



# **Malawi Shelter Cluster Technical Working Group for Promoting Safer Building Practices in Malawi**

a collaboration with the Global Shelter Cluster Working Group on “Promoting Safer Building Practices” and partners of the GCRF research project





## Agenda:

- 1. recap & conclusions last meeting**
- 2. discuss draft matrix with criteria for identifying contextually appropriate construction materials and technologies**
- 3. introduction to how geoscience work can support shelter response with Q&A**





## Recap of goals and objectives

- Step 0: **Forming the Working Group**
- Step 1: **Understanding the Context** (KAP analysis, building practices, construction failure mechanisms, coping strategies, available materials, etc.)
- Step 2: Define IEC **Preliminary Objectives**
- Step 3: Identifying **Stakeholders & Audiences**
- Step 4: **Engagement pathways analysis** (communication media analysis)
- Step 5: **Develop Detailed Messaging** for Audience/ Stakeholders and Engagement Pathways
- Step 6: Define **Roll-Out Strategy** and confirm IEC objectives
- Step 7: Define **Monitoring, Revision and Evaluation** Framework

### → **Context analysis:**

- Assessment trainings by CRAterre and fieldwork by CRS, Cadecom, CARD; finding shared and discussed in the TWG
- Sharing knowledge and experience from active agencies CRS/Cadecom, HfH, Care, Malawi Red Cross
- Identified most common failure mechanisms



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→ Objectives and shared ambition:  
promote stronger, more durable housing especially in highly vulnerable communities that are facing the realities of poverty, lack of resources and limited capacities.

- Focus not only on technical solutions but on awareness raising and better understanding of weaknesses and risks
- what are “green technologies” in different contexts? How to decide, identify the appropriate



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### → Objectives:

- Raise awareness of communities about their shelter & settlement related vulnerabilities and risks
- Promote safer building practices as widely as possible, with focus on people who do not receive any external reconstruction support

### → Key stakeholders and audiences:

- the affected communities
- artisans and builders
- VCPCs, housing officers and other community mobilizers
- Traditional Authorities.
- National authorities (MLHUD, MOPW, district level governance)

→ **Different kind of messages are needed for different target groups**



**Malawi Shelter Cluster**  
ShelterCluster.org  
Coordinating Humanitarian Shelter



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### → Suggested Communication channels:

- “Theatre for change” (or for development) performances
- Community awareness raising about safer building practices
- Basic hands on trainings and demonstrations of safe construction practices in the communities (for “self-builders”)
- Practical trainings for local artisans and builders, ideally with a “safer construction” certification
- Construction of Model houses
- Workshops and/or conferences to bring together representatives from the different involved ministries and levels (National and district level governance) and practitioners (NGOs) to discuss and exchange.
- Continue coordination through the Shelter Cluster and the TWG



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### → Messages identified based on analysis of failure mechanisms:

- Foundations:
    - Strongly advocate for the importance of building foundations and promote deep and strong foundations (except for in areas with black cotton soil)
    - Raised plinths
    - promote use of damp proof membrane
  - Walls and loadbearing structures:
    - Focus on proper dimensioning of elements (walls, columns, lintels)!
    - Where possible avoid wooden parts for loadbearing elements
    - Protect wall base with plaster
  - **Promote materials that have least environmental impact**
  - **Focus on good workmanship**
- different regions/context different techniques and materials are appropriate.
- If “green materials or techniques” are not affordable they will not be used, hence are not sustainable



## How to choose the most suitable "green" material/technology for your project?

materials	economic criteria				technical criteria				envi	
	"Accessibility" is the material available in local markets?		"Availability locally": is the material produced locally/come from local sources (potential	"Affordability", how easy can majority of affected populations afford to buy this material? (maybe as percentage of average income?)	maintenance (ease & frequency): how often does the material need to be maintained/repared?	is there traditional knowledge of the techniques within the community?	should implementation preferably be done by skilled artisans or more highly qualified builders? Is special equipment or machinery needed?	resistance against certain hazards?	estimated durability (in years?)	local environr (such as defor over-exploita sand etc)
alternative binders (lime, ash, ...)										
bamboo										
burnt brick										
cement (for mortar, additive, rendering)										
CGI-sheets										
compressed stabilised earth blocks (CSEB)										
concrete (cement+sand+gravel+water), eg. For slab or columns										
concrete blocks										
earth/mud (e.g. rammed earth)										
grass/thatch										
sand										
steel										
sun dried earth blocks										
timber (construction grade timber)										
water										

the material easily available in local markets (e.g. max. xx Km or hours to walk? At	5	is the material is produced locally (same community, or district?)	5	required quantity can be sourced free of cost, only investemtn is labour	5	no need for maintenance for more than 15 years	5	almost everyone knows how to do it	5	no need to hire skilled labour	can resist well against Flood	over 15 years without maintenance	5
the material can be found in local markets but not easily (max. xx Km or hours to walk? only one seller?)	4	produced/brought from other district	3	required quantity can be afforded very easily (e.g. a few days income?)	4	need minor repairs/treatment app. every 10 years	4	many people know, it is easy to learn by watching or with minimal practice	3	better to contract local artisans	can resist well against EQ	up to 10 years without maintenance	4
available in larger markets nearby town (km?)	3	produced/brought from other	1	required quantity can be afforded (e.g. a months income?)	3	need repairs/treatment app. every 5 years	3	only some local artisans know how to use this mateirals/techiue well	1	better to hire qualified builders	can resist well against strong wind	around 5 years without maintenance	3
not easily available, needs to be brought from city/other district/region	2			required quantity is difficult to afford (e.g. a years income?)	2	needs to be repaired/treated every 3 years	2			need to hire qualified builders and equipment		maximum 3 years without maintenance	2
not available in country	0			cant be afforded	0	needs to be repaired/treated annually	0		1	this level of expertise and equipment is not available here		less than 2 years without	1



## **2. Introduction presentations on how geoscience work can support shelter response with Q&A regarding interest in a longer session/workshop with geoscientists**