

## **Diversity and Adaptation of Shelters in Transitional Settlements for IDPs in Afghanistan**

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*The diversity of shelters used in transitional settlements for Internally Displaced Persons (IDPs) in Herat, Afghanistan is described. The information is based on a field survey undertaken in March 2002 and highlights the adaptation techniques, which IDPs undertake to improve any provided shelter. Potential areas for improvement are indicated; for example, the possibility for using insulated, demountable liners to prevent cold-related deaths without sacrificing shelter flexibility along with the likely need for better agency coordination of the shelter responses they provide. The wider context in which the technical recommendations would be implemented must also be considered. Such issues include agency resources, political impediments to providing the desired option, and the preference of many IDPs that the best shelter would be their home.*

*Keywords:* Afghanistan, forced migrants, IDPs, shelter, tents, transitional settlement.

### **Introduction**

Afghanistan has been affected by decades of war and years of drought, leading to significant population migrations within and out of the country and the development of large transitional settlements to cope with the displaced populations (see Jazayeri (2002) and Marsden (2003) for a detailed background to this situation). At the end of 2001, following limited rainfall along with the overthrow of the Taliban regime in Kabul, a significant proportion of the displaced population, internally and externally, was eager to return to their homes. Thus, the transitional settlements have been rapidly fluctuating in size. For example, UNHCR (2003) reported that throughout 2002, 1.8 million refugees and 250,000 IDPs in Afghanistan returned home with UNHCR assistance while another 200,000 IDPs returned on their own.

In the context of this complex situation, this paper examines the diversity and adaptation of shelters used in transitional settlements in Afghanistan following a field survey undertaken in March 2002 by one of the authors, Ashmore. The basic typology in Box 1 was developed to categorise the shelters.

**Box 1 Shelter typologies to categorise shelters**

Type 1	Traditional, permanent shelter
Type 2	Shelter brought in by IDPs
Type 3	Shelters made locally by IDPs
Type 4	Agency-supported locally built shelter
Type 5	Agency-imported shelter (mainly tents)

Due to rapid changes, the data and specific observations reported in this paper should be considered only an overview of the situation as it was in March 2002.

Shelter is more than just a roof. Shelter is a habitable covered living space, providing a secure, healthy living environment with privacy and dignity for those within it. The provision of adequate shelter is a key aspect of humanitarian response. Failure to provide adequate shelter will lead to increased mortality and morbidity as well as increased psychological trauma. Shelter is one of the five key sectors of the Sphere Project Humanitarian Charter and Minimum Standards in Disaster Response (Sphere, 2000, 2003). The University of Cambridge Shelterproject.org has produced a discussion of the importance, history and spending on the shelter sector (shelterproject.org, 2003b). This paper discusses shelters as they are seen in the field but does not discuss the selection of transitional settlement strategies nor the selection of the transitional settlement sites that were visited.

Davis provides a clear discussion of shelter provision and approaches following natural disasters (Davis, 1978), although the circumstances of populations following natural disasters where displacement is local are different from those of people who have had to relocate owing to conflict and drought. *Engineering in Emergencies* (Lambert and Davis, 2002) provides technical information on construction techniques. Basic guidance on shelter strategy and provision is provided by the United Nations High Commissioner for Refugees (UNHCR, 1999). Guidelines for transitional shelter for displaced populations are being developed with the University of Cambridge's Shelterproject.org and collaborating agencies (shelterproject.org, forthcoming). This paper does not intend to provide guidance but aims to share information from the field on how shelters are used in practice by the displaced populations in western Afghanistan.

**Methodology**

Five transitional settlements of IDPs in and around the city of Herat in western Afghanistan were visited, along with five tent manufacturers in Pakistan (see Figure 1). Unstructured and semi-structured interviews were conducted with IDPs in the transitional settlements, with agency personnel, and with tent factory management staff. Specific agencies are not identified, except for publicly available references, in order to respect confidentiality. Additionally, it enables discussion to take place without presenting information that could be used critically about individuals and groups who are doing the best feasible while working in difficult conditions.

The main limitations of this report are:

- The settlements assessed represent a small geographical area.
- The settlements were examined at only one point in time.

- The interviews are from a relatively small number of IDPs, agency personnel and tent manufacturers.
- There were difficulties arising from language and cultural differences among researchers, translators and interviewees.

## Findings

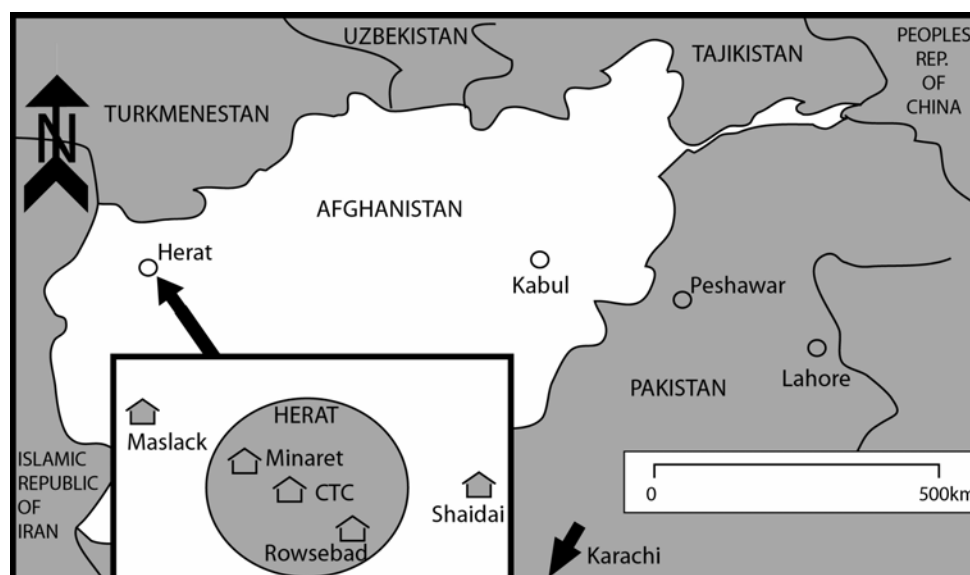
### Overview of transitional settlements

This section describes the five transitional settlements around Herat which were visited: CTC, Maslack, Minaret I + II, Shaidai, and Rowsebad (see Figure 1). As of 14 March 2002, agencies reported over 150,000 IDPs in these transitional settlements with the majority in Maslack (see Table 1).

The number of occupants listed for CTC and Rowsebad are estimates based on the average official Maslack family size of 3.8 people. This size denotes a small family for Afghanistan, but could indicate multiple distributions of food and shelter to the same families. Moreover, multiple registrations by IDPs are likely to have slightly inflated the figures in Table 1. Frequent reports were made of Afghan families, possibly local or possibly non-local, pretending to use shelters or having one family member stay in a shelter in order to qualify for relief supplies.

Following rains and the beginning of the planting season, the population of these transitional settlements was falling owing to both assisted and voluntary returns. Simultaneously, many new arrivals were appearing and, as per agency policy, were being settled in Shaidai with all other settlements being closed to newcomers.

CTC was located in the centre of Herat and comprised mainly permanent structures. The population had brought in most of the material needed for immediate shelter needs and over time had adapted their shelter using local materials and tech-



**Figure 1** Map of locations visited in Afghanistan and Pakistan

**Table 1 Overview of the IDP settlements surrounding Herat in March 2002**

<i>Transitional settlement</i>	<i>Families</i>	<i>Occupants</i>
CTC	120	460
Maslack	30,500	116,000
Minaret I+II	1,250	7,000
Rowsebad	990	3,800
Shaidai	4,600	25,000
TOTAL	37,400	153,500

niques. In March 2002, much of CTC was demolished to provide land for a school.

More than 17 agencies were involved in Maslack which was divided into three settlements, each of which was divided into blocks. Each block generally contained a single shelter type. Many of the transitional shelter options had become solid constructions through additions with local material, either self-built or agency-supported. Maslack had the highest concentration of new tents in the Herat area and was the only transitional settlement visited which had numerous ridge tents that had not been rebuilt in adobe. A high turnover rate of tents was evident in Maslack for the following reasons:

- Wind damage. The usable life of some tents is less than three weeks.
- Settlement restructuring. Hoop tents visited one afternoon had been moved by the following day.
- IDPs selling and taking tents even though agency policy was that tents should remain when families depart and returnees were given one tent per family as they left Maslack. Many tents were also reported as stolen.

Minaret was opened in 1994 and hence is the oldest transitional settlement in or around Herat. Minaret I + II's population is relatively static, explaining the preponderance of more permanent, solid structures. Adaptation of imported shelter materials such as addition of mud walls to canvas tents was prominent.

Rowsebad, which has existed for approximately six years, and Shaidai, the second-largest settlement in the Herat region, displayed similar shelter characteristics to Minaret I + II. More permanent, solid structures, incorporating imported materials, were prominent. The populations appear to have met their shelter needs through adaptation with reduced agency assistance, although the difficulties the population faced at the start of the settlements are not known.

The following section details the specific shelters observed, grouped according to the typology developed. Table 2 summarises the shelters observed in each transitional settlement along with the shelters' types. The diversity suggests that a single approach to shelter provision may not be adequate for this emergency situation, although a shift towards more durable shelter options in the transitional settlements was occurring in March 2002.

### ***Type 1: traditional, permanent shelters***

Type 1 refers to the host population's shelter. Although some of the adapted shelters were relatively sophisticated, none was as advanced or solid as the host population's

**Table 2 Summary of shelters in the Herat area in March 2002**

<i>Transitional settlement</i>	<i>Type cf Box1</i>	<i>More detailed description</i>
CTC	Type 2	Several yurts had been built. Local materials had been added to some, making these shelters more Type 3
	Type 3	Mainly adobe-walled enclosures with adobe structures. Some old ridge tents were incorporated as roofing
Maslack	Type 2	Some Kuchi tents
	Type 3	Self-built adobe construction. Roof collapse is a concern. Some canvas tents (Type 5) were also converted to Type 3
	Type 4	Semi-permanent, agency-built houses with latrines. Some had raised stone bases and some had increased earthquake resistance with wooden ring beams
	Type 5	Fewer than 2,000 tents remained, most of which were hoop tents. Ridge tents of varying origin, design, and quality were also present, including fewer than 500 ridge canvas tents. Some self-built shelters (Type 3) started out as tents (Type 5) but now used the canvas for only the roof
Minaret I + II	Type 3	The majority of structures are self-built adobe buildings. Some have tented roofs with adobe walls. There are also several adobe-walled compounds
	Type 4	Some agency-supported adobe structures
Rowsebad	Type 3	The majority of structures are adobe with canvas forming the roof. Many canvas tents (Type 5) were likely converted to Type 3 by the occupants
	Type 4	Several agency-built, adobe, solid structures
Shaidai	Type 5	About 5–10 hoop tents and 5–10 ridge tents
	Type 3	The majority of shelters were locally made adobe houses
	Type 4	Some adobe houses built by agencies
	Type 5	Approximately 300 hoop tents

houses. The benefits derived from housing IDPs in such permanent structures are questionable considering the political difficulties which could result (Babister and Kelman, 2002). Regardless, examining the traditional, permanent shelter in an area is useful for emergency shelter work. First, it informs about available materials, skills which could be used, natural hazards faced, and design solutions which might work in that area. Second, local solutions should be considered for reconstruction and resettlement projects.

Diverse house styles and construction techniques were seen, many of which had features for improving their environmental performance. Traditional construction is of adobe, so structures have a relatively large thermal mass. Thus, they stay warm at night and cool during the day. Windows are small, minimising heat loss in the winter and keeping the inside dark and shaded during the summer. Some houses have heating systems in which exhaust gases from a bread oven (*tanur*) pass under the floor, thereby heating it and using the oven to maximum efficiency.

Many houses have wind scoops on the roof to aid ventilation during the hot summer months. The wind passes over the wind scoop, which causes a negative pressure, thereby drawing air out from the house. These scoops can be adapted to take a stove's flue pipe in winter. Many locally-built shelters also have vaulted roofs which

permit construction without wood. Such local practices could be considered for transitional settlements, but must be balanced with the questionable benefits of building permanent structures for a transitional population (Babister and Kelman, 2002).

### ***Type 2: shelter brought in by IDPs***

There were two types of shelter imported by IDPs: Kuchi tents and yurts (Kuchis are a major nomadic ethnic group in Afghanistan).

Kuchi tents are made from panels of woven goat wool that are stitched together over a wooden frame. The wool is thick and black, working as a good insulator against both the summer's heat and the winter's cold. The wool is also thick enough to repel rain water. The structure is adaptable so that it can be raised and ventilated in the heat or lowered in the cold or in strong winds. Kuchi tents, weigh several hundred kilograms each.

Each tent takes one family approximately one month to make if there is wool available. There are currently insufficient supplies of wool in Herat for large-scale production. Furthermore, the logistics of setting up large-scale production are difficult, although some local support exists for setting up fabrication projects. Kuchi tents are dispersed throughout the Herat region, but relatively small numbers occur in the IDP settlements. For example, in March 2002, fewer than 100 Kuchi tents were in and around Maslack. In some cases, the material from Kuchi tents was combined with agency-imported tents.

Kuchi tents are adapted well to the local environment. They are a good shelter option in terms of thermal performance in a diversity of weather conditions. They cannot be mass-produced and are heavier than canvas tents, hence they are unlikely to be suitable for emergency deployment without stockpiling. Stockpiling is impractical due to its highly localised nature and the high degree of protection from the environment and the population which the stockpiles would require.

Yurts are dome-shaped and are based about a wooden frame. Yurts in Herat had not moved for a relatively long time. They were built up with mud for approximately the first metre from the ground, then covered with a combination of animal skins, plastic sheeting, and felt. Yurts weigh several hundred kilograms each. The fabrication of Yurts is labour intensive and requires considerable skill.

Yurts are uncommon in Herat, being present only in CTC — and in small numbers there. The IDPs living in them came from north-east Afghanistan. Yurts are known for their excellent performance in cold climate. Yurts are heavy and require plenty of wood to build. They would not be available in the quantities required for emergency deployment without stockpiling. Observed yurts had poor roofs due to the occupants' lack of resources and the lack of source materials.

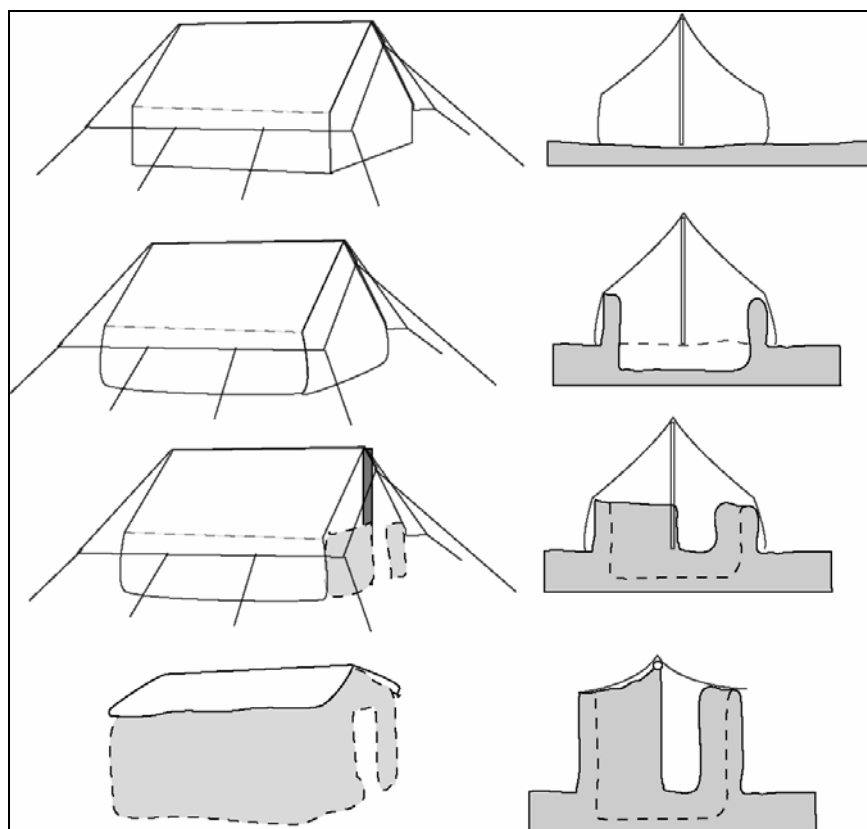
### ***Type 3: shelters made locally by IDPs***

Type 3 shelters are made locally by IDPs using any available material, generally with walls of adobe and roofs of plastic sheeting, canvas and wood. In parts of Maslack, a policy was enacted of removing some of these shelters because of poor site planning and the danger from collapse and leaky roofs. Additionally, projects had been completed to aid IDPs build their own shelters by distributing wooden poles and aiding IDPs to make mud blocks.

After a long period of occupation in transitional settlements, IDPs frequently make mud shelters, often using sections of plastic sheeting or building on existing, donated tents. Figure 2 illustrates how this transition from tent (Type 5) to semi-permanent self-built (Type 3) or agency-supported (Type 4) structure occurs. Shelters in transition from tents to a semi-permanent adobe structure were one of the most common shelter types to be found in IDP settlements in and around Herat. Roofs commonly remain canvas for several reasons. Families may lack the material, money, skill or physical ability to make a durable roof. By maintaining a canvas roof, it is possible that some families believe that agencies will be more likely to distribute food and other relief items to them.

#### **Type 4: agency-supported**

Type 4 shelters are agency-supported, locally built shelters, generally solidly constructed to a high standard. These shelters typically use a mud and stone base, with adobe block walls. Many use a wooden ring beam, and a flat wooden roof sealed with mud. The structure is often finished with wooden doors and windows. Some of these shelter designs are not sustainable, mainly due to the use of wood in a country suffering from deforestation.



**Figure 2** The transition effected by IDPs around Herat from tent (Type 5) to semi-permanent self-built (Type 3) or agency-supported (Type 4) structure

The occupants questioned, some of whom had always lived in Kuchi tents before, were generally happy with their shelters and considered them to be high quality. This high quality might be problematic because creating near-permanent accommodation in a temporary settlement could become a disincentive to return home and could dissuade the population from continuing to use their traditional shelter options. From a planning perspective, the shelters were often built with large spaces between them in a grid pattern along one side of the settlement. This layout does not account for traditional community practices.

### **Type 5: agency-imported shelters**

Type 5 shelters are all tents (see Figure 3). They were highly variable in quality and specification even though all IDPs faced similar conditions. The agency-imported shelters were less common than many other shelter types in and around Herat in March 2002, with most appearing in Maslack. The three main types were hoop tents (see Figure 3a), canvas ridge tents (see Figure 3b), and high-walled centre-pole tents (see Figure 3c). Low-walled centre-pole tents (figure 3d) were also observed.

Hoop tents (see Figure 3a) were the most common type of imported family shelter in and around Herat. By March 2002, the agency using these tents had procured approximately 10,000 for Afghanistan. This shelter comprises a steel tubular frame with a three-layer skin. The outer layer is strong PVC canvas, the middle layer is silver bubble wrap for insulation, and the inner layer is plastic sacking.

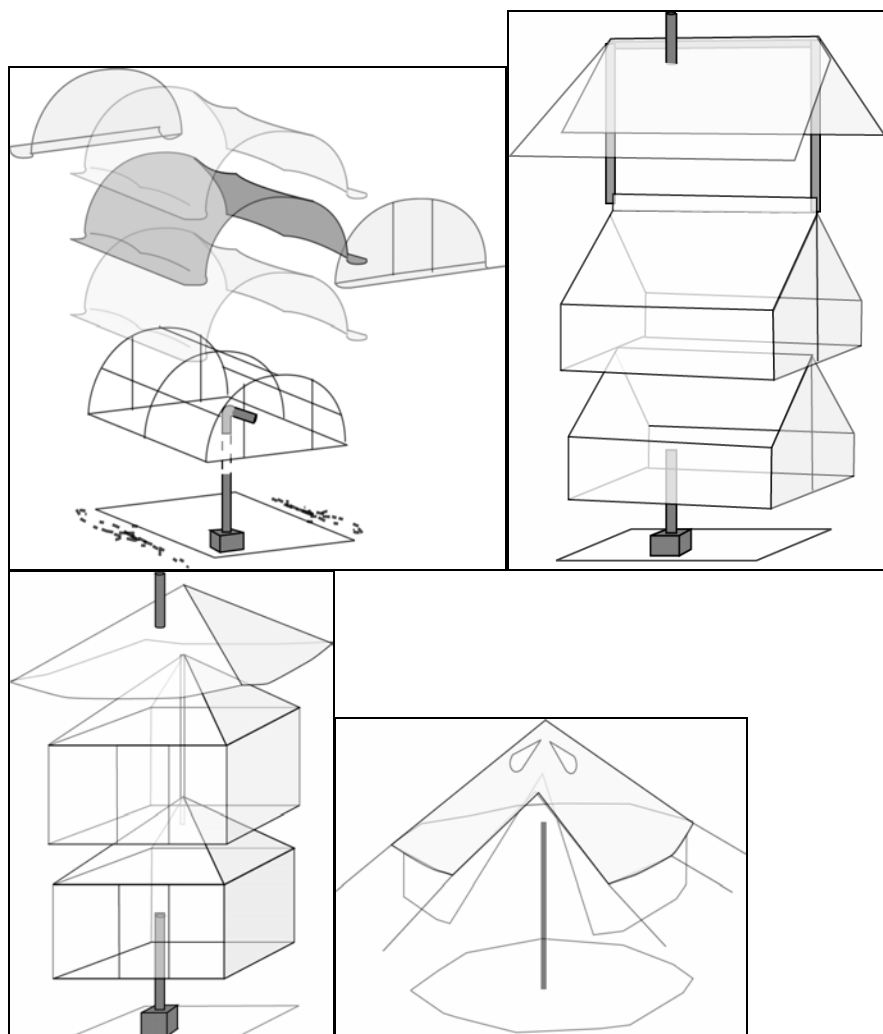
The occupants liked the quantity of internal volume compared with other tents with the same floor area. On occasion, IDPs used several shelters to make community centres or mosques. These shelters highlight some design issues:

- Zips for doors have been seen to fail.
- Weakly welded joints were seen to fail. The structural design uses the welded joints and the skin of the shelter for lateral stability. The effective lack of diagonal elements means that these welds took most of the wind load.
- Two sizes of spanner which are required for tightening bolts. Wing nuts could simplify the building of the shelters.

Canvas ridge tents (see Figure 3b) were supplied by several agencies in large quantities. For example, one agency had 27,000 available for Afghanistan. In Maslack, several different designs of canvas tents were observed (see Table 3). The canvas quality varied among agencies in terms of the density of the weave and the weight, which was 50–100kg/m<sup>2</sup> with the presence or absence of a flysheet being a significant factor in determining final weight. These tents are generally heavy but are standard for agencies and have been extensively field-tested. Their main limitations are the canvas rotting, the spikes on the poles snapping and the ropes decaying. These problems are exacerbated by the variation of specifications among agencies and manufacturers.

Lead-time varies between immediate and two weeks for production. Individual suppliers in Pakistan can fabricate up to 1,000 tents per day. In addition, many agencies and suppliers maintain limited stocks.





**Figure 3** Type 5 agency imported shelters. Top left is 3a; top right is 3b; bottom left is 3c; and bottom right is 3d

High-walled centre-pole tents (see Figure 3c) were rare in IDP settlements around Herat, although they are one agency's standard shelter specification. Each tent weighs approximately 120kg. Lead-time varies between immediate and two weeks for production of substantial quantities in Pakistan. These tents have the advantages of plenty of headroom as well as useable internal space. Having tall flat walls, however, puts large additional stress on the structure in windy environments such as Herat.

Several low-walled centre-pole tents (see Figure 3d) were available in warehouses in Herat. Only one was seen in Maslack, but 200 were in warehouses in Herat in early April 2002. This tent style is simple and well known. The main advantage is the relatively low weight for transport because it has only one pole and less material than the high-walled tents. The consequent disadvantage is the reduced amount of headroom.

**Table 3** Most common canvas ridge tents in Maslack, March 2002

	<i>Flysheet</i>	<i>Inner tent</i>	<i>Polyester wadding</i>	<i>Desouti lining(*)</i>	<i>Insulation</i>	<i>Tent poles</i>
Each row represents a different canvas ridge tent supplied by a different agency		4			None	Bamboo
	4	4	4	4	0.100kg polyester wadding stitched between inner tent and desouti lining	Galvanised
	4	4			None	Galvanised
		4			None	Galvanised; three verticals with reduced diameter
		4			None	Galvanised

\* Desouti is the name used by tent manufacturers for a thin cotton lining (approx 160g/m<sup>2</sup>) to tents

### Adaptation of tents

Shelter durability was a significant issue in Maslack. Piles of poles representing several hundred broken tents and approximately 30m<sup>3</sup> of damaged cotton canvas representing an estimated 200 tents were stored in Maslack's distribution compound. The age and origin of the canvas were not indicated, although failure was generally due to decayed and torn canvas as well as failed stitching. The poles tended to break either where the end spike joins the poles in the case of ridge tents or at the welded joints in the case of the frames of hoop tents.

Many IDPs added a form of insulating liner to protect against the cold. In Maslack, IDPs blocked draughts using spare materials. These small amounts of material represent a fairly major investment for poor displaced families. The placement of blankets (see Figure 4a) indicates that the major leaks were at the doors. Therefore, attention to door detailing — or even fabrication of ridge tents with a door at only one end — could significantly reduce cold air infiltration (Manfield, 2000).

Many IDPs found canvas flapping in the wind to be a problem. Flapping tent roofs create draughts and annoying sounds and vibrations, damage the tent and loosen



**Figure 4** Canvas ridge tents illustrating (4a) draft blocking and (4b) ventilation by occupants (Maslack, March 2002)

the pegs holding the tent down. Several cases were seen of ropes or the heavy woollen material from Kuchi tents being tied over tents to stop this flapping.

The design of canvas tents allows IDPs to ventilate the tent when the weather is hot and not windy by opening doors or raising parts of the base (see Figure 4b). When it is windy, tents are generally kept closed to keep out the dust. The ability to ventilate by choice is needed for insulated liners too, as it permits ventilation in hot weather but draughts may be blocked when it is windy or cold. This ventilation is not possible once the walls have been permanently trenched in or when internal walls are built. As a result, many of the tents that had been put up during warm weather were not trenched into the ground.

### ***Tent manufacturers***

Ten factories belonging to five major tent manufacturers were visited in Lahore and Karachi in Pakistan. Some factories manufacture tents starting with spun cotton and raw materials, some purchase components independently, and some use subcontractors. During the visits, some factories were in full production while others were empty or working on small-scale orders.

The factory workers are generally on daily or piecework wages, allowing manufacturers to assemble a large workforce when large orders are received. Because of the warm climate, sewing can be done outside and on building roofs if needed.

Children of estimated ages 10–12 years old were seen manufacturing school tents in one factory, so the use of child labour should be a concern of purchasing agencies. Employee safety may also be questionable with observations of no ear protection and limited availability of welding masks. An economic concern is that large orders with tight deadlines cause rises in the prices of raw cotton and thread which affects the entire population. Nevertheless, spreading a large order out over time is often not feasible in an emergency situation.

## **Discussion**

### ***Lessons learned***

With respect to Type 5 shelters, several tent designs are readily procurable by agencies. As a result variable shelter responses were employed for the same caseload in the visited transitional settlements (see Figure 5). The diversity of shelter provision for IDPs experiencing similar circumstances appears to represent an uneven and unsatisfactory use of resources. Although this situation is partly attributable to the different arrival times of IDPs at the same transitional settlement, it is most likely primarily the result of highly variable shelter specifications and responses for the same population. For example, while some agencies were constructing earthquake-resistant houses, others were providing only tents. Variation in the quality and design of tents was also seen to vary significantly between agencies (see Table 2).

Polyester wadding appears to be a new innovation for insulating canvas tents, with two agencies producing versions with the polyester wadding stitched between the



**Figure 5** Different shelters and adaptations of shelters in Maslack, Herat, March 2002

inner tent and the *desouti* lining. Although neither the fire resistance nor the thermal performance of this polyester wadding is as high as other insulation materials, it does represent an improvement on the inadequate, non-insulated shelters used. Even with this insulation, heat loss through infiltration, especially leaky doors and joints, was an obvious problem in the Herat region.

Providing a wind-resistant, insulated transportable shelter for use in cold climates such as Afghanistan is desirable. Such shelters must be adaptable to and flexible for widely varying weather conditions because, except in winter, cold is not a significant issue. Providing insulated tents or cold-weather liners could cause problems in the summer with the temperature inside a tent being too hot, unless the liners or insulation could be easily removed or ventilation could be easily increased. The benefits of a demountable or ventilated system, flexible for both hot and cold weather, therefore warrants further investigation. Demountable liners could also potentially be reused during later reconstruction phases (Manfield, 2000).

The planning of the settlements was problematic. Many were laid out on a rectangular grid, ignoring topography and social and community structures. In places, wind tunnels were created, leading to damage and destruction of shelters. The lack of physical protection for tents near the peripheries of the settlements also caused wind failures. Moreover, the poor settlement layout undermined a sense of ownership and community which led to destructive behaviour, such as misuse of toilets.

To avoid such problems, guidelines for planning temporary settlements could be used, such as the ACCESS methodology proposed by Corsellis (2001) and also detailed in Lambert and Davis (2002). Considering the indicators for the minimum standards in Sphere (2000) might also assist, although flexibility must be maintained to cope with the diversity of factors and different situations involved in sheltering displaced people. Such an approach is often challenging to implement in the field and weaknesses in the shelter standards are being addressed for the revision of Sphere (2003).

The following overall statements may be considered about the shelter types seen in the IDP transitional settlements in Afghanistan, although not all lessons apply in all cases:

- Shelter types used by the host population have many features to improve environmental performance, for example insulation features, under-floor heating

and wind scoops. These features are indicative of the environmental conditions to which transitional populations will be exposed. Therefore, transitional shelter should attempt to factor in knowledge about these environmental conditions.

- Existing transportable systems are unlikely to be a feasible option for large-scale emergency deployment. Systems used traditionally by the host population, for example Kuchi tents, employ low-cost and appropriate technology; however, they rely on a nomadic existence with a sustainable supply of woodlands and livestock for maintenance. Supply issues and weight prevent their large-scale deployment and purchase by agencies in the emergency context.
- As noted by Davis (1978), forced migrants tend to adapt shelter over time. Afghan IDPs improved their shelters, often building inside and around existing tents that had been given to them. These composite typologies were one of the most common shelter types to be found in the older IDP settlements, particularly where occupants are healthy enough to construct them. This process should be supported by agencies while ensuring that local resources are not used unsustainably.
- The political wisdom and sustainability of agency-supported, locally built shelter should be questioned for transitional settlements. Agency-supported shelters, though, are generally constructed to a high standard and have the potential to resolve many shelter concerns.

Furthermore, as evidenced by the interviews conducted, the specific system in which the IDPs were sheltering was not necessarily their main concern. Even if all the shelter concerns articulated here could be addressed, the overall shelter response might not be viable. For example, in Maslack, many IDPs noted that food security and the desire to return were their main concerns, not their shelter structure. When asked how their transitional shelter could be improved, a common response was nothing, because return home was the preferred — perhaps the only desired — option. ‘Home’ refers not only to the location where they normally live, but also to the services, availability of work and social infrastructure which were present before forced displacement. This result indicates the wider scope of any emergency situation that the IDPs’ comfort, security, and wishes go beyond the physical shelter objects which can be provided (see also Babister and Kelman, 2002; Davis, 1978).

### **Further work**

Agencies could investigate further how to improve and consolidate their shelter and transitional settlement strategies (see also Shelterproject.org, 2003). These strategies should include not only the physical structure of the shelter, but also flooring, blankets, mattresses, stoves (e.g. Ashmore, 2002) and clothing as part what could be termed a ‘shelter system’. The need is to define a complete, location-specific shelter package rather than just providing a tent or a locally built structure. Producing such a package has not been thoroughly researched yet and it is part on ongoing work by this paper’s authors (see <http://www.shelterproject.org>).

In particular, the connection between imported or locally built structures and other non-food items such as insect nets and clothing is not clearly defined by agencies, resulting in a varied shelter response for forced migrants in the transitional settlements visited. Another task would be interagency discussion on technical specifications and policy issues, requiring each agency to openly discuss their shelter procurement strategies and programme design. The authors are involved in such work including the

definition of and the development of guidelines for the transitional settlement sector (Shelterproject.org, 2003, forthcoming).

## Conclusions

A field survey of IDP transitional settlements around Herat has been described in order to provide some background and possible suggestions for improving shelter responses in such settlements. In addition to the common logistical constraints of cost, weight and packed volume, tents should be designed for user adaptation with durable materials to aid in construction of shelters beyond the initial emergency phase. Shelters provided to the same caseload should be consistent. If there are time pressures and variable expertise in the field, the specification of tents should be agreed between agencies at the point of purchase, preferably before a full-scale emergency exists.

Despite these suggestions, the wider context in which the technical recommendations would be implemented must be considered. First, agencies might not have the resources required, both before and during the emergency. Second, no matter how good and appropriate the transitional shelter becomes, it is still only *transitional* and is not a substitute for the durable solution which many IDPs would prefer: their homes.

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