

Lessons Learned:

GRC/AutRC 2010 earthquake shelter response



Presentation outline

- Components of the shelter program
- Indicative costs of each solution
- Beneficiary satisfaction survey, April-May 2013
- Lessons learned and recommendations
- A few words from the beneficiaries

Components of the shelter program



1003 T-shelters
constructed between
March-December 2010.
Lightweight construction,
tarpaulin wall covering,
timber roof structure,
single-pitched corrugated
iron roof sheeting

Components of the shelter program

2000 P-shelters constructed between February 2011 & August 2012. Raised concrete floor, timber wall structure covered with plywood sheeting, paint, timber roof trusses, double-pitched corrugated iron roof sheeting.



Components of the shelter program



845 T-shelters
upgraded between
May 2012 – April 2013
with new concrete
footings, timber
columns, plywood
walling, window and
paint.

Indicative costs (USD)

T-shelter unit cost	T-shelter upgrade unit cost	T-shelter upgrade total unit cost		P-shelter unit cost
\$1050	\$1475	\$2525 (\$125/m2)		\$2640 (\$129/m2)

The above costs do not include salaries of national or international staff

Components of the shelter program:
any questions?

Beneficiary Satisfaction Survey

Lessons learned:

As can be seen from the Beneficiary Satisfaction Survey, the beneficiaries are quite happy with the results....

but we can always do it better

Lessons learned:

Beneficiary selection criteria

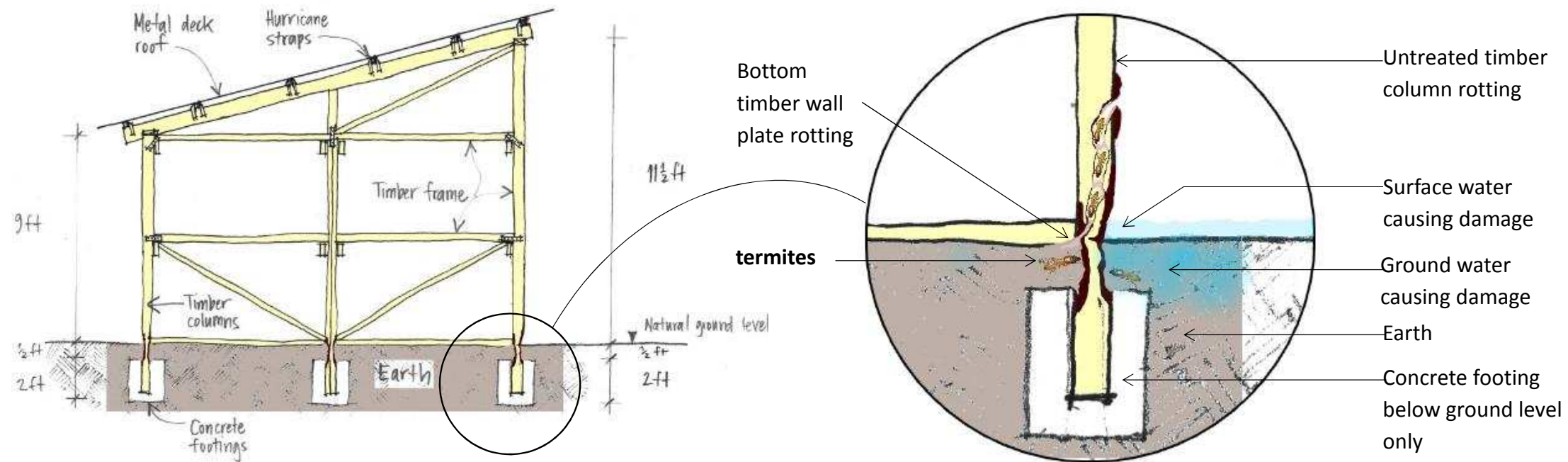
Did we explain it well enough?

73% of the beneficiaries said YES

Recommendations:

Install a community notice board for central and transparent distribution of key project messages to all community members

Lessons learned: Better construction detailing



T-shelter field survey May 2012



T-shelter field survey May 2012

NUMBER OF HOUSES SURVEYED WITH:	KOLO-KOLO	SOUS DE BABA	ROSSEAU	TOTAL	%
ORIGINAL BENEFICIARIES AS OCCUPANTS	359	230	242	831	100%
CEMENT FLOOR CONSTRUCTED BY BENEFICIARY	314	201	189	704	85%
ORIGINAL TARPAULIN STILL IN PLACE	349	226	241	816	98%
PLYWOOD OR OTHER WALLS PRESENT	8	4	1	13	2%
CATEGORY 1: COLUMNS IN GOOD CONDITION	17	7	29	53	6%
CATEGORY 2: COLUMNS WITH LIGHT WATER OR TERMITE DAMAGE	59	27	51	137	16%
CATEGORY 3: COLUMNS ROTTING, WILL NEED REPLACEMENT IN THE NEXT FEW YEARS	241	167	119	527	63%
CATEGORY 4: COLUMNS NOT STRUCTURALLY STABLE, IN NEED OF IMMEDIATE REPLACEMENT	41	28	42	111	13%
INSUFFICIENT HURRICANE STRAPPING	47	5	68	120	14%



Lessons learned: Indicative costs with improved footing detail (USD)

T-shelter unit cost	Extra cement and labour for improved footings	T-shelter upgrade unit cost	T-shelter upgrade total unit cost (revised)		P-shelter unit cost
\$1050	\$100	\$1058	\$2208 (\$110/m2)		\$2640 (\$129/m2)

Improved construction detailing of T-shelter footings may have saved approx. \$USD 267,000 and 8 months.
These costs do not include salaries of national or international staff

Lessons learned:

Better construction detailing

Recommendations:

- Carefully weigh up rapid response against durability. People may live in the shelters indefinitely.
- An emergency shelter is not a transitional shelter
- For T-shelters, build a solid, durable core structure which can be added to later.
- Carefully select appropriate materials (treated timber) and protect them as much as possible from natural elements and pests
- Respect local building typologies (avoid single pitched roof)

Lessons learned:

Spatial requirements & cultural norms

Recommendations:

Beneficiaries negative feelings about not having enough space could be mitigated through:

- Construction of a veranda or break-out space.
(Many beneficiaries added this themselves)
- Outdoor cooking space
- Internal division in shelter
- Second door

Lessons learned:

Delays with procurement and tension
with beneficiaries

Recommendations:

- Allow more time for procurement in planning.
- Better communication with beneficiaries
- Consider cash grants for some local procurement by beneficiary
- Employ national shelter logistician to support

Lessons learned:

Beneficiaries withheld construction materials

Recommendations:

- Deliver material for crucial structural elements (hurricane straps, bracing) directly to contractors
- Further training and advice to beneficiaries

Lessons learned:

Internal coordination between departments could be improved

Recommendations:

- Joint Recovery Program with same beneficiaries across several components = joint program database
- Shelters need latrines, latrines need land. Latrine and shelter delegate (or team) could be one in the same.

Lessons learned:

Internal competition between departments

Recommendations:

- Form only 1 Community Committee per community, which can act as the focal point for all departments
- Add a 5th department “Beneficiary Communications” who acts as the primary contact point with all Community Committees on behalf of the operational departments.

Lessons learned:

Tension caused by recruitment

Recommendations:

- Recruit staff locally

Lessons learned:
Questions?

Significance of the shelter for the beneficiaries



I am very glad you ask me this question. This house has a lot to do to my survival situation today. « Cette maison a beaucoup à voir à ma survie aujourd'hui ».

Significance of the shelter for the beneficiaries

I cannot explain in words, so I keep silent.



Significance of the shelter for the beneficiaries



Really important because I had nothing and I was sleeping under a tree. Now I got out of that situation, it was the most beautiful thing that has happened to me.

Significance of the shelter for the beneficiaries



After the earthquake everybody was so scared, but now because of the house in plywood I am not afraid that the concrete will crash again. That is the most important thing about this house.

Significance of the shelter for the beneficiaries



A roof over my head is all that is important to me. Everyone needs that.

Significance of the shelter for the beneficiaries



*Really important.
I lost everything.
Now I have
something, I can
breathe and
start all over.*

Thanks to GRC/AutRC



Congrats to the GRC/AutRC for this project. It really help us against the « banane and cabrit thief ». They gave me job. Now it's done.

Thanks to GRC/AutRC



*It is a good project;
it gave us work and
advised in case of
disasters. I say
thanks to the Red
Cross*

Thanks to GRC/AutRC

I thank the GRC/AutRC one more time for giving me the hope, because I didn't know what to do when I was staring at my house after the earthquake.



Thanks to GRC/AutRC



*Thanks to the
GRC/AutRC for the
assistance given
after the
earthquake, it
allows us to "de
nous relancer et de
vivre a nouveau".*

Thanks to GRC/AutRC



A big thank you to the GRC/AutRC for their work done in the community. You are our second family after the earthquake. We would like you to stay here for a long time and we are waiting for more projects. Thanks, thanks.

GRC/AutRC shelter team in 2013

