

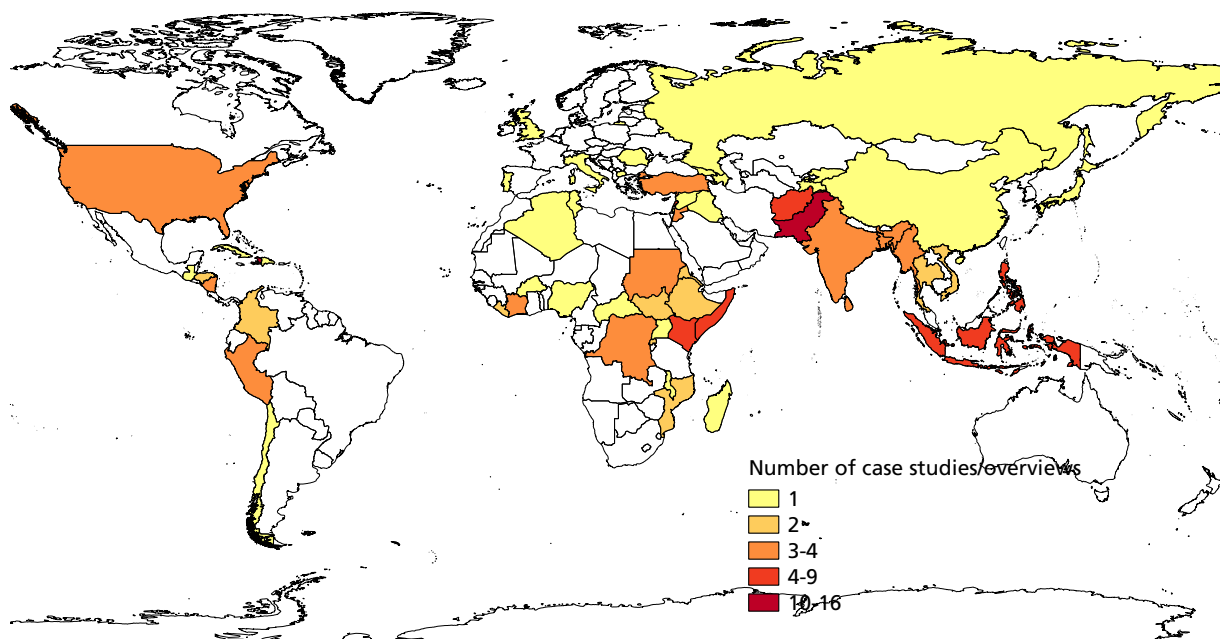
C.1 Index of case studies by country

This index lists all the case studies in this book and all the previous editions of Shelter Projects (2008, 2009, 2010 and 2011-2012). It is sorted by country and by date. Projects are colour coded as follows:

Case studies

Updates - Follow up reports on existing case studies, and technical analyses of individual shelter designs.

Historic case studies - Case studies of projects before 2000



Afghanistan, 2012, Conflict	Case study	Shelter Projects 2011-2012
Afghanistan, 2010, Conflict	Update	Shelter Projects 2010
Afghanistan, 2009, Conflict	Case study	Shelter Projects 2009
Afghanistan, 2009, Conflict	Technical	Post-Disaster Shelter: 10 Designs
Afghanistan, 2002, Conflict	Case study	Shelter Projects 2008
Afghanistan, 2002, Conflict	Update	Shelter Projects 2009
Algeria, 1980, Earthquake	Case study	Shelter Projects 2009
Azerbaijan, 1992, Conflict	Case study	Shelter Projects 2008
Bangladesh, 2009, Cyclone	Overview	Shelter Projects 2009
Bangladesh, 2008, Cyclone	Technical	Post-Disaster Shelter: 10 Designs
Bangladesh, 2007, Cyclone	Overview	Shelter Projects 2009
Bangladesh, 2007, Cyclone	Case study	Shelter Projects 2009
Bangladesh, 1975, Conflict	Case study	Shelter Projects 2008
Burkina Faso, 2012, Conflict	Case study	Shelter Projects 2011-2012
Burkina Faso, 2009, Conflict	Technical	Post-Disaster Shelter: 10 Designs
Central African Republic, 2013, Conflict	Case study	Shelter_Projects 2013-2014
Chile, 2010, Earthquake	Case study	Shelter Projects 2010
China, Sichuan, 2008, Earthquake	Case study	Shelter Projects 2009
Colombia, 2011, Floods	Case study	Shelter_Projects 2013-2014
Colombia, 2010, Floods	Case study	Shelter Projects 2011-2012
Côte d'Ivoire, 2010–2011, Conflict	Overview	Shelter Projects 2011-2012
Côte d'Ivoire, 2010–2011, Conflict	2 Case studies	Shelter Projects 2011-2012

Cuba, 2012, Hurricane	Case study	Shelter_Projects 2013-2014
Dominican Republic, 2012, Hurricane	Case study	Shelter_Projects 2013-2014
DRC, 2009, Conflict	Case study	Shelter Projects 2009
DRC, 2002, Volcano	Case study	Shelter Projects 2011-2012
DRC, 2002, Volcano	Case study	Shelter Projects 2008
Eritrea, 2004-, Conflict	Update	Shelter Projects 2009
Eritrea, 1998, Conflict	Case study	Shelter Projects 2008
Ethiopia (Assosa), 2011, Conflict	Case study	Shelter Projects 2011-2012
Ethiopia (Dollo Ado), 2012, Conflict	Case study	Shelter Projects 2011-2012
Fiji, 2012, Tropical Cyclone	Case study	Shelter_Projects 2013-2014
Gaza, Palestine, 2009, Conflict	Case study	Shelter Projects 2009
Georgia, 2008, Conflict	Case study	Shelter Projects 2009
Grenada, 2010, Hurricane	Case study	Shelter Projects 2010
Guatemala, 1976, Earthquake	Case study	Shelter Projects 2009
Haiti, 2012, Hurricane	Case study	Shelter_Projects 2013-2014
Haiti, 2010, Earthquake	3 x Technical	Post-Disaster Shelter: 10 Designs
Haiti, 2010, Earthquake	Overview	Shelter Projects 2011-2012
Haiti, 2010, Earthquake	3 Case studies	Shelter Projects 2011-2012
Haiti, 2010, Earthquake	Overview	Shelter Projects 2010
Haiti, 2010, Earthquake	6 Case studies	Shelter Projects 2010
Haiti, 2010, Earthquake	Technical	T-shelter: 8 designs
Haiti, 2008, Floods	Case study	Shelter Projects 2009
Haiti, 1982, Hurricane	Case study	Shelter Projects 2009
Honduras, 1998, Hurricane	Case study	Shelter Projects 2008
Honduras, 1974, Hurricane	Case study	Shelter Projects 2009
Hurricane Sandy, 2012, Hurricane	Overview	Shelter_Projects 2013-2014
India, 2001, Earthquake	Case study	Shelter Projects 2008
India, 1977, Cyclone	2 Case studies	Shelter Projects 2009
India, 1977, Cyclone	Case study	Shelter Projects 2008
India, 1971, Conflict	Case study	Shelter Projects 2008
Indonesia, 2009, Earthquake	Overview	Shelter Projects 2010
Indonesia, 2009, Earthquake	2 Case studies	Shelter Projects 2010
Indonesia, 2009, Earthquake	2 x Technical	T-shelter: 8 designs
Indonesia, 2006, Earthquake	Overview	Shelter Projects 2008
Indonesia, 2006, Earthquake	2 Case studies	Shelter Projects 2008
Indonesia, 2004, Earthquake/Tsunami	Case study	Shelter Projects 2008
Indonesia, 2004, Earthquake/Tsunami	Technical	T-shelter: 8 designs
Ingushetia, 1999, Conflict	Case study	Shelter Projects 2008
Iraq (KR-I), 2013, Conflict	Case study	Shelter_Projects 2013-2014
Italy, 2009, Earthquake	Overview	Shelter Projects 2008
Italy, 2009, Earthquake	Case study	Shelter Projects 2009
Japan, 2011, Earthquake/Tsunami	Case study	Shelter Projects 2011-2012
Jordan, 2014, Conflict	Case study	Shelter_Projects 2013-2014
Jordan, 2013, Conflict	2 Case studies	Shelter_Projects 2013-2014
Kenya, 2008, Conflict	Case study	Shelter Projects 2008
Kenya, 2008, Conflict	Update	Shelter Projects 2009

Kenya, Dadaab, 2009, Conflict	Update	Shelter Projects 2009
Kenya, Dadaab, 2008, Conflict	Update	Shelter Projects 2009
Kenya, Dadaab, 2007, Floods/Conflict	Case study	Shelter Projects 2008
Kenya-Dadaab, 2011, Conflict	Case study	Shelter Projects 2011-2012
Kyrgyzstan, 2010, Conflict	Case study	Shelter Projects 2010
Lebanon, 2013, Conflict	Case study	Shelter_Projects 2013-2014
Lebanon, 2012, Conflict	2 Case studies	Shelter_Projects 2013-2014
Lebanon, 2011, Conflict	Case study	Shelter Projects 2011-2012
Lebanon, 2007, Conflict	Case study	Shelter Projects 2011-2012
Liberia, 2007, Conflict	Case study	Shelter Projects 2008
Liberia, 2007, Conflict	Update	Shelter Projects 2009
Madagascar, 2012, Cyclone	Case study	Shelter Projects 2011-2012
Malawi, 2009, Earthquake	Case study	Shelter Projects 2010
Mozambique, 2007, Cyclone	Case study	Shelter Projects 2008
Mozambique, 2007, Cyclone	Case study	Shelter Projects 2010
Myanmar, 2012, Conflict	Case study	Shelter_Projects 2013-2014
Myanmar, 2008, Cyclone	Case study	Shelter Projects 2009
Myanmar, 2008, Cyclone	2 Case studies	Shelter Projects 2010
Nicaragua, 2007, Hurricane	Case study	Shelter Projects 2011-2012
Nicaragua, 1972, Earthquake	Case study	Shelter Projects 2008
Nicaragua, 1972, Earthquake	Case study	Shelter Projects 2009
Nigeria, 2012, Floods	Case study	Shelter_Projects 2013-2014
Pakistan, 2010-2014, Overview	Case study	Shelter_Projects 2013-2014
Pakistan, 2012, Floods	3 Case studies	Shelter_Projects 2013-2014
Pakistan, 2011, Floods	2 Case studies	Shelter Projects 2011-2012
Pakistan, 2010, Floods	2 Case studies	Shelter Projects 2011-2012
Pakistan, 2010, Floods	Technical	Post-Disaster Shelter: 10 Designs
Pakistan, 2010, Floods	Technical	T-shelter: 8 designs
Pakistan, 2010, Floods	Overview	Shelter Projects 2010
Pakistan, 2010, Floods	2 Case studies	Shelter Projects 2010
Pakistan, 2009, Conflict	Case study	Shelter Projects 2010
Pakistan, 2005, Earthquake	Overview	Shelter Projects 2008
Pakistan, 2005, Earthquake	2 Case studies	Shelter Projects 2008
Peru, 2012, Floods	Case study	Shelter Projects 2011-2012
Peru, 2007, Earthquake	3 Case studies	Shelter Projects 2008
Peru, 2007, Earthquake	Overview	Shelter Projects 2008
Peru, 2007, Earthquake	2 x Technical	T-shelter: 8 designs
Philippines, 2013, Typhoon	Overview and 2 Case Studies	Shelter_Projects 2013-2014
Philippines, 2012, Cyclone	2 x Technical	Post-Disaster Shelter: 10 Designs
Philippines, 2012, Typhoon	Case study	Shelter_Projects 2013-2014
Philippines, 2011, Cyclone	Overview	Shelter Projects 2011-2012
Philippines, 2011, Cyclone	2 Case studies	Shelter Projects 2011-2012
Philippines, 2010, Cyclone	Case study	Shelter Projects 2010
Portugal, 1755, Earthquake	Case study	Shelter_Projects 2013-2014
Republic of South Sudan, 2011, Conflict	Case study	Shelter Projects 2011-2012
Romania, 2010, Floods	Case study	Shelter Projects 2010

Rwanda, 2008, Conflict	Case study	Shelter Projects 2008
Rwanda, 2008, Conflict	Update	Shelter Projects 2009
Somalia, 2011, Conflict	Case study	Shelter Projects 2011-2012
Somalia, 2009, Conflict	Case study	Shelter Projects 2009
Somalia, 2009, Conflict	Case study	Shelter Projects 2009
Somalia, 2008, Conflict	Case study	Shelter Projects 2009
Somalia, 2007, Conflict	Case study	Shelter Projects 2008
South Sudan, 2012, Conflict	Case study	Shelter_Projects 2013-2014
Sri Lanka, 2010, Conflict	Technical	Post-Disaster Shelter: 10 Designs
Sri Lanka, 2009, Conflict	Case study	Shelter Projects 2010
Sri Lanka, 2007, Conflict	Update	Shelter Projects 2009
Sri Lanka, 2007, Conflict	Case study	Shelter Projects 2008
Sri Lanka, 2004, Tsunami	Case study	Shelter Projects 2008
Sudan, 1985, Conflict	Case study	Shelter Projects 2008
Sudan, Darfur, 2004-, Conflict	Case study	Shelter Projects 2008
Sudan, Darfur, 2004-, Conflict	Case study	Shelter Projects 2009
Syria conflict, 2011, Conflict	Overview	Shelter_Projects 2013-2014
Tajikistan, 2010, Earthquake	Case study	Shelter Projects 2010
Thailand, 1979-1980, Conflict	Case study	Shelter Projects 2008
Thailand, 2011, Floods	Case study	Shelter Projects 2011-2012
Tonga, 2010, Tsunami	Case study	Shelter Projects 2010
Tonga, 1982, Cyclone	Case study	Shelter Projects 2008
Tunisia, 2011, Conflict	Case study	Shelter Projects 2011-2012
Turkey, 1976, Earthquake	Case study	Shelter Projects 2009
Turkey, 1975, Earthquake	Case study	Shelter Projects 2009
Turkey, 1970, Earthquake	Case study	Shelter Projects 2009
Uganda, 2007, Floods	Case study	Shelter Projects 2009
UK, 1945, Conflict	Case study	Shelter Projects 2009
USA, 1906, Earthquake	Case study	Shelter Projects 2010
USA, 1871, Fire	Case study	Shelter Projects 2011-2012
Vietnam, 2009, Typhoon	Case study	Shelter Projects 2010
Vietnam, 2004, Typhoon	Technical	T-shelter: 8 designs
Yugoslavia-Ex, 1963, Earthquake	Case study	Shelter Projects 2009

C.2 Conversion tables

These tables are included to help readers convert the measurements in the Bills of Quantities. The data on this page is all rounded to 4 significant figures. Penny sizes are rounded to the nearest mm.

Length				
Imperial	1 inch (in.)	1 feet (ft.) = 12 in.	1 yard (yd.) = 3 ft. = 36 in.	1 mile = 1760 yd.
Metric	25.4 mm = 2.54 cm	304.8 mm	0.9144 m	1.609 km

For equivalence tables in timber sizing see UNOCHA / IFRC / CARE International, Timber

Area			
Imperial	1 square feet (sq. ft.)	1 square yard (yd ²) = 9 sq. ft.	1 acre
Metric	0.0929 m ²	0.8361 m ²	4046.9 m ²

1 perch = 30.25 yd²

1 acre = 4,840 yd²

1 hectare = 10 000 m²

Volume		
Imperial	1 cubic feet (ft ³)	1 cubic yard (yd ³)
Metric	28.32 litres = 0.02832 m ³	0.7646 m ³

1 US liquid gallon = 3.785 litres

1 US dry gallon = 4.405 litres

1 imperial (UK) gallon = 4.546 litres

Weight			
Imperial	1 pound (lb)	Ton (UK, long ton)	Ton (US, net ton, short ton)
Metric	0.4536 Kg	1.1016 MT = 1016 Kg	0.9072 MT = 907.2 Kg

Note that there are several different imperial systems of weights. We quote the British imperial ton as in the Weights and Measures Act of 1824, and the United States customary system. Additional useful conversions are:

1 lb = 16 Ounces (Oz.)

1 stone = 14 pounds (lb.)

1 hundredweight (cwt.) - UK = 112 lb.

1 hundredweight (cwt.) - US = 100 lb.

Nails - "penny sizes"													
Imperial	Penny size	2d	3d	4d	6d	8d	10d	16d	20d	40d	50d	60d	100d
	Inches	1	1 ¼	1 ½	2	2 ½	3	3 ½	4	5	5 ½	6	10
Metric	Nearest length (mm)	25	32	38	51	64	76	89	102	127	140	152	254

C.3 Further reading and resources

Further Reading

In compiling this edition of Shelter Projects, we have drawn on key informant interviews, and a variety of sources. The published sources are listed below under General statistics and websites.

We also include a list of background documents - these are key shelter texts in which readers can find further reading on many of the shelter related issues raised by these case studies. Some of them are directly referred to in the text.

General statistics

CRED, EM-DAT disaster database.

www.emdat.be.

Global database of world disasters

IFRC, World Disasters Report, 2014 - Focus on culture and risk

IFRC, World Disasters Report, 2013 - Focus on technology and the future of humanitarian action

Available from www.ifrc.org

Annual report providing a global overview of disaster trends

IFRC, reports

Available from reliefweb.int

These include Appeals, Operational updates, final, mid year and annual reports.

IDMC/ NRC, Internal Displacement Global Overview of Trends and Developments in 2010

Available from www.internal-displacement.org

OCHA, Sitreps, Available from reliefweb.int.

Situation reports on major responses

OCHA appeal documents

<http://www.unocha.org/cap/>

Financial appeals, action plans and reviews with narratives for OCHA coordinated responses.

UNHCR, Global Trends 2010

Available from www.unhcr.org

Websites

www.sheltercluster.org

Home page of the global shelter cluster - the coordination mechanism for shelter responses. Contains links to individual responses including strategy documents.

www.sphereproject.org

Download the Sphere handbook, find information on trainings and other activities from the Sphere Project. The Sphere Project aims to improve the quality of humanitarian assistance and the accountability of humanitarian actors to their constituents, donors and affected populations.

www.shelterlibrary.org

A library of free documents relating to transitional settlement and reconstruction.

humanitarianlibrary.org

The Humanitarian Library is designed as a global clearinghouse for regional humanitarian knowledge. As a user-oriented resource, it is designed to be the first reference for both sharing and searching for field-relevant documents.

UNHCR Data portal

data.unhcr.org

Regional response portals for individual refugee related responses.

www.disasterassessment.org

A site where members of the disaster management community can meet to exchange tools and case studies related to disaster risk assessment.

IFRC/ICRC Emergency relief items catalogue - website

<http://procurement.ifrc.org/catalogue/>

Detailed specifications of all items commonly used by IFRC and ICRC

IFRC Shelter video channel

bit.ly/ifrcshelter

Red Cross Red Crescent videos related to emergency shelter

www.reliefweb.int

Up to date information on complex emergencies and natural disasters as well as an archive of information, field reports and situation reports from emergencies since 1996. OCHA situation reports (sitreps) and IFRC appeal documents and operations updates have been of particular use in compiling these case studies.

Key shelter publications

Camp management project, Camp Management Toolkit 2008

Available from: www.nrc.no/camp

A comprehensive field manual for camp management organisations and stakeholders involved in camp operations.

Charlesworth E., Humanitarian Architecture, 15 stories of architects working after disasters.

Available on www.routledge.com and amazon.com

An analysis of the role and engagement of architects to respond to the design and planning challenges of rebuilding post-disaster sites and cities.

Corsellis and Vitale, Transitional Settlement: Displaced Populations, Oxfam publishing, 2005

Available from: www.shelterlibrary.org

Guidelines for the strategic planning and implementation of settlement responses for displaced populations.

IASC, Shelter Centre, Selecting NFIs for shelter - 2008.

Available from: www.shelterlibrary.org

Provides information, case studies and guidance on how to choose the best items to distribute to those affected by natural disaster or conflict.

ICRC/IFRC Guidelines for cash transfer programming - 2007

Available from: www.ifrc.org/

Provides information on when and how to distribute cash in disaster response.

IFRC, Guidelines for assessment in emergencies - 2008.

Available from: www.ifrc.org

Practical information and guidance on how to conduct assessments in emergencies.

IFRC Owner Driven Housing Reconstruction Guidelines (ODHR), 2010

Available from: www.ifrc.org

Guidance on the planning and implementation of assisted self help reconstruction projects.

IFRC, Oxfam GB, Plastic sheeting, 2007

Available from: www.plastic-sheeting.org

A guide to the use and specification of plastic sheeting in humanitarian relief, 2007. An illustrated booklet on when and how to use plastic sheeting most effectively in emergencies.

IFRC, The IFRC shelter kit, 2010

Available from: www.shelterlibrary.org

A guide on the IFRC shelter kit and how to use it.

IFRC, Transitional Shelter: Eight Designs, 2011

A review of risks in shelter construction and detailed structural analysis of eight different transitional shelters designs that have been used in the field in large scale projects.

IFRC, post-disaster shelter – 10 designs

Available from www.sheltercasestudies.org

A compilation of technical designs of selected shelter projects

Mike Albu, The Emergency Market Mapping and Analysis Toolkit,

Available from: <http://emma-toolkit.org>

A toolkit designed for generalists, as well as specialist staff on how to conduct an emergency market mapping analysis.

NRC, Shelter Centre, Urban Shelter Guidelines

Available from: www.shelterlibrary.org

General guidance for urban humanitarian response.

NRC/IFRC, Security of tenure in humanitarian shelter operations

Available on www.ifrc.org/documents

A short report highlighting the regulatory barriers to the provision of short and medium term shelter solutions, presented in collaboration through several case studies.

Shelter Centre, UN, DfID, Shelter after disaster - Strategies for transitional settlement and reconstruction, 2010

Available from: www.shelterlibrary.org

A book containing information and guidance on how to agree strategies for reconstruction after natural disasters. Contains description of the types of shelter programmes that organisations can implement.

UNDRO, (now UNOCHA), Davis, I., Shelter After Disaster, Guidelines for Assistance, 1982

Available from: www.shelterlibrary.org

Guidelines and description of shelter provision in all aspects of natural disasters (from preparedness to reconstruction).

Sphere Project, Sphere - Humanitarian charter and minimum standards in humanitarian response, 2011

Available from: www.sphereproject.org

Contains consensus standards agreed among major humanitarian organisations for key sectors including shelter and settlement. It also contains actions, indicators and guidance notes as to whether standards have been achieved.

Sultan Barakat, HPN Network paper 043, Housing reconstruction after conflict and disaster, ODI, 2003

Available from: www.odihpn.org/documents/networkpaper043.pdf

Review of housing reconstruction experiences and approaches.

UNHABITAT, IFRC, UNHCR, Shelter Projects 2011-12

Available from: www.ShelterCaseStudies.org

Case studies of shelter projects.

UNHABITAT, IFRC, UNHCR, Shelter Projects 2010

Available from: www.ShelterCaseStudies.org

Case studies of shelter projects.

UNHABITAT, IFRC, Shelter Projects 2009

Available from: www.ShelterCaseStudies.org

Case studies of shelter projects.

UNHABITAT, IFRC, UNHCR, Shelter Projects 2008

Available from: www.ShelterCaseStudies.org

Case studies of shelter projects.

UNHABITAT, Land and Natural Disasters - Guidance for Practitioners, 2010

Available from: www.disasterassessment.org or from unhabitat.org

A book containing guidance on land issues following natural disasters.

UNHCR, Handbook for Emergencies, Third Edition, 2007

Available from: <http://www.unhcr.org>

A book containing guidance on the management and all the key sectors in refugee emergencies.

UNICEF, Compendium of Temporary Learning Spaces (TLS): Design and practice in emergencies 2011

Designs and guidance on the construction of temporary learning spaces.

UN/OCHA, Tents - A guide to the use and logistics of tents in humanitarian relief, 2004

Available from: www.shelterlibrary.org

A booklet describing when and how to use tents as well how to support those living in them to best adapt them to meet their needs.

UN/OCHA / IFRC / CARE International, Timber as a construction material in humanitarian operations, 2009

Available from: www.humanitarian timber.org

An illustrated booklet on how to source and use timber for the construction of basic structures.