

## Kachin Shelter Partners Technical Working Group (TWiG)

Venue: UNHCR Office in Myitkyina  
Date: Wednesday 13 August 2013  
Time: 10:00 AM to 12:45 PM

### Meeting Participants:

- Paul Knudsen, Shelter Expert, Shelter Cluster
- U Myint Maung, UNHCR
- Daw Seng Pan, UNHCR, CCCM Cluster Coordinator
- U Lu Zaw, UNHCR
- U Zaw Min, DRC
- U Branmai, KBC
- U Haung Zal, KBC
- U Khun Aung, KMSS
- U La Htwel Aung, Metta
- U La Htut, Shalom
- U Khammaung, Shalom

Minutes: Paul Knudsen

## Agenda & Discussion

1. Welcome and introduction
2. New standard design for 5 unit shelter, and upgrading of existing shelters
3. Identifying gaps and needs
4. Work in NGCA
5. Progress of renovation work in camps, and shelter construction in Pharkant
6. Challenges
7. Toolkits and carpenter training
8. AOB

### Welcome and introduction

Participants were welcomed by Paul Knudsen to what is hoped to be the first regular technical meetings for shelter engineers and agencies involved in shelter construction and maintenance in the area. The aim of the meetings will be to work together to share ideas, dispense information, and in general seek the best solutions for safe and durable shelters compliance with the international agreed

standards for shelter and associated infrastructure in camps. The use of local materials and local knowledge and skills in the work is also essential to achieve good results.

### **Standard design for 5 unit shelter**

The most important changes from previous designs were highlighted; especially features that provide better safety for the building: anchoring the building to the ground through the foundations, bracing etc. It was noted that reinforcement for foundations cast in situ is missing from the BoQs.

Bracing has not been used in the previous design, and there are some issues about how it should be fixed in the new design. There may be need for some modifications which should not weaken the structures, but ensure that the bracings will function as intended. This is especially to make sure that the ceiling braces are done in a practical way, but also to consider some changes to the wall bracings which can allow for space for back door in shelter also. We will come back to solutions to this.

Rainwater catchment and gutters should be followed up in a later meeting. To allow for installation of gutters, the rafters should be cut at the right length for easy installation of bargeboard and gutter, even if not provided at the time of building. The need for gutters is not only related to rainwater collection, but also is a health hazard problem if water is making areas in front of the shelters muddy. The question about where rainwater is to be collected should be agreed with the WaSH teams.

Kitchens for shelters is a difficult issue, and it needs more work to find the right solution to how these should be included in the camps. IDP's in general are in favour of communal kitchen, and where provided they will usually build a makeshift kitchen next to their entrance. This may be considered an unacceptable fire hazard. For new construction it is agreed that it is necessary to plan for future building of kitchens, also where this is not included in the project. Since the favoured solution is to provide a kitchen enclosure/room just outside the shelter, this must be considered when deciding on the space for buildings. Where space does not allow this, especially in camps that are already built up, other solutions should be sought to build kitchen nearby the shelters. The main concern of the IDP's is reported to be that they need to have spaces that can be closed to avoid animals, children etc to enter the kitchen, make the kitchen into a place where utensils and some food can be stored safely and food cooked in a clean environment. There are some kitchen designs that can be looked into to see if some standards can be made from these, e.g. new kitchen at Town Church in Waingmaw as well as the DRC designs. Other that have their own designs should present them to the Cluster as input in the planning process. This will be an issue in the next meeting also.

### **Identifying gaps and needs**

Shelter engineers and their assistants are in position to advise the Camp Managers about needs for improvements to shelter, in particular when structural problems should be addressed. It should not be expected that the IDP's have the technical knowledge to include such matters in their own requests as they may not be aware of the needs. Also questions about the number of occupants in each shelter should be discussed, and if overcrowding (according to Sphere standards) is the case, this may be a case for considering additional shelters.

### **Work in NGCA areas**

Working in NGCA is more challenging than in GCA. With restriction on access there is less supervision of work, and more responsibility put on the builders themselves. It is also difficult to find well qualified

carpenters in these areas, which means that less qualified carpenters have to do work with less supervision.

Materials of common standard are not readily available. Materials procured from China are not always of the same specifications and quality as common in Myanmar, e.g. plywood standards.

Most of the camps are in hilly, rocky terrain and needs special designs of shelters. The climatic conditions are harsher with cold winters and the shelters should be built to a standard which is more appropriate for the climate and the site conditions. Using plywood is considered a better option than bamboo in the colder climate in the border areas, both due to letting less unwanted air ventilation through the material, and because of scarcity of bamboo in most of the areas. In some areas where there are bamboo forests, there is also a risk of landmines which makes it a safety hazard to cut bamboo.

All this increases the risk of errors when building in these areas. During the emergency phase of the displacement there was not time to handle these additional challenges, and the result is that there are needs for work to upgrade many camps to acceptable minimum standards.

One of the ways of meeting these challenges is to provide training of carpenters and foremen. This should be a priority when working in NGCA areas.

### **Progress of work in camps, and shelter construction in Pharkant**

<b>Implementing Partner</b>	<b>Progress</b>	<b>Location</b>	<b>Remarks</b>
Renovation/Upgrading			
Shalom	80%	All locations	
KBC	90%	Myitkyina & Waingmaw	GCA areas
KBC	0%	NGCA	Not started
KMSS	100%	All locations	Completed
Construction			
KBC	40 of 100 shelters completed	Pharkant.	Work on-going on remaining 60 shelters

### **Challenges**

To be discussed in next meeting.

### **Toolkits and carpenter training**

Toolkits to be followed-up at next meeting

Carpenter training was discussed as a need in general, and particular in NGCA (see item 4). Although there is need to discuss further about what the training should include, how it should be conducted and who should do it, this may be something that can be added as the work goes on. It is important

especially in the NGCA that the IP's provide training as *any* training is likely to be better than none. The important issues will be to ensure that work is done as well as possible under the given conditions, and that the carpenters are using the right tools and the right materials for the work, as well as have some understanding of the basic principles of making safe shelters.

This will be followed up.

## AOB

None

The members of the group are encouraged to submit matter that they want to discuss in the next meeting. The next meeting is proposed to be held on Tuesday 27th August, 10:00 at UNHCR. If any other organizations wish to provide space for the meeting, it would be welcomed.

## SUMMARY/ACTION

Raised by	Discussion	Opinion	Action to Follow up
Standard design for 5 unit shelter			
All	Foundation – concrete post footing	Prefab or precast concrete post footing has to be done in accordance with design. If not possible, alternatives should be agreed <b>before</b> work is done.	
All	Ceiling braces	How many and where to put?	Agree on recommendation in next meeting
All	Wall braces - issues about how to find the best solution	Where to install? Only at both end side or also at interior cross walls? How to install at back and possibly the front wall?	Agree on recommendation in next meeting
DRC	Roof truss bracing and how to do it	Alternative to standard design - roof bracing should be put under roof trusses (alternative to ceiling braces)	Agree on recommendation in next meeting

All	Rainwater catchment and gutters	Gutter is needed to avoid water in front of the shelter.  Rainwater catchment should be considered where access to water is difficult/more expensive. Rainwater may not be safe for drinking when collected from roofs.	Gutter has to be installed as per design. Rainwater catchment tanks as needed.  Drainage away from shelter should be provided (WaSH)
All	Communal kitchen	Not preferred by IDP's. Storage of food and utensils not possible, apart from shelter, unclean environment for cooking and no privacy are some arguments. Most IDPs prefer individual kitchen attached to shelter.	Plans are needed for different site conditions (attached to shelter, separate building etc). What are the space requirements?  Prepare proposals and discuss at next meeting.
KBC		Separate budget for shelter and kitchen (as now) is preferable.	As long as kitchen is planned separately from shelter this will still be the case.
Identifying gaps and needs			
All IPs	Details described in para-3		Action to be taken by IPs
Work in NGCA areas			
All IPs and Agencies	See details described in para-4  The IPs recommended to use plywood or other materials that gives better wind-proofing of walls (and floors) in wind-exposed areas and chilly winters. Bamboo is more suitable in other areas.		To be followed up in future meetings.
Progress of renovation work in camps, and shelter construction in Pharkant			
All IPs and Agencies	See details described in para-5		UNHCR conducts regular monitoring for renovation and shelter construction while the activities are on-going.

Challenges			
All IPs and Agencies			To be followed up in next meeting.
Toolkits and carpenter training			
All IPs and Agencies	Details described in para-7		To be followed up in next meeting.