



Helpdesk Research Report

Transitional shelter in post-disaster contexts

Brigitte Rohwerder

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Question

What have been the different approaches/strategies to transitional shelter in post-natural disaster contexts in developing countries and what lessons have been learned (with a focus on the non-technical aspects of transitional shelter)?

Contents

1. Overview
2. Transitional shelter approaches/strategies
3. Case studies
4. Lessons learned
5. References

1. Overview

Shelter in post-disaster contexts is an essential contributor to survival, security, personal safety, protection from the climate, and resistance to ill health and disease (IFRC, 2013, p. 4; Félix et al, 2013, p. 136). After the immediate emergency response, governments and others responding to the disaster face urgent decisions over 'how to develop transitional shelter options that are responsive to both the immediate risks and to the longer term reconstruction and recovery needs' (GFDRR, 2011, p. 25). Transitional shelter potentially needs to last years until a permanent solution can be achieved (GFDRR, 2011, p. 30). Much of the literature on approaches to transitional shelter in post-natural disaster contexts in developing countries and lessons learned is grey literature published by organisations working on shelter in such contexts, as well as a few academic articles and independent evaluations. The literature reflects the variety of different approaches and definitions, which complicate understandings of transitional shelter and lessons learned.

There are three main approaches to transitional shelter:

- **Shelter Centre, IOM: Transitional Shelter Guidelines.** Transitional shelter is an incremental process rather than a multi-phased approach, whereby the shelter is built using all the shelter materials distributed. Transitional shelters can be: i) upgraded into part of a permanent house; ii) reused for another purpose; iii) relocated from a temporary site to a permanent location; iv) resold, to generate income to aid with recovery; and v) recycled for reconstruction.
- **IFRC: Post-disaster shelter.** Shelter after disaster involves an overlapping process of emergency, temporary, transitional, progressive, core and permanent housing. In this case transitional shelters are rapid, post-disaster shelters made from materials that can be upgraded or re-used in more permanent structures, or that can be relocated from temporary sites to permanent locations. Progressive shelters are non-movable rapid shelters designed to be later upgraded to a more permanent status.
- **USAID: Transitional shelter.** Transitional shelter addresses short to medium term needs – up to three years – of disaster affected households. It involves the provision of inputs, sometimes including salvaged materials, construction assistance, technical advice, and oversight needed to create shelters consistent with internationally recognised guidelines.

All three approaches incorporate disaster risk reduction measures to reduce the vulnerability of households to future natural disasters.

Alternative post-disaster approaches include:

- **temporary shelters or housing**, in which people can reside for up to three years before moving into permanent housing. They often consist of a pre-fabricated house and have been criticised due to problems of sustainability and cultural appropriateness;
- **semi-permanent shelter**, which involves building parts of some elements of a house, such as the foundations and a roof, in order to offer shelter while the remainder of the house is completed;
- **sites and services**, which involves preparing the site for the permanent house and all wet services and utilities, such as the bathroom, sewage and electrical supply;
- **core house or one room shelter (ORS)**, which involves building at least one complete room of a final house, to offer shelter while the remainder of the house is completed by the household, using their own means and resources.

Brief case studies of transitional shelter approaches after a variety of natural disasters including earthquakes, floods, and cyclones in Bangladesh, Pakistan, India, Indonesia, Philippines, and Haiti are presented.

Lessons learned from the variety of post-disaster transitional shelter approaches include:

- they are **cost effective** over time and provide good **opportunities for scale-up**;
- they provide **better living space and livelihood opportunities**;
- the use of **local materials** (including materials salvaged from damaged homes), labour and designs appropriate to the local context promotes acceptance and ownership;
- there is a risk that prices of materials may be **inflated** and local resources **over exploited**;

- while they allow for **flexibility of location**, they should preferably be built on or near the original site;
- affected **communities/individuals** should lead on them and the **needs of marginalised and vulnerable groups**, such as pregnant women, female-headed households, children, orphan-headed households, the landless, the elderly, sick and those with disabilities, should be considered;
- **significant human resources** may be required to coordinate the acquisition of building materials, ensure technical reconstruction skills and community input;
- **knowledge of good, safe building practices** is needed to ensure houses do not repeat pre-disaster weaknesses and incorporate disaster risk reduction measures;
- recipients' and communities' **expectations** should be managed;
- **legal and regulatory frameworks** can hinder effective shelter provision;
- **land issues** need to be addressed immediately;
- the **economic, social, and other barriers** that prevent people rebuilding safely need to be overcome;
- both an **exit strategy** and site management are needed to prevent transitional shelters becoming permanent;
- transitional shelter should not take the pressure off the **permanent housing reconstruction effort**;
- the wider **environment for transition** (livelihoods, community governance, WASH, transport) is important for the success of the transition.

2. Transitional shelter approaches/strategies

Transitional shelter approaches are part of the wider continuum of relief, reconstruction/rehabilitation, and development (Maynard et al, 2016, p. 11). Additional support and consideration may be required for the most marginalised and vulnerable people including pregnant women, female-headed households, children, orphan-headed households, the landless, the elderly, sick and those with disabilities, especially as these vulnerable groups tend to get overlooked by shelter programmes (Shelter Centre, 2012, p. 145; USAID, no date, p. 1).

Transitional shelter has been misunderstood and interpreted differently by various actors (expert comment). There are three transitional shelter methodologies currently in use which are wholly operationally distinct: those proposed in the Transitional Shelter Guidelines by the Shelter Centre, IOM, DFID and Sida; those used by IFRC; and those used by USAID (expert comment). Practitioners have tried to make the best sense they can of these different approaches and respond to the difficulties of implementing these (expert comment; Maynard et al, 2016, p. 11).

Shelter Centre, IOM: Transitional Shelter Guidelines

The Transitional Shelter Guidelines define transitional shelter as 'an incremental process which supports the shelter of families affected by conflicts and disasters, as they seek to maintain alternative options for their recovery' rather than a multi-phased approach (Shelter Centre, 2012, p. 2). They stress that the

process should only be considered as part of an ongoing and comprehensive strategy for shelter, settlement and reconstruction (Shelter Centre, 2012, p. 2). Transitional shelter can be: 'i) upgraded into part of a permanent house; ii) reused for another purpose; iii) relocated from a temporary site to a permanent location; iv) resold, to generate income to aid with recovery; and v) recycled for reconstruction' (Shelter Centre, 2012, p. 2, 15). Transitional shelter can be used to support both displaced and non-displaced populations in a variety of settlement options (Shelter Centre, 2014, p. 4). The process can last years and is only appropriate for tenants when land rights and safe shelter close to their sources of livelihood cannot be achieved immediately, and for owners only when repairs or reconstruction cannot start immediately (Shelter Centre, 2012, p. 2).

Figure 1: Incremental transitional shelter process



Source: Shelter Centre, 2012, p. 3

Figure 2: Multi-phased shelter approach



Source: Shelter Centre, 2012, p. 3

Under this approach prefabricated structures procured overseas, construction of semi-permanent shelters, core housing and the supply of tents would not be considered transitional shelter (Shelter Centre, 2012, p. 2, 8). Transitional shelter should not be a complete shelter built at one time but a process, whereby the shelter is built incrementally using all the shelter materials distributed (Shelter Centre, 2012, p. 6).

The ten principles of transitional shelter are to: i) **assess the situation** (transitional shelter may not be an appropriate shelter response in all situations or for all people affected in any situation); ii) **involve the community** as their knowledge contributed to a more efficient and cost effective response; iii) **develop a strategy** to use transitional shelter as part of the inter-sector support for appropriate groups within the

affected population until durable shelter solutions can be reached; iv) **reduce vulnerability** and contribute to disaster risk reduction; v) **agree standards** with affected populations which consider the implications of local hazards, climate, available labour and skills, available material, traditional building practices, cultural requirements and social and household activities; vi) **maximise the choice** of shelter and settlement options for each household by allowing beneficiaries to recycle, upgrade, reuse, resell and relocate their shelters as required; vii) **buy time** while sustainable reconstruction is taking place; viii) **undertake an incremental process** that allows beneficiaries to upgrade, reuse, resell or recycle at their own pace until durable shelter solutions are achieved, and not treat it as a phase of the response to be succeeded by reconstruction; ix) **plan the site** on land that is safe, legal and appropriate; x) **ensure reconstruction** occurs at the same time as transitional shelter programmes, with the shelters designed to complement and contribute to a reconstruction programme through the process of being upgraded, reused, recycled or resold (Shelter Centre, 2012, p. 11-14).

Some have found these guidelines and principles difficult to apply in practice (Maynard et al, 2016, p. 11; Wagemann, 2015, p. 2). For example, transitional shelters are often not really built to be upgraded (despite being a requirement of the guidelines) which means that changes made by households can compromise the overall structure, making families vulnerable again (Wagemann, 2015, p. 7).

IFRC: Post-disaster shelter

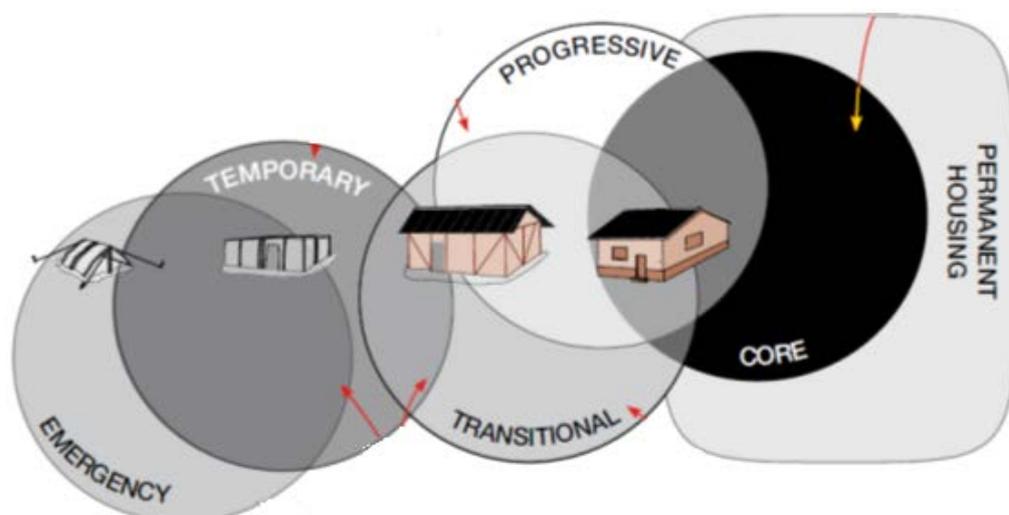
The International Federation of Red Cross and Red Crescent Societies (IFRC) understand shelter after disaster to involve an overlapping process of emergency, temporary, transitional, progressive, core, and permanent housing (IFRC, 2013, p. 8). T-shelter is a term used to describe either temporary or transitional shelter, an overlapping definition which can provide flexibility when the terms temporary or transitional may be politically unacceptable (IFRC, 2013, p. 8, 9). Shelter designs must not increase the vulnerability of occupants to natural hazards (IFRC, 2013, p. 15).

Temporary shelters are post-disaster shelters designed as a rapid shelter solution. They prioritise speed and limit construction costs, which means their lifetime may be limited (IFRC, 2013, p. 8). However, temporary shelters might have to have a long duration in some locations, such as camps, where there is no planned end state, so shelters cannot be “transitional” (IFRC, 2013, p. 9).

Transitional shelters are rapid, post-disaster shelters made from materials that can be upgraded or re-used in more permanent structures, or that can be relocated from temporary sites to permanent locations. They recognise that the affected population often start post-disaster shelter themselves, and that this resourcefulness and self-management should be supported (IFRC, 2013, p. 8).

Progressive shelters are rapid, post-disaster shelters planned and designed to be upgraded later to a more permanent status, with future transformation and alteration possibilities integrated into the structural basis of the unit (IFRC, 2013, p. 8). They are immovable and built on permanent sites with the goal of becoming part of lasting solutions (IFRC, 2013, p. 9).

Figure 3: Overlapping definitions of shelter terminology moving through shelter duration



Source: adapted from IFRC, 2013, p. 8

USAID: transitional shelter

For USAID transitional shelter is intended to address short to medium term needs – up to three years – of disaster affected households (USAID, n.d., p. 1). It often complements emergency shelter assistance (USAID, n.d, p. 1).

Transitional shelter involves the provision of inputs, sometimes including salvaged materials, construction assistance, technical advice, and oversight needed to create shelter consistent with internationally recognised guidelines, such as the Sphere Standards¹, where conditions permit (USAID, n.d., p. 2). It is also intended to re-engage disaster-affected households with the longer-term incremental housing development process that was disrupted by a disaster or crisis, thereby accelerating the transition to recovery and reconstruction (USAID, n.d., p. 2). Experience from Haiti and Pakistan indicate the need to include guidance, for example, on how to incrementally improve and expand transitional shelters to turn them into permanent housing (USAID, n.d., p. 2).

Transitional shelter interventions integrate disaster risk reduction measures to reduce the social and economic impact of future disasters and to consider the needs of the most vulnerable.

Alternative post-disaster shelter approaches²

Temporary shelter usually involves a short stay in a tent or public shelter, while **temporary housing** involves the provision of a place where people can usually reside for six months to three years enabling them to return to their normal daily activities prior to moving into permanent housing (Félix et al, 2013, p. 137). **Temporary housing** usually consists of a pre-fabricated house (ready-made units or houses to be assembled on site), or rented accommodation or similar (Félix et al, 2013, p. 137). They are used for a specific amount of time rather than being part of a process (Wagemann, 2015, p. 1). It has been criticised due to problems of sustainability and cultural inadequacy (Félix et al, 2013, p. 137-138).

¹ A humanitarian charter and minimum standards in humanitarian response.

² Affected individuals/household may also choose to stay with host families, who will require support to reduce any additional burden of caring for hosted families (GFDRR, 2011, p. 30).

Advice for Nepal from ALNAP (on the basis of lessons from the Pakistan earthquake) focuses on **temporary shelter** and suggests that high quality waterproof tents are viable temporary shelter options needed to prepare for the monsoon (Sanderson and Ramalingam, 2015, p. 19). They warn that temporary shelter is less straightforward in urban areas where open urban spaces such as parks, squares and sports areas are quickly occupied by homeless people and/or those afraid to re-enter buildings (Sanderson and Ramalingam, 2015, p. 20). Any temporary shelters in camps must be as short-term as possible as they are expensive to maintain and hard to close. For example, authorities closed the Pakistan earthquake camps after six months which avoided the risk of protracted relief (Sanderson and Ramalingam, 2015, p. 20).

Semi-permanent shelter involves building parts of some elements of a house, such as the foundations and a roof, in order to offer shelter while the remainder of the house is completed (Shelter Centre, 2012, p. 17). This approach may require parts of the shelter to be disassembled later to complete reconstruction (Shelter Centre, 2012, p. 17).

Sites and **services** refers to preparing the site for the permanent house and all wet services and utilities, such as the bathroom, sewage and electrical supply, in order to: accelerate the process of reconstructing the rest of the house; offset the costs payable by the owner; and increase the quality of planning and provision for common services and for maintaining hygiene (Shelter Centre, 2012, p. 18).

Core house or one room shelter (ORS) involves building at least one complete room of a final house, to offer shelter while the household complete the remainder of the house, using their own means and resources (Shelter Centre, 2012, p. 16; IFRC, 2013, p. 8). This approach may also build part of the rest of the house, such as the foundations, or all or parts of key services, such as the latrine or connection to utilities (Shelter Centre, 2012, p. 18). This response was used after the 2010 floods in Pakistan (Shelter Centre, 2012, p. 18).

3. Case studies

Bangladesh

In response to Cyclone Sidr in 2007, the Bangladesh government initiated an early recovery programme to provide transitional shelters for those in need, including shelter repair assistance (Nadiruzzaman and Paul, 2013, p. 169). Within a week of the cyclone's landfall, a one-time housing grant of 5000 taka (USD 70) per family had been disbursed to some 100,000 families with fully destroyed homes in the worst-affected areas, along with 13,000 bundles of corrugated iron sheets, 13,406 tents and 15,000 plastic sheets to provide transitional shelters (Nadiruzzaman and Paul, 2013, p. 169). NGOs and donors also provided transitional shelter (in this case constructing shelters) (Nadiruzzaman and Paul, 2013, p. 169).

However these efforts were insufficient to meet the urgent shelter needs and were considered inequitable (Nadiruzzaman and Paul, 2013, p. 169). In addition, assistance was used to buy emergency items such as food or winter clothing, including by selling donated housing material (Nadiruzzaman and Paul, 2013, p. 170).

Pakistan

In response to the 2005 earthquake, the delivery of effective, safe, culturally appropriate and winterised shelter that could best utilise the existing skills and resources of the affected population was a pressing

need (Global Shelter Cluster, 2005, p. 1). As winterised tents were not available in sufficient quantities or were not the most appropriate option, alternative non-tented shelter was proposed (Global Shelter Cluster, 2005, p. 1). This included transitional shelters through 'the supply of 'self-build shelter kits' to allow families to build for themselves a warm, safe inhabitable space using both distributed and salvaged material' (Global Shelter Cluster, 2005, p. 1). Transitional shelters needed to be safe and culturally sensitive, for example, by providing extra fabric for internal partitioning (Global Shelter Cluster, 2005, p. 3). In addition, the approach of winter meant that the provision of shelter needed to be accompanied by the ability to insulate a shelter from the ground and the provision of personal insulation, bedding and heating (Global Shelter Cluster, 2005, p. 4).

These self-build shelter kits were designed to:

- enable families to stay in the same place, maintaining access to their social support networks and livelihoods;
- reduce strain on relief camps and anticipate reconstruction;
- give local people greater control over the process;
- use the labour resources of the affected population effectively and efficiently;
- allow families to incrementally improve their shelter as other resources become available;
- reduce risks of fire and collapse due to snow if constructed appropriately; and
- contribute to the recovery of the Pakistani economy as materials for the kit could be locally or regionally procured (Global Shelter Cluster, 2005, p. 1-2).

Agencies had to provide technical guidance, as well as assess and deliver materials, including in relation to disaster risk reduction (Global Shelter Cluster, 2005, p. 3). Vulnerable groups could require additional assistance, and direct consultations were recommended with women, people with disabilities, and female headed households (Global Shelter Cluster, 2005, p. 3, 4). Reusable dome shaped transitional shelters were built, using recycled material salvaged from debris (GFDRR, 2011, p. 28).

India

CARE India has carried out an evaluation of post-disaster shelter responses in the wake of various natural disasters since 2001 (CARE, 2016). In one case, after the 2007 floods, 145 small 'transitional' houses incorporating brick plinths and frames, a tiled bamboo roof, bamboo matting walls, a small veranda, and an attached toilet were constructed (CARE, 2016, p. 25). These houses were supposed to: increase flood resistance by raising the houses on plinths; provide a durable frame strong enough to survive flooding and high winds; provide a durable and maintainable roof which maintained an acceptable internal environment; provide temporary walling that could be maintained or replaced by the occupants; and avoid open defecation (CARE, 2016, p. 25). They were built by the households with the help of skilled masons, and cash for work and information was provided on safer building practices (CARE, 2016, p. 25).

Survey respondents felt these eight year old transitional shelters were resistant to hazards, especially as a result of the plinth (CARE, 2016, p. 27, 32). In addition the houses were felt to have adequate space (although lacking in private space); the quality of material, construction and technical supervision on the project was considered good; and the houses were maintainable (CARE, 2016, p. 27). However, while they needed less frequent maintenance, it was more expensive and maintenance had been neglected in many houses (CARE, 2016, p. 28). Moreover, the toilets were not in use due to cultural preferences for open defecation (CARE, 2016, p. 29). Although all respondents had plans to extend their houses, none

had been able to upgrade or extend them beyond the few who had replaced the bamboo walling with bricks (CARE, 2016, p. 27). This was in part due to the expectation that they would be receiving a house from the government (CARE, 2016, p. 27). Avoiding relocation meant that people's livelihoods and schools were still accessible (CARE, 2016, p. 32).

Elsewhere in India the use of the words 'temporary' or 'transitional' to describe the provision of shelter (partly durable construction with high quality materials and partly non-durable construction), devalued the assistance in the eyes of recipients and risked raising expectations of further assistance to come (CARE, 2016, p. 90). Despite this, the houses have reduced disaster risk and there is clear evidence that households can gradually upgrade them (CARE, 2016, p. 90). However, the needs of the most vulnerable have not been met; the limited number of those supported has caused some divisions in communities; the absence of internal partitions compromised privacy and dignity; and the lack of complementary livelihoods assistance has slowed the pace of recovery and upgrading (CARE, 2016, p. 90). In general community engagement with the transitional shelter programmes has been weak (CARE, 2016, p. 32, 90).

Indonesia

After the Aceh Indonesia tsunami in 2004 many displaced people lived in tents, and over 100,000 IDPs were housed in 'barracks', while permanent housing was reconstructed as part of the government response (Batchelor, 2011, p. 43). Over half of the displaced population chose to live with families and friends (Batchelor, 2011, p. 43). A transitional shelter approach was used in response to the long rebuilding process and the degradation of tents and barracks (Batchelor, 2011, p. 46).

Despite the government discouraging a transitional shelter approach and wide criticism for its slow implementation, it had a significant impact on recovery (Batchelor, 2011, p. 51). Later evaluations show that, even after moving to permanent housing, almost all beneficiaries still used their transitional shelters as businesses or additional living space (Shelter Centre, 2012, p. 14). Materials were also recycled to contribute to permanent reconstruction in many cases (Shelter Centre, 2012, p. 14). Others sold the materials to generate cash (Batchelor, 2011, p. 51).

Learning from the 2004 tsunami informed responses to subsequent natural disasters in Indonesia (Batchelor, 2011, p. 55). After the 2006 Yogyakarta earthquake, transitional shelters were provided much earlier, so as to be in place before the onset of the rainy season (Batchelor, 2011, p. 54, 55). The early provision of roofing materials and temporary shelters meant that the majority of the affected households could begin their own recovery activities (Batchelor, 2011, p. 63). This time, some government support was provided for the transitional shelter strategy, although they also proposed a 'one-step' strategy (or rapid reconstruction) as an alternative (Batchelor, 2011, p. 55). This involved affected families moving directly from emergency shelter provided by humanitarian organisations to government-funded permanent housing, including through cash grants to families to enable them to re-build their own houses, with the provision of tools and technical assistance from NGOs (Batchelor, 2011, p. 56). Demand for transitional shelters decreased as the rainy season ended and the rebuilding of permanent houses began (Batchelor, 2011, p. 58).

The provision of transitional shelters had a much bigger impact post-tsunami than post-earthquake because permanent housing reconstruction was much slower and because it enabled displaced families to return home (Batchelor, 2011, p. 64). Transitional shelters are important in bridging the gap between emergency shelter and permanent housing, particularly for the most vulnerable households who often take longest to complete the reconstruction of their permanent homes (Batchelor, 2011, p. 64).

Philippines

In response to Tropical Storm “Washi”, Catholic Relief Services (CRS) implemented an urban transitional shelter and settlement programme to cover the length of time prior to the completion of permanent housing (Hirano, 2012, p. 9). They provided households with transitional shelter units from around the third month onwards (Hirano, 2012, p. 2, 9). Greater government backing could have speeded this process up, but the government, though willing to allocate land for tent cities, was reluctant to give land for transitional shelters (Hirano, 2012, p. 9). Commitments to re-housing the entire affected population within a year and concerns over duplication of resources compared to a direct move from emergency to permanent shelter meant the government did not back the initiative (Hirano, 2012, p. 11). However, a transitional shelter approach was implemented because there was no contingency plan in case it took longer to re-house people (given that in past disasters it had taken longer than a year) and people would have to wait in inadequate conditions such as tents, which overheat in the tropical climate, if not provided with alternative shelter (Hirano, 2012, p. 11).

CRS’s T-shelters used local materials and labour, cost less than a tent, and were designed to suit the local climate and traditional architecture (Hirano, 2012, p. 11, 24). They could be moved and/or used to extend or improve future permanent houses (Hirano, 2012, p. 11, 24). Those living in low to medium risk zones were offered a transitional shelter to be rebuilt in their original neighbourhood but with deeper foundations than those in relocation sites and raised higher to be above the normal flood line (Hirano, 2012, p. 11). Community-wide WASH projects were implemented alongside the shelter programme (Hirano, 2012, p. 11).

Transitional shelters for those who were relocated were designed to be movable (could be disassembled) and to be temporary in nature in order to limit the damage to the land, the use of which had been negotiated on a case-by-case basis (Hirano, 2012, p. 12). CRS gave donation certificates to each family giving them ownership of the transitional shelter and clearly communicating that they would need to move them if they could no longer use the land (Hirano, 2012, p. 24). As communal infrastructure is less movable, CRS opted to negotiate with land owners for such infrastructure to be either donated to the land owners when the IDPs vacated the site or for the infrastructure to be dismantled and land cleared prior to return, depending on landowner preference (Hirano, 2012, p. 12).

Haiti

In the 2010 Haiti response, transitional shelters were designed to withstand hurricanes common during the rainy season (Shelter Centre, 2012, p. 12). Recipients were trained in hurricane-resilient roof construction and disaster risk reduction principles to support later reconstruction (Shelter Centre, 2012, p. 12). Initially simple covering methods such as tarpaulins were used in order to shelter as many affected people as possible before the upcoming rainy season (Shelter Centre, 2012, p. 14). Later further materials and training for upgrading were provided (Shelter Centre, 2012, p. 14).

However, the design of T-Shelters in Haiti has been criticised for actually hindering the recovery and increasing vulnerabilities to natural hazards, which resulted in the original T-Shelter design being modified to accommodate wind resistance and seismic parameters (Wagemann, 2015, p. 2). This made it far more costly, with a longer delivery time, meaning it was not cost-effective in comparison to a permanent housing approach (Wagemann, 2015, p. 2).

4. Lessons learned

There are a wide variety of opinions in the humanitarian sector on the effectiveness of transitional shelter (Shelter Centre, 2012, p. 5). Some promote it as an effective participatory process that assists beneficiaries in rebuilding their homes, while others strongly oppose it as an expensive, damaging product that diverts funds away from permanent reconstruction efforts (Shelter Centre, 2012, p. 5). The Shelter Centre (2012, p. 5) suggests this opposition is based on a lack of understanding of the transitional shelter approach, its definition and how it differs from other reconstruction methods.

Some lessons which have been learned from the variety of transitional shelter approaches implemented across a range of post-disaster contexts include:

Cost-effective over time

The transitional shelter approach is cost-effective over time if implemented correctly (Shelter Centre, 2012, p. 6). While initial start-up costs may be high, the approach offers a 'beneficiary-driven reconstruction process that quickly becomes self-supporting through direct investment into local economies' and 'often provides livelihood opportunities which are proven to speed up the recovery process and quickly reduces dependency on external assistance' as materials and labour are procured from the local economy (Shelter Centre, 2012, p. 6, 19; GFDRR, 2011, p. 27). It is important that transitional shelter is implemented as soon as possible to reduce costs (Shelter Centre, 2012, p. 6). Tents are cheaper if shelter is needed for less than a year (Shelter Centre, 2012, p. 20).

Opportunities for scale-up

Large numbers of transitional shelters can be built incrementally after large disasters because they use common local and regional materials, unlike tents which have to be procured from elsewhere (Shelter Centre, 2012, p. 19).

Better living space and opportunities

Transitional shelters offer better living spaces than tents for activities such as childcare, cooking and home-based enterprises, and the recovery of livelihoods (Shelter Centre, 2012, p. 6, 19). In addition they can provide a secure and healthy living environment that offers dignity and privacy (Shelter Centre, 2012, p. 19). Transitional shelters can also be used later as, for example, a shop or livestock shelter (Shelter Centre, 2012, p. 19).

Materials

The use of local materials (and local construction practices and designs appropriate to the context and local hazards) improves acceptance, ownership and ability to maximise the value of shelters, and contributes significantly to effective disaster risk reduction (CARE, 2016, p. 7).

Materials may be salvaged from damaged and destroyed homes and reused for transitional shelters (Shelter Centre, 2012, p. 19). However, the price of key materials may be inflated if demand outstrips supply, or if people attempt to profiteer from need (Shelter Centre, 2012, p. 20). Local resources may be

over exploited with, for example, timber coming from unsustainable sources (Shelter Centre, 2012, p. 20).

If materials are not available, the later stages of building transitional shelters, after the initial progress made through distribution of materials such as plastic sheets and fixings, may be delayed (Shelter Centre, 2012, p. 20). In addition, lack of sufficient resources to complete reconstruction of permanent homes may leave affected families in transitional shelters for long periods (Shelter Centre, 2012, p. 20).

Flexibility of location

Transitional shelters may be relocated from a transitional settlement site to a transitional reconstruction site (Shelter Centre, 2012, p. 19).

Affected community/individual led

Transitional shelters should preferably be tailored to community/individual needs and circumstances and decisions about shelter type and location made in consultation with the affected population (GFDRR, 2011, p. 25). The approach should be undertaken *by*, rather than *for* them (GFDRR, 2011, p. 26). However, allowing affected families to construct their own shelter may be more difficult in urban environments (GFDRR, 2011, p. 26). The degree of acceptability and ownership by displaced communities determines the success of transitional shelter programmes (GFDRR, 2011, p. 30).

Marginalised and vulnerable groups

The needs of vulnerable groups (the elderly, the infirm, disabled people, women-headed families, families with many children, the homeless and landless) must be considered as they may otherwise be overlooked (Flinn, 2013, p. 39; CARE, 2016, p. 8). Meaningful engagement may be difficult but it is important (expert comment). Moreover, it may be easier to provide transitional houses for families that own their land and have a bit of space free of rubble even if they are not the most in need (Flinn, 2013, p. 39).

Human resources and technical knowledge

Significant human resources are often required to coordinate the acquisition of building materials, the required technical reconstruction skills and community input (Shelter Centre, 2012, p. 20). If there is insufficient skill, technical capacity or cross-sector coordination, transitional shelter approaches may be poorly implemented and result in unsafe practices (Shelter Centre, 2012, p. 20; Flinn, 2013, p. 39).

As affected people will often take on responsibility for building their new homes, they need knowledge of good, safe building practices to ensure houses do not repeat pre-disaster weaknesses (Flinn, 2013, p. 39; Wagemann, 2015, p. 2). Expansion to gain much needed space can weaken the structure of the transitional shelter if households do not understand what they are doing (Wagemann, 2015, p. 6).

Disaster risk reduction

The introduction of simple construction techniques such as cross-bracing and hurricane straps can mean shelters are more resilient to future disasters (Shelter Centre, 2012, p. 19).

Managing expectations

Care should be taken to prevent false expectations amongst affected communities that everyone is entitled to a transitional shelter (Shelter Centre, 2012, p. 20). In addition, care should be taken to ensure communities understand the purpose of the transitional shelter programmes (or temporary or semi-permanent) so they know exactly what is entailed and they don't have unreasonable expectations (CARE, 2016, p. 91).

National legal and regulatory frameworks

Laws, policies and regulations may complicate the transitional shelter response (IFRC, 2014, p. 4). For instance a 2014 study of Nepal found that the provision of effective emergency shelter could potentially be hampered in different ways by: an absence of relevant laws, policies and regulations; a lack of sufficient detail to enable their effective application; situations have not yet arisen where they might be applied or they may have been overlooked; where relevant laws, policies and regulations were applied, they were found to be inadequate in practice or applied selectively (IFRC, 2014, p. 4).

Land

Land-use issues are key for all types of shelter and need to be addressed from day one in order to prevent it becoming a bottleneck in assisting those in need (Hirano, 2012, p. 2; Batchelor, 2011, p. 46).

Transitional shelters should preferably be built near or on the site of the original homes (GFDRR, 2011, p. 27).

Barriers

In order for transitional shelter approaches to be effective, the economic, regulatory, social, and other barriers that prevent people rebuilding safely need to be overcome (expert comment). In a country like Nepal this involves considerations of structural safety, but also the many other hazards and risks people face, including poverty (expert comment).

Exit strategies and site management

An exit strategy needs to be developed, and sites need to be properly managed and decommissioned, in order to prevent transitional settlement sites becoming slums (Shelter Centre, 2012, p. 20). Transitional shelter 'frequently becomes post facto permanent' although it should not be a permanent solution (Flinn, 2013, p. 38; GFDRR, 2011, p. 27).

One expert asserted there was 'no point planning a transitional project if people can't transition to something better' (expert comment). In addition, 'merely delivering some form of shelter and expecting a transition to happen will be fine for those with the necessary resources and rights, but will leave the most vulnerable and the weakest trapped in an inadequate 'temporary' situation in the long term' (expert comment).

The provision of transitional shelter should not render the displaced population "invisible" or take the pressure off the permanent housing reconstruction effort (GFDRR, 2011, p. 27).

The environment for transition

One expert noted that it is 'people's livelihoods and community organisation (governance) that has the greatest effect on how 'transitional' a shelter project is, rather than the designs or intentions of the implementing agencies' (expert comment). CARE's work in India found that 'maintenance burden and costs, and the economic capacity of beneficiaries, are key drivers for, or obstacles to, good long term outcomes of shelter programmes' (CARE, 2016, p. 6). In addition, livelihoods and WASH provision have an important impact on the wider success of shelter projects (CARE, 2016, p. 7). The likelihood of a successful programme increases with the rapid return to livelihoods (GRDRR, 2011, p. 29). Transportation should be provided to new and former sources of livelihoods (GFDRR, 2011, p. 29).

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Expert contributors

Tom Newby, CARE UK
 Bill Flinn, Oxford Brookes and CARE International
 Tom Corsellis, Shelter Centre
 Elizabeth Parker, Independent consultant

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