Introduction

This book contains summaries of shelter projects that have been implemented in response to conflicts and complex emergencies (Section A, page 1) and to natural disasters (Section B, page 39). It also contains summaries of historical shelter projects (Section C, page 83) that took place before 2000.

The case studies in this book were implemented by many different organisations, a full list of which can be found in the acknowledgements section (page iv). In order to allow weaknesses of programmes to be openly shared, none of the case studies are directly attributed to individual organisations.

This book also contains summaries of case studies that have a fuller write up in 🕮 Shelter Projects 2008. Where there is significant new information, updates are included with the project summaries.

As a result of the projects being implemented in diverse and often challenging conditions, they illustrate both good and bad practices. From every case study there are lessons that can be learnt, and aspects that should be repeated or avoided elsewhere.

All projects in this book were implemented in different contexts. The case study Georgia 2009 (A.8 page 16) gives a good examples of how many projects must be continually adapted to meet the changing context. None of these projects should be copied directly.

Selection of case studies

Given the scale of emergency shelter need every year, case studies included in this book must be implemented on a large scale. Trials or design concepts are not included.

The case studies were selected using the following criteria as a guide:

- The shelter project was implemented in full.
- A minimum of five hundred families had improved shelter as a result of the project activities.
- The project was implemented largely within the first year following natural disaster. For conflict-affected populations, chronic emergencies and returns processes, longer timescales were considered.
- Accurate project information had to be available from staff involved in the project implementation.

The case studies that have been selected illustrate a diversity of approaches to meet shelter need. In all of them, providing shelter is more than simply designing architecturally impressive structures.

As a result of challenging contexts, nothing was built at all in some of the projects. In other projects, the advocacy and learning support components of the project had a larger impact than the organisation was able to achieve through construction alone.

Shelter responses in 2009

In 2009, 335 reported natural disasters, killed over 10,000 people and affected more than 119 million people[1].

In 2009 there were also substantial new displacements due to conflict in countries such as Pakistan, Sri Lanka and Somalia. By the end of 2009, 43.3 million people worldwide had been forcibly displaced by conflict and persecution, the highest number since the mid-1990s[2]. This includes an estimated 27,100,000 people who had been displaced within countries, and an additional 15.2 million refugees who had been displaced into other countries.

1) Annual Disaster Statistical Review 2009. The numbers and trends. CRED, WHO, Université Catholique de Louvain
2) 2009 Global Trends: Refugees, Asylum-seekers, Returnees, Internally Displaced and Stateless Persons, UNHCR 2010

Disasters and conflict have had different impacts in different regions. Asian countries were most affected by natural disasters whilst countries in Africa were most affected by conflict.

As many of the responses to disasters in 2009 are still ongoing, many of them are not written up in this book. Instead we include the following new case studies, as well as updates to case studies previously documented in 🕮 Shelter Projects 2008.

New case studies in Shelter Projects 2009
1945
UK (post conflict) - page 116
1982
Haiti - page 54
2007
Bangladesh (Cyclone Sidr) - page 116
Uganda (flooding) - page 79
2008
China, (earthquake) - page 50
Georgia (conflict) - page 16
Haiti (flooding) - page 54
Myanmar (Cyclone Nargis) - page 67
Somalia, Puntland (conflict) - page 29
Somalia, Somaliland (conflict) - page 32
2009
Afghanistan (conflict returns) - page 3
Bangladesh (Cyclone Aila) - page 41
DRC (conflict) - page 9
Gaza (conflict) - page 13
Italy (earthquake) - page 62
Kenya, Dadaab (conflict/ flooding) - page 21

Introduction

		Non-food item distribution		Shelter construction			Labour			
	Urban?	Household items	Shelter materials	Transitional	Permanent / core housing	Cash or voucher	Community	Contracted	Direct	Technical expertise
A.1 Afghanistan - 2009			✓	✓			✓			
A.2 Afghanistan - 2002		✓	✓		✓	✓			✓	✓
A.3 Azerbaijan - 1992	Y			✓				✓		
A.4 DRC - 2009		✓	✓		✓	✓	✓			✓
A.5 Eritrea - 1998		✓	✓							
A.6 Gaza (Palestine) -2008	Y									✓
A.7 Georgia - 2009		✓	✓		✓	✓			✓	
A.8 Ingushetia - 1999	Y			✓		✓	✓	✓	✓	
A.9 Kenya - 2008			✓	✓						✓
A.10 Kenya (Dadaab) -2009			✓		✓		✓		✓	✓
A.11 Kenya (Dabaab) - 2007			✓		✓		✓		✓	✓
A.12 Liberia - 2007			✓		✓	✓	✓			✓
A.13 Rwanda - 2008			✓		✓		v		✓	✓
A.15 Somalia - 2008	Y	✓	✓	✓					✓	✓
A.16 Somalia - 2009	Y		✓	✓					✓	✓
A.17 Somalia - 2007	Y				✓			✓		✓
A.18 Sri Lanka - 2007				✓	✓	✓	✓			✓
A.19 Sudan, Darfur - 2004		✓	✓							
B.3 Bangladesh - 2009		✓		✓					✓	✓
B.4 China - 2009			✓		✓	✓	✓	✓		✓
B.5 D.R.Congo - 2002	Y	✓		✓		✓	✓		✓	✓
B.6 Haiti - 2008	Y	✓	✓	✓						✓
B.7 India - Gujarat - 2001			✓			✓	✓		✓	✓
B.8 Indonesia - Aceh - 2004	Y				✓		✓	✓		✓
B.10 Jogyakarta - 2006						✓				
B.11 Jogyakarta - 2006		✓		✓			✓		✓	✓
B.13 Italy - 2009	Y			✓				✓		
B.14 Mozambique - 2007			✓			✓				
B.15 Myanmar - 2008			✓		✓	✓			✓	
B.17 Pakistan - 2005		✓	✓			✓	✓		✓	
B.18 Pakistan - 2005				✓			✓			✓
B.20 Peru - 2007	Y		✓	✓			✓			✓
B.21 Peru - 2007	Y			✓			✓		✓	✓
B.22 Peru - 2007				✓				✓		✓
B.23 Sri Lanka - 2004				✓					✓	
B.24 Uganda - 2007			✓				✓			✓

Explanation of columns:
– Urban? - was the programme in an urban environment?
– Non-food items distribution - which types of materials were distributed
– shelter construction - were transitional shelters built or were permanent or core houses built?
– Labour - community members built their own shelters, contractors built shelters or direct labour - the organisation built the houses
– Technical expertise - the shelter project had a training component or had significant external technical support

This book includes many diverse projects, all of which aimed to improve the shelter of the affected population.

Projects included in this book range from building damage assessment (A.6, Gaza, Palestine - 2008, page 13) to cash or voucher distribution (page 9) to hiring of contractors to build shelters, to training (B.25, Uganda - 2007, page 79). Many of the projects, such as the one responding to cyclone Sidr in Bangladesh have used several approaches (B.3, page 46) to meet the needs as they evolve following a disaster.

Despite the differences between projects, there are many recurring themes which we discuss below.

Support the affected people

The first and main effort in all responses is by the affected people themselves. Of the case studies in this book, the more effective projects were implemented with the close involvement of the affectees.

📖 Sphere standards and indicators ("Annex" on page 121) provides common standards on participation, initial assessment, monitoring and evaluation.

📖 Supporting the affected people is the first principle outlined in Transitional Settlement and Reconstruction after Natural Disasters as well as in Shelter After Disaster ("Annex" on page 121)

Urban shelter

As over half of the world's population now lives in urban areas, and the long term impacts of many disasters is to drive people further into cities, this edition of Shelter Projects includes case studies of shelter programmes in urban environments.

The case study of solidarity families in Democratic Republic of Congo (A.4, page 9) provides a good example of how finding shelter with host families may be supported. The case study from the Haiti floods of 2008 (B.6, page 54) includes a programme of supporting families in collective centres to find rental properties. The case study of Gaza (A.6, page 13) illustrates a detailed damage assessment of multi-storey concrete buildings with different apartments owned by different families.

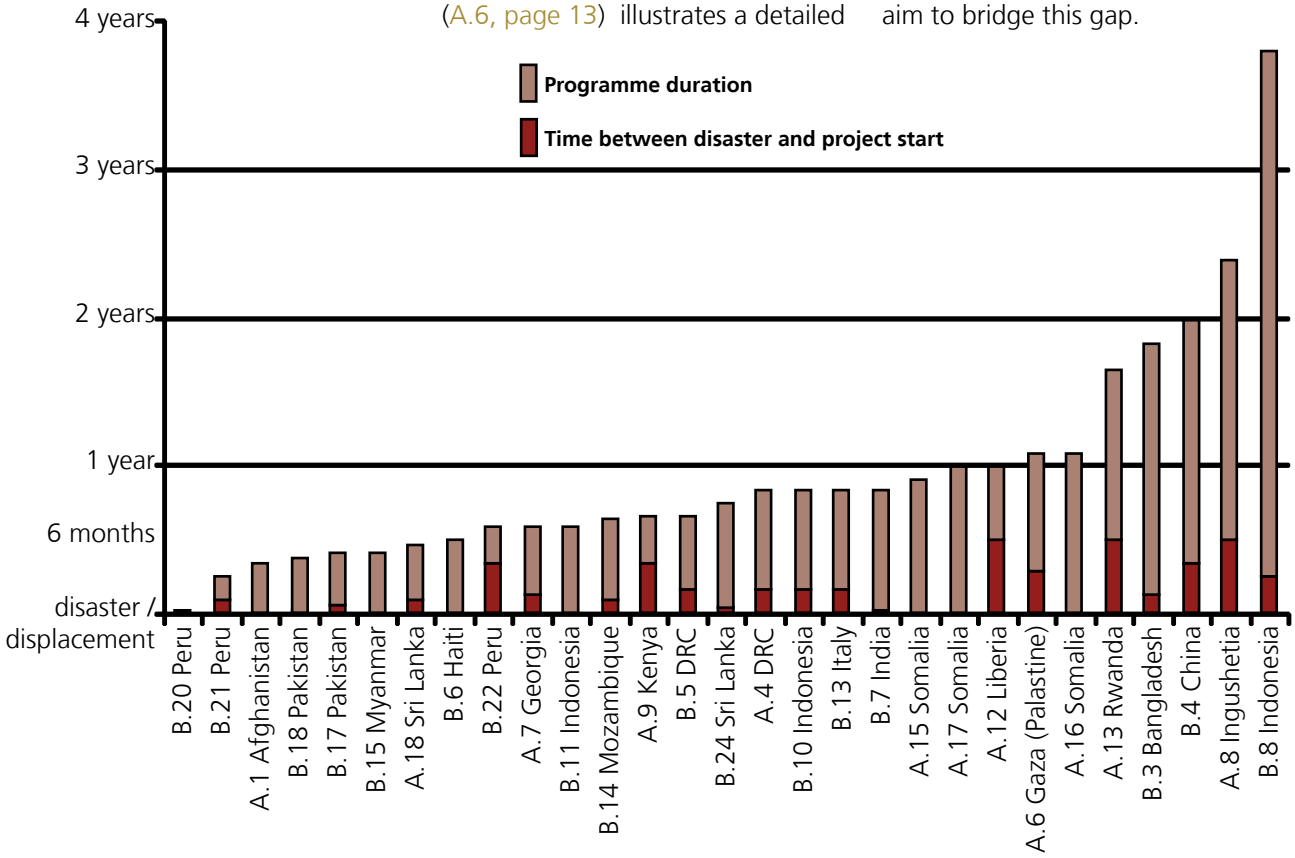
Phases of response

Responses to disasters or conflict are commonly split into phases:

- preparedness before the disaster
- emergency response
- recovery phase
- durable solutions

Many of the case studies include emergency shelter responses aimed at bridging the gap between emergency shelter and durable housing solutions, whilst reducing vulnerability to future disasters. The summary graph below illustrates the duration of the different projects in this book.

Housing programmes can take many years to complete, especially when implemented on a large scale. The project in Rwanda (A.13, page 26), illustrates a housing project that took two years to build 220 houses. The speed of durable shelter construction can leave a gap, with families in emergency shelter for many years. Transitional responses aim to bridge this gap.



Graph of the duration of the different projects. Some of the projects in support of long term displacements have not been included due to their long timelines. The majority of projects were implemented under funding cycles of less than one year.

Introduction

Speed of Response

Commonly, following a large-scale natural disaster, there is a surge of media attention at the outset, with an initial focus on search and rescue and latterly on aid delivery. Media interest often focuses at some stage on the pace of relief distributions.

The graph below illustrates the speeds of emergency distribution from responses in Indonesia (Jogyakarta 2006), Myanmar (2009) and Indonesia (Sumatra 2009). It is interesting to compare these graphs with the media interest which peaks during the first weeks. Relief distributions are run on longer time frames than the initial media reporting of the emergency.

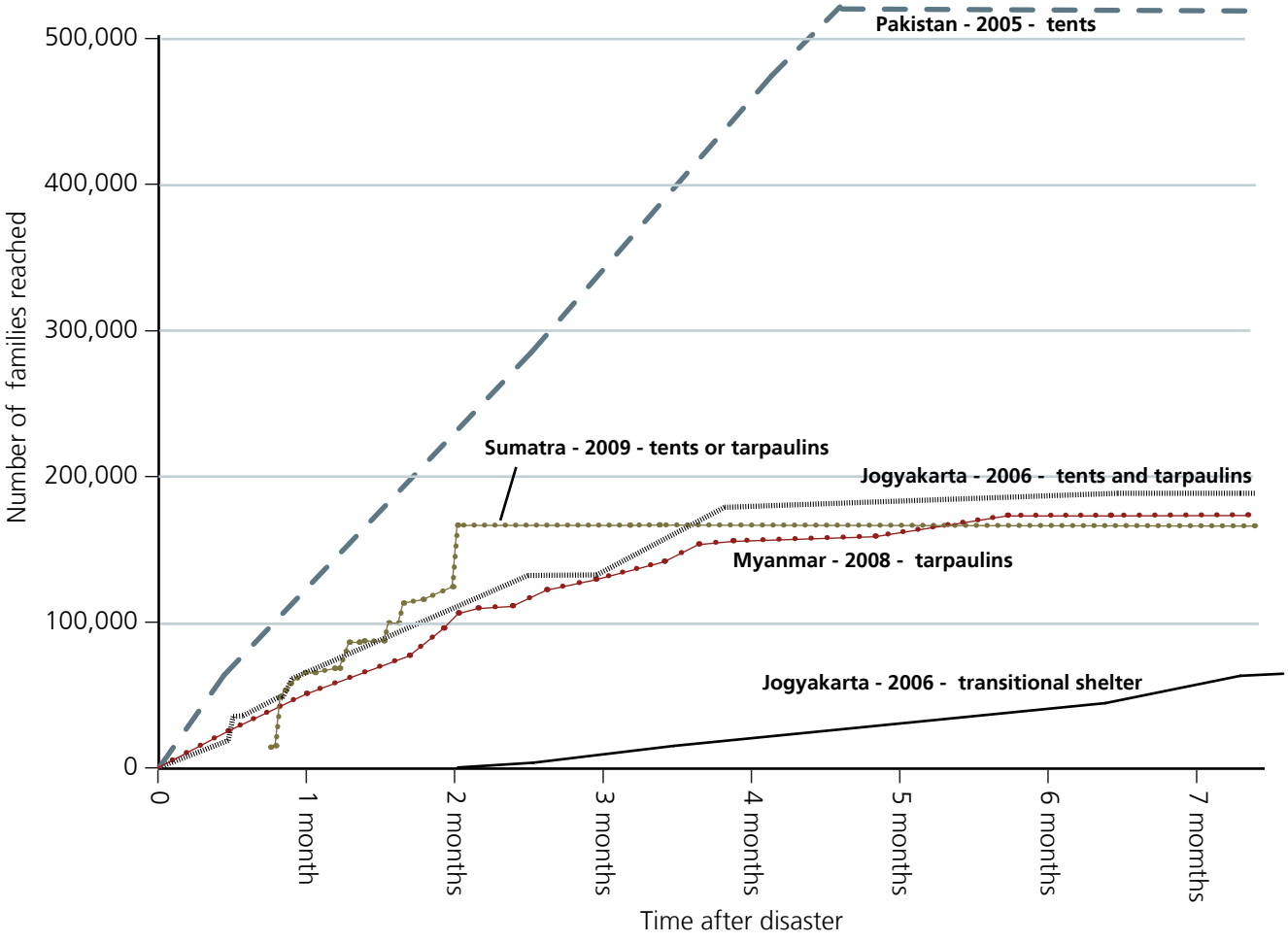
In the first month, organisations must often rapidly scale up staffing, establish supply pipelines and mobilise distribution teams or agreements and support partner organisations. From the examples below, the quickest distribution of shelter items lasted two months.

Transitional shelter programming often takes even longer to implement. The Jogyakarta transitional shelter response (Indonesia 2006) is known as being relatively quick, but still took 12 months to build 75,000 transitional shelters.

Core shelter in which a basic structure is built with the intention that families can upgrade later. In Sri Lanka (A.19, page 36) this allowed short term shelter funding to be used in building more permanent housing.

Permanent housing programmes often take three or more years to complete on a significant scale (see B.8, Indonesia, on page 58 for an example).

Graph of shelter materials distribution to households against time for four major disasters. In all disasters, additional materials were distributed. eg. in Pakistan corrugated iron, plastic sheeting and shelter repair kits were also distributed. The information in this graph does not take into account targetting, or other support activities such as training, advocacy or voucher distribution
Data is taken from shelter cluster commodity tracking lists or from OCHA sitreps and is subject to errors in reporting.



Pakistan - 2005 - earthquake
Households provided with a tent
Total: 520,000 tents

Sumatra - 2009 - earthquake
Households provided with tents or tarpaulins
Total: 170,000 tarpaulins

Jogyakarta - 2006 - earthquake
Households provided with a tent or a tarpaulin
Total: 390,000 tents and tarpaulins

Myanmar - 2008 - cyclone
Households provided with two tarpaulins
Total: 350,000 tarpaulins

Jogyakarta - 2006 - earthquake
Transitional shelter construction
Total: 75,000 built in 12 months

Funding

Funding of is often one of the key determinants of the types of shelter responses. A good illusatration of this is the contrast between the responses to the 2008 earthquake in Italy (B.12, page 62) and the 2007 earthquake in Peru (B.19, page 73) or the conflict in Somalia (A.14, page 73). The different responses to cyclones Aila (B.1, page 41) and Sidr (B.2 page 46), both in Bangladesh, are partly the result of differing funding.

The time frame of funding has a major impact on the projects implemented. Often relief funds are for less than one year, meaning that there is time pressure to complete construction of agreed numbers of shelters rather than to ensure that shelters are occupied and meet the needs.

Scale of programme

The responses illustrate the challenge of whether to implement high quality programmes for fewer people or poorer quality responses to support more people. The case studies in Somalia illustrate this challenge. One project (A.15 Somalia 2009, page 29) delivered improved but basic shelter to over 24,000 people, the other (A.17 Somalia, 2008, page 35) provided improved sites and services for 700 people over two years with higher project costs per family.

Assistance methods

The case studies in this book include a diversity of ways of getting assistance to people who have been affected by conflict or disaster.

A standardised shelter kit of tools, fixings and tarpaulins that can be stockpiled or procured locally and distributed following emergencies has recently been developed and deployed in many countries. The aim of the kit is to support families to build stronger shelters, as well as providing items that will help during reconstruction. The case study from Myanmar provides some lessons for its use.

Climate and risk

Shelter programmes respond to different hazards in different ways. In the town of Bosaso in Somalia (A.15, page 29) one of the major threats to families living in displacement sites was fire, which had destroyed many people's homes. The best way to reduce the risk of a major fire was to work with communities to improve urban solid waste disposal, to install fire breaks, and to establish committees. This proved more cost-effective and practical as an approach than trying to build fire-proof shelters.

Projects were implemented in very different climates. The case study from Sozma Qala camp in Afghanistan (A.1, page 3) illustrates winterisation of tents as well as water supplies for a camp in Afghanistan prior to the onset of winter. Many of the responses, such as that to the Uganda floods in 2007 (B.25 page 79) take into account the weather, maintaining thermal comfort of buildings whilst including hazard mitigation measures.

Selecting project locations and choosing who will benefit is critical to the success of projects. Photo: Joseph Ashmore

Selecting beneficiaries

Project location is often selected by a combination of where need is greatest, where organisations or their partners have existing programmes, and where there are gaps. Giving support to a selected location can create a pull factor and increase the population requesting support. The case study from Gonaives in Haiti, 2008, (B.6, page 54) illustrates some of these challenges and some measures that were taken in response to the pull factors caused by the assistance.

Selecting which individuals or families will benefit from a project is often challenging, and if badly managed can be open to abuse. The case study from cyclone Sidr in Bangladesh 2007 (B.3, page 54) provides an example of selecting families with the agreement of community committees.

Basing selection solely on whether a family's house is damaged can bias responses away from those who rent or squat their homes. Selecting families on the basis of other vulnerabilities such as in Somaliland, (B.16, page 32) requires clearly agreed criteria and requires working closely with communities to be effective. Whichever selection criteria are used, the larger the package of support being offered, the more pressure there will be on getting the selection of families correct.

Training

Many of the projects in this book, such as those outlined for Haiti in 1982 (C.6, page 93) or the programme implemented in Uganda in response to the 2007 flooding (B.25, page 79) have a significant training and capacity building component. Successful training programmes have a significant disaster risk reduction component, allowing the shelter assistance programmes following a conflict or a natural disaster to reduce vulnerability in the future.

Introduction

Shelter size

The illustration below shows the diversity of shelter covered areas in these case studies. These vary from 9m² (B.20, Peru 2007, page 74) to 74m² (B.12, Italy, 2009, page 62) this is a result of varying needs, permanency, budgets logistics constraints, host standards and official policies.

📖 Sphere 2004 - Shelter and Settlement, Standard 3: covered living space has the following indicator:

"Duration: in the immediate aftermath of a disaster, particularly in extreme climatic conditions where shelter materials are not readily available, a covered area of less than 3.5m² per person may be appropriate to save life and to provide adequate short-term shelter to the greatest number of people in need. In such instances, the shelter response should be designed to reach 3.5m² per person as soon as possible, as longer durations may begin to affect the health and well-being of the people accommodated. If 3.5m² per person cannot be achieved, or is in excess of the typical space used by the affected or neighbouring population, consideration should be given to the impact on dignity, health and privacy of a reduced covered area. A decision to provide less than 3.5m² per person should be highlighted, along with measures to mitigate against any adverse affects on the affected population."

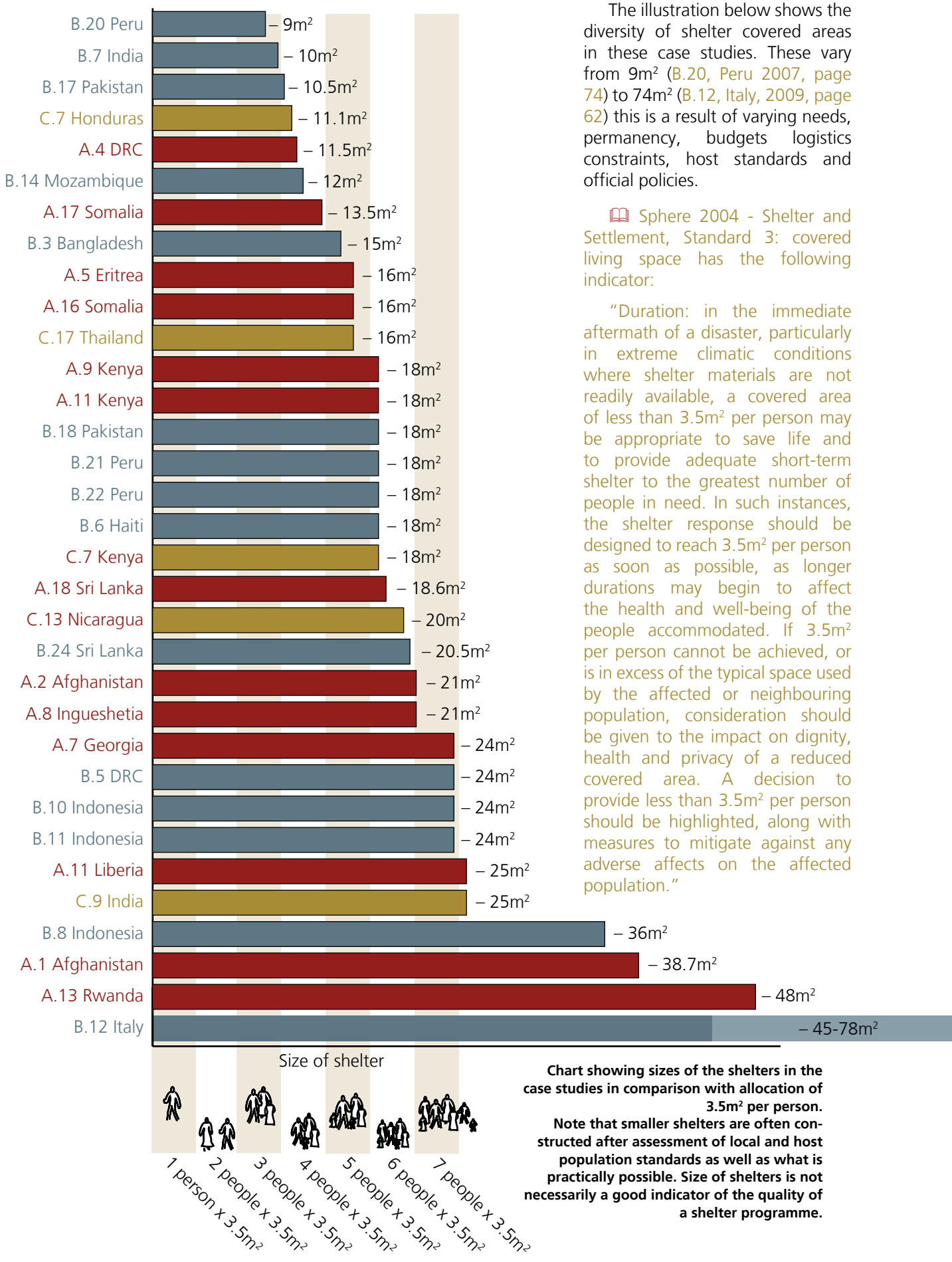


Chart showing sizes of the shelters in the case studies in comparison with allocation of 3.5m² per person.
Note that smaller shelters are often constructed after assessment of local and host population standards as well as what is practically possible. Size of shelters is not necessarily a good indicator of the quality of a shelter programme.

"Nero at this time was at Antium, and did not return to Rome until the fire approached his house, which he had built to connect the palace with the gardens of Maecenas. It could not, however, be stopped from devouring the palace, the house, and everything around it. However, to relieve the people, driven out homeless as they were, he threw open to them the Campus Martius and the public buildings of Agrippa, and even his own gardens, and raised temporary structures to receive the destitute multitude. Supplies of food were brought up from Ostia and the neighbouring towns, and the price of corn was reduced to three sesterces a peck. These acts, though popular, produced no effect, since a rumour had gone forth everywhere that, at the very time when the city was in flames, the emperor appeared on a private stage and sang of the destruction of Troy, comparing present misfortunes with the calamities of antiquity."

Tacitus - The Annals / Book 15 - writing in 64 AD following the fire of Rome. an early example of emergency shelter provision.

Introduction