ using a simple random sample design. The sample frame was a list provided by the BRC of all beneficiary households, and 59 beneficiaries were selected randomly using Excel. Logistical difficulties prevented the team from interviewing 5 of the selected beneficiaries, and thus the **total number of beneficiaries interviewed was 54**. This smaller sample size increased the margin of error to 6.3%. The team did attempt to interview all beneficiaries. For those who were not at home, observations were made of external repairs completed or new construction materials on-site.

The beneficiary survey (*Annex 2*) was administered by BRC volunteers and consisted of 18 questions that were designed to measure a majority of the key social and technical issues related to the above objectives. Not all beneficiaries answered all the questions in the survey. For those questions with less than 100% response, the number

² The voucher amounts were in Belize Dollars, which have a fixed exchange rate to the US Dollar of 2:1. In order to provide price context at a regional level, all dollar amounts listed in this report refer to US dollars.

³ The confidence level and margin of error can be interpreted in the following way: one can be confident with 95% certainty that the true value for the entire population of any indicator falls within the range of the sample estimate +/- 5%. For example, if the survey would find that 80% of respondents understood how to use the voucher; one could be confident with 95% certainty that the true value for the entire population of this indicator would fall within 75% (80% - 5%) and 85% (80% + 5%).

of actual respondents to the question is listed as a superscripted number ^(n=xx) adjacent to the result. To provide additional subjective information, a greater sense of program impact at the community level, and further validate the individual survey results; **focus group discussions** with 5-8 beneficiaries were also held in each community. A total of thirteen community members participated in these events and overall attendance was favorably diverse in gender and age. Refer to Annex 3 for questions that guided the discussions.

III. FINDINGS & ANALYSIS

The survey results reported below are point estimates of the means (or averages) of the indicators studied. Confidence intervals (which are the reported result +/- the margin of error of 6.3%) are not explicitly calculated, and the reader is reminded to consider the margin of error when interpreting the results. The analysis of the survey results is based on a combination of this objective data, the field visits and the subjective information received from the focus group discussions.

A. GENERAL PROFILE OF RESPONDENTS

50% male/50% female respondents	Respondent's average household income ⁽ⁿ⁼⁵³⁾					
Average family size = 4.8	<\$300/mo.	58%	\$301-750/mo.	38%	\$751-\$1,000	4%
25 of 35 Gracie Rock beneficiaries interviewed	Voucher amount per respondent (weighted avg. value = \$1,055)					
29 of 35 Hattieville beneficiaries interviewed	\$500	48%	\$1,250	33%	\$2,000	22%

Highlighting the vulnerability of the beneficiary families, the majority are earning less than the minimum wage. Due to the low income recorded amongst the beneficiary families, the amount of funds provided by the voucher in the case of a major damage or destroyed classification was a significant amount of resources. However, the values of the vouchers were determined through a cost analysis of the amount of materials and tools that would be needed to complete general repairs for each damage classification. In some cases the funds provided were sufficient, when combined with the use of salvaged materials, to purchase enough materials to completely re-construct a home. The only instance where the amount of the vouchers seemed excessive was for some of the homes that had received minor damage. A few of them were able to complete repairs utilizing the same storm damaged materials or the damages were not excessive enough to necessitate \$500 in assistance.

B. VOUCHER REDEMPTION & MATERIALS DELIVERY

➤ **100% of respondents understood the program, its purpose and how to use the voucher.**

As part of the voucher distribution process, the program implementation team developed a set of "Instructions for Voucher Distribution." The instructions for the volunteers list out all of the necessary steps to ensure that a clear explanation is given to the beneficiary at the time of distribution so that they have a complete understanding of the program and how to use the voucher. Additionally, along with the home repair instructional flyers, the beneficiaries were provided with an acknowledgement letter that summarizes all of the necessary program information and a detailed FAQ.

➤ **100% of respondents stated that the construction materials and tools needed to repair/rebuild their home were available for sale at the building supplies store at a fair or normal price.**

The BRC had a pre-established relationship with the building supplies store that was selected for the voucher program partnership. This led to the provision of a 20% discount for the beneficiaries that allowed them to maximize the amount of resources obtained through the voucher. A one page MOU outlining the purpose of partnership and roles of both the Red Cross and the merchant was signed in relatively short order. As part of the agreement, the BRC designated a staff person as a point of contact to assist with any issues as well as agreed to pay all invoices within 30 days of receipt.

- **Only 7% of respondents noted problems with using the voucher at the building supplies store.**

Approximately 1/3 of the beneficiaries noted challenges in choosing the correct materials at the building supplies store and this could have led to the small percentage perceiving problems with using the voucher at the store. However, there were no issues with the exchange of the voucher for materials as a result of the good relationship and communications with the merchant and the clear set of written instructions for use and exchange of the voucher that were provided to both the merchant and beneficiaries.

- **94% stated that the materials were delivered on time⁽ⁿ⁼⁵²⁾ and 96% stated that the materials arrived in good condition.⁽ⁿ⁼⁵³⁾**

The merchant agreed in the MOU to deliver purchases to beneficiaries within a 30 mile radius, which encompassed the 2 beneficiary communities. As part of this arrangement, they agreed to make bulk deliveries to each community at a minimum of two times per week until all merchandise had been delivered. An interview with management of the building supplies store revealed that they had made a total of 6 bulk distributions to the two communities combined. As the building supplies store grouped their deliveries together twice a week, beneficiaries had to wait a few days to a week in order to receive their materials. However, this was a free service and per the respondents the deliveries were completed in a timely manner.

C. ABILITY TO COMPLETE REPAIRS

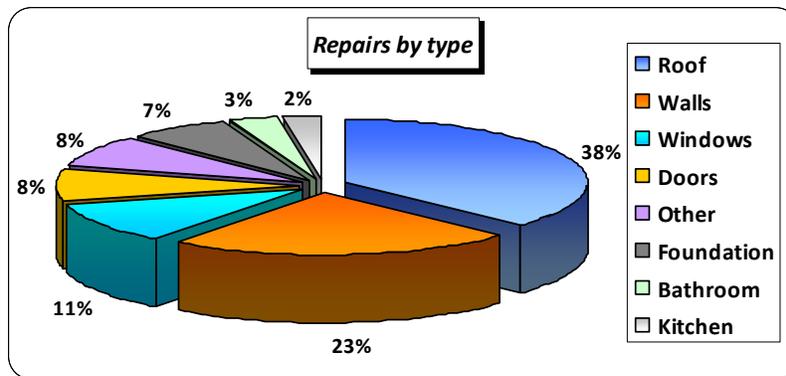
- **94% of the respondents felt that their family had the knowledge and skills to repair/rebuild their home with the materials and tools purchased with the voucher.**

The initial household level assessments determined that there was the technical capacity to conduct basic repairs and construction at the household and community level, and thus an infusion of resources through the cash voucher helped to complete the solution to their home repair needs.

- **27% of the respondents needed more information and/or assistance in choosing the correct materials to repair/rebuild their home.⁽ⁿ⁼⁵²⁾**

Some felt that the hardest part of the program was selecting materials, while others felt that they knew exactly what they needed. The strain of providing this assistance to beneficiaries was also noted by management of the building supplies store. In the focus group discussions, the participants stated that they sought the help of relatives, friends and other community members to help determine the correct materials to purchase, while additional assistance was provided in-store by the merchant.

- **The most common repairs made with the materials and tools purchased with the voucher were:⁽ⁿ⁼⁵⁰⁾**



On average, each respondent made 2.6 different types of repair to their homes.

- **85% of respondents found the flyers provided by the BRC regarding hurricane straps, bracing their home and rebuilding their roof helpful when making repairs.⁽ⁿ⁼⁵³⁾**

The information provided to beneficiaries resulted from coordination with Shelter Advisors at both ARC and IFRC Americas Zone.

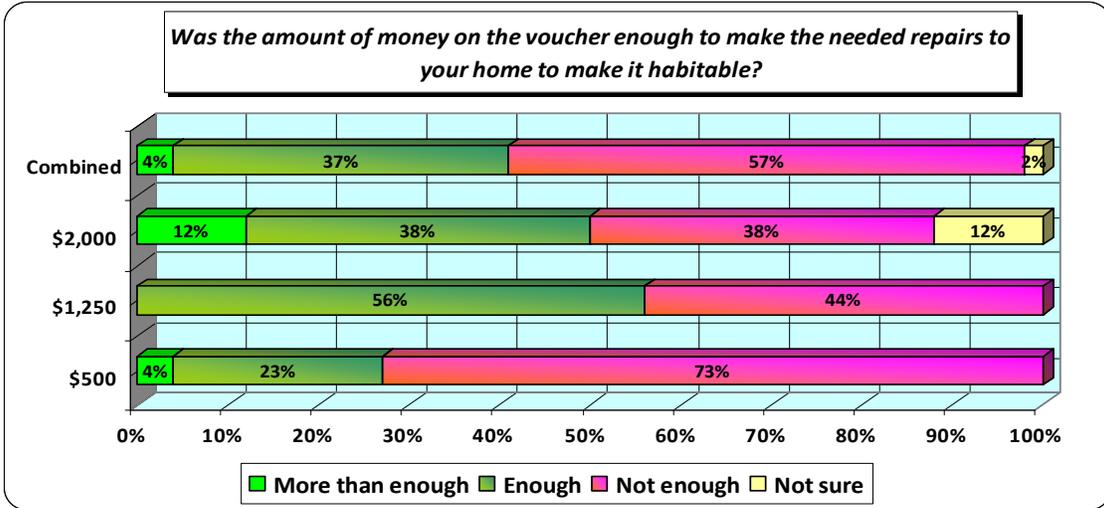
- **60% used the hurricane straps.⁽ⁿ⁼⁵³⁾ Of those that used the straps, 100% found the instructions helpful.**

Beneficiaries were required to purchase a minimum of 24 hurricane straps at the merchant. For those who have not yet used them, they have them on-site, recognize their usefulness and indicated plans to install them prior to the start of the next hurricane season.

- **72% of families could have used more information and/or training about ways to make their home more hurricane resistant.**

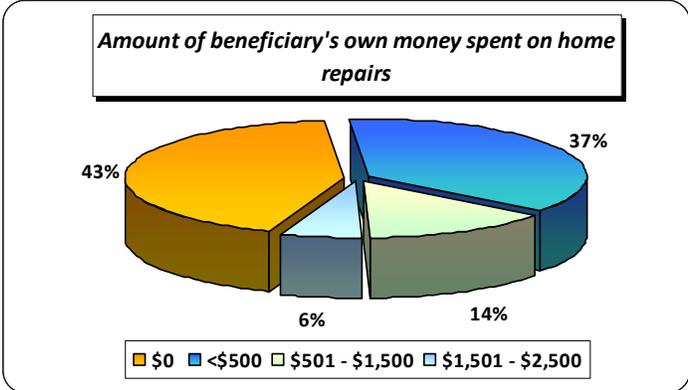
This figure highlights the need to provide appropriate technical assistance in cash for shelter programs and additional commentary on this subject is in the “*Lessons Learned and Recommendations*” section of this report.

D. VOUCHER AMOUNT



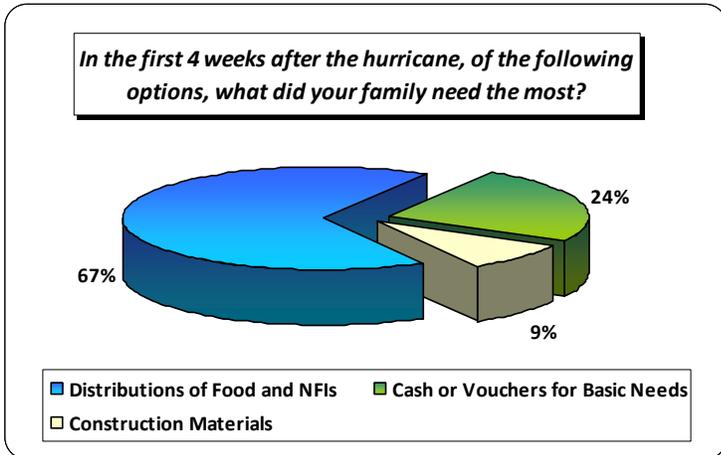
- **For those beneficiaries who answered “Not enough” or “Not sure”, 65% of them said the combination of using their own money and the Red Cross vouchers allowed them to make enough repairs to their home to make it habitable.**

Three months after the hurricane struck these communities, the amount of the vouchers combined with the discount provided by the building supplies store, plus the resources of the homeowners allowed for the clear majority of beneficiaries to make enough repairs to their homes to make them habitable and their lives to return to a sense of normalcy. The voucher program was not intended to improve homes beyond their pre-hurricane state, except for making them more disaster resistant. As the above table shows, there is a clear break in satisfaction levels between those who received a voucher worth \$1,250 or \$2,000 and the beneficiaries who received \$500 for the minor damage classification. However, in the focus groups, where a majority of the participants, as with the program, had received a voucher worth \$500, there was agreement that the value of the vouchers was appropriate and that it was fair to allocate different amounts to families based on their level of damages and needs. The focus group participants did note that there were a small percentage of community members (10-20%) who wanted more funds, which differs from the above percentages, but realized that the program had finite resources.



E. ALTERNATIVE PROGRAMMING

The following hypothetical questions were asked to help determine, with the benefit of hindsight and from the beneficiary's point of view, what would be the preferred type of programming delivered by the BRC during the emergency relief phase as well as for early recovery shelter assistance:



After the hurricane the BRC distributed food and NFIs to these two communities. While, **approximately a quarter of the families would have preferred to receive cash or a voucher to meet their basic needs**, the focus group participants stated that the distance to larger markets, lack of transparency as to what the funds would be used for amongst community members, and the **usefulness of direct delivery of food and NFIs** to the communities, led to a clear majority choosing the latter for their immediate post-disaster needs.

If the respondents were given a choice 8 weeks after the hurricane (which is when the vouchers were distributed), **of the following 3 types of shelter assistance from the Red Cross...**

- **4% would have chosen to receive a standard pre-selected kit of building materials with the same value as the Red Cross voucher.**
- **92% would have elected to choose their own materials and tools using the voucher.**
- **4% would have chosen to have repairs of the same value as the voucher chosen by someone else and completed for them.**

F. IMPACT

- **100% of respondents stated that the voucher program helped their community to recover more quickly.**⁽ⁿ⁼⁵³⁾
- **100% of respondents felt that this Red Cross voucher program contributed significantly to their family’s emotional and physical recovery from the hurricane.**

The choice, empowerment, dignity and respect that cash transfer programs provide, helped lead to the agreement by all respondents that this type of shelter program had a positive impact on their recovery process, as well as that of their community.

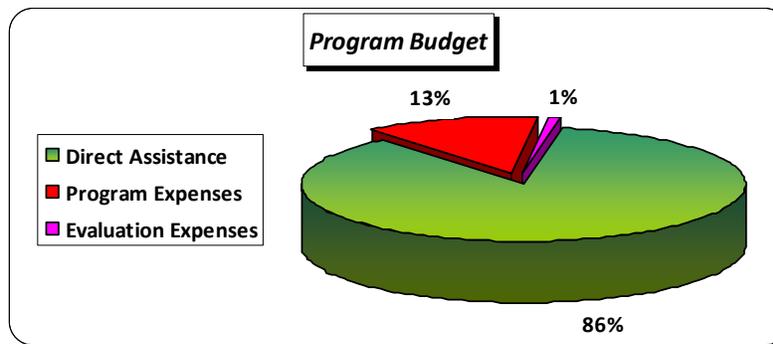
- **100% of respondents were satisfied overall with this Voucher for Home Repair program.**⁽ⁿ⁼⁵²⁾
- Even with the dissatisfaction that was noted by a large number of beneficiaries with the amount of the voucher, or the challenges detailed in choosing the correct construction materials, the level of assistance that the cash voucher provided to a vulnerable population was a significant resource for their recovery from this disaster. Also, by establishing a clear set of parameters to be included in the program with a transparent approach in the communities, not only were the beneficiaries satisfied with the program, but their neighbors who potentially did not receive a voucher understood the program and delivery of assistance by the BRC.

Guiding Principle #3 for shelter after disaster: “Invariably, the greatest effort in a response is made by those affected. They are also most aware of the most appropriate, sustainable and rapid routes to recovery. The greater the involvement of the community in implementation, the more effective and cost-efficient the response will be.”⁴

The involvement of the community was noted by one particular beneficiary during a focus group when she said that *“the Red Cross reached out to us, they took one step forward, and we as a community had to take a step forward to meet them and participate in this program.”* This led to an effective response, not only as measured by the overall satisfaction level of the beneficiaries, but also by the cost effectiveness of the program...

⁴ “SHELTER AFTER DISASTER, strategies for transitional settlement and reconstruction”; Shelter Centre; 10 Guiding Principles; 2010; p. 352

IV. PROGRAM COST EFFECTIVENESS



86% of the program funds went directly into the hands of beneficiaries, via the cash vouchers, empowering them to purchase the tools and materials that they individually needed to repair or reconstruct their home. The above budget does not include the expenses related to the deployed ARC delegates for the program design/implementation as well as the final evaluation. With the experience of implementing the program and the tools and systems that were created, it is assumed that the BRC will be able to implement a similar program in the future without external personnel assistance. If the program was scaled up to increase the number of beneficiaries, the amount of funds provided to beneficiaries would increase at a higher rate than the program expenses, leading to an even higher percentage of funds allocated to direct assistance. The BRC verified all invoices and vouchers from the merchant and completed all payments to them within 5 weeks of the voucher distribution.

V. LESSONS LEARNED & RECOMMENDATIONS for future cash for shelter programs

- 1) This cash for shelter program was appropriately **designed according to the priority needs of the targeted communities** and implemented in an effective and efficient manner. This program, along with the cash voucher for shelter program in Costa Rica and the larger scale Tarjeta RED program in Chile can help provide an adjustable framework for future cash for shelter interventions when adapted to country specific contexts.
- 2) The **community based beneficiary selection process**, provides a transparent way for the community to learn about and have input into the program while mitigating the chances for exclusion and related complaints.
- 3) **Appropriate technical support**, as outlined in the IFRC Owner Driven Housing Reconstruction Principles, includes the “provision by the program of as much technical assistance, training and support as needed.” As 68% of the respondents noted that they could have used more information and/or training in hurricane resistant construction techniques, then this portion of the program could have been strengthened. Assistance from the Zone Shelter delegate was received, however due to time constraints for the implementation of the program, not all of the resourced materials could be appropriately utilized. Besides providing information to beneficiaries in the form of flyers or videos, future programs could include one or more of the following **add-on components**:
 - The Red Cross NS could hire a locally recognized and certified contractor and provide a half-day workshop/training on hurricane resistant building and basic home repair techniques, along with safe construction practices, to both beneficiaries and the community at-large at the local community center or school.
 - During the focus group discussions, single mother beneficiaries noted challenges and confusion in selecting the appropriate materials from the building supplies store. During the distribution process, the RC volunteers could ask beneficiaries if they are in need of professional assistance to select the materials for their home. This list of beneficiaries could then be provided to the retained contractor, who would then schedule home visits to the requesting families and provide them with a no-obligation, free of charge shopping list of items that are needed to repair the damages to their homes.
 - Although only a small percentage of beneficiaries didn't feel that they had the knowledge and skills to repair their homes, during the registration phase all beneficiaries could be given the option to have a contractor

assist them with repairs. In order to partially subsidize the cost of this add-on program and limit demand, a percentage reduction in the amount of the voucher given to the beneficiary would need to be determined.

- On large-scale cash for shelter programs, a construction company could provide job training in basic home repair techniques and safe construction practices to community members and then a Cash for Work project would employ these trained community members to provide appropriate technical guidance and additional labor to homeowners. Besides assisting homeowners, this program would be providing livelihoods training in vulnerable communities within economically challenged regions.
 - These add-on components would only add a small percentage increase to program administration expenses and still **maintain the direct assistance to beneficiaries at 80% or above of overall program funding.**
- 4) At a regional level, as part of the **contingency planning process for shelter interventions**, encourage National Societies to engage pre-disaster with building supplies and hardware stores in order to determine capacity, map locations and pre-draft MOUs and financial payment flows so that a cash for shelter program can be rapidly stood up and implemented effectively per the local context. In this response, the pre-existing relationship that the BRC had with the merchant led to a more rapid delivery of assistance to the beneficiaries. Additionally, pre-identification and development of commonly needed materials & tools lists for these types of interventions, both to determine availability of goods during market analysis and when setting voucher values, will also contribute to program success.

- 5) By **enabling beneficiaries**, of whom 94% stated that they had the knowledge and skills to rebuild/repair their homes, to *“build upon the established housing processes, resources and capacities at the household and community level”* they all concluded that the program helped the community recover more quickly and contributed significantly to their family’s emotional and physical recovery from the hurricane. This helps validate the key reasons identified as to why cash programming should be implemented when the conditions are appropriate and put the beneficiaries in control of their own recovery.



- 6) There were a fair amount of power tools such as circular saws that were bought, that wouldn’t be considered necessary for beneficiaries in the minor damage classification. Additionally, one beneficiary bought a generator that was worth half the value of his voucher. Thus, **restricting the purchase of certain items** in a building supplies store, dependent upon damage classification levels, could be agreed upon with the merchant and communicated to beneficiaries. On the other hand, these tools can be used for livelihoods activities or payment to other community members for assistance with completing repairs and overall are valuable assets for the community, whether resold or used by the purchaser.
- 7) Establish a **price monitoring system** at the selected merchant for 7 to 10 key construction materials. A baseline should be established prior to establishing an agreement with the merchant and then monitoring visits should be conducted during the voucher redemption process and after program completion. These prices should also be compared with 1-2 competitors of the merchant in order to ensure that prices are only moving due to external market forces and not due to an influx of customers and funds from the voucher program. In this program, the merchant provided a 20% discount to the programs’ beneficiaries. A review of the invoices from the merchant showed that the pre-discount prices that the beneficiaries received on the purchase of key items was actually 5-10% less than what the merchant was charging after the program had completed.
- 8) For cash for shelter programs, where the damage and needs assessment of a physical structure is critical to determining the level of assistance provided, National Societies should **pre-identify volunteers that have a construction, engineering or similar background** for the valuable technical input that they can provide in program design and establishing voucher amounts, as well as in implementing the program.

VI. CONCLUSION

This cash voucher for shelter program is both **replicable** and **scalable**, while providing a significant, positive impact on the emotional and physical recovery of families and their communities. With additional funding this program could have been expanded to additional communities with minimal additional administrative burden. The tools and systems that were developed for this shelter intervention provide a platform from which to implement a similar program in the future. Additionally, more than 85% of the program **funds went directly into the hands of the beneficiaries**, thus being a cost effective use of donor funding for a permanent shelter solution.

Overall, there was a high level of satisfaction with all components of this program due its **transparent nature** and the **choice** it provided beneficiaries for addressing their own unique needs. As 92% of the respondents preferred this type of shelter intervention over the provision of a shelter kit or a standardized, contractor built solution not chosen by them; this approach by the BRC was best suited to address the identified shelter needs in the communities while achieving **appropriate coverage** within the small targeted population. The **participatory process** of engaging communities in this program and the amount of financial assistance were adequate, while the **technical assistance** provided could have been improved. Through this program, beneficiary families have been provided with a **solid foundation for recovery** and the framework for implementing this type of cash transfer program in the region is now further refined.



VII. ANNEXES

- Annex 1 – Cash Voucher template
- Annex 2 – Beneficiary Questionnaire
- Annex 3 – Focus Group Discussion questions
- Annex 4 – Evaluation TOR