



Safer Houses Methodology

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Comprehensive Disaster Management
(CDM):

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Safer Houses Methodology - Objective

- To improve the knowledge and practical competency of communities on how to reinforce wooden or concrete houses in the event of **hurricanes**, **earthquakes** and **floods**, through training and hands-on practical construction exercises.



Linked to **VCA** and **PASSA**

Prevention phase

- **VCA** (Vulnerability and Capacity Assessment)
- **PASSA** (Participatory Approach for Safe Shelter Awareness)
- **Safer Houses methodology**
 - ▶ Training of Trainers
 - ▶ Training of Community Members

Time

***Focusing on Disaster Risk Reduction:
learning reinforcement techniques, flood protection measures and
how to build a safer wooden house, hurricane- and earthquake-resistant***



Training of **Trainers** (ToT)

Participants: 8 to 10 participants – issuing from the field of construction - carpenters / masons / construction instructors → key people

Duration: 4 days

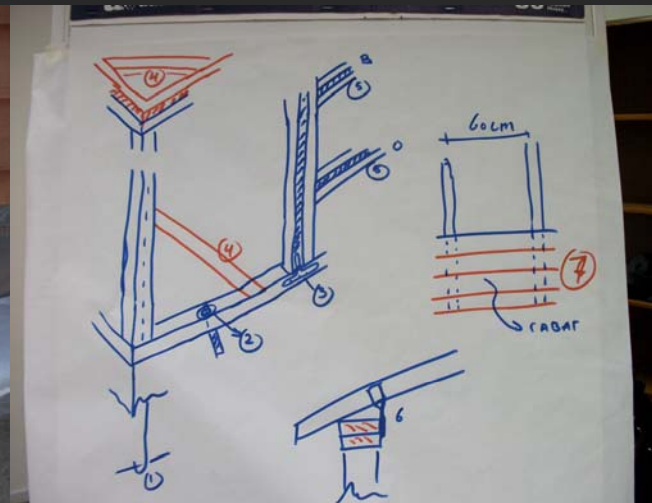
- Theoretical training: 1 day (classroom)
- Practical training: 3 days in the community





Specific objectives - ToT:

- ▶ Learn how to carry out a technical assessment
- ▶ Learn and apply reinforcement techniques based on the construction standards and Building Code – 2 to 3 houses
- ▶ Learn and apply flood protection measures
- ▶ Share and disseminate reinforcement techniques to community members



The participants are evaluated to become a Trainer



Expectations from the **Trainers**

- Actively participate in the Training of Trainers
- Assess the vulnerable houses in the community prior to the training
- Conduct a 2-day Community Training
- Supervise the reinforcement of a certain number of houses in each community



Selection of houses

Social criteria

Vulnerable families:

- Elderly
- Disabled / ill
- Single parent
- Family with many children

2. Technical criteria

- ownership of the house / land
- built in a safe location
- strong enough to be reinforced
- no termites
- structure made of reinforced concrete

Selection: wooden houses up to 24x32 ft (7x10m), concrete houses up to 22x22 ft (10x10m)



Community training

Participants: 12/15 community members / people living in vulnerable houses

Practical training: 2 days in the community focusing on learning reinforcement techniques and flood protection measures - **strengthening 5 - 6 houses**

Duration: 2 days

Trainer: 4 facilitators

Support:

- Community members handbook





safer houses in the Caribbean

Country / # communities	# of com trainers certified (not)	# of community members trained	# of houses reinforced
Barbados / 2	/	12	5
Dominica / 3	3	52	56
Grenada / 16	6 (12)	124	48
Jamaica / 1 (+5)	1 (20)	23	39
St. Lucia / 0	2	/	/
Trinidad and Tobago / 1	6	/	3
TOTAL / 22	18 (22)	211	151



Hurricane Sandy – effects on a community

2 houses damaged in the community:

7 houses with severe damage

15 houses with minor damage

one of the 39 houses which were previously reinforced suffered from Hurricane Sandy



Safer Houses - Claverty Cottage & Clifton Hill



Benefits to the communities

Reduce the level of damages to homes

Empower individuals – disaster risk reduction

Build capacity at individual and community level – skills, competency, knowledge

Individuals and communities can now take greater responsibility for protecting their homes

By teaching people how to better protect their houses, they'll be proactive and do this prior to each hurricane season or threat of hazards/disaster



 International Federation of Red Cross and Red Crescent Societies

Caribbean Red Cross National Societies





THANK YOU!

Delphine Decoray – Shelter Regional Coordinator – French RC
shelter.pirac.frc@gmail.com or reynette.royer@ifrc.org



What should be done if a house cannot be reinforced





→ Building Safer Wooden Houses

applying hurricane- and earthquake-resistant techniques



House destroyed by hurricane Sandy



House built by Jamaica Red Cross in 2008 (after Dean)