

## Kachin Shelter Partners Technical Working Group (TWiG)

Venue: UNHCR Office in Myitkyina

Date: Tuesday 27 August 2013

Time: 10:00 AM to 12:00 PM

### Meeting Participants:

- Paul Knudsen, Shelter Expert, Shelter Cluster
- U Myint Maung, UNHCR
- Haung Zay, KBC
- U La Htut, Shalom (Engineer)
- U Khammaung, Shalom (Coordinator)

Absent: KMSS, DRC, UNICEF & World Vision

## Agenda & Discussion

1. Minutes of the last meeting
2. Standard design, details
3. Kitchen
4. Other structures
5. Building in NGCA
6. AOB

### Minutes of the last meeting

Some action points to be followed up concerned technicalities:

- ✓ Construction such as bracing to prevent shelter from tilting, to be discussed later during the meeting.
- ✓ Rain water harvesting system (RWHS): Shelter Expert mentioned there is a need to discuss this point further. It remains unclear in which camps this is appropriate and relevant or not. During previous meeting it was agreed that this would probably not be considered as a priority but could be useful at least for the entrance of buildings, as support to drainage. Regarding this point it was agreed that the Shelter Expert would make contact with the WaSH cluster to define which sector takes which responsibilities.

- ✓ Communal kitchen: It was agreed it was not the best solution due to several problems, such as safe storage of tools and security for children.
- ✓ Gaps and needs identification: Shelter Expert mentioned that it would not be possible to go much in depth into this matter during the meeting because the Cluster needs to do some preparation to consolidate its data.
- ✓ Tool kit: Agreed as an important part of next phase of work but needs to combine distribution of tools with training within communities as to their use.
- ✓ Material used for construction.

### **Standard design, details**

Ceiling braces: Cluster Lead suggests that no additional vertical bracing is needed for roofing, but that it could be considered to add braces below the rafters to ensure stability both in the horizontal and vertical planes. Attendees agreed with this technical solution.

Agreed by all that the central bracing on the ceiling is not necessary.

**Action point: Cluster Lead to provide sketch for everyone to agree; will be provided by September 4<sup>th</sup> to Cluster partners.**

Shelter Expert showed on computer designs that have been accepted at international level regarding bracing (sample 5); agreement that there is no need for cross-bracing.

Shelter Expert underlined that the discussion on bracing only concerned 5-unit buildings. If the building is bigger, norms have to be modified and middle bracing (on the long elevations) may be needed for these longer buildings.

Side walls: Shelter Experts used sketch to present the needs for bracing for side walls, only also needed at both extremities, inside the walls. Have to be careful that the bracing does not create difficulties to fit the door. There again, this applies only for up to 5-unit building. This needs to be applied for front and back sides.

In summary, for a 5-unit building, bracing is necessary at all levels only for 4 rooms out of 5 (no need on the middle one)

It is normally to do also with bamboo buildings as well as timber buildings, but the technic would be different.

KBC: Prefers to provide shelters with two doors, to allow for some shelters to be divided into two units, to accommodate smaller households within the same space.

Shelter Experts stressed that the main point is that the door has to be built in a place that does not impact the structure of the building, but as a general rule a shelter unit should not be divided as it is planned for one HH. If the occupants later want to make such changes, they can, but that should generally be their own choice in the camp.

- ✓ For the walls between the units, should we use mesh bamboo for better ventilation or do we stay with bamboo mat?

It was agreed that mesh was better for lighting and ventilation, but it does not protect as well from the rain. For the extremities, attendees recommended that it would be entirely closed up to the roof with bamboo mat, rather than bamboo mesh. KBC proposes to keep small holes with bamboo mesh in the bamboo mat. The Cluster Lead insisted that it cannot be only a hole otherwise the solidity of the bamboo mat can be compromised. It needs to be framed properly. All agree that the “windows” will be directly sewed within the bamboo mat. Partners may decide what is possible to provide at each location to allow for necessary light and ventilation in the end walls.

✓ Doors and windows

Standard design specifies a need for window at the backside. The Cluster Coordinator for Kachin mentioned that due to the lack of windows he witnessed camps where people were doing “self-made” openings in the wall of the shelter for light and ventilation, which is not good for sustainability of the structure. Shelter Expert strongly encouraged the need for a window, no matter if the decision is for one or two doors for a unit. The attendees agreed.

Shelter Expert mentioned that 2 doors can lead to some security issues as it offers potentially a back entry into houses. However, if the second door is kept closed when not used it should not be such a big issue. Shelter Expert reminded the UNHCR IPs that if they would like to make 2 doors on a unit they need to approach UNHCR for validation and share with the Shelter Cluster. IPs for UNHCR need to provide written request to modify shelter design.

Shelter Expert encouraged participants to prepare before the meeting when they have specific issues they would like to share and offer presentations. This way, it will make the meeting more time efficient.

Regarding the gutter system, gutters needs to be completed with a down pipe. Like this, if it is decided to adapt a reservoir the down pipe for connection is already in place and if the decisions is not to install RWHS it is easy to complete the pipe to reach the drainage system.

### **Kitchen design**

During the previous meeting the group discussed 2, potentially 3, different kitchen designs. One is attached to the unit and the other a free-standing building with individual kitchen units. These should ideally be made as one unit for each shelter, but may be difficult to achieve on sites with limited space.

For new structures, add on kitchen 6' x 8' and a covered entrance 6' x 3'. This size will cover the front side of each shelter, allowing 5 kitchens to be built as annex to a standard 5-shelter longhouse.

Additional kitchen to existing sites, separate kitchen buildings, double row, 6' x 7'6" for each unit.

The design must allow for smoke to escape between the roof of the shelter and the roof of the kitchen while water should be kept out, using gutters to protect the buildings against splatter.

Where a separate building is provided it should be with gutters to avoid water at the entrance to the individual kitchen unit.

Should kitchen units be provided with bamboo mesh above metal sheets, as well as a door to give more privacy for each unit? This will add to the cost of building, and it should be carefully assessed if the added benefits for the users outweigh the extra cost.

Within middle of September UNHCR shall make proposal for design drawings; two types: annexes to shelter buildings and free-standing structures.

### **Other structures**

What is needed of other shelter-associated buildings? Multipurpose buildings, recreational and/or educational spaces for children, space for women groups and other special groups, camp offices, camp clinics etc. As time goes by and the camp becomes more “mature” there will be a demand for more than the basic shelters and where not already built it should be expected that these needs should be considered. This should be taken into account when planning new works.

IP’s and Cluster partner UNHCR need to consider these needs and follow-up based on a priority for the most important structures, e.g. camp clinics. Some different designs have been seen in camps. Is there a good case for standardizing or is it better to accept that various camps (size of population, space on site, distance to referral facilities etc. should require tailor-made designs?

### **Building in NGCA**

Without making too general statements about the conditions in NGCA versus other locations, the Cluster can still draw some trends based on various factors that contribute to different needs in these areas; for example, availability of materials. This then leads to the issue of how to make adjustments and manage with what is available, while still trying to deliver minimum standards.

Other factors to consider include: different climatic conditions (colder and more wind); problematic site conditions, in particular steep slopes and narrow/tight sites on which to build the camps; less supervision during construction due to lack of access for staff and less skilled craftsmen available to take responsibility for the quality of work; and UXOs (landmines) in areas near the sites, and from where bamboo is normally cut for construction.

These are constraints that need to be taken into account when planning work in these areas, and some allowances should be made for delays and extra work needed for meeting these challenges.

### **AOB**

None

Next meeting date to be announced; the date/time will be coordinated with the convoys as participation in these has higher priority than the TWiG forum.

## SUMMARY/ACTION

Agenda item	Action	By whom	Time
Shelter design, details	To provide sketches of bracing of rafters	Cluster Lead	4 <sup>th</sup> September '13
Kitchen	Proposal for design drawings for two types of kitchen. Individual annexes to shelter buildings and free standing structure (can be used as individual or collective kitchen).	Cluster Lead	15 <sup>th</sup> September '13
Other structures	Make prioritized list of other necessary buildings for camps	Cluster Members	Before next meeting
Building in NGCA	Building in NGCA. Make allowances for the extra challenges of work in these areas, i.e.: materials, climatic conditions, topography and available skills and supervisory capacity.	Cluster Members	Continuously
AOB	Next meeting to be announced	Cluster Lead	In good time before the meeting