Office for the Coordination of Humanitarian Affairs (OCHA)

shelter centre

DFID Department for International Development

Transitional settlement and reconstruction after natural disasters

Field Edition

United Nations

Transitional settlement and reconstruction principles » see section 1.5.3

Principle 1. Support the affected community

The first and main effort in responding to an emergency is always made by the affected community. The impact of the disaster on the community must be ascertained and appropriate support provided to local responses when these are appropriate and safe. Support must also be based on an understanding of the different roles and resources of individuals and groups within the community. Assessments (Principle 3) provide an understanding of these factors.

Principle 2. Coordinate and promote a strategy for response

Coordination between governmental and international stakeholders must be based on a consensus strategy, developed and maintained with the participation of the affected population and government. A coordinated response strategy aims to support the government, filling gaps where necessary.

The strategy should cover the entire response, from the initial crisis, to recovery, and to the point at which durable solutions are reached for every member of the affected population. Transitional settlement, reconstruction and risk reduction should be linked to or compatible with national planning mechanisms and programmes for sustainable development. The strategy must be consistent with international and national law, and with the standards and principles agreed among stakeholders. This should ensure that assisting groups respond to the needs of the affected population, regardless of whether or not they owned land or property, and include all vulnerable groups.

Principle 3. Maintain continuous assessment of risk, damage, needs and resources

Emergency assessments, followed by ongoing assessments, monitoring and evaluation, are essential to a successful response. The strategy for response should be reviewed and updated according to the results obtained from this ongoing process.

Principle 4. Avoid relocation or resettlement unless it is essential for reasons of safety

Affected communities should not be displaced or resettled unless it is absolutely essential to avoid risks from physical hazards (see Principle 5). Displacement is likely to exacerbate the impacts that a disaster has on property, social connections and livelihoods, in both rural and urban environments. Remaining at home or close to home enables survivors to support themselves and recover their livelihoods, as well as helping to prevent problems arising over land tenure. Displacement must always be voluntary and the rights of the affected population respected.

Principle 5. Minimise duration and distance, when displacement is essential

If displacement is essential for reasons of safety (see Principle 4), the displaced population should be supported to minimise the duration of their displacement and the physical distance from their place of origin. Minimising the duration and distance of displacement enables people to recover their social connections and livelihoods as quickly as possible.

Principle 6. Support settlement and reconstruction for all those affected

Support must be offered to all affected persons, regardless of whether or not they are land or property owners or living in houses or apartment buildings. Families hosting displaced populations must also be included. Assisting groups should identify and monitor major problems facing the response so that the needs of all affected persons can be met, regardless of race, ethnicity, gender and age. This includes people who settle in a new location. A variety of solutions should be considered.

Principle 7. Ensure rights and secure tenure for all those affected

Security of tenure and property rights must be achieved for all those affected, whether they were previously illegal or informal occupants of their homes, tenants, or owners. Support must therefore be provided to the establishment of these rights for all members of the affected population, including those initially without property rights. This support must take place as early as possible, to ensure that displaced persons can return home as quickly as possible. The reconstruction of homes and communities can only begin once such issues are resolved. Displaced persons also require security of tenure while displacement lasts in the place where they are currently living.

Principle 8. Support the affected population in making informed choices

The affected population must be presented with a selection of transitional settlement options based upon their initial choices, where appropriate, with enough information to make informed decisions.

Principle 9. Ensure that vulnerability to disasters is not rebuilt

It is vital that the opportunity provided by disasters to raise awareness and undertake mitigation and measures which reduce people's vulnerability to future events is taken. Vulnerability must be reduced by incorporating specific risk reduction activities and measures into the transitional settlement and reconstruction response, for example, increasing the hazard resistance of buildings being reconstructed.

Principle 10. Undertake contingency planning

Contingency plans must be developed and/or previously existing plans updated in light of experience gained in the disaster. Contingency planning is most effective when it is a participatory process that includes all the actors who will be required to work together in the event of an emergency. It is a forward planning process, in which scenarios and objectives are agreed, managerial and technical actions defined, and potential response systems put in place to respond to an emergency situation.

Transitional settlement and reconstruction after natural disasters

Field Edition

United Nations

Note

The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or its authorities, or concerning the delimitation of its frontiers or boundaries.

The opinions, figures and estimates set forth in this document are the responsibility of the authors, and should not necessarily be considered as reflecting the views or carrying the endorsement of the United Nations.

Field edition

This field edition has been developed to be used for extensive field testing over the coming months. Feedback is sought from operational stakeholders, including from governments and humanitarian and developmental organisations. Comments will be included in a second review process which will be followed by a revised, updated and expanded edition of the guidelines, to be published by the Shelter Centre and UN/OCHA in 2009.

To feed back on the 2008 field edition or to join the second review process for the revised edition, contact:

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Acknowledgements

Publishers and contributors

These guidelines, *Transitional Settlement and Reconstruction After Natural Disasters*, are the first revision of the key publication *Shelter After Disaster: Guidelines for Assistance*, published in 1982 by UNDRO (now UN/OCHA).

The executive editors and lead authors of the revised guidelines were Tom Corsellis and Antonella Vitale, the Co-Directors of Shelter Centre.

Isabelle de Muyser-Boucher, Chief of the Logistics Support Unit (LSU), Emergency Services Branch (ESB), acted as project manager and coordinating editor on behalf of UN/OCHA, with support from Florence Secula, Assistant Humanitarian Affairs Officer.

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The cover photograph by Shelter Centre shows Kuta Raja, Aceh, Indonesia, 2005.
Figure 1.2 is adapted from an original supplied by Heiner Gloor.

Peer review

The revision was reviewed at the 2006 and 2007 Shelter Meetings, a biannual forum organised by Shelter Centre, which is attended by the key NGO, IO, UN and government stakeholders in the sector. It was also reviewed at ten meetings of a dedicated review panel, each attended by some or all of the following organisations:

CARE International	The Sphere Project
IFRC	Swiss Solidarity
IOM	UNDP
NRC	UN-Habitat
ProAct	UNHCR
ProVention Consortium	UNICEF
Risk RED	UN/ISDR
SDC/HA	UN/OCHA

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The revision was informed by a scoping study *Exploring key Changes and Development in post disaster Settlement Shelter and Housing 1982–2006*, published by UN/OCHA in May 2006 (available for free download on http://ochaonline.un.org and www.sheltercentre.org or in hardcopy from lsu@un.org).

Who the guidelines are for

The guidelines are designed to assist all stakeholders responding to rapid-onset disasters, especially those responsible for planning and coordination in governments and humanitarian and developmental organisations.

Governments and stakeholders supporting governments, namely national, regional and local governments, task forces and line ministries: guidance is offered in planning, coordinating and implementing a sector response, including involving and coordinating with humanitarian and developmental organisations.

Coordinators, at national, inter-sectoral and sectoral levels: while much responsibility for decision making rests with coordinators, the critical sectoral factors are technical. Guidance is offered in planning and coordinating a sector response, including both understanding the implications of technical decisions and integrating technical expertise in planning and implementation.

Technical specialists, including information managers, namely people with professional technical backgrounds and significant operational humanitarian experience at coordination, programme and project levels: guidance is offered to support specialists in planning and implementing sector response, as well as in meeting their responsibilities to participate in coordination mechanisms.

What the guidelines are about

The guidelines cover coordination and strategic planning and implementation relevant to transitional settlement and reconstruction following all natural disasters.

Guidance covers the transition following a natural disaster from the emergency shelter needed for survival to durable solutions for communities, including identifying needs for support to communal infrastructure such as roads and hospitals, often over a period of several years.

Using and navigating these guidelines

The major concepts used in these guidelines are represented additionally using icons, which are presented in the icon legend on the last page of the guidelines. Similar navigation through the guidelines and to external and CD resources is supported through additional icons (» Icon legend).

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Eleven strategic planning activities

introduced in **Chapter 2**

- Strategic planning objectives
- Coordination
- Critical path analysis
- Transitional settlement and reconstruction options
- Resources
- Schedule for implementation
- Participation
- Assessment, monitoring and evaluation
- Scenarios
- Legal framework
- Handover

Seven hazard types

introduced in **Chapter 3**

- Earthquake
- Flood
- Windstorm
- Volcano
- Wave
- Slide
- Fire

Seven risks to houses

- Earthquake
- Flood
- Windstorm
- Volcano
- Wave
- Slide
- Fire

Four methods of building back safer

- Repair
- Retrofit
- Rebuild
- Relocate

Six transitional settlement options

introduced in **Chapter 4**

- Host families
- Urban self-settlement
- Rural self-settlement
- Collective centres
- Self-settled camps
- Planned camps

Six transitional reconstruction options

introduced in **Chapter 5**

- Occupancy with no legal status
- House tenant
- Apartment tenant
- Land tenant
- House owner-occupier
- Apartment owner-occupier

Five housing damage categories

introduced in **Chapter 6**

- 0 Category 0
- 1 Category 1
- 2 Category 2
- 3 Category 3
- 4 Category 4

Twelve assistance methods

- Information centre
- Community labour
- Contracted labour
- Direct labour
- Household NFIs
- Shelter NFIs
- Transitional shelter
- Technical expertise
- Cash
- Vouchers
- Loans
- Capacity building

Navigation icons

- Internal reference
- External reference
- Available on CD resource
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Principles and coordination 1

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This chapter offers guidance for all stakeholders in collaborating to achieve equitable and appropriate support for all of the affected population, depending on their needs, throughout the response. Maintaining effective coordination helps to identify gaps, minimises overlaps and enables sustainable support to be provided. Using laws, principles and standards appropriately ensures that the rights and duties of those involved are understood and respected by all stakeholders.

1.1 Shelter, settlement and reconstruction

Shelter for survival

1. Shelter is critical to survival. From the emergency phase until durable solutions, it is necessary to provide security and personal safety, while protection from the climate also protects from ill health and disease. Shelter and settlement support human dignity and family and community life, when populations are displaced or in their homes, maximising communal coping strategies (📖 The Sphere Project, 2004).

Shelter and livelihoods

2. More secure shelter in a safer settlement constitutes the immediate and sustainable physical foundation to livelihoods development, including through enabling protection and reducing risk. Poor decision-making can result in a return to the vulnerabilities that resulted in the disaster in the first place. It can also create unsustainable settlements.

Transitional settlement

3. For those who have been displaced by a disaster, 'transitional settlement' describes their movement between shelter options starting from the disaster, over the period of their displacement, which may be for days or years: for example, initially a family may self-settle on a roadside, before moving to stay with a host family. Displacement often continues long after the risk that caused displacement is no longer acute, when people remain displaced for economic, political or legal reasons, such as when land tenure has not been resolved (» section 7.5) in order that reconstruction may begin.

Transitional reconstruction

4. For those who have not been displaced by the disaster, or for those returning from displacement, 'transitional reconstruction' describes how people regain longer-term housing, for example tenants who were renting an apartment in a city, or the owners of a rural farm. Transitional reconstruction begins immediately after a disaster, as people recover what they can, however, for those affected badly it can often occur over a number of years. During transitional reconstruction, some people move, for example from owning an apartment to renting a house. For others, such as those squatting in informal settlements, a disaster may offer an opportunity for a sustainable and legal solution to their housing needs.

The priorities of affected populations

5. Following a disaster, support to transitional settlement and reconstruction may be the greatest priority of those affected. During the emergency phase, this support is one of the life-saving priorities of the affected population, along with other priorities including clean water, food and medicines.

1.2 Priorities in disaster response

Varied resources of the affected population

6. The first and main responders to any disaster are the affected populations themselves. This is true both immediately following a disaster and during the recovery process. However, the resources and needs of those affected by disaster vary widely.

Supporting the most vulnerable

7. The most vulnerable, poorest, and hardest to reach members of society are usually those most affected and in most need. The challenge remains to identify and support all of the people affected, with priority given to those in greatest need. Governments and international humanitarian organisations have more experience in supporting reconstruction for those who own their property or land. There is less experience in supporting transitional settlement and reconstruction of tenants and the landless, who, in urban situations, are often the majority.

Urbanisation and risk

8. Rapid urbanisation, particularly in developing countries, means that half of the world's population is now living in urban areas. Most of these densely populated and poorly developed urban areas are vulnerable to hazards. For example, 40 of the 50 fastest-growing cities are in earthquake zones (UN-Habitat, 2006).

Widespread insecurity of tenure

9. Land is an increasingly scarce commodity, particularly for the poor. Most of the inhabitants of urban areas are tenants or squatters, many having informal tenure. In rural areas, landless people and families without land tenure also make up a sizeable group. These groups often fall outside post-disaster housing provision as many programmes take as their basis home or land ownership. Such marginalised groups must be supported according to need in the shelter response to a disaster.

Urban housing tenure worldwide, per cent (1998) Table 1.1

	Owner	Tenant	Squatter	Other
World	42	34	19	5

Source: UN-Habitat, 2003b.

Supporting those with insecure tenure

10. Currently, some vulnerable groups, such as people with informal tenure, are not recognised as beneficiaries by some governments and humanitarian organisations. It is vital that they are recognised, and that barriers to supporting them are overcome.

Importance of coordination

11. Settlement and reconstruction support activities for affected communities must take place within a coordinated strategy that works with governments and pools the resources of humanitarian organisations, donors and the private sector. Coordination ensures that equitable support is provided to the entire affected community, starting from the emergency response until durable solutions for all are achieved. Effective coordination also improves efficient use of resources and reduces duplication of efforts (» sections 1.4, 2.2.2 and 7.1).

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Minimising displacement

12. Following most disasters, the majority of the affected population stay in or close to their homes, and they should be supported to remain there when it is safe to do so. When displacement is necessary, the priority for those supporting displaced persons is to minimise, as far as is safe, the distance and duration of displacement. Remaining at home or close to home makes it easier for survivors to support themselves, recover their livelihoods and reconstruct or regain use of their homes.

Importance of mapping risks

13. Community risk mapping should be undertaken, based upon assessments of the local knowledge of hazards, in order to better understand risk as well as traditional coping strategies and construction techniques. Traditional building practices incorporating risk reduction knowledge may be lost as new building materials and styles are introduced. Other factors associated with modernisation, such as migration, often mean that this local knowledge is less accessible than in the past. While materials and technologies may change, solutions should be appropriate for local social and cultural norms as well as economic activities. Public participation in risk analysis and recovery planning will help to draw this knowledge into the open and create community ownership in recovery and risk reduction plans.

Importance of damage assessments

14. Assessments are required of the level and reasons for damage to local construction types. Results will inform how support should be offered to achieve reductions in risk through sustainable changes in building practices (» section 7.7).

Protecting livelihoods

15. Risk reduction must be applied across entire communities, including protection of individual livelihoods, homes and assets as well as communal services and infrastructure. Supporting people to protect their assets during and after disasters not only helps them to recover quickly but also reduces future vulnerability and poverty (📖 ALNAP and ProVention, 2007b).

Introducing lessons learnt

16. While there is much that can be learned from experience elsewhere, approaches from one part of the world may not be applicable or optimal in other areas due to variations in the kinds of hazards facing a community, in the local construction and development practices, and in the capacities and resources available to the communitiy. Care should be taken in adapting such borrowed experience to local conditions and needs: inappropriate technical guidance, which may vary within an area of a few kilometres, can result in the rejection of assistance as being unsustainable or too costly.

Reducing vulnerability to climate change

17. Reconstruction should include efforts to reduce exposure to hazards that may increase in frequency or severity with increasing climate risk.

Reducing environmental impacts

18. Reconstruction should also include efforts to to maximise energy efficiency, and to minimise the use of non-renewable resources and adverse impacts on the environment. Examples include purchasing locally produced materials, in order to reduce transport, from sustainable sources; building with materials with low embodied energy; promoting passive heating, cooling and lighting; and using rainwater runoff.

1.3 Disaster and response timeline

Phases of response

19. For the sake of clarity, the period following a disaster has been broken down into the following three distinct response phases which are referred to throughout these guidelines: emergency, recovery and durable solutions (» section 6.2). In reality, these phases usually overlap. Transit takes place throughout displacement until return or relocation. The transit of individuals and populations must be mapped so that support can be provided to them throughout the response.

Emergency

20. The emergency phase is the period during which individuals within the affected population are concerned primarily with survival.

Recovery

21. Recovery support ensures that the displaced population is supported to shorten the need for emergency sheltering and moves towards more durable housing solutions as quickly as possible. Reconstruction begins for non-displaced populations and those returning home.

Durable solutions

22. Durable solutions are sustainable options for settlement, both for those who were not displaced, and for those who were displaced but returned, resettled in the region that they displaced to, or relocated to another region or country.

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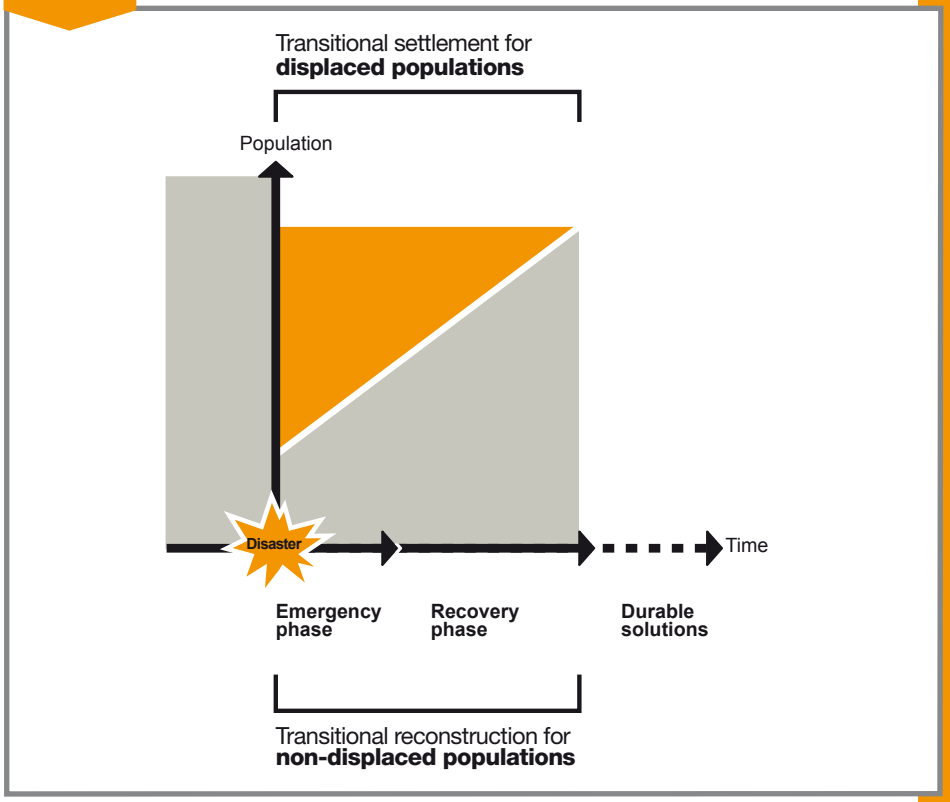
A strategy from disaster to durable solutions

23. Both governments and humanitarian organisations have tendencies to consider support offered to affected populations in phases, corresponding to handovers of responsibility within their internal structures. It is essential, however, that response is planned and implemented as a continuous, uninterrupted effort. It must take place within a strategic framework (» section 2.2) that covers the entire affected population, from immediate response to durable solutions. Figure 1.1 shows how the phases of response form part of an overall strategy.

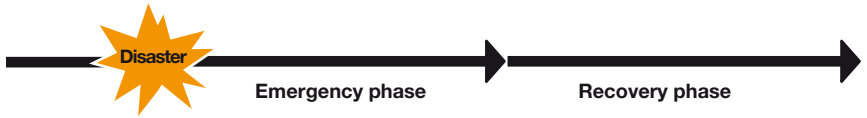
Figure 1.1 **The phases of response within the transitional settlement and reconstruction strategy**



24. Table 1.2 shows a typical timeline of disaster and response from the point of view of the affected population, government and humanitarian organisations.

Timeline of a disaster response **Table 1. 2**

Affected population	Ensuring survival and safety of families, protecting property, building emergency shelter Emergency services arrive, search and rescue teams arrive Family and community splitting up, some being displaced, some remaining. Displaced populations establishing self-settled camps or staying with host families or in collective centres	Beginning of reconstruction, recovering materials, adapting transitional settlements for seasonal changes as necessary Displaced families or individual members of such families, returning home and beginning reconstruction activities Support from government and international humanitarian organisations, with materials, funds and capacity
Local NGOs and CBOs	Using knowledge of local communities, capacities and resources in assessment and implementation activities Participation in coordination meetings, also representing affected population	Identification and support of affected populations Facilitation of assessments and monitoring Rubble clearance, reconstruction begins Facilitation of follow-up assessments
Government	Emergency management authority or task force established to coordinate response Coordination meetings with national and international aid agencies	Handover from emergency authority or task force to line ministries Ongoing coordination with international humanitarian community Assessments of damage and needs. Establishment of beneficiary lists. Support for reconstruction
International humanitarian organisations	Arrival, briefing, introductions to representatives of government and the affected population Initial assessments mapping the location of the affected populations Handover from search and rescue and emergency disaster assessment and coordination teams Coordination meetings including government and affected population Writing preliminary strategic plan	Coordination of support to government and affected population as funding and other resources arrive Detailed assessments of remaining needs and monitoring of project implementation Rubble clearance, reconstruction begins Incoming capacity targeted as needed Teams changing and handing over Follow-up assessments



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1.4 Coordination and information management

Importance of coordination

25. For an effective response, coordination must be developed and maintained in all areas of operation, across all stakeholders, and at all levels of response (» section 2.2.2 and 7.1).

Key coordination tools

26. The key tools needed for coordination include offering services, such as accurate information, to all stakeholders; supporting access to affected areas; and maintaining an up-to-date strategic plan as a framework for operational collaborations.

A consensus process

27. The coordination services should be defined by those coordinated. Coordination must be a consensus process, continually revised, entailing regular consultation and adjustment to circumstances. Coordination should be resourced sufficiently to enable all stakeholders involved to benefit from: common pooling and sharing of knowledge; common advocacy; and influence over the overall response plan with their own planning activities. Coordination is not a centralised command structure that replaces or represses the planning process of each stakeholder.

Supporting government

28. Humanitarian coordination resources should support the response strategy of the government, filling gaps in capacity where required (» Figure 1.2). Coordination should be maintained across the entire area of response, using a variety of mechanisms, in order to: assess coordination services required; disseminate and review the strategy; and build sustainable coordination capacity. Mechanisms include training and workshops, at which local government, NGOs and the affected and local populations are involved together, as appropriate.

Responsibility of all stakeholders

29. Coordination is the responsibility of everyone involved in the response. It is essential that a collaborative culture is supported and achieved to counteract the tendency of organisations and institutions to think and act autonomously, without consideration of their wider role or impact in the wider response. It is the responsibility of government to support coordination in order to support its citizens. It is the responsibility of humanitarian organisations to support this coordination in order to meet their humanitarian mandates.

Case study 1.1

Mozambique floods

In 2000, a series of tropical storms meant that six major river systems in Mozambique flooded. Around 4.5 million people were affected and 650,000 were displaced. The following year, there was once again major flooding, affecting 500,000 and displacing 223,000 people.

The importance of coordination

In 2000, the Government of Mozambique coordinated the response as numerous humanitarian organisations arrived to assist, holding daily meetings to ensure satisfactory coordination. Effective coordination ensured that cholera was eliminated and malaria was controlled.
The floods in 2001 were farther north, where the gov ernment disaster management agency's resources were weaker, but as humanitarian organisations had developed and maintained contacts in the country, the overall response was still of a good standard.

The provision of housing during the recovery period was successful, although even with a well-coordinated response there were gaps. Whilst the quality of housing provided during recovery was generally of a higher standard than prior to the floods, no standard plan for house construction meant that standards varied considerably and some agencies even failed to provide sanitation facilities.

Adapting to a changing situation

30. The structure, services and strategy of sectoral coordination should change significantly over the duration of a response as demands change, and so the remit of sectoral coordination must constantly be re-evaluated in order to remain appropriate.

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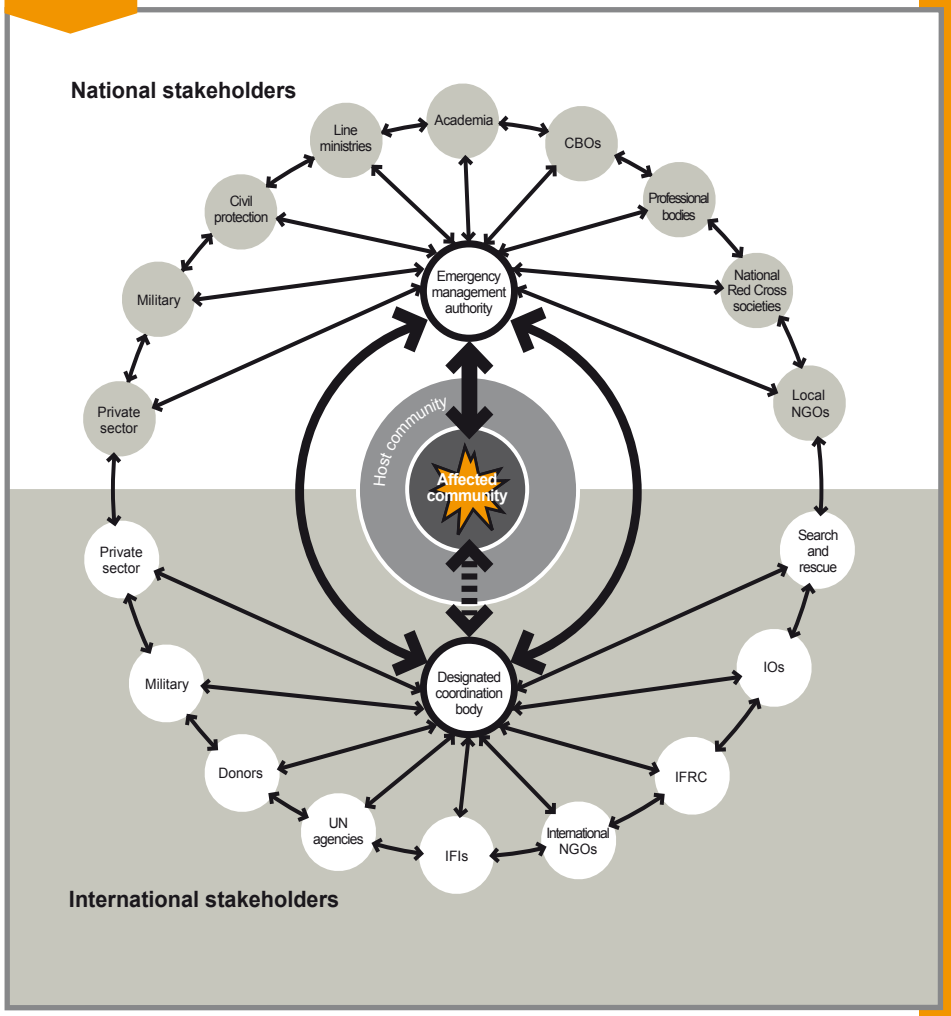
Integration of coordination mechanisms

31. Sectoral coordination requires sufficient capacity and resources, through the participating stakeholders, in order to collaborate effectively with the coordination mechanisms of government and other sectors. The remit of sectoral coordination should be agreed with government around need. This may require the adaptation of pre-defined structures within the humanitarian community.

Figure 1.2 **Example of coordination mechanisms involved in the response to a disaster**



Levels of coordination

32. Beneath the responsible governmental coordination mechanism, there will be other formal and informal coordination mechanisms:

- local and provincial government coordination mechanisms, including planning authorities, housing authorities and public works departments;
- community coordination mechanisms, including community leaders, community based organisations (CBOs) and local non-governmental organisations (NGOs);
- international humanitarian organisations' coordination mechanisms, including under the United Nations Resident Coordinator and sectors of operation such as shelter, and water and sanitation;
- international financial institutions (IFIs), such as the World Bank and regional development banks; and
- governmental bilateral and multilateral donor agencies.

The sector coordinator

33. The aim of a sector coordinator is to create an enabling environment. Trust in the coordinator should be built through their accountability, responsiveness, and independence from the interests of governments and implementing stakeholders. The coordinator should be a specialist in the sector, including in technical implementation. The coordinator should lead the development and maintenance both of the information management tools requested by stakeholders, and of a technical strategy for sectoral response.

Coordination meetings

34. National and regional coordination meetings guide operational partners and other stakeholders through a process which starts with the sharing of useful planning information, and which goes on to stimulate and support cooperation within and between stakeholders.

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Importance of information management

35. Effective coordination of sector activities requires access to the most reliable and accurate information available. Information management in an emergency situation is a fundamental component of the coordination process. It collates and disseminates much of the basic information that will inform implementation, such as:

- developments in strategic, programme and project planning;
- the location of the affected population;
- risk mapping;
- the location and levels of damage;
- the nature and size of capacities and resources;
- changes in levels of access to affected areas;
- appropriate law, such as building codes; and
- land use, cadastres and mapping.

Information management services

36. A series of services should be developed by government and humanitarian coordinators in order to collate and disseminate information. These services may involve specialist technical tools and expertise, such as internet-based resources and geographic information systems (GIS). Proactive measures must be taken by coordinators to ensure that all stakeholders have access to and can use the information and resources offered through these tools, ideally in all local languages.

1.5 Combining law, principles and standards

1.5.1	Using national law with international law	15
1.5.2	Agreeing principles and standards for response	16
1.5.3	Transitional settlement and reconstruction principles	17
1.5.4	International guiding standards	24

Importance of a legal basis for the response

37. A sound legal basis in national and international law (» section 2.2.10) for the response and sector strategy is essential for the reasons outlined below:

- the entire response can be halted or undermined by legal issues, for example it is common for reconstruction to be delayed when proof of tenure cannot be established for affected families. However, if the legal basis for the response is understood and established correctly early on there should be far fewer obstacles to progress;
- a sound legal basis helps the government and local authorities of the affected country or countries to ensure that all involved in the response have a clear idea of their rights and duties, and of who is being supported to recover;
- the legal basis for the response contributes to making the response accountable and sustainable, for example in recording officially land tenure or rights;
- basing the legal framework on existing national law supports the role of national governments, and improves opportunities for laws to be sustainable and enforced;
- national disaster law determines the entitlements of the affected population, such as criteria of eligibility for housing, and expropriation of land; and
- a sound legal basis for the response contributes to risk reduction by contributing to risk management and laying the foundation for the response to any future emergency, such as through appropriate and enforced building codes.

Principles and standards as normative guidance

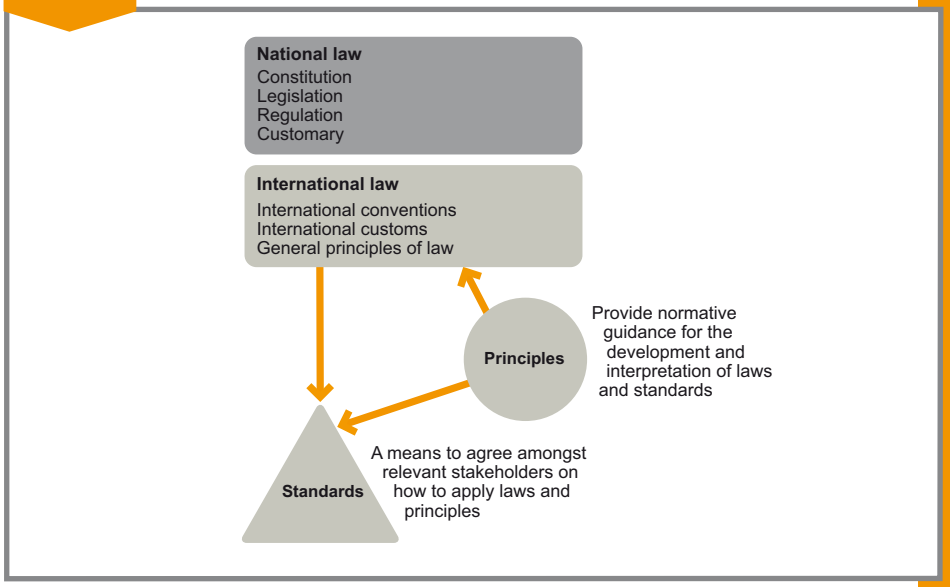
38. Principles developed from good practice learnt through countless responses are complementary to the legal framework: they offer practical normative guidance as to how similar problems have been approached in the past. Similarly, international standards for response provide benchmarks, often quantitative, against which the response can be measured, and which link national and international law to operational good practice (» Figure 1.3). Principles and standards can also be agreed or adapted locally. Translation into local languages is fundamental.

Law, principles and standards as coordination tools

39. The legal framework, principles and standards support coordination through:

- providing guidance to stakeholders on the rights of the affected population and how they should be assisted;
- presenting a structure that should achieve equitable support, taking account of ethnicity, gender, age and all factors in vulnerability; and
- facilitating communication and consensus between stakeholders using a clear and coherent approach that involves all levels and regions of operation, and based upon the best use of resources and capacity.

Figure 1.3 The relationship between laws, principles and standards



1.5.1 Using national law with international law

Legal response and contracting

40. The reconstruction of every house and even temporary support to displaced populations are governed by national laws. National contract law and the regulations of humanitarian organisations must be followed to engage specialist services, skilled labour and equipment, for example through competitive tender. Failure to take into account these laws may delay the resolution of disputes, cause additional disputes, or result in legal proceedings. Humanitarian organisations often have little experience of contract management in construction, especially at a large scale, for which technical specialists should be consulted.

Recognising sovereignty and custom

41. The sovereignty of the national government must be respected and an understanding formed of the legal framework and how it is used. The legal framework consists of national law, including religious and customary law, as well as relevant international law. The legal framework and its particular norms will directly affect operations, for example in the use of land for settlements.

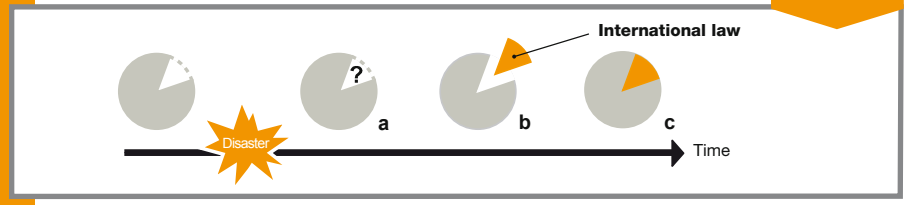
Identifying gaps in national law

42. National laws may be insufficient for the exceptional requirements of the response. If gaps in the national legal framework are identified ('a' on Figure 1.4), specialist legal guidance on how to fill them with appropriate international human rights and humanitarian law should be sought ('b' on Figure 1.4).

Filling gaps in national law

43. Gaps and/or inconsistencies identified in the national legal framework should be drawn to the attention of the public authorities. The latter should be encouraged to fill them in line with international law and locally and internationally accepted principles and standards ('c' on Figure 1.4). International humanitarian and human rights law provides the normative framework and should ideally be translated into national legislation. In principle, the norm providing the greatest degree of protection to the affected population should be applied, be it national or international law. If national legislation gives less protection than international law, humanitarian organisations must apply international law.

How appropriate international human rights and humanitarian law can be used to fill potential gaps in national law **Figure 1.4**



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1.5.2 Agreeing principles and standards for response

Providing normative guidance

44. Principles provide practical general, or normative, guidance as to how the affected population should be assisted: a single page of principles can be disseminated more easily than a strategy. Principles communicate an approach, recognising that no strategy can be fully comprehensive or predict every eventuality. Principles underpinning the response should therefore be agreed among stakeholders as early as possible.

Coverage of existing principles

45. Existing published principles and standards relevant to shelter after natural disasters and complex emergencies are consistent with each other, clearly expressed and easily translated. However, they do not provide detailed coverage of the shelter needs of all those affected by disaster. Existing published standards are described in section 1.5.4, while the existing published principles are described below.

Guiding Principles on Internal Displacement

46. *Guiding Principles on Internal Displacement* (📖 UN/OCHA, 1998), also called Deng's Principles: these principles describe the rights of the internally displaced at all stages of their displacement, up to their safe return or resettlement. They also cover the prevention of displacement. Although not legally binding, the principles are based on binding law and provide valuable practical guidance for governments, authorities, intergovernmental organisations and NGOs in their work with the internally displaced. The principles do not contain specific guidance on implementing shelter.

The Pinheiro Principles

47. *The Pinheiro Principles* (📖 COHRE, 2005): the Pinheiro principles are designed to provide practical guidance to states, UN agencies and the broader international community on how best to address the complex legal and technical issues surrounding housing, land and property restitution. The principles provide a consolidated and universal approach to dealing effectively with outstanding housing and property restitution claims and are grounded firmly within existing international human rights and humanitarian law. They provide a normative basis on which to build interventions, but contain no specific guidance on implementing shelter strategies.

1.5.3 Transitional settlement and reconstruction principles

A basis for agreeing principles of response

48. The principles presented in this chapter provide practical normative guidance as to how the affected population should be assisted in transitional settlement and reconstruction operations following a natural disaster. They may be used as a basis for establishing agreement amongst all stakeholders, including the affected population, local civil society and NGOs, the international community, and government, on principles for response in specific circumstances. Stakeholders must ensure that the agreed principles for response are complementary to and consistent with the legal framework in place in the country affected.

Outcome indicators

49. The outcome indicators for each principle list some of the results to be expected in terms of the knowledge, behaviour and performance of the stakeholders involved in humanitarian response to a natural disaster. They are not quantifiable, but may be used as the basis for developing detailed and quantifiable indicators in operations.

Principle 1. Support the affected community

50. The first and main effort in responding to an emergency is always made by the affected community. The impact of the disaster on the community must be ascertained and appropriate support provided to local responses when these are appropriate and safe. Support must also be based on an understanding of the different roles and resources of individuals and groups within the community. Assessments (» Principle 3) provide an understanding of these factors.

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Indicators for Principle 1

- Support provided takes account of the vulnerabilities, roles and resources of members of the affected population, as ascertained and reviewed in assessment, monitoring and evaluation activities (» Principle 3).
- Representatives of the affected population, including vulnerable groups, are identified and are immediately and consistently involved in discussions on the elaboration of the response strategy.
- Assistance provided to the affected population supports their individual and community choices and decisions, when these are safe and appropriate.

Principle 2. Coordinate and promote a strategy for response

51. Coordination between governmental and international stakeholders must be based on a consensus strategy, developed and maintained with the participation of the affected population and government. A coordinated response strategy aims to support the government, filling gaps where necessary.

52. The strategy should cover the entire response, from the initial crisis, to recovery, and to the point at which durable solutions are reached for every member of the affected population. Transitional settlement, reconstruction and risk reduction should be linked to or compatible with national planning mechanisms and programmes for sustainable development. The strategy must be consistent with international and national law, and with the standards and principles agreed among stakeholders. This should ensure that assisting groups respond to the needs of the affected population, regardless of whether or not they owned land or property, and include all vulnerable groups.

Indicators for Principle 2

- Consensus on the strategy is reached and maintained throughout the response, up to the attainment of durable solutions for every member of the affected population.
- International assistance supports and complements the coordination response by local and national governments.
- Wide participation in coordination bodies is achieved, including representatives of vulnerable groups.
- Transitional settlement and reconstruction programmes are coordinated with other sectors, such as health and water and sanitation.

Principle 3. Maintain continuous assessment of risk, damage, needs and resources

53. Emergency assessments, followed by ongoing assessments, monitoring and evaluation, are essential to a successful response. The strategy for response should be reviewed and updated according to the results obtained from this ongoing process.

Indicators for Principle 3

- Assessment, monitoring and evaluation cover: the resources, capacities, needs and priorities of affected and host populations; the combination of risks from hazards, vulnerabilities and environmental management; and the capacities of government, the construction industry and aid agencies.
- The assessment process itself is as inclusive as possible, with wide participation and ownership of the assessment and its results.
- The response strategy is updated on the basis of regular assessment, monitoring and evaluation activities.
- Assessment takes into account the social impact of the disaster and the different needs of the affected population, including upon gender, age and disability.

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Principle 4. Avoid relocation or resettlement unless it is essential for reasons of safety

54. Affected communities should not be displaced or resettled unless it is absolutely essential to avoid risks from physical hazards (» Principle 5). Displacement is likely to exacerbate the impacts that a disaster has on property, social connections and livelihoods, in both rural and urban environments. Remaining at home or close to home enables survivors to support themselves and recover their livelihoods, as well as helping to prevent problems arising over land tenure. Displacement must always be voluntary and the rights of the affected population respected.

Indicator for Principle 4

- Evacuation does not take place unless absolutely necessary owing to threat from physical hazard(s).
- If evacuation does take place for reasons beyond risks from natural hazards, advocacy with the authorities has been carried out. The *Guiding Principles on Internal Displacement* (📖 UN/OCHA, 1998) provides valuable practical guidance in such cases.

Principle 5. Minimise duration and distance of displacement, when displacement is essential

55. If displacement is essential for reasons of safety (» Principle 4), the displaced population should be supported to minimise the duration of their displacement and the physical distance from their place of origin. Minimising the duration and distance of displacement enables people to recover their social connections and livelihoods as quickly as possible.

Indicators for Principle 5

- If evacuation is required in order to avoid risk due to physical hazards, the reasons have been explained clearly to the affected population in order to persuade them to relocate voluntarily, and their rights have been respected throughout the evacuation process.
- Advocacy with government took place in cases where these rights were not respected.
- Camps and collective centres have been built only as a last resort to support an unavoidable displacement.

Principle 6. Support settlement and reconstruction for all those affected

56. Support must be offered to all affected persons, regardless of whether or not they are land or property owners or living in houses or apartment buildings. Families hosting displaced populations must also be included. Assisting groups should identify and monitor major problems facing the response so that the needs of all affected persons can be met, regardless of race, ethnicity, gender and age. This includes people who settle in a new location. A variety of solutions should be considered.

Indicators for Principle 6

- All families/vulnerable groups were provided with adequate assistance throughout the period of their displacement, until they achieved durable solutions to their displacement and were able to begin reconstruction.
- Reconstruction was supported appropriately according to need.
- Reconstruction included squatters, those with informal tenure, tenants and owners in both urban and rural environments.
- Entire communities were rebuilt or repaired with the public services and infrastructure required for a community to function including: schools and hospitals; roads and other transportation means; family services; power, water, and communications systems; and other community facilities and services.
- Practical standards for response were defined to achieve equitable support, building on internationally agreed standards such as the *Humanitarian Charter and Minimum Standards in Disaster Response* (📖 The Sphere Project, 2004).

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Principle 7. Ensure rights and secure tenure for all those affected

57. Security of tenure and property rights must be achieved for all those affected, whether they were previously illegal or informal occupants of their homes, tenants, or owners. Support must therefore be provided to the establishment of these rights for all members of the affected population, including those initially without property rights. This support must take place as early as possible, to ensure that displaced persons can return home as quickly as possible. The reconstruction of homes and communities can only begin once such issues are resolved. Displaced persons also require security of tenure while displacement lasts in the place where they are currently living.

Indicators for Principle 7

- Proactive advocacy efforts have been undertaken to ensure that secure tenure is established for all those affected by the disaster.
- The reconstruction strategy included programmes for tenants and informal settlers and those with no legal status as well as owners. Property rights and secure tenure were established for all, including people with no such rights prior to the disaster.

Principle 8. Support the affected population in making informed choices

58. The affected population must be presented with a selection of transitional settlement options based upon their initial choices, where appropriate, with enough information to make informed decisions.

Indicators for Principle 8

- The community was fully informed and involved in all decisions at all stages of the response.
- Information was provided to all as part of a coordinated public communication plan.

- Public information was continuously updated and improved, including through feedback from members of the affected population.
- The methods used to provide finance for communities to recover their homes and livelihoods were based on the assessment of needs, capacities, capabilities and resources, and then discussed with the affected population.
- Distributions of materials and cash were transparent and were made in instalments, with monitoring of usage.

Principle 9. Ensure that vulnerability to disasters is not rebuilt

59. It is vital that the opportunity provided by disasters to raise awareness and undertake mitigation and measures which reduce people's vulnerability to future events is taken. Vulnerability must be reduced by incorporating specific risk reduction activities and measures into the transitional settlement and reconstruction response, for example, increasing the hazard resistance of buildings being reconstructed.

Indicators for Principle 9

- Risk management measures put in place were a sustainable mixture of: appropriate site selection, proper zoning and planning of settlements, introducing and/or enforcing building standards and codes, training and certification in safe construction methods, choosing materials appropriate to local conditions.
- Women, children, disabled and elderly people, and other vulnerable groups were involved in risk management efforts.
- Communal infrastructure and housing were rebuilt or repaired with reduced vulnerability to future disasters.
- Government was supported in improving site selection, risk mapping, land-use planning, hazard-resistant building methods and building regulations.

Principle 10. Undertake contingency planning

60. Contingency plans must be developed and/or previously existing plans updated in light of experience gained in the disaster. Contingency planning is most effective when it is a participatory process that includes all the actors who will be required to work together in the event of an emergency. It is a forward planning process, in which scenarios and objectives are agreed, managerial and technical actions defined, and potential response systems put in place to respond to an emergency situation.

Indicators for Principle 10

- Government is supported, where necessary, in developing and updating contingency plans, as well as the capacity required to implement them.
- Contingency planning processes are regularly tested through exercises. Participants in a contingency planning process ideally include all those who will be involved in responding to a crisis.

1.5.4 International guiding standards

Importance of standards

61. International standards, such as those published by The Sphere Project and UNHCR, provide benchmarks for assistance through which the humanitarian response can be monitored and evaluated.

Features of relevant standards

62. The standards for response must be:

- appropriate to the local situation and to all stakeholders;
- agreed among all stakeholders; and
- achievable with available capacity and materials.

Adjusting to local conditions

63. Internationally agreed standards may be relevant to specific situations, but always require both adjustment or phrasing to meet local circumstances, and agreement by all stakeholders. Existing standards are not comprehensive and currently focus on displaced populations, and especially planned camps and collective centres. They are sometimes applicable to other transitional settlement and reconstruction options. The agreed standards will need to be validated with donors.

Case study 1.2

Indian Ocean tsunami

The Indian Ocean tsunami disaster involved major earthquakes on 26th December 2004 and 28th March 2005. Both earthquakes created destructive tsunamis. The disaster killed over 150,000 people, damaged or destroyed over 200,000 homes and displaced over 500,000 people in Indonesia alone.

Support settlement and reconstruction for all those affected

Field research in Aceh revealed a number of cases where returning widows or daughters had been denied legitimate land claims. These dispossessory acts commonly took the form of arguments that female claimants could not obtain land unless they married (or remarried), or through threats of violence.

There were also examples, however, of village leaders ensuring that women had better treatment in terms of land inheritance than the strict provisions of formal inheritance law in Aceh. These locally negotiated solutions were often based on local customs that differ from the formal law.

To ensure that vulnerable groups are provided with appropriate assistance, actors should identify such groups, and their sizes, as early as possible, with an assessment of the risks they face. Programme development should reflect the collected data and risk assessments.

Standards and indicators published by The Sphere Project and UNHCR

Humanitarian Charter and Minimum Standards in Disaster Response

64. *Humanitarian Charter and Minimum Standards in Disaster Response* (The Sphere Project, 2004): the Humanitarian Charter describes the core principles that govern humanitarian action and asserts the right of populations to protection and assistance. The Minimum Standards show what these principles mean in practice, organised into an initial chapter detailing process standards for the planning and implementation of programmes, and four technical chapters. One of these is on shelter, settlement and non-food items. The Minimum Standards, together with their supporting indicators and guidance notes, enable an analytical assessment of programme requirements and a framework for monitoring progress and evaluating outcomes. The Sphere handbook also provides a powerful tool for coordination and advocacy, particularly in its multi-sectoral scope and in linking principles to practice.

Table 1. 3 Comparison of Sphere indicators for shelter and settlement, and UNHCR standards for site selection, planning and shelter

	The Sphere Project (2004) indicators	UNHCR (2007) standards
Affected population		
Minimum surface area of camp per person	45 m² including infrastructure (pp. 216–17)	45 m² per person recommended (including garden). Should not be less than 30 m² per person (p. 210)
Minimum covered floor area per person	At least 3.5 m² except in extreme circumstances (pp. 219–220)	3.5 m² in warm climate 4.5–5.5 m² in cold climate or urban situations, including kitchen and bathing facilities (p. 221)
Firebreak		
Minimum distance between buildings	The planning guidance of 45 m² per person includes firebreaks (p. 217)	Minimum twice structure height, three to four times structure height if highly flammable (p. 219)
Minimum distance between blocks of clusters of dwellings		30 m per built-up 300 m (p. 219)
Water supply		
Minimum quantity of water (litres per person per day)	15 (p. 63)	15–20 (p. 549)
People per tap-stand [1]	Maximum 250 (p. 65)	1 tap per 200 people not further than 100 m (p. 549)
Distance from dwellings to taps	Maximum 500 m (p. 63)	Maximum 100 m or a few minutes' walk (p. 219)
Sanitation		
Maximum people per latrine	20 people (if sex-segregated public toilets) (pp. 71–72)	In order of preference: (1) family (5–10 people) (2) 20 people (p. 549)
Distance from dwelling to toilet	Maximum 50 m (p. 71)	6–50 m (p. 549)
Minimum distance between latrines and soakaways and ground-water source [2]	30 m (p. 74)	30 m (p. 269)
Distance from bottom of pit to water table	Minimum 1.5 m (p. 74)	Minimum 1.5 m (p. 269)
Refuse		
Distance from dwellings to refuse disposal	Less than 100 m to communal pit (p. 83)	
People per 100-litre refuse container	Maximum 10 families (p. 83)	50 (p. 549)
People per 2 m x 5 m x 2 m communal refuse pit		500 (p. 549)

[1] The Sphere Project elaborates: people per 16.6 litres per minute (lpm) hand-pump = 500 max; people per 12.5 lpm well = 400 max; people sharing 1 washbasin = 100 max (pp. 65, 69).
[2] Distances may be increased for fissured rock limestone, reduced for fine soil (p. 75).

Handbook for Emergencies

65. *Handbook for Emergencies* (UNHCR, 2007): includes practical guidance notes and checklists. The handbook provides guidance for the provision of protection to those covered by the mandate of UNHCR, including the shelter-related and settlement-related needs of persons who are of concern to UNHCR. The emphasis is on planned camps and collective centres.

Defining standards and indicators

66. The Sphere Project and UNHCR use the term 'standard' in different ways. Standards in the *Humanitarian Charter and Minimum Standards in Disaster Response* are qualitative in form and universally applicable to all operational environments. Indicators are qualitative or quantitative tools for measuring the appropriateness and impact of applied standards and can be adapted to context. They should always be read alongside the relevant guidance note, that highlights specific points that should be considered when applying the standards in different situations. Meeting one indicator does not translate into meeting the Minimum Standard. In the *Handbook for Emergencies*, standards are determined by the UNHCR, governments and partners, and are often quantitative in form. They are more comparable with Sphere indicators than standards.

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Planning for response 2

2.1 Coordinating strategic, programme and project plans 30

2.2 Strategic, programme and project planning template 35

This chapter describes the role and main activities of planning for a transitional settlement and reconstruction response, beginning in the first days with the rapid development of the first versions of plans. The chapter offers a template for the development and maintenance of consistent strategic, programme and project plans, from national to local levels. Plans are required in order to agree and implement a coordinated, appropriate and sustainable transitional settlement and reconstruction response to the needs of the entire affected population.

Coordinating and developing a strategic plan

Checklist 2.1

1. **Form a strategic, programme or project planning team** by identifying key representative stakeholders, to develop draft plans in the first days of response, and then lead their development and maintenance.
2. **Consult each level of the sector, government task force and other sectors over their strategies and planning mechanisms**, including contingency and preparedness plans.
3. **Develop drafts of the first versions of strategic, programme or project plans** with the team in the first days of response, for comment by the sector at different levels, other sectors and government.
4. **Agree first versions of strategic, programme and project plans** within government and the sector at different levels, through coordination meetings, and then achieve agreement within other sectors.
5. **Disseminate the strategic, programme and project plans** through a variety of coordinated activities, such as through government, local and international organisations, workshops, training and the media.
6. **Build and revise strategic, programme and project plans continuously over the response**, using both full assessments and planning processes of other sectors, and recognising changing needs and circumstances.
7. **Monitor the strategic, programme and project plans** continuously over the response, comparing results against the objectives and indicators within each plan, both in order to identify major changes in operational priorities, and to identify gaps in response.

2.1 Coordinating strategic, programme and project plans

Aim of strategies

67. The sector strategic plan, supporting programme and project plans are required for a coordinated, appropriate and sustainable transitional settlement and reconstruction response to the needs of the entire affected population. To meet this aim, each plan should be informed, understood and agreed by the affected population, as well as by all government, national and international stakeholders (» section 7.1).

Rapid first versions of plans

68. First versions of strategic, programme and project plans must be agreed within the first days of response, and describe only the objectives and a common approach to each activity within the plan, and support the later development of specifics and quantifiable indicators. In a matter of hours, a small team may complete draft first versions, using the template in this chapter, and presenting a single consensus to the sector, to other sectors, and most importantly to government. The first version plans will enable and support:

- the coordinated implementation of emergency response;
- the involvement of all stakeholders in discussion and consultation;
- linkages between national and local levels of response; and
- the collection of baseline data, such as on population movements and damage levels, to inform later assessment.

Planning teams

69. Planning teams should be formed at strategic, programme and project levels, in order to develop and maintain their respective plans. The teams must be representative of stakeholders, so as to ensure that plans are appropriate and commonly agreed, otherwise they will be unsuccessful and poorly implemented. At each level of planning, therefore, teams should include representatives of:

- the government task force or line ministries;
- the responsible humanitarian sector coordinator;
- humanitarian organisations; and
- the affected population and any host population, wherever practical.

Involving the affected population

70. If it is impractical for the affected population and any host population to be represented in initial meetings, alternative mechanisms such as committees must be agreed with them as soon as possible. As the activities in the plans change over the period of response, it is important to support the development of planning teams, for example through managing handover between the stakeholders involved.

Role of technical specialists

71. As strategic, programme and project plans describe the response of a technical sector, their development should be led by senior and experienced technical specialists, from both government and humanitarian organisations. The specialists should present plans to the wider sector, coordinators and government.

Role of government

72. National government bears ultimate responsibility for strategic planning and the coordination of all stakeholders in transitional settlement and reconstruction response after natural disaster.

Role of humanitarian organisations

73. Humanitarian organisations aim to fill any gaps in the coordination and implementation capacities of the national government. However, an additional separate coordination body may be required, involving representation by government.

Strategic plans

74. The strategic plan is a single coordinated sector strategy, agreed by all stakeholders and usually maintained at national level by or in partnership with the government, that integrates programme and project plans in order to describe the entire response to transitional settlement and reconstruction needs.

Programme plans

75. The strategic plan comprises a series of programme plans, for example plans supporting all host family support.

Project plans

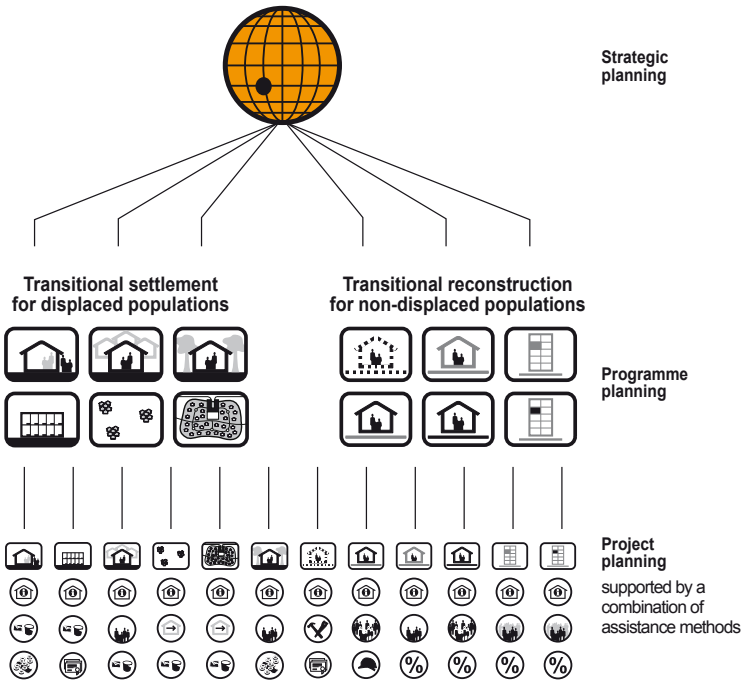
76. Each programme plan comprises a series of project plans, for example plans supporting host families in different localities.

Importance of planning

77. Effective coordination depends on stakeholders agreeing on a plan and implementing it together. The national strategic plan outlines the strategy for response, to be elaborated at local, programme and project levels (» Figure 2.1). Planning should be well coordinated between levels, to ensure that any project activity fits into the strategic plan. Ideally, the strategy should be developed jointly with the government, integrating its strategy and describing the role of the humanitarian community in supporting the government, in its ultimate responsibility towards its citizens.

1 Principles and coordination
2 Planning for response
3 Responding to hazards
4 Transitional settlement: displaced
5 Transitional reconstruction: non-displaced
6 Implementing a response
7 Toolkits
8 Resources

Figure 2.1 Strategic, programme and project planning levels



Strategic planning as a service

78. Developing and updating strategic, programme and project plans is a way of ensuring that the plans developed by humanitarian organisations support those of government and that they are able to contribute to the overall response. Together they should form a coordinated, appropriate and sustainable response to the needs of the entire affected population. Planning is not a way of promoting centralised control over stakeholders, but rather is a service to them, by reflecting their various contributions, capacities, needs and priorities.

Strategic planning and coordination

79. The central strategic plan is an essential coordination tool for the transitional settlement and reconstruction sector, other sectors, donors, and, most importantly, government, offering a single document in which changing needs, priorities and phases of implementation response are agreed and recorded throughout the response.

Strategies and information management

80. As well as bringing together stakeholders, the strategic plan is a tool for information management as it forms part of the process of obtaining and communicating information, for example, on pre-disaster demographics, the construction industry, national law, and post-disaster demographics and access (» section 1.4).

Phasing plans

81. Strategic, programme and project plans need to be phased. Each version of each plan should describe the immediate activities required, outlining later phases, as well as evaluating previous phases in relation to the overall objective agreed for the response. The phases of each plan should cover the entire response, from the disaster until durable solutions are reached.

Versions of plans

82. Planning needs to be a continuous process, in order to ensure that all plans remain an accurate reflection of consensus in rapidly changing contexts. New versions should be agreed and disseminated regularly, updating the quantified details of the population affected, levels of damage and resources, as well as the corresponding implementation targets and performance indicators. Plans are therefore active documents developed over time, requiring the integration of changes at strategic, programme and project levels, as well as approval by the sector coordination body (» Figure 2.2).

Linking with other sectors

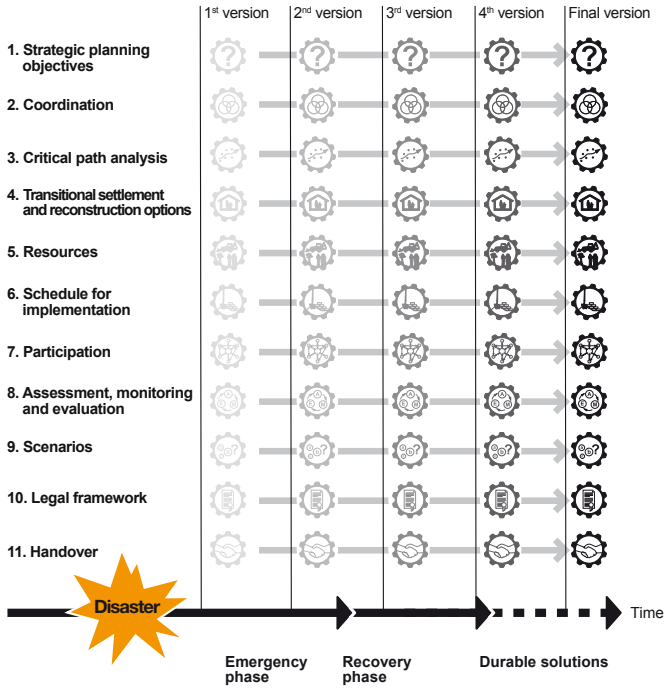
83. The sector strategic plan for transitional settlement and transitional reconstruction should be consistent with and integrated within the wider coordination mechanisms in place in each country, including the Common Humanitarian Action Plan (CHAP). The CHAP is a strategic plan for humanitarian response in a given country or region (http://ochaonline.un.org). An adequate response must link effectively with other sectors in order to support comprehensive programming, such as with water and sanitation. Links with other sectors additionally offer data on indicators to inform monitoring, such as the prevalence of acute respiratory infections from the health sector.

Using existing contingency plans

84. If suitable contingency plans are in place, they should be consulted, updated and used to form the basis of the response. One outcome of the strategic planning process should be the development of a contingency plan for future emergencies.

1 Principles and coordination
2 Planning for response
3 Responding to hazards
4 Transitional settlement: displaced
5 Transitional reconstruction: non-displaced
6 Implementing a response
7 Toolkits
8 Resources

Figure 2.2 The development of strategic, programme and project plans over the period of response



Exit strategy

85. As part of the handover, each plan should outline an exit strategy, so that donors, humanitarian organisations and the government know the limits of the responsibilities of stakeholders involved in the response (» section 2.2.11).

Opportunities and threats in planning

Ensuring needs are met

86. Strategic, programme and project plans ensure that all those involved understand their rights and responsibilities as well as the agreed course of action. It, therefore, increases the likelihood that resettlement and reconstruction proceed according to the needs of the affected population.

Threat of unmet expectations

87. Uncoordinated or out-of-date plans risk raising unrealistic expectations among the affected population. Care must be taken to ensure regular, consistent and timely communication.

Threat of decreased consultation

88. Planning teams may not consult properly with stakeholders, and especially the affected population and their hosts. This is a particular threat after the first version of the plan is released, when teams may assume that their obligation for consultation is over: both consultation and participation must be ongoing to inform the development and implementation of plans (» section 2.2.7).

2.2 Strategic, programme and project planning template

2.2.1	Strategic planning objectives	37
2.2.2	Coordination	39
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2.2.10	Legal framework	59
2.2.11	Handover	61

Strategic template or checklist

89. This section offers a template to develop strategic, programme and project plans. The template can be used additionally as a checklist when developing or implementing strategies developed using alternative tools.

Eleven planning activities

90. Each of the eleven planning activities described within this template requires the support of the other ten activities in order for the plan to be successful. All of the activities should be developed and implemented at the same time: the activities are not listed in a hierarchical or chronological order, and each will require constant review over the response (» Figure 2.3).

Strategic, programme and project plans

91. Planning at strategic, programme and project levels requires the same activities, although the objective, priority and implementation of each activity may be very different. Using a consistent planning template supports coordination between levels, ensuring that programme and project activities fit into the strategic plan (» section 7.1.2). All levels of planning should be informed by the planning activities of other sectors, humanitarian organisations and local government.

Planning process

92. The rest of the section elaborates the planning process, activity by activity. For each activity this will involve:

- a brief explanation of the purpose of the activity;
- ways of achieving agreement on each activity among stakeholders; and
- a checklist of deliverables, which may be used to form the template table of contents of the planning document itself.

Figure 2.3 **Suggested activities to inform the development of a strategic plan, and supporting programme and project plans**

2.2.1 Activity 1. Strategic planning objectives

Achieving consensus over the desired end state of the response.

Purpose

Expressing the intended outcome

93. To express what populations affected by the disaster want and expect as the aim or objectives of the assistance offered.

Strategic, programme and project objectives

94. To ensure that the sector response is agreed and implemented consistently at every level, through ensuring that the objectives of each project support those of each programme, which must in turn support the overall planning objectives of the strategy.

Inclusion

95. To ensure that marginalised and vulnerable groups, including ethnic minorities, disabled persons, women and children, achieve representation.

Community

96. To ensure that consideration is given to the needs of affected communities as a whole, in addition to the transitional settlement and reconstruction needs of individuals and families. Community considerations include: sustainable vulnerability reduction, such as through risk mapping and zoned development; livelihoods, such as through access to markets; and communal service infrastructure, such as schools, clinics and utilities.

Identifying gaps and capacities

97. To identify the specific strategic objectives for both government and humanitarian and developmental organisations, with international aid agencies filling gaps in government support where required.

Achieving agreement on the strategic planning objectives

Strategic objectives

98. At strategic level, a collective statement should be drafted by stakeholders on what the response aims to achieve, in order to gain consensus regarding the desired end state. This should cover the scope and main content of the transitional settlement and reconstruction strategy up to and including handover. The resulting strategic planning objectives should be used as a basis for negotiation and advocacy between stakeholders.

Programme and project objectives

99. At programme and project levels, a collective statement should be drafted by stakeholders on what the programme and project responses aim to achieve, in order to gain consensus over the desired end state of each plan. This should cover the scope and main content up to and including handover (» section 2.2.11). The resulting programme and project planning objectives should be listed under the strategic planning objectives, and used as a basis for negotiation and advocacy between stakeholders.

Discussion among stakeholders

100. Agreeing the objectives requires discussion with all relevant stakeholders, particularly the affected population. While it may be impractical to involve representatives from all stakeholder groups in all levels of planning, their guidance should be sought, and informal committees maintained for the relevant discussions.

Agreeing indicators

101. Indicators should be agreed by all stakeholders, acting as 'tripwires' to warn if objectives are not being met. It is equally important for stakeholders to commit to modifying the programme if required. Indicators should be continually reviewed and revised, relevant to each phase of the response.

Checklist 2.2 **Strategic, programme and project planning objectives**

1. In the strategic plan, agree and list the **strategic planning objectives**.
2. In the programme and project plans, agree and list the **programme and project planning objectives** under the strategic planning objectives, and communicate them back to the strategic planning team.
3. List the **main stakeholders** who should participate in agreeing and reviewing the objectives, at each level.
4. Describe the process of **agreeing and reviewing** the objectives.
5. Describe the key links between the objectives and the **other ten activities** in the strategic, programme and project plans.
6. List the **indicators of achieving the objectives**, and how and when the indicators will be monitored.
7. *Agree further checklist points within strategic planning group.*

2.2.2 Activity 2. Coordination

Establishing effective and integrated coordination mechanisms, offering appropriate information management and tools.

Purpose

Stakeholder involvement

102. To ensure that the opinions, priorities, needs and capacities of all stakeholders are reflected without bias or prejudice in the planning and implementation of response.

Focal points

103. For each stakeholder, to ensure that agreement is reached on identifying and supporting focal points and their responsibilities. To communicate this information, with contact details, amongst the appropriate stakeholders.

Coordination mechanisms

104. To ensure that all sector coordination mechanisms, such as committees and meetings, at all levels of coordination are comprehensive, and provide unbiased, timely and implementation-oriented services and collective tools (» section 1.4).

Government contribution

105. To understand and map the contribution of government to achieving its strategic, programme and project planning objectives, its capacity to do so, and the processes it will employ.

Role of aid organisations

106. To define the role, resources and contribution of humanitarian and developmental organisations in achieving the strategic, programme and project planning objectives agreed with government.

Information management

107. To provide full, accurate, timely and responsive information services, involving each stakeholder in coordination both in agreeing information requirements, and in developing and maintaining mechanisms for gathering and disseminating the information.

Public information

108. To ensure that the affected population and general public understand their rights, the methods of consultation and accountability open to them, the assistance that will be offered to them, and the mechanisms and stakeholders involved.

Achieving agreement on coordination

Enabling effective interaction

109. Agreeing on effective operational coordination mechanisms supports all stakeholders in communicating with each other. This includes the formal and informal coordination mechanisms of communities, governments and humanitarian organisations.

Stakeholder roles

110. Agreement needs to be reached on the complementary roles of the affected population, any host population, government at national and local levels and including task forces and line ministries, and the national and international humanitarian community. These roles will differ in different localities, and will change over the course of the response.

Different coordination in different phases

111. Each of these coordination mechanisms changes over each phase of the operation. It is important that such changes are identified by the other coordination mechanisms, and that the coordination plan is amended accordingly. Attention is needed to support effective handovers between phases and mechanisms, including the notification of other mechanisms and a planning review.

Avoiding gaps

112. Agreeing on coordination can avoid one of the most common threats to an effective response, which is the existence of gaps in coordination, understanding and response between the formal and informal coordination mechanisms of community, government and humanitarian stakeholders.

Supporting government response

113. Coordination meetings among stakeholders should include discussions that enable humanitarian stakeholders to understand the government's contribution to the response, its capacity and its processes. On this basis, the role of humanitarian aid organisations can be agreed. The objective of humanitarian aid agencies is to complement government and civil society efforts in achieving the strategic planning objectives (www. humanitarianreform.org).

Information management services

114. The foundation to coordination, once it is established, is a range of services offering full, accurate, timely and responsive information that is appropriate to all stakeholders. Effective information management services require strong links to strategic and local coordination mechanisms (» section 1.4). To operate effectively, information services require both participation by stakeholders, and sufficient resources and access to affected populations and areas.

Case study 2.1

Yogyakarta earthquake

The earthquake that shook Yogyakarta and Central Java in the early morning of 27th May 2006 caused widespread destruction, loss of life and injury. The official death toll was 5,749, with more than 38,000 injured. The provincial government estimated that 303,330 houses were destroyed or severely damaged and nearly 1.2 million people were left homeless.

Coordination in needs assessment

Immediately following the disaster, a rapid needs assessment was carried out. There was widespread collaboration between a variety of stakeholders including the Indonesian Government to undertake this assessment. As a result, it was possible to collect and collate qualitative, community-level preliminary data on post-disaster impacts and needs from a variety of local and international NGOs and UN agencies.

The international humanitarian community benefited from learning about the assessments, activities and plans of other organisations. These benefits included: timely access to the most up-to-date damage and loss data for use in developing disaster response plans and funding appeals, as well as avoiding the duplication of needs assessments in areas already being covered by other organisations.

The collective response was also improved. The analysis of hazards, risk and vulnerability put together initially was then integrated into a wider country response strategy, ensuring that disaster risk reduction was an integral part of Indonesia's development.

Four stages of information management

115. Information management may be understood in four stages: agreeing what information is needed; developing means of collecting the information; collating and analysing the information; and methods and routes of disseminating the information to those who need it. Technical tools, such as response-specific websites and GIS, can be extremely useful if they are employed and supported appropriately (» section 1.4).

Public outreach

116. A public outreach programme (also called information campaigns) should be developed for communication with the affected and general population. Public outreach projects should be agreed by all stakeholders at each planning level.

Engaging and informing the public

117. The public outreach programme should build a productive relationship with local and international media in order to engage the public in order to:

- provide news, for example on any continued risk from hazards where people are settled or reconstructing;
- elicit response on the development and implementation of plans; and
- offer information regarding what to expect from the response, for example on their rights, mechanisms for land tenure dispute arbitration, technical advice, housing safety and access to compensation and credit.

Managing expectation and informing opinion

118. As reconstruction will take months or years, the opportunity should be taken to develop the public outreach programme to support realistic expectations, risk reduction, preparedness and early warning. The mass media, such as radio and newspapers, offer useful tools to engage and inform the public in familiar ways. For example, graphic poster campaigns or radio dramas that discuss relevant topics may be more effective than more formal information routes. Such information should be sensitive to local culture and regularly user-tested to ensure that messages are being understood and acted upon.

Coordination **Checklist 2.3**

1. **List required participants** in coordination bodies.
2. **Secure commitments from stakeholders** to respond to needs, fill gaps and ensure an appropriate distribution of responsibilities within the coordination body, with clearly defined focal points for specific issues where necessary.
3. Ensure that **sectoral coordination mechanisms** are adapted over time to reflect the capacities of local actors and the engagement of development partners.
4. Describe and allocate **main roles.**
5. Describe the **relationship** between **government and humanitarian coordination mechanisms** and strategic planning.
6. **Agree** the **information management requirements** and develop appropriate services and mechanisms.
7. **Agree** the **public information approach** for how to link with other sectors to offer timely consultation and advice (» Activity 7).
8. **Agree** the **budget** for developing and maintaining the coordination plan, how the budget will be met, and the degree of accountability required.
9. *Agree further checklist points within strategic planning group.*

2.2.3 Activity 3. Critical path analysis

Summarising resolved, outstanding and predicted opportunities and barriers to response, based upon likely scenarios (» Activity 9).

Purpose

Main Identifying barriers and solutions

119. To identify and describe the main opportunities for, and barriers to, a successful response, so that the required measures can be taken to achieve the agreed strategic, programme and project planning objectives.

Achieving agreement on critical path analysis

Critical path

120. There are usually a few key factors unique to a particular disaster that determine the success or failure of sector response. These factors may be positive, such as good community relations or an existing land register, or negative, such as poor access to the affected areas, an ongoing conflict, or the scarcity of a construction material. Critical path analysis in this planning framework comprises identifying these key unique factors, and integrating them into planning with specific additional emphasis. It is important to identify critical paths in order to prioritise the use of resources, and also to ensure that international and national stakeholders share the same understanding as local stakeholders of key factors.

Consulting stakeholders

121. The basis to critical path analysis is consulting with all relevant stakeholders, from national government to groups within local communities. Stakeholders may have identified their own critical paths. However, care must be taken to ensure that the paths critical to the sector are identified (📖 Corsellis and Vitale, 2005).

Barriers and opportunities

122. Each barrier or opportunity identified requires discussions and decisions on the following:

- discussion of its likely impacts;
- development of quantifiable indicators, to monitor whether the situation is improving or worsening;
- discussion of what has been done about it to date; and
- planning for what needs to be done.

Critical path analysis **Checklist 2.4**

1. List the **main predicted opportunities for and barriers** to achieving the strategic objectives.
2. List the **implications** of each opportunity and barrier, describing predicted impacts over the response.
3. Describe **what can be done** about each opportunity and barrier.
4. Draw up a **plan and schedule** for follow-up action on each opportunity and barrier.
5. *Agree further checklist points within strategic planning group.*

2.2.4 Activity 4. Transitional settlement and reconstruction options

Deciding which transitional settlement and reconstruction options will be supported and how; standards of response.

Purpose

Listing required activities

123. To describe the technical sector activities required for both displaced and non-displaced affected populations, in order to achieve the desired end state outlined in the agreed strategic, programme and project planning objectives.

Rebuilding infrastructure

124. To ensure that communal infrastructure, as well as housing, is rebuilt.

Laws and standards

125. To agree the national and international laws, principles and standards that should be employed to support this plan (» section 1.5).

Achieving agreement on the transitional settlement and reconstruction options

The key technical plan of the strategy

126. The transitional settlement and reconstruction options are the core of the strategy that describes whether, for example, host families should be supported, camps should be discouraged or closed, reconstruction be prohibited in zones at risk, and how support should be offered to tenants as well as home owners. The plan also describes how beneficiaries should be selected, how the support should be offered, and over what period.

Agreement on support options

127. Stakeholders need to agree on:

- which of the six options to support for the transitional settlement of displaced populations (» Chapter 4), how to support them and for how long; and
- how to support the relevant transitional reconstruction activities for non-displaced populations (» Chapter 5), for example with materials, technical advice and capacity building within government planning offices.

Concurrent activities

128. In most responses, support to displaced and non-displaced populations occurs at the same time from the beginning of the response: as a result, both responses need to be integrated and described in strategic, programme and project plans.

Understanding choices

129. It is essential to maintain an understanding of which transitional settlement or reconstruction options have been chosen by the displaced and non-displaced populations, and to understand also why they made their choices. This understanding will determine which options should be supported and how the support should be offered, at each phase of response.

Diversity of needs

130. It is necessary to recognise the diversity of transitional settlement and reconstruction needs within the affected population and the responses required. It is also necessary to agree and use appropriate criteria for vulnerability within the population, for example those who cannot physically contribute to building their shelter or to reconstruction.

Providing equitable support

131. It is essential that each transitional settlement or reconstruction programme follows equivalent operational procedures, both so that each family affected receives equitable support, and so that each programme contributes to the common agreed strategic planning objectives.

Determining levels of support

132. Stakeholders should agree on the appropriate level of support for each of the transitional settlement and reconstruction programmes, defined through agreed principles and standards. Appropriate level of support means the size and nature of shelter offered, and the quantity and value of materials or assistance offered. It is important to provide equivalent support for each option accepted within the plan.

Assistance methods

133. Methods of support following disaster include the following (» Chapter 6):

- labour options, including self-help, contracted and direct labour; and
- support options, including financing options, technical assistance and materials distribution.

Transitional settlement and reconstruction options — **Checklist 2.5**

1. Agree **criteria for vulnerability** relevant specifically to the sector.
2. For displaced populations, decide on **which of the six transitional settlement options will be supported,** where, how, and to what level.
3. For non-displaced populations, decide on **how each of the six transitional reconstruction options will be supported,** and to what level.
4. Decide on the **appropriate roles in response** of local, government, humanitarian and commercial stakeholders.
5. *Agree further checklist points within strategic planning group.*

2.2.5 Activity 5. Resources

Determining means of obtaining the required resources.

Purpose

Obtaining and distributing resources

134. To identify the funding, materials and capacity required to achieve the strategic, programme and project planning objectives, where these resources are, and how they will be obtained, stored and distributed.

Resources for communities

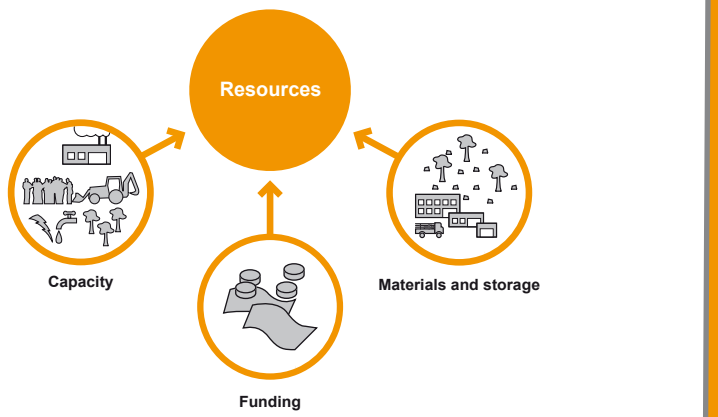
135. Resources are required for shared communal infrastructure, such as educational, medical, utility and transport facilities, as well as for housing for the affected population.

Achieving agreement on resources

Resources as and when required

136. Stakeholders should ensure that funding, materials and capacity are available at the right time (» Figure 2.5). This requires planning for different phases in order to manage resources to best effect.

Figure 2.4 Resources



Threats to a successful response

137. Agreeing on how to obtain the required resources avoids two of the most common threats to an effective response, which are the overexploitation of resources and underestimation of the funding and capacity required to achieve the strategic planning objectives.

Identifying capacity gaps

138. Gaps in capacity and how to fill them must also be identified, including:

- the local construction materials production industry, such as brick factories;
- environmental capacity, such as the sustainable availability of timber, aggregates and water;
- labour capacity, including skilled and organised labour, damage assessors and technical inspectors;
- management and coordination capacity, to plan and implement the transitional reconstruction programme; and
- machinery, such as the heavy plant required to clear heavy debris, construct roads or destroy damaged buildings.

Filling capacity gaps

139. Where gaps are identified, capacity must be built, for example by:

- bringing in human resource capacity from outside, such as through contractors or humanitarian organisations;
- providing skills training, such as in safe construction techniques; and
- repairing or reconstructing local production and transport capacities for construction materials, such as reconnecting power to a sawmill or repairing a bridge that connects an affected area to a port.

Recycling construction materials

140. Re-using construction materials from damaged and destroyed houses often provides an immediate and environmentally sustainable source of materials for construction, landfill or road building. The work required to recover and sort construction materials and make them usable needs to be supported, such as with tools. It is dangerous to re-use some materials, such as reinforcing steel that has failed or been distorted.

Accessing stockpiles of emergency equipment

141. Mechanisms for accessing local, regional or international stockpiles of emergency shelter non-food items (NFIs) must be identified, including: how each stockpile may be accessed, which items may be obtained, quantities, and lead times to delivery. Some stockpiles and supporting humanitarian organisations have framework agreements with suppliers that may result in additional capacity.

Regional construction materials

142. Mechanisms for assessing, obtaining and transporting building materials manufactured regionally must also be identified, as local production will be insufficient.

Identifying funding needs and sources

143. Funding requirements and sources must also be identified. Appeals to donors may be consolidated among implementing agencies as part of the coordination service for the response, using the information collected as part of the strategic planning process, including: assessments, descriptions of roles and responsibilities, and monitoring reports about progress and impact (» section 7.2). It is crucial to coordinate the process of obtaining funds. Financial tracking identifies and monitors resource needs in evolving situations, in addition to the timeliness of donor response to urgent needs (» section 7.2.6). The financial resources of the affected population and remittances from abroad should also be taken into consideration. Existing financial tracking tools should be used, and additional financial tracking requirements specific to the response should be explored.

Checklist 2.6 **Resources**

1. **Assess emergency shelter NFIs** available in stockpiles.
2. **Assess local capacity** to produce **building materials**.
3. **Assess and map damage and needs.**
4. **Identify gaps in resources** and how to **fill them.**
5. **Draw up a schedule** for meeting major resource needs.
6. **List funding requirements.**
7. **Identify relevant donors** and **processes** to obtain funding.
8. **Submit appeals** to the relevant donors.
9. *Agree further checklist points within strategic planning group.*

2.2.6 Activity 6. Schedule for implementation

Defining how the main bottlenecks in implementation will be overcome, when each activity will take place, when strategic reviews will take place, and which indicators will be used.

Purpose

What needs to be done when

144. To ensure that all stakeholders understand which major activities must be undertaken in which phase of the operation. The schedule for implementation includes the activities required to take advantage of the opportunities and overcome the barriers identified in Activity 3, such as the onset of winter or the monsoon season, or the continued presence of floodwaters.

Diversity and equity of response

145. To maximise the opportunity for diversity of response while also ensuring equity of response, culturally appropriate design, and construction of sustainable, low-maintenance facilities.

Achieving agreement on the schedule for implementation

Schedules of works

146. Schedules of works or Gantt charts should be developed, illustrating project schedules, and including start and finish dates of key elements of the projects. Schedules should be developed by technical specialists and agreed by the planning team.

Continuous updating

147. Developing and using the schedule for implementation involves a continuous process of:

- mapping where the affected population is located, which transitional settlement and reconstruction options they are using, whether they can be adequately supported where they are, and how they can best be supported within their rapidly changing circumstances, which may involve choosing to move location or from one transitional settlement and reconstruction option to another, in order to better suit changing needs;
- mapping where the response capacity is, and its scale, identifying and supporting local capacities and resources (» section 2.2.5);
- ensuring that geographical and social coverage is complete; and
- monitoring and evaluating participation levels and the cultural and technical appropriateness of programmes.

Checklist 2.7 **Schedule for implementation**

1. **Draw up a timeline** or **Gantt chart.**
2. **Map critical paths** in implementation.
3. **Map milestones** in each of the other activities of the plan.
4. **List major events** such as monsoon season or winter.
5. **Map scenarios** and **indicators**.
6. **Identify who** does **what, where.**
7. **Map coverage**.
8. *Agree further checklist points within strategic planning group.*

2.2.7 Activity 7. Participation

Agreeing how affected and host populations will be engaged.

Purpose

Supporting relationships

148. To identify the most important relationships and support them, using the opportunities they provide to resolve problems before they become critical.

Stakeholder roles

149. To ensure that all stakeholders understand their roles, responsibilities and representation in strategic planning and implementation.

Services to stakeholders

150. To ensure that coordinators are offering appropriate and sufficient services to stakeholders to support lasting relationships between stakeholder groups, which are required to meet strategic planning objectives.

Responding to needs

151. To ensure that the strategic planning objectives agreed upon (» section 2.2.1) express accurately the needs and priorities of affected populations, and recognise that they are the primary actors in their transitional settlement and reconstruction and recovery of their own livelihoods.

Achieving agreement on the participation plan

Achieving a successful response

152. Establishing effective participation is essential if a successful response is to be implemented. Participating groups which are core to implementation include local government and community leaders, civil defence bodies and CBOs.

Engaging the affected population

153. This activity determines how affected and host populations will be engaged. Marginalised groups must be identified and involved. This includes their participation in decision-making, identification of communication channels, strategic plan development, training workshops and implementation (📖 UNHCR, 2006).

Methods to ensure particpation

154. Methods for involving vulnerable groups include:

- identifying existing social groups and networks;
- holding focus groups for minority groups;
- holding meetings in a variety of locations; and
- holding meetings at different times of day.

Using existing participation mechanisms

155. Participation should involve as many stakeholders as possible, not only the affected population. Wherever possible, participation mechanisms should be based upon existing mechanisms that support representation and engagement within and between affected communities and other stakeholder groups. Care should be taken not to disrupt the original functioning of these mechanisms. They may include:

- CBOs;
- formal and informal conflict resolution systems;
- workshops;
- formal and informal community committees;
- assessment, monitoring and evaluation processes; and
- public media.

Case study 2.2

Indian Ocean tsunami

» Case study 1.2.

Community participation in land tenure

The disaster destroyed most of the land records in many areas. In addition, there was widespread obscuring, alteration or destruction of boundary markers.

To facilitate reconstruction, secure land tenure had to be established. Without the aid of prior records, the Indonesian Government set up the Reconstruction of Land Administration Systems in Aceh and Nias (RALAS), of which a core element was the community-driven adjudication of land rights. Under RALAS, each land owner signs a statement of ownership that is endorsed by his/her neighbours and the village chief. A map is then drawn up of all land titles in a village and displayed, given village members time to lodge complaints. If no objections are raised within the 30-day period, the local government issues land certificates to the designated land owners.

This community-driven project to determine land ownership was a success. There were few cases of housing being incorrectly sited, though such cases were often a result of failure to engage in the project or improper village planning.

Checklist 2.8 **Participation**

1. **List** required participants.
2. **List activities** making up the participation plan.
3. **Describe** and **allocate** roles.
4. **List the mechanisms** required to achieve the participation plan.
5. **Draw up a schedule** for achieving the participation plan.
6. *Agree further checklist points within strategic planning group.*

2.2.8 Activity 8. Assessment, monitoring and evaluation

Undertaking continuous assessment, monitoring and evaluation to inform the strategic plan.

Purpose

Ensuring an appropriate response

156. To ensure that the response is appropriate to needs and circumstances, and that it is consistent with the agreed strategic planning objectives.

Achieving agreement on assessment, monitoring and evaluation

Involving stakeholders

157. The assessment process requires the involvement of as many stakeholders as possible. It makes reference to existing plans and local profiles, takes into account people's livelihoods and identifies their capacities and available resources (» section 7.3).

Appropriate teams to collect information

158. People who are able to collect information from all groups in the affected population in a culturally acceptable manner should be included in assessment teams, especially with regard to gender and language skills (📖 The Sphere Project, 2004). Local cultural practices may require that women or minority groups be consulted separately by individuals who are culturally acceptable (📖 Roche, 1999).

Identifying local capacities

159. Local capacities and strategies to cope with the disaster, both those of the affected population and the surrounding population, should be identified. Remittances from relatives living abroad usually increase in times of crisis and directly contribute to household income.

Need for experts

160. Experts may be required to support gaps in capacity, for example in damage assessment, housing or land and tenure issues (» section 6.5.12).

Understanding priorities

161. Assessment leads to an understanding of the immediate priorities of the affected population, and accurate updating of the strategic and operational plans. Assessments should be done regularly and linked to ongoing monitoring and evaluation activities. Outcome indicators can be developed that include a focus on obtaining feedback from the affected population, in order to identify any required alterations to plans. Such indicators:

- increase the relevance and accuracy of beneficiary identification criteria and methods;
- maximise use of the available capacity of stakeholders to reduce costs;
- maximise coordination and minimise unnecessary duplication in order to prevent the affected population refusing to participate in assessments and manage expectations;
- broaden acceptance among stakeholders of the results; and
- form a basis for further coordination and cooperation between stakeholders, including the affected population.

Beneficiary identification criteria

162. Beneficiary identification criteria should be discussed among stakeholders to ensure that fair and comprehensive criteria are agreed, and that vulnerable members of the community are included.

Informing scenarios

163. Expanded assessment and monitoring inform the development and updating of scenarios, as well as providing information on whether predicted or new scenarios are emerging. This allows adjustment of operations to fit the changing context.

Importance of coordinated assessment

164. Sector assessment, monitoring and evaluation should be coordinated with other assessment efforts (» section 7.1.4). Effective assessment enables indicators from other key related sectors, such as health, to be fed into the transitional settlement and reconstruction plan (📖 IFRC, 2005).

Using a variety of sources

165. Information should be sought using the resources available. A variety of tools should be used, based on research, observation and interviews.

Emergency then detailed assessment

166. An initial emergency assessment should be followed by consistent and comprehensive assessment, monitoring and evaluation which build on the emergency assessment baseline data. Each assessment is vital, and each requires different capacities.

Assessments consider:

- risk, including the identification and mapping of hazards, political or social unrest and security issues;
- population and demographics, including the needs, location and number of those affected;
- damage, including the scale, degree and form of damage to both housing and infrastructure; and
- resources, including human resources in both government and the humanitarian community, stockpiles, construction capacity, and other market capacities and potential to provide materials and inputs.

Monitoring and evaluation provide:

- information on the changing situation, which often involves monitoring the arrival of building materials or tents, assessing whether these are meeting demand, and the coordination of activities at ports and airports; and
- continuous updating and mapping of information on population needs (including those of the most vulnerable, as well as displaced persons and their hosts), livelihoods and protection, damage to buildings and service infrastructure, environmental resources, land use and risks.

Assessment, monitoring and evaluation — **Checklist 2.9**

1. **List required assessments.**
2. **List main activities** to be carried out.
3. **Describe** and **allocate roles.**
4. **Establish mechanisms** for achieving the assessments.
5. **Draw up a schedule** for achieving assessments.
6. **Budget** for achieving the assessments.
7. *Agree further checklist points within strategic planning group.*

2.2.9 Activity 9. Scenarios

Establishing possible scenarios, from best to worst, and the most likely to occur, with indicators of progress.

Purpose

Identifying paths towards objectives

167. To develop a plan based on assumptions about future events. In order to maximise the accuracy of strategic planning, scenarios must be developed of alternative future events to identify potential paths towards the planning objectives.

Achieving agreement on scenarios

Building on assessment

168. Scenario planning builds on the assessment process and therefore involves broad input from stakeholders. It takes into account factors such as population needs, the risk environment, the economic situation, relations between host and hosted populations, security concerns and the weather. Scenario planning assists in the selection of transitional settlement and reconstruction options by outlining the likely course of events. It establishes different possible courses of events and indicators to recognise when these are occurring or changing.

Most likely scenario

169. The most likely scenario should be outlined, with an explanation of the reasons for the selection, and the assumptions made. This scenario should be continuously updated, in light of the changing situation and new information.

Updating of scenarios

170. Scenarios are altered and updated as a result of the assessment, monitoring and evaluation processes. Quantifiable indicators need to be elaborated to allow identification of which scenario is occurring and when a move from one to another is taking place. Scenario planning also includes outlining what to do when this happens.

Informing contingency planning

171. Contingency planning is usually based on scenario planning. The development of new scenarios as the situation changes allows the contingency plan to be altered and remain accurate (📖 IASC, 2001).

Integration into stratgeic plans

172. Scenarios developed by the national government or other coordinating mechanisms need to be integrated into the strategic plan being developed by the international community.

Scenarios **Checklist 2.10**

1. **Map best case scenario,** i.e. achievement of the strategic planning objectives.
2. **Map worst case scenario,** including existing and potential hazards.
3. **Map most likely scenario.**
4. **Map indicators,** including **how they will be revised.**
5. As **variables** in the scenarios, consider hazards, climate, security and funding.
6. *Agree further checklist points within strategic planning group.*

2.2.10 Activity 10. Legal framework

Understanding the existing and relevant legal framework within which the strategy will be implemented and operations will take place.

Purpose

Ensuring a legal basis to response

173. To ensure that transitional settlement and reconstruction operations which aim at protecting the affected population and their hosts are taking place in line with the existing and relevant legal framework (» section 1.5).

Achieving agreement on the legal framework

Framework should support

174. The legal framework should support:

- Survival of the affected population;
- emergency coordination;
- safety of buildings through building codes;
- land rights and use through rental laws, property restitution, state requisitions, land registers and cadastres; and
- beneficiary selection, including definitions of vulnerability.

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Filling gaps in national laws

175. The sovereignty of national governments must be recognised by humanitarian organisations. Gaps and/or inconsistencies identified in the national legal framework should be drawn to the attention of the public authorities and the latter should be encouraged to fill them in line with international law and locally and internationally accepted principles and standards.

Normative framework

176. International humanitarian and human rights law provides the normative framework and should ideally be translated into national legislation.

Supporting government

177. Government should be supported, where required, to fill the gaps identified in national law. For example, international humanitarian aid agencies can provide the expertise necessary to build a comprehensive land register and compile beneficiary lists. The entire response can be halted by unresolved or ignored legal issues (» section 1.5).

Principles and standards

178. Principles and standards act as practical expressions of national law and international humanitarian and human rights law (» Chapter 1). They include *Guiding Principles on Internal Displacement* (📖 UN/OCHA, 1998), *The Pinheiro Principles* (📖 COHRE, 2005), and those found in *Handbook for Emergencies* (📖 UNHCR, 2007) and *Humanitarian Charter and Minimum Standards in Disaster Response* (📖 The Sphere Project, 2004).

Housing rights

179. Legal support to the affected population must assist them in obtaining housing rights, including secure tenure.

Legal framework **Checklist 2.11**

1. **Recognise the sovereignty** of national governments and list any **major legal issues** likely to confront the response (checking against the scenarios).
2. **Identify the international legal instruments** the government has signed up to and any associated case law.
3. **Determine the degree** to which **national law and enforcement mechanisms** are likely to **support the response**.
4. **Engage legal experts** to identify **gaps** in national law and which **international human rights** or **humanitarian law** might be used to fill **the gaps**.
5. **Propose measures** to government, on this basis, for filling any gaps in national law.
6. **Work with government** to achieve a sound and **enforceable legal framework** to **support the strategy**.
7. **Disseminate** the legal framework in the required languages and ensure **that all stakeholders are aware** of it as a basis for their actions. The framework needs to be **understood and adequately supported** at **national** and **local levels.**
8. *Agree further checklist points within strategic planning group.*

2.2.11 Activity 11. Handover

A series of handovers occur throughout the response between responsible agencies, as the prioirites and mechanisms of response change in each phase.

Purpose

A series of handovers of responsibility

180. To ensure that each strategic, programme and project responsibility is handed over completely, throughout the response, for example community and family case files.

Identifying new responsibilities

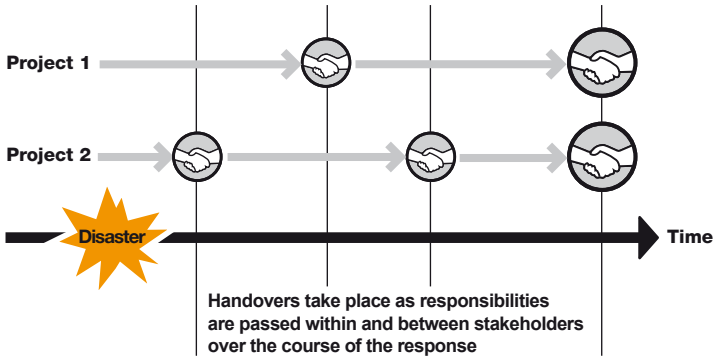
181. To ensure that any additional responsibilities are identified as these change significantly in different phases.

Achieving agreement on handover

Passing responsibilities between organisations

182. Successful handover involves first of all identifying who is handing over to whom. It then involves passing responsibilities between organisations and coordination or response mechanisms (» Figure 2.6). For example, case-load information about displaced families must be handed over from government and humanitarian agencies supporting displacement to the agencies supporting reconstruction.

Figure 2.5 Handovers occur throughout the response



A gradual process

183. Handover should be a gradual process, which allows time for those handing over to communicate with those who will later be taking over. This requires identifying and holding discussions with the handover parties as early as possible.

A constant process

184. Handover is a constant process. It is the responsibility of every individual to maintain documentation to enable immediate handover, recognising the dynamic nature of a humanitarian response.

Handover between individuals

185. Handover also occurs between individuals within organisations as staff members change, and the same handover principles apply in this case as to handover between organisations.

Final handover

186. Final handover occurs usually to government, once the strategic, programme and project objectives have been achieved.

Exit strategy

187. An exit strategy needs to be identified so that donors, government, and humanitarian agencies understand the limits of their responsibility.

Handover **Checklist 2.12**

1. **List the main handovers** required between stakeholders throughout the process.
2. **List capacity, handover materials and information required** for each handover.
3. **Hand over risk analysis** and carry out **risk management.**
4. **Ensure that handover** plans are fed into the **assessment process.**
5. **Draw up exit strategies**, based on completion of the strategic planning objectives.
6. *Agree further checklist points within strategic planning group.*

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Responding to hazards 3

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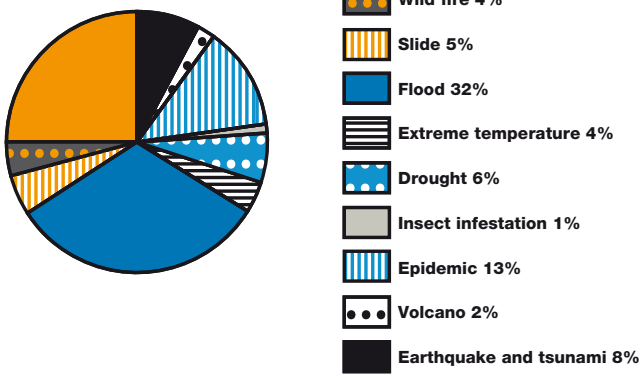
3.2 Types of hazard 68

This chapter provides guidance on hazards and how the vulnerability of populations affected by disasters may be reduced, from the emergency phase through displacement, if displacement occurs, until the recons-truction of safer housing.

The chapter introduces ways to support individuals, communities and governments to map and analyse their risks, and to decrease vulnerability sustainably. Emphasis is given to the hazards that have been the most prevalent in recent years, and those that have the greatest negative impact upon settlements (» Figure 3.1).

World distribution of disasters by type (1991–2005) Figure 3.1



Source: EM-DAT: Emergency Events Database.

Checklist 3.1 **Risk mapping and risk management**

1. **Identify and map** the immediate risks faced by every part of the affected population, including from multiple hazards, as well as the preparedness and risk management capacities and tools of the population.
2. **Analyse threats** from future hazards and community and household vulnerabilities to them.
3. **Identify opportunities** for long-term risk reduction.
4. **Integrate risk analysis** and risk reduction into strategic, programme and project planning, for both displaced and non-displaced populations, including public awareness programmes and sustainable local preparedness capacities.
5. **Monitor and evaluate** the effectiveness of risk reduction continually, using sustainable tools involving the community, and adjust response plans accordingly.

3.1 Vulnerability and risk

Risk mitigation and management

188. Transitional settlement and reconstruction sector response must maximise the safety of populations affected by natural disaster through integrating risk migitation and management into transitional settlement and reconstruction response. This includes prevention and preparedness measures which help manage risk in future recurrent hazards.

Reducing vulnerability

189. Vulnerability can be reduced in order to manage risk. For example, for a village on a low-lying coastal region vulnerable to cyclones: relocation to a safer area; construction of safer houses in the village; and building cyclone shelters. While some types of risk are very difficult to reduce or eliminate, it is possible to reduce vulnerability to them, especially by increasing capacities for disaster prevention and risk management.

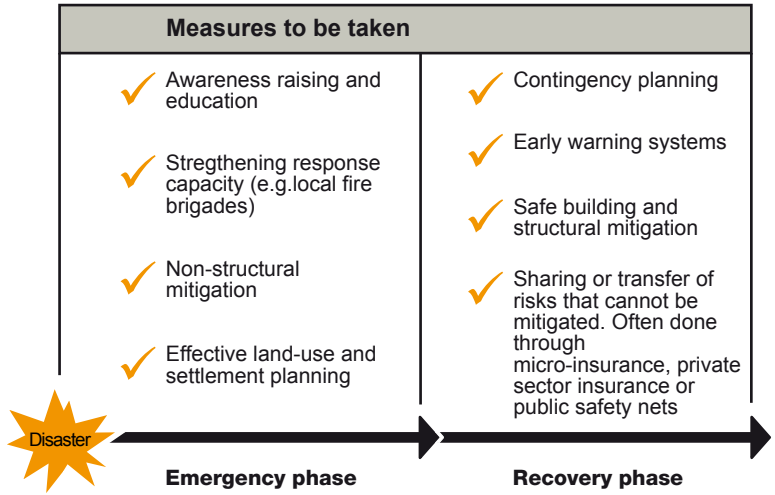
Prevention and community resilience

190. From the emergency phase onwards, disaster response offers an opportunity to populations at risk, to governments, and to the humanitarian community to develop a culture of prevention and risk management (» section 7.4), such as through developing and enforcing appropriate planning and building codes.

Reconstruction and coping strategies together

191. Effective risk mitigation and risk management include elements of prevention, preparedness and risk transfer. While responding to a disaster, from emergency to durable solutions, the goal is to build back better, which means safer, and reconstruction activities must to undertaken together with activities intended to strengthen individual and community coping strategies (» section 7.7).

Risk mitigation and risk management elements **Table 3.1**



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3.2 Types of hazard

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Overview

192. This section presents an overview of different types of hazards, outlining their general characteristics and how each hazard may affect both current response and future risk. Both disaster events and future risks are often caused by a combination of hazards. As a result, approaches to risk reduction must integrate measures designed for the variety of hazards faced by a community.

Social and environmental impacts

193. Hazards impact complex social and environmental systems. Monitoring and impact evaluation provide critical feedback about the effectiveness of risk reduction measures for these systems, and help to guide learning and improve efforts toward the construction of safer communities (» section 7.3.2).

3.2.1 Floods

Floods develop from a range of slow-onset and rapid-onset events that can occur in river basins, along coasts, or in urban areas, often as a result of torrential rainfall, storms and high tides.

Characteristics

Duration of flooding

194. The duration of flooding depends in part upon surface and ground water drainage. However, generally floodwater in slow-onset floods tends to remain longer than in rapid-onset floods, sometimes remaining for several weeks or even months.

Prolonging flood duration

195. While protecting communities in the early stages of flooding, embankments and other flood control measures can sometimes limit the draining of flood waters and prolong the duration of flooding.

Rapid-onset flooding

196. Rapid-onset floods last for a shorter period of time but may cause more damage and pose a greater risk because there is less time for people to take preventive action, especially in the absence of early warning systems.

Flash floods

197. At the extreme of rapid-onset, flash floods develop and achieve maximum impact in a very short period of time, often with high-velocity flow and as the result of heavy rainfall in a localised area.

Urban flooding

198. Urban floods often develop as the result of: the narrowing or blockage of natural drainage channels and rivers, and lack of maintenance to clear debris and silt; increased run off of rain water, due to the hard surfaces used in roofs and pavements; and the location of housing and other buildings in flood-prone areas.

Emergency response

Damage to transport infrastructure

199. Flood waters often disrupt roads and rail lines, making land access difficult or impossible, delaying assessment and increasing the costs of logistics. They also reduce the access of people in the affected communities to aid, health and education services, local markets and work sites. Relocation of facilities or alternative transport need to be arranged already in the emergency phase, to support the return to work, education and provide access to health and education.

Damage to structures

200. Long-standing flood waters can cause rot in wood components and weakening of walls in structures, even though structures may look intact.

Harmful materials

201. Flooding can also bring with it exposure to harmful materials, as inundation and dampness can lead to mould. Flood waters may raise up waste or hazardous materials that have been buried. These types of impacts may also result in the contamination of water supplies and outbreak of disease.

Mitigate against future flooding

202. Flooding may reoccur during the ongoing response as meteorological conditions change. It is therefore crucial that mitigation measures are included immediately into sector strategic, programme and project planning.

A future hazard

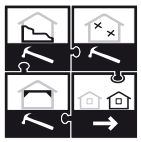
203. A lack of access to safe land often forces people to choose to live in flood-prone areas, in order to ensure access to shelter or livelihoods. The choice of safe sites for the relocation of settlements often needs to be accompanied by the reform of land policies and development incentives, as well as public awareness to inform the decision of the population regarding the level of risk they are willing to accept (» sections 7.4, 7.6 and 7.7).

Flow of water

204. Local development can restrict the flow of water and aggravate flooding by obstructing natural channels; and reducing ground absorption as areas are covered with roofs, pavement or other hard surfaces. However, it is also possible to create drainage systems which increase the flow of water to rivers and lessen the risks of flooding.

Impact of climate change

205. Climate change is increasing the frequency and severity of flooding in many areas of the world. Flooding risk may still be significant even in areas where rainy seasons appear to be decreasing in length and the primary concern is most of the times drought. In areas severely affected by drought, water is often not easily absorbed by the ground, and that can lead to flash floods when there is heavy rainfall.



Building back safer

206. Flood planning should be done on a catchment-wide basis with the participation and agreement of all necessary stakeholders, including the population that does not have any legal occupancy status, such as slum dwellers (» section 5.1).

Flood maps

207. Flood maps are a useful tool to outline which areas are likely to be exposed to future floods, for example to assess whether the community can protect itself against the highest flood expected every 100 years (» section 7.4.2). Such flood maps should take into account increasingly severe flooding due to climate change.

Flood control measures

208. Flood control measures such as embankments, dykes, sandbags and pumps may provide protection against moderate flooding, but do not provide a robust, long-term solution for addressing widely variable flood risk.

Hazardous areas

209. Settlement should be prohibited in the most hazardous areas, if safer sites are available. Re-siting to locations of reduced risk, particularly on higher ground, must be supported wherever possible and acceptable for the recovery of the livelihoods of communities (» section 7.7).

Natural drainage

210. Maintaining open space along river banks, and keeping rivers and channels free of obstructions and debris, ensure maximum levels of natural drainage.

Surface water

211. The use of permeable paving materials and rain catchment systems for roofs can help to reduce surface water rain runoff.

Plinths

212. Raised plinths or footings and above ground storage locations in houses have helped to reduce flood damage and losses during cyclones.

Hazard proofing critical facilities

213. Hazard proofing and siting of critical services, such as health, water and sanitation, help to ensure that these services are available when most needed. For example, wells or boreholes can be constructed to extend above the usual flood water level, with access via a raised platform and steps. Similarly critical facilities can be constructed so as to seal out water.

Community preparedness programmes

214. Community preparedness programmes, promoting the development of family preparedness plans, swimming skills and water rescue capacities, will also help communities to protect themselves during future floods.

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3.2.2 Cyclones and windstorms

Windstorms result from the rapid circulation of air masses between areas of different air pressure. Cyclones are particularly large storms in which the air circulates about a low-pressure centre.

Characteristics

Damage to structures

215. The high winds from cyclones and windstorms can pick up loose materials, such as roofing and cars, turning them into projectiles which often cause the major damage to structures. Rain water is blown at high speeds and can penetrate structures from unanticipated angles.

Different hazard types

216. Cyclones can produce different types of hazards including: severe wind storms, storm surges, flooding, tornadoes and torrential rainfall, once the cyclone makes landfall.

Warning systems

217. Cyclone and tornado models and warnings have improved in recent years, although local warning systems may not be adequate, and there is still often substantial variability between projected paths and where cyclones eventually make landfall.

Speeds and paths

218. Cyclone speeds and paths can vary tremendously, as the storms pick up energy over warm water, or lose energy over land masses.

Emergency response

Communication damage

219. The high winds from cyclones and windstorms often cause damage to communication links.

Coastal and inland damage

220. A focus on the coastal impacts of cyclones may mask damage further inland from resulting tornadoes or rain-induced flooding or landslides.

Transport access

221. Flooding includes by cyclones and windstorms may reduce transport access for assessment and logistic support.

A future hazard

222. Regular exposure to moderate cyclones often causes people to disregard the potential risks of higher impact storms that occur less frequently.

Natural barriers

223. The protection and planting of natural barriers, such as mangrove forests, and the protection of coral reefs and barrier islands, help to maintain natural buffers to mitigate cyclone impacts.

Holistic warning systems

224. Early warning systems are effective when linked to: all administration levels in government; radio and television services; and regularly practised prepardness plans that enable timely evacuation to adequate shelter.

Building back safer

225. Construction of accessible cyclone resistent shelters, equipped with food and clean water storages, have proved life-saving in countries prone to this hazard (» section 7.7.2).

Siting and orientation

226. Careful attention to the siting and orientation of settlements can help to reduce exposure to wind as well as the rain, sand, dust or ash it may carry.

Plinths

227. Raised plinths or footings and above ground storage locations in houses have helped to reduce flood damage and losses during cyclones.

Roofs

228. Roof tie-down straps, as well as certain roof shapes and angles, have helped to reduce wind damage.

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Case study 3.1

Hurricane Mitch

Between 25th October and 1st November 1998, Hurricane Mitch passed over Honduras. The hurricane caused massive flooding and landslides, displacing 450,000 people – many to the 1,375 collective centres that were established.

Mitigation

Lessons learnt following Hurricane Mitch often refer to pre-disaster mitigation. The biggest factor affecting the quality of recovery efforts after the hurricane was the level of vulnerability within communities prior to the hurricane.

The practice of integrating risk management with recovery was implemented successfully in some cases. A network of dedicated support institutions and regional emergency offices also emerged. Rebuilding included measures such as construction on stilts in flood-prone regions. As a result, vulnerability and post-disaster response to events, such as tropical storm Michelle, has significantly improved since 1998.

3.2.3 Earthquakes

Earthquakes are tremors of the earth's surface typically triggered by the release of stress along underground fault lines.

Characteristics

Damage

229. While the strength of the fault rupture is expressed as a single magnitude, the shaking intensity and damage in particular locations may vary considerably based upon:

- distance to the epicentre of the fault rupture;
- the depth of the rupture;
- the soil type in the location;
- nearby geological or topological features, such as valleys, that may amplify or distort the shock waves;
- the duration of the shaking and pattern of long or short waves;
- the construction technology used, for example timber frame or adobe;
- the layout of the building, for example L-shaped plans are considerably more vulnerable than square plans; and
- the level of seismic-resistant engineering techniques employed, whether achieved through tradition, construction skill or enforced building codes (» sections 6.4.2 and 7.7.1).

Secondary hazards

230. Earthquakes can cause a number of secondary hazards including follow-on fires, landslides, avalanches and tsunamis.

Liquefaction

231. Earthquakes may also cause liquefaction or subsidence of the ground, undermining the foundations of structures or infrastructure. This occurs typically in sandy soils where the water in the soil separates and pools, reducing the stability of the soil.

Aftershocks

232. Earthquakes are often preceded or followed by a series of smaller tremors that may last for years. When these occur after the disaster, they are called 'aftershocks'.

Emergency response

Local medical infrastructure

233. Early warning sufficient to achieve safe evacuation has yet to be achieved for earthquakes, meaning that they can result in significant mortality and serious injury, requiring local medical infrastructure.

Factors in mortality and damage

234. Earthquakes cause little mortality and injury directly, most of which is a result of the collapse of buildings. Significant factors in impact include urban and rural building types, construction methods, and where people are at the time of day that the earthquake impacts. It is essential to identify such critical factors as soon as possible, and to assess their impact throughout the affected area.

Impact on infrastructure

235. Earthquakes can have significant impacts on transportation and communications infrastructure, limiting access, aid delivery, and impeding needs and damage assessment.

Secondary hazards

236. Earthquakes may cause follow-on fires. Ruptures in gas lines due to shaking or settling can produce fires, even several days after the earthquake.

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Aftershock damage

237. Aftershocks may cause additional damage to structures and can create fear in the community. Even those people whose houses are not damaged often refuse to return to them, significantly increasing the number of people with transitional settlement needs.

Technical specialists

238. Significant numbers of sector technical specialists must be brought to the affected area as soon as search and rescue and life saving activities have been carried out, in order to assess the structural soundness of the buildings still standing, and to decide on the ones which are unsafe and need to be demolished before they cause additional casualties (» section 6.5.12). Technical specialists should share knowledge, capacity and resources with local specialists, so as to maximise the speed of response.

Debris disposal

239. Debris disposal is required before reconstruction can begin. Guidance must be disseminated to the affected population over the safe use of reclaimed materials. Appropriate tools are essential to the recovery and reuse of materials.

Standards and building codes

240. Standards for transitional settlement and reconstruction need to be agreed with all stakeholders (» section 1.5), whether a building code is in place in the affected country or not, as the building code will be difficult to enforce during response. It is important to define and agree standards for building seismically-resistant shelters and houses based upon construction technologies familiar to the affected population. The phased distribution of compensation and materials may be made conditional on meeting agreed standards, controlled by sector technical specialists.

A future hazard

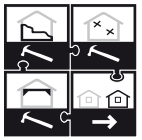
241. Damaged and vulnerable buildings will need to be repaired and retrofitted to survive future earthquakes, based on thorough inspections.

High risk areas

242. High risk areas need to be restricted for future development through land-use planning that incorporates seismic risks. For example, construction should not be allowed on unstable slopes or areas with alluvial soils or loosely packed infill. Re-siting, to locations of reduced risk, must be supported wherever this option is available (» section 7.6).

Modifying building codes

243. In order to mitigate risk, improved standards, adopted for transitional reconstruction, need to be gradually integrated into building codes and local planning and governance. Effective incentives and enforcement mechanisms must be developed, implemented and monitored.



Building back safer

244. The detailed damage assessment of each area affected should include the nature of the structural failure of local building types, and of the mortality and injuries that resulted from it. Assessments are also required of the skills and materials used by the construction industry. Safer transitional reconstruction must be based upon achieving a sustainable change in building practices appropriate to a specific environment, culture and economy.

Soil studies

245. Seismic and soil studies may be needed in the most affected areas and for the construction of larger structures.

Safe building methods

246. Transitional reconstruction programmes need to incorporate safe-building methods, for example by strengthening lateral supports and cross-bracing and strong attachment of all load bearing walls to the foundations (📖 UN/ISDR, 2007).

Safe and sustainable construction practices

247. The training of builders and local contractors on safety measures appropriate to their construction methods can help improve safety of future construction. However, improved techniques are often only practised immediately after an earthquake, while awareness is raised in the minds of their clients. In order to reduce future risks, efforts need to be made to ensure sustainable and affordable changes in construction practices.

Training and dissemination

248. Training and dissemination of safe building techniques has proved successful during transitional reconstruction, especially through walk-in information centres that can also provide information about available technical assistance.

Case study 3.2

Pakistan earthquake

Northern Pakistan and the surrounding regions were struck by an earthquake measuring 7.6 on the Richter scale on 8th October 2005. There was widespread damage to assets and livelihoods, leaving 2.8 million people without shelter.

Building back safer

The Pakistani Government, with the assistance of a wide network of NGOs and UN agencies, developed a policy to promote building back better. Affected persons were given cash to fund the repair or rebuilding of their houses depending on the damage to each shelter.

Assisting bodies were then able to train locals in seismic-resistant construction, with some evidence of a sustainable change in construction practices that should result in a sustainable reduction in vulnerability.

3.2.4 Landslides

Landslides are downward ground movements, often resulting from rock falls or the failure of steep or unstable slopes.

Characteristics

Occurrence

249. Landslides often occur in connection with other natural hazards such as earthquakes, volcanoes and floods.

Location

250. Landslides tend to occur on steep slopes or in places where slopes are undercut by roads, other excavation or water sources such as river beds or coastlines.

Structures prone to landslides

251. Structures built on steep slopes, such as hill sides, can be prone to landslides during heavy rains, depending on their geological composition and deforestation.

Danger to settlements

252. Landslides or debris flow may also sweep down on settlements from higher ground. High volumes of mud or debris can travel a considerable distance, depending on the slope, and cover settlements in metres of debris. This is especially likely in periods of high rainfall, when water saturation levels in the soil increase and water runoff helps to build the momentum of the slide.

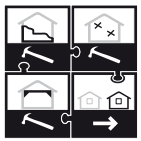
Emergency response

Increased threat

253. Water in saturated soil often dissipates slowly, so the threat of landslides may increase over several days or weeks, even if rain is not continuous in that period.

A future hazard

254. Deforestation and development improvements, including road cuts, can reduce the stability of slopes and increase the likelihood of landslides.



Building back safer

255. The careful siting of settlement areas can reduce the exposure to landslides. Local consultation is likely to be the most effective method of mapping risk areas. In addition, fallen rock, debris piles, slope areas without vegetation, and slope areas with different or newer vegetation can be indications of where landslides have occurred in the past, and where they may happen again in the future.

Reducing risk

256. Risk can be reduced, especially to vulnerable groups such as informal dwellers, through the mapping of landslide-prone areas, linked to master plans for future construction and public awareness campaigns.

Drainage

257. The appropriate drainage of settlement areas will prevent soil saturation and can reduce the risk of landslides.

Vegetation

258. The planting of vegetation can help to maintain the stability of slopes.

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3.2.5 Fires

Fires are the rapid combustion of elements of the natural or built environment. They may be caused naturally or by people, either accidentally or intentionally.

Characteristics

Vulnerable conditions

259. Wildfires are common in many places in the world, particularly in climates where there is sufficient rainfall to allow the growth of brush and trees, but where there are dry periods when leaves and branches dry out and become highly flammable. Wildfires tend to be severe during years of drought and days when there are strong winds.

Increasing frequency

260. With increasing settlement in woodland areas, wildfires are occurring more frequently, resulting in the loss of houses built on the urban periphery.

Causes in urban areas

261. Urban fires often break out as the result of stoves placed indoors to generate heat. In densely packed urban environments fires can spread rapidly between structures. In squatter settlements, there is also likely to be less access to fire-protection lines.

Natural causes

262. Fires are often caused by other hazards, such as earthquakes, lightning strikes during storms and ash following volcanic eruptions. Each cause often creates different patterns of fire and damage. In hazard-prone areas, local fire departments will often be able to advise on such patterns, as well as effective prevention and mitigation measures.

Emergency response

Dry conditions

263. Dry conditions and high winds may allow fires to continue to spread and inhibit fire fighting and assessment.

Danger of hazardous materials

264. Fires may cause hazardous materials to be released into the air. Winds may spread such materials, as well as heat and smoke, endangering other nearby areas.

Risk to populations

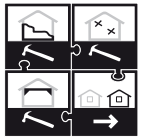
265. Affected populations remain at risk until the fire is extinguished or exhausted, as conditions may change rapidly, such as wind direction. This normally requires short-term transitional settlement in a safe area following rapid evacuation, and specialist advice before beginning assessment or return.

Firebreaks

266. Transitional settlements such as self-settled camps often create a significant fire risk if adequate distances are not maintained between shelters to provide firebreaks (» Table 1.3). The use of fire retardant materials will help to slow the spread of fires, however, their impact may be marginal given the variety of materials usually present and the fire intensity.

A future hazard

267. Wildfires are a natural part of some ecosystems and their reoccurrence needs to be factored into settlement planning.



Building back safer

268. Family and community preparedness, such as the training of local fire brigades, are fundamental critical measures to ensure that people can put out any fires that may occur.

Firebreaks and vegetation trimming

269. Enforcement of building set-backs and other firebreaks will help to ensure that fires do not spread out of control. The trimming of vegetation along boundary lines for settlement areas, and along roads and infrastructure lines, will help to protect these areas from fire risk.

Fire departments

270. A trained community-based fire-fighting service and the availability of fire-fighting tools, including adequate water storage or water lines, support communities to manage the risk and promote awareness.

Safer materials

271. Damage from fires can also be reduced by the use of materials that do not release toxins into the air if burned. Facilities where such materials are stored may require additional protection measures and specific access by fire-fighting teams.

3.2.6 Volcanoes

Volcanoes are vents in the ground surface through which molten, liquid rock and associated gases and ash erupt, often leading to the formation of a conical mountain around the vent.

Characteristics

Associated hazards

272. In addition to lava flows, significant damage from volcanic eruptions can be caused by pyroclastic flows of molten ash or lahars. Lahars are mud flows, often caused by rain and flooding, that pick up ash and other debris.

Harmful gases

273. The gas and ash released by volcanoes can also threaten people, animals, agriculture, and property as the chemical compounds which they contain can cause respiratory irritation, acid rain and injuries to animals that graze on vegetation coated with volcanic ash (http://volcanoes.usgs.gov/).

Emergency response

Safe, early evacuation often difficult

274. Early warning sufficient to achieve safe evacuation cannot always be achieved for volcanoes, meaning that they can result in significant mortality.

Effects of ash

275. Volcanic ash can affect not only health but also motors and engines, especially for aircraft, interfering with assessments, the provision of critical services and the delivery of humanitarian assistance.

Effects of wind

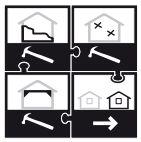
276. Wind patterns can dramatically affect the plume, or dust cloud, area in which volcanic gases and ash are spread, sometimes affecting areas even hundreds of kilometres away.

A future hazard

277. As with many hazards, increasing numbers of people are living in areas threatened by potential volcanic eruption. The accuracy of early warning systems to detect patterns of volcanic activity is increasing but needs to be matched with vigilant community awareness programmes, contingency planning for evacuation and regular drills.

Public awareness

278. In urban areas where city expansion has occurred on active volcanic eruption cones, public awareness linked with programmes for preventative relocation and livelihoods regeneration must be supported.



Building back safer

279. Buildings can be protected by ensuring that roofs can handle ash loads, such as through slopes or bracing, and by the placement of doorways away from the direction of likely wind and ash flows, to ensure evacuation routes are accessible.

Planned evacuation

280. Evacuation routes should be planned in advance and practised regularly through exercises.

3.2.7 Tsunamis

Tsunamis are large waves caused by the displacement of undersea water by earthquakes, volcanic eruptions or coastal landslides.

Characteristics

Series of waves

281. Tsunamis are often made up of a series of waves that can travel hundreds of kilometres. As the waves get closer to shore, they decrease in speed and increase in height.

Force

282. The force of the tsunami can be tremendous, carrying boulders, trees, buildings and vehicles in its wake.

Emergency response

Variable damage

283. The level of inland penetration of tsunamis and their subsequent damage is dependent on the depth of water and shape and slope of the coastline at the points where the waves make landfall, which may vary significantly along a coastline.

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A future hazard

284. Tsunami warning systems have been developed, but are most effective in warning populations living on coasts some distance from where the tsunami originates; allowing time for a warning to be issued and evacuation to take place.

Indicators

285. For those living close to where a tsunami starts, the most effective measures are to promote awareness of the risk of tsunamis as a result of earthquakes or other triggering events, to monitor for signs of those events (particularly earthquakes) or tsunami precursors (such as the sudden outward flow of the sea), and take appropriate evacuation measures.

Building back safer

286. Community shelters and critical infrastructure should be sited on areas of higher elevation or far enough inland not to be threatened b the tsunami, which can be up to 1.5 km, depending on the topography.

Evacuation routes

287. Evacuation routes should be planned in advance and practised regularly through exercises.

Hazard maps

288. Hazard and evacuation maps should be distributed to the public to guide tsunami preparedness efforts.

3.2.8 Other hazards

Other hazards include natural hazards such as drought, as well as man-made hazards such as industrial hazards and conflict, which can often be combined with natural hazards.

Loss of life and damage

289. Other natural hazards affect proportionately fewer people each year than the floods, cyclones and earthquakes mentioned above, however, they still cause significant loss of life and damage.

Droughts

Factors aggravating dought

290. Drought emergencies develop as a result of extended periods of dry weather and reduced availability of water. However, these situations are often aggravated by policies unfavourable to pastoralist or nomadic lifestyles or by conflict situations that weaken coping mechanisms and increase vulnerabilities (📖 ALNAP and ProVention, 2007a).

Population displacements

291. Droughts can often result in large population displacements, particularly when assistance is being provided in centralised locations. Decentralised response strategies often have the best chance of supporting existing livelihoods and enabling quick recovery.

Impact of climate change

292. Water shortages are likely to increase in many areas, even as storms and floods may become more common, as a result of changes in extreme weather associated with climate change.

Water resources

293. Development of dry-land water resources, including catchments and roof collection systems will help to ensure access to water resources throughout the year.

Industrial or technological hazards

Hazardous materials

294. Hazardous materials are an integral part of modern industrialised societies. The release or spill of these materials into the environment may occur as the result of an emergency incident at a facility producing them or storing them or as a secondary hazard resulting from damage to such facilities during a natural hazard.

Conflict and violence

Compounding risk

295. Situations of conflict and violence can serve to compound the risks from natural hazards and industrial or technological hazards, and intensify the complexity of response efforts.

Protection and security

296. Settlement planning and assistance strategies need to ensure adequate protection and security, especially for those groups in the community who are most vulnerable. Care should be taken when defining a housing programme for returnees and for disaster-affected communities to provide comparable standards of assistance to both, in order to avoid fuelling tensions.

Social cohesion

297. In certain situations, facing the challenges of responding to recent disasters or impending hazards can have a unifying effect on divided communities.

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Transitional settlement options: displaced populations

4

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This chapter introduces the six transitional settlement options of populations displaced by natural disaster and goes on to describe how support may be offered to each option.

Although many disasters need not result in displacement, sometimes hazards such as flooding require people at risk to move temporarily to safety.

The chapter describes how people may be supported in minimising the safe distance and duration of their displacement, so that when they are no longer at risk, they can begin their return to sustainable livelihoods and transitional reconstruction.

The six options and the terminology used are consistent with those for conflicts and complex emergencies, in recognition that planning and response must be consistent when disasters occur in insecure areas, or in areas accommodating populations displaced by conflict.

4.1 The six transitional settlement options

Settlement options

298. When a population is displaced people decide, for a variety of reasons, to choose different options for their settlement, for example in a collective centre such as a cyclone shelter, or self-settling on a roadside on higher ground after a flood. Six options have been categorised from the choices made by populations displaced following disasters and conflicts in the past, and lessons from past displacements have been learnt about each option.

Movement between options

299. It is likely that the people affected will move between options until their displacement ends, and they begin transitional reconstruction activities. For example, they may stay with neighbours or relatives or with host families, then move into camps, and then self-settle on land near where they used to live.

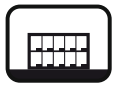
Multiple suitable options

300. After risk mapping (» section 7.4) and assessments (» section 7.3) have been undertaken, it is likely that a number of the settlement options chosen by the displaced population will be considered by government and humanitarian organisations to be safe, and to meet the broader strategic objectives agreed for assistance. It should therefore be appropriate to offer support to more than one of the options selected by those displaced.

Option 1: **Host families**
This settlement option involves sheltering the displaced population within the households of local families, or on land or in properties owned by them.

Option 2: **Urban self-settlement**
Displaced populations may decide to settle in an urban settlement, or in parts of it unaffected by the disaster, occupying unclaimed properties or land, or settling informally.

Option 3: **Rural self-settlement**
Rural self-settlement takes place when displaced families settle on rural land that is owned collectively, rather than privately.



Option 4: **Collective centres**
Collective centres, also referred to as mass shelters, are usually transit facilities located in pre-existing structures.

Option 5: **Self-settled camps**
A displaced community or displaced groups may settle in camps, independently of assistance from local government or the aid community.

Option 6: **Planned camps**
Planned camps are places where displaced populations find accommodation on purpose-built sites, and a full services infrastructure is provided.

Supporting the priorities of the displaced

301. Although government and humanitarian organisations may consider one option more convenient than another to deliver assistance, supporting the choices of the displaced population will usually achieve sustainable solutions most quickly and efficiently (» section 2.2.4). Supporting only some options favoured by displaced groups may also have disproportionate negative impacts upon vulnerable groups and individuals. In addition, as long as the options chosen are safe, government and humanitarian organisations may have limited legal and humanitarian justifications to require displaced populations to settle temporarily where they do not wish to.

4.2 The transitional settlement options: dispersed and grouped

Advantages of dispersed settlement

Usual first choice of affected populations

302. When displaced populations cannot access purpose-built collective centres (option 4), they frequently choose dispersed settlement (options 1–3). This often indicates the importance to displaced persons of:

- being able to move quickly to safety when hazards persist;
- the responsiveness of dispersed settlement to their changing needs;
- specific local conditions appropriate to their needs;
- using community and family coping strategies, such as living with relatives;
- greater access to environmental resources, such as clean water and cooking fuel, than when they are in larger groups; and
- staying as close to their homes as is possible safely, so that they may monitor changes in circumstances and return home as soon feasible.

Development supporting relief

303. The host population may be compensated effectively through support and sustainable improvements made to communal infrastructure, such as water distribution systems or schools (» section 2.2.5).

Relatively low cost

304. In addition, dispersed settlement can be more cost-effective for the government and humanitarian organisations, requiring smaller initial investments with more opportunities for sustainable developmental impact than grouped settlement.

Disadvantages of dispersed settlement

Limited capacity to asses and assist

305. In the emergency phase, dispersed settlement often provides a challenge to the limited capacity within government and humanitarian agencies that must assess need and provide assistance across a wide area. Preparedness, well planned logistics and carefully located distribution centres can help mitigate some of these disadvantages.

Distance of displacement

306. It is essential that such short-term limits upon capacity in supporting dispersed settlement do not require people to move large distances to distribution centres. This may result in self-settlement or camps forming far from the homes of those affected that may last longer than necessary, prolonging displacement and delaying longer term recovery.

Protection

307. Protection and security concerns, particularly relating to vulnerable groups, may prove more difficult to identify and act on than in grouped settlement options.

Advantages of grouped settlement

Collective centres and evacuation areas

308. The best emergency phase options to save lives are facilities constructed as part of consistent preparedness plans to protect populations from specific hazards, such as cyclones or floods (option 4), or evacuation areas prepared to become planned camps (option 6). To be effective, these facilities should be part of a preparedness plan that is practised regularly by the population at risk. The infrastructure of and accessibility to hazard-proof shelters must be maintained so as to be ready whenever needed.

Disadvantages of grouped settlements

Extending displacement

309. Although displaced people may initially group together, such as in self-settled camps (option 5), grouped settlements often extend unnecessarily the period of displacement. This is especially true in planned camps (option 6) that are built after the disaster, and are often some distance from the homes of those affected.

Psychosocial problems

310. Densely-occupied grouped settlements such as collective centres (option 4) that are used for a period of longer than a few days exacerbate or create individual and communal psychosocial problems.

Health risks

311. Dense settlement increases health risks, both from the increased density of vectors, such as rats, and from exposure to communicable diseases, such as cholera.

Factions and exploitation

312. In addition, populations in camps are vulnerable to influence by political or armed factions, as well as exploitation and gender-based violence, as community coping mechanisms become fragmented.

Dependency

313. Extended displacement in grouped settlement can result in de-skilling and increased dependency within the displaced population, in part as a result of the lack of connection with previous livelihoods and dislocation from familiar living patterns.

Disparity of assistance

314. Tensions or conflict may result from a disparity between assistance offered to those living in grouped settlement and those outside it, whether affected or unaffected by the disaster.

Concentrated environmental impacts

315. The density of occupation of grouped settlement concentrates environmental impacts into a small area, which is likely to result in unsustainable natural resource management and reduction of natural resources available to the host population (» section 1.2). For example, the displaced population may use the drinking water available to their host population, or cut down the woodland for use for fuel wood for cooking.

Relatively high costs

316. Grouped settlements usually require higher initial capital investment and higher maintenance costs than dispersed settlement. For example, a camp requires the construction of water infrastructure such as boreholes. In contrast, dispersed settlement usually relies upon the infrastructure of the host population, such as wells, which can be upgraded through assistance.

4.3 Supporting each transitional settlement option

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Overview of the six options

317. This section presents an overview of the six transitional settlement options. Each option is then elaborated using a summary of their strengths and weaknesses, and the opportunities and threats that each entails.

Planning process

318. As part of the planning process, each of the six transitional settlement options should be assessed in relation to:

- its suitability for particular groups of the affected population;
- the number of displaced persons that it might accommodate appropriately, so that strategic, programme and project assistance may support the entire displaced population;
- the speed at which it can be accessed by the affected population and how they can support duration solutions to displacement and the beginning of transitional reconstruction;
- any limits on the duration of its use and opportunities for their further use during reconstruction; and
- its capacity for expansion.

Case study 4.1

Gujarat earthquake

In late January 2001, an earthquake measuring 7.9 on the Richter scale hit the Gujarat region of India. The earthquake destroyed more than 1 million homes and killed nearly 20,000 people.

Providing a variety of settlement options

In the emergency phase, the international humanitarian community distributed large quantities of tents. Evaluations of sector responses criticised the effort, saying it undermined existing coping strategies. Tents had short-term durability, when compared with the speed of reconstruction, and there were considerable delays in supply and deployment. The locally produced transitional shelter alternatives adopted by some organisations offered shelter that would last the period until reconstruction was complete, and for a similar cost.

4.3.1 Host families

This settlement option involves sheltering the displaced population within the households of local families, or on land or in properties owned by them.

Payment

319. Displaced people may have the opportunity to live with relations, neighbours and friends, or strangers who act as hosts. They may be allowed to stay without payment or on a rent-paying basis, paying either in cash or in kind, for example by offering labour or sharing received relief goods.

Successful support

320. Successful support to host family settlement requires the provision of assistance to both local and displaced populations, and host families in particular, in order to prevent tensions, which would inevitably derive from the competition over services and resources.

Strengths

321. Strengths of host families:

- being the most readily available solution to immediate settlement needs, before any others options can be supported;
- increasing opportunities for integration with the local population, when not already part of the same community, in the case of micro-displacement;
- facilitating a wider social support network; and
- supporting existing coping strategies (» section 7.3.3), especially for vulnerable individuals, by keeping families together and within a stable household environment.

Weaknesses

322. Weaknesses of host families:

- constraints to assistance by government and humanitarian organisations, as dispersal stretches their capacity to access and support;
- limited access to over-stretched local and aid-supported communal services, such as health care, especially for vulnerable groups;
- difficult access to assistance such as food in distant distribution centres, which impacts vulnerable groups especially; and
- tensions may arise after long durations of stay, possibly requiring movement to another settlement option.

Opportunities

323. Host families offer opportunities to:

- use existing infrastructure, allowing for fast implementation of the programme. The infrastructure should be improved and supported to ensure that it is able to cope with the additional needs of the displaced population;
- develop integrated and equitable systems of support for host and hosted populations;
- promote and support methods of livelihood provision for both groups;
- support existing infrastructure, and hence development;
- increase awareness of the rights of both populations; and
- keep financial resources within the community, especially if cash is distributed in support of the affected community.

Threats

324. Threats to operations involving host families:

- there is an increased risk of physical, sexual and financial exploitation, either by the host or the hosted populations;
- social complications may arise from close proximity of populations and pressure on local services;
- opportunities for both host and hosted families to undertake domestic work, maintain hygiene and engage in home based enterprises may be constrained by lack of space in host-family houses and land;
- resentment may result from disparities in assistance or lack of environmental resources;
- host families may become overburdened and impoverished over long periods of hosting, especially if the proportion of host to hosted population is unsustainable; and
- existing infrastructure can become overwhelmed unless it is supported adequately and effectively.

4.3.2 Urban self-settlement

Displaced populations may decide to settle in an urban settlement, or in parts of it unaffected by the disaster, occupying unclaimed properties or land, or settling informally.

Cities

325. Displaced populations may be moving to an area of the city different from the one that they previously occupied, or they may rent or occupy less damaged and unclaimed properties in the city, or in another city to which they have fled for safety or to find accommodation or work.

Government

326. Property or land may be made available by government for occupation, whether by requisition or by the payment of compensation or rent.

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Successful support

327. Successful urban self-settlement operations require that any support offered takes into account or integrates local and displaced populations. It is usually necessary to negotiate the financial and legal basis on which displaced populations are able to settle securely in urban areas.

External support

328. External support should aim to mitigate any negative impacts of the displaced population on the local population, while increasing local capacities in a sustainable manner.

Strengths

329. Strengths of urban self-settlement:

- enables urban populations to remain in urban environments similar to those to which they are accustomed;
- enables diversity of livelihood opportunities and increased opportunities for self-sufficiency;
- promotes contacts and encourages integration with the local population;
- may provide opportunities to find work; and
- facilitates a wider social support network.

Weaknesses

330. Weaknesses of urban self-settlement:

- lack of formal ownership rights for land or property for the affected population;
- dispersal stretches the capacity of aid organisations and local authorities to assess and support displaced populations;
- leads to competition over work, resources and facilities with the host population; and
- it is difficult to identify the affected population and upgrade settlements to meet minimum standards.

Opportunities

331. Urban self-settlement offers opportunities to:

- have a greater self-determination of where and how to live;
- reduce burdens on the authorities and humanitarian organisations;
- maintain the affected population in a familiar location and level of urban services;
- access or rebuild original livelihoods, if still viable after the disaster;
- support the upgrading of existing services infrastructure to meet the needs of both the displaced and host populations;
- support established livelihoods for both groups; and
- reduce the vulnerability of the displaced population through creating interdependence and communication with the local population.

Threats

332. Threats to operations involving urban self-settlement:

- constraints on access and limits on logistics capacity mean that reaching one family takes longer in a dispersed settlement than it would in a more concentrated settlement; and
- displaced populations often increase the size of existing informal settlement areas on the periphery of cities, living on land that they do not own. It is also likely that the existence of such settlements will be politically sensitive. Care should be taken to ensure that any support offered takes into account or integrates any existing inhabitants and their neighbours.

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4.3.3 Rural self-settlement

Rural self-settlement takes place when displaced families settle on rural land that is owned collectively, rather than privately.

Successful support

333. Successful rural self-settlement operations require assessment of the livelihoods of displaced and local populations, in order to identify opportunities for the displaced to become more self-sufficient. Support should be offered to both local and displaced populations in order to prevent tensions and support positive relations.

Government

334. Property or land may be made available by government for occupation, whether by requisition or by the payment of compensation or rent.

Large population movements

335. Rural self-settlement often involves a large number of population movements. This fluidity may, however, be seen as a direct expression of choice by the displaced population.

Environmental capacity

336. Rural self-settlement should be supported only when the carrying capacity of the local environment is sufficient for both the host and the displaced populations.

Strengths

337. Strengths of rural self-settlement:

- promotes integration with the local population;
- facilitates a wider social support network, with benefits for the displaced population; and
- close proximity to the local population enables trade of goods and services.

Weaknesses

338. Weaknesses of rural self-settlement:

- dispersal in rural self-settlement stretches the capacity of aid organisations and local authorities to access and support displaced populations;
- livelihood patterns, land-use patterns (» section 7.5) and natural resource management of the host population may be disrupted. For example, overuse of land by the displaced population may lead to soil becoming compacted and unusable. Land needs to be rehabilitated at regular intervals and prior to its return to its previous use;
- access to local and aid-supported communal services, such as health care, is difficult, especially for vulnerable groups; and
- access to distributed aid, such as food, is difficult, especially for vulnerable groups.

Opportunities

339. Rural self-settlement offers opportunities to:

- identify and respond to the needs of both the host and displaced population;
- develop self-sufficiency, if agriculture or animal husbandry are possible;
- upgrade infrastructure, such as transport, health care, water and sanitation, schools, power supplies, food production and food security;
- support livelihoods, for example by involving both communities in all construction activities; and
- provide a durable solution, if families are allowed to settle permanently on or near the land that they have been occupying. In this case, developmental assistance programmes designed to sustain and develop livelihoods may follow on from this transitional settlement option.

Threats

340. Threats to operations involving rural self-settlement:

- any competition for resources may lead to local populations or authorities refusing to allow rural self-settlement, and people may have to move further away from their homes;
- there is a risk of physical, sexual or financial exploitation of the displaced population by the local population, or vice versa;
- constraints on access and limits on logistics capacity mean that reaching one family takes longer in a dispersed settlement than it would in a more concentrated settlement; and
- if the displaced community outnumbers the local community, rural self-settlement is unlikely to be acceptable to the local population and authorities for any length of time, for social, economic and resource management reasons.

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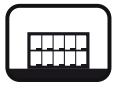
4.3.4 Collective centres



Collective centres, also referred to as mass shelters, are usually transit facilities located in pre-existing structures.

Purpose

341. Collective centres are either constructed in rural or urban areas as part of preparedness plans to protect populations from specific hazards, or existing structures, such as schools, requisitioned after the disaster in order to accommodate displaced persons temporarily.

Requisition

342. Collective centres that are existing structures requisitioned after the disaster are often in or close to urban areas; designated when there are significant flows of displaced people into or out of the location. Effects on infrastructure caused by the use of the collective centre need to be considered.

Date of return

343. Where the centre normally serves another purpose, and is temporarily available, its return to normal use should be planned. Operations supporting collective centres are successful if an end-date to the use of the structure is identified and planned for. Multipartite agreements among relevant parties can be used to ensure that the date of return of the facility is understood and agreed by all, as well as the condition in which it will be returned. Such an agreement may include local communities, facility owners, local authorities, host populations, humanitarian organisations and displaced populations. The agreement might also include modifications to the facility so that it can serve as a place of evacuation during future emergencies.

Inappropriate for long-term support

344. Collective centres should not be considered for long-term accommodation unless they can offer appropriate support, such as conditions to ensure privacy and appropriate sanitation and kitchen facilities. As with any form of institutional accommodation, unless sufficient privacy and independence can be assured, a prolonged period of stay is likely to result in stress, possibly leading to depression, social unrest, or other individual or communal psychosocial problems. This is especially important if centres are being considered for vulnerable groups, such as elderly people.

Case study 4.2

Hurricane Katrina

Hurricane Katrina, reaching Category 5 on the Safir-Simpson scale, hit the southern coast of the USA in August 2005. It caused severe damage, particularly to New Orleans, which flooded as high winds broke the levee system. Around 1,800 people died and over 770,000 were displaced.

Disadvantages of collective centres

Prior to landfall of the hurricane, large-scale evacuations took place. Many people, however, did not have the resources to evacuate. The city of New Orleans made available a sports stadium as a collective centre.

The occupancy of the stadium reached an estimated 12,000 displaced persons. High winds and flooding limited the access by road to the stadium in the first days of response. Supplies of water and food were insufficient.

Evacuation of the most vulnerable was safe and practical some time before it was undertaken.

Strengths

345. **Strengths of collective centres:**

- they are built or identified to offer shelter that is safe and appropriate, protecting the displaced against assessed hazards;
- it is relatively easy to identify and assess beneficiaries (» section 2.2.8);
- food, water and other supplies are easy to distribute;
- access to services is straightforward, where a health team is able, for example, to visit a centre and identify problems more easily than when a population is dispersed; and
- the identification of vulnerable groups and individuals is relatively easy.

Weaknesses

346. Weaknesses of collective centres:

- for the reasons outlined below, collective centres must have a short operational life;
- collective centres have very high running costs which supporting government agencies or humanitarian organisations may not have the resources (» section 2.2.5) to support over the period required;
- existing structures usually require additional communal services, such as for sanitation, washing, laundry and security, including fire alarms and fire escapes;
- social and psychological problems, including dependency, often result from the lack of privacy, livelihoods and recreational opportunities; and
- the social structure of the affected population may not be compatible with the communal living required and, in such cases, may further undermine the social structures and create resistance to support and achieving durable solutions to displacement.

Opportunities

347. Collective centres offer opportunities to:

- raise awareness of risks that the population is facing and practice preparedness plans (» section 7.3);
- improve the morale of the residents and support them, for example by ensuring good maintenance of the centre. This will also provide work and an income for some, and increase the confidence of the local population in the support programme. Maintenance is the most cost-effective way of ensuring that the centre will eventually be handed back to the owners in an appropriate state;
- support and improve infrastructure and the facilities of existing structures to meet the needs of the host and displaced population;
- consider methods of compensation for those who have had livelihoods disrupted by the occupation of the building; and
- begin to form community structures, if the affected population is subsequently to be relocated together rather than return to transitional reconstruction.

Threats

348. Threats to operations involving collective centres:

- the presence of a collective centre, as any other grouped settlement, may increase vulnerability to attack; it may become a focus for hostilities in complex emergencies;
- fire may be a risk, if cooking or heating present hazards, and especially for vulnerable individuals and existing structures where evacuation is difficult;
- if the centre is normally used for another function, such as a school, its delayed return may create problems for the education of the local population (» section 2.2.8);
- if the centre had a prior use, there is a threat of disruption to the livelihood of the building owner, and compensation should be considered for the other livelihoods that will have been affected by the occupation of the collective centre;
- in many cases, no responsibility is taken for maintenance, and management of the structure and definition of roles needs to start at the very beginning of the use of the centre, even if it is only to be used for a few weeks, as degradation of the centre begins extremely quickly;
- the spread of communicable disease is more likely in densely occupied living areas with communal services, such as sanitation and cooking, and so the risks should be discussed with the appropriate health professionals; and
- although collective centres should be the first transitional settlement option to be discontinued, they are often the last, as they usually contain the most vulnerable for whom durable solutions to displacement are the most difficult.

4.3.5 Self-settled camps

A displaced community or displaced groups may settle in camps, independently of assistance from local government or the aid community.

Reasons for self-settlement

349. Grouped self-settlements are usually established before the arrival of humanitarian organisations in the field. Displaced communities often choose this option because they find living in a group preferable for social reasons. Also, it makes them feel more secure, and they hope it will improve their chances of receiving external assistance.

Site and settlement

350. Self-settled camps are often sited on state-owned or communal land, usually after limited negotiations with the local population over use and access (» section 2.2.7). A decision must be taken by governmental or local authorities, possibly on the basis of advice from humanitarian organisations, upon whether or not: the site and settlement can be supported and improved; the settlement must be supported to move to a different site; or alternative settlement options need to be developed.

Adjustments to camp

351. If the location is acceptable and successful, support to the self-settled camps option is likely to require some adjustments to the density, water supply and sanitation of the camp. Self-settled camps are often located close to hazardous sites, however, as people prefer to stay close to their original settlements.

Land ownership

352. Difficulties over settlement in camps may arise with owners of the land and/or local communities (» section 7.5). For this reason, negotiations should be begun as early as possible to ensure that displaced populations are able to have security of settlement during their period of displacement. Negotiations should also include details of the condition in which the land should be returned, environmental considerations, and handover of infrastructure built as part of the response.

Strengths

353. Strengths of self-settled camps:

- entail increased opportunities for self-sufficiency and self-determination;
- allow for the maintenance of existing methods of livelihood support and social structures; and
- keep families and communities together, thereby supporting social cohesion.

Weaknesses

354. Weaknesses of self-settled camps:

- occupation of the site will disrupt methods of livelihood support and resource provision previously associated with the land. It may therefore cause disruption to the livelihoods of the host population;
- there is a risk of physical, sexual or financial exploitation by the site owner;

- environmental damage often results;
- disaster risk may continue when camps are located close to affected areas; and
- occupation of communal or state land results in constant threat of eviction.

Opportunities

355. Self-settled camps offer opportunities to:

- assist vulnerable groups within the affected communities by supporting other settlement options, such as accommodation with host families. There may be, for example, an abundant supply of natural resources and good access (» section 2.2.5), and only a small local population. In such circumstances, it may be feasible to assume that the displaced population can undertake settlement, while intervention by international organisations concentrates on assisting vulnerable groups;
- develop the camp, with the displaced community and government, to meet national and international standards;
- support and improve existing infrastructure and facilities to meet the needs of the host and affected population; and
- consider methods of compensation for those who have had livelihoods disrupted by the occupation of the site.

Threats

356. Threats to operations involving self-settled camps:

- increased vulnerability to both external and internal security threats may result from the existence of self-settlement in camps; and
- the presence of the displaced population will have an impact on the wider local community. Care must be taken to prevent tensions and to ensure that local services can be maintained. As well as supporting family accommodation, some upgrading of infrastructure might be considered.

4.3.6 Planned camps

Planned camps are places where displaced populations find accommodation on purpose-built sites, and a full services infrastructure is provided.

Last option

357. Planned camps are very rarely appropriate or necessary after a natural disaster. They may, however, have to be considered as the last option. They should never appear as the first or only option.

When appropriate

358. Planned camp operations have been successful when the affected populations have lost their property, land and livelihoods, and if there is no other appropriate option. There may, for example, be insufficient land or housing stock for self-settlement.

Proximity

359. The camp should be built as close as is safe and appropriate to people's former homes and livelihoods.

Social structure

360. Camp planning should be sensitive to the social structure of the affected population. For example, people who came from the same villages or neighbourhoods should be located close together when possible. Livelihoods space needs, such as for animal husbandry, and proximity to sources of livelihoods, such as markets, shops, and offices, should also be taken into account. The relationship with the host population can be supported by avoiding conflicts over scarce natural resources.

Establishing camps

361. Planned camps require replicating an entire support system. As a result, establishing camps involves factors such as the following:

- strategic planning;
- the selection of sites;
- camp management;
- options for phasing, development and expansion;
- cross-cutting factors, such as gender and age; and
- cross-sectoral issues, such as water and health.

Strengths

362. Strengths of planned camps:

- facilitate distribution relief supplies;
- facilitate identification of vulnerable groups and individuals;
- can be planned to meet the needs of the affected population; and
- land use can be negotiated with governments without rent or purchase.

Weaknesses

363. Weaknesses of planned camps:

- increase vulnerability to internal and external security threats;
- limit access to income-generating activities;
- lead to competition over resources;
- environmental damage and disruption to established methods of natural resource management result; and
- often cause disruption to the livelihoods of the host population.

Opportunities

364. Planned camps offer opportunities to:

- understand the needs of the displaced population and plan the camp appropriately;
- develop a natural resource management plan;
- involve both displaced and local populations in construction activities and by facilitating access to local markets;
- give support to public meetings involving local and displaced populations. Both groups should be offered activities such as training courses or social events. This will help open channels of communication and prevent misunderstandings; and
- upgrade infrastructure, such as transport, health care, water and sanitation, schools, power generation and transmission, food production and security, police stations, prisons and courts.

Threats

365. Threats to operations involving planned camps:

- camps may increase the vulnerability of displaced persons to security threats;
- both external and internal planned camps centralise resource extraction, leading to environmental degradation (such as deforestation, overgrazing and erosion). Efforts should be taken to counteract these effects, and monitoring will then be required to keep track of environmental rehabilitation programmes; and
- camps become difficult to dismantle and risk becoming permanent, especially in urban areas where there is a shortage of accommodation.

Transitional reconstruction options: non-displaced populations 5

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This chapter categorises housing occupancy into the six transitional reconstruction options available to populations who have not been displaced by natural disaster, who return home, or who relocate to live in a new location. It goes on to describe how support may be offered to each option.

The chapter does not describe technical assistance methods for physical reconstruction, which are summarised in the next chapter. Instead, a framework is offered for reconstructing durable solutions to the settlement and shelter needs of populations impacted by natural disasters, whether or not they owned their land or homes.

Half of the population of the world live in urban areas. As global populations continue to move into urban areas, more and more people are at risk: poor urban planning, poor enforcement of laws and building codes, and pressures upon land result in populations living on unsafe sites in unsafe buildings.

More than half of people living in urban areas do not have land tenure. Instead they rent or settle informally or illegally. Both rural and urban populations affected by disasters require assistance in recovering or obtaining housing, including secure tenure or improved housing rights.

Assistance must be offered to the poorest and most vulnerable. The first option for assistance that is categorised is of people who are occupying land or property with no legal status, who may be from areas where no formal records were kept, whose records were lost in the disaster or are in dispute, are squatters or are homeless.

5.1 The six transitional reconstruction options

The six transitional reconstruction options

366. This section categorises the six options for transitional reconstruction, which are presented in more detail in section 5.3, as well as describing the various forms of occupancy and tenure. The categories and terminology are consistent with those used in development, in recognition that planning and response will take many years, and are part of wider sustainable development. In addition to the category of illegal occupancy, or squatters, the occupancy types can be grouped into tenant-occupancy and owner-occupancy.

Movement between options

367. Transitional reconstruction is presented as a series of options because many families affected by disasters move between one form of occupancy and another, for example between owning a house and renting an apartment. By offering assistance, such as through the twelve methods presented in Chapter 6, stakeholders may support the decisions of families affected over whether and how they should move.

Rebuilding communal infrastructure

368. Successful responses require rebuilding or repairing the communal service infrastructure for communities, as well as their houses, in both rural and urban areas. The infrastructure required for a community to function is a vital aspect of an integrated approach to reconstruction.

Option 1: **Occupancy with no legal status**
The occupant occupies land or property without the explicit permission of the owner.

Option 2: **House tenant**
The house and land are rented by the occupant formally or informally.

Option 3: **Apartment tenant**
The apartment is rented by the occupant formally or informally.

Option 4: **Land tenant**
The house is owned, but the land is rented.

Option 5: **Apartment owner-occupier**
The occupant owns their apartment, a self-contained housing unit that occupies only part of a building, formally or informally.

Option 6: **House owner-occupier**
The occupier owns their house and land or is in part-ownership, such as when repaying a mortgage or loan. Ownership may be formal or informal.

Understanding the housing of all affected

369. It is essential to form a full understanding of the housing and legal circumstances of every person affected by a disaster, so that assistance may be offered to every person, with priority given to the poorest and most vulnerable (» section 3.1) who often do not have land tenure.

Occupancy and tenure

370. Land and housing tenure may be defined as the terms and conditions under which land and property are held, used and transacted. Illegal tenure refers to occupation of land or buildings without permission of the legal owners.

Rental

371. Rental agreements are made between tenants and private citizens, private companies or public bodies. Rented property is usually occupied by low-income families and, in developing countries, is rarely regulated.

Collective tenure

372. Collective forms of tenure ensure secure tenure on the basis of agreed shared access. The collective component of this tenancy can be a corporate body, a private company, a housing association or a cooperative. Communal tenure is common in communities with a long history and strong cultural identity. Access to land may be governed by custom, and may include the right to occupy.

Informal tenure

373. Informality of tenure refers to those people whose tenure is not recorded by local or national authorities. People with informal tenure, who may be owner-occupiers or tenants of houses or apartments, differ from those with no legal status only in the sense that they have occupied land or buildings with the permission of the owner. Owner-occupiers and tenants with informal tenure may be difficult to identify after a disaster.

Slum dwellers

374. Around one-third of the global urban population live in slums, and that number is likely to double by 2030. Many of those living in slums may in fact pay rent and may have bought their house informally. They have varying degrees of security of tenure; however, they are much less likely to be able to claim restitution from the government and humanitarian organisations, as they have no legal proof of their previous ownership or tenancy status.

Squatters

375. Squatters are people who occupy land or buildings without the explicit permission of the owner. Worldwide, squatters are about one-fifth of all households.

Loss of records

376. Often it is very difficult to establish tenure of those affected, especially when records may have been lost or destroyed, or when tenure is not officially recognised prior to the disaster. Following a disaster, it is vital that humanitarian organisations identify and support populations lacking security of tenure (» section 7.5) or who have no records to prove their tenure, to achieve secure, equitable and sustainable housing solutions. This is primarily achieved through advocating with governments.

Establishing tenure

377. It is essential that efforts are made to establish tenure for all those affected. Significant capacity will be required by government, which may seek support from humanitarian organisations and the commercial sector, especially when involving technical tools such as databases and GIS. Most of the capacity required should be for field assessment (» section 7.3), for the constitution of cadastres, and for the formalisation of informal or insecure tenure.

Case study 5.1

Indian Ocean tsunami

» Case study 1.2.

Supporting all equally

Eighteen months after the disaster, in the provinces of Aceh and Nias in Indonesia 15 per cent of the displaced were still in temporary living centres, and a third of these were renters and squatters, even though far less than one-third of the population were renters or squatters prior to the tsunami. For over a year, renters and squatters were not identified as a separate group requiring protection, nor were data collected as to their needs for land, housing and livelihoods. The Master Plan for reconstruction in Aceh identified land rights as a key element of rehabilitation, but made no reference to supporting the needs of renters and squatters.

In February 2007, over two years after the initial tsunami, the Aceh and Nias Reconstruction Authority developed a policy of free land and housing for renters and squatters.

5.2 General advantages and disadvantages for tenants and owner-occupiers after natural disasters

Advantages and disadvantages

378. The paragraphs below summarise the frequently-found advantages and disadvantages for tenants and owner-occupiers when reconstructing livelihoods and housing following disaster.

Advantages

379. **General advantages for tenants:**

- no damage to financial assets occurs, other than to personal possessions; and
- it is easier for the affected family to relocate if relocation is desired.

Disadvantages

380. **General disadvantages for tenants:**

- there may be no established rights for tenants, especially tenants with informal tenancy agreements;
- tenancy contracts are rarely recorded with authorities;
- tenancy contracts are rarely available if the landlord has also been affected;
- the landlord may not wish to rebuild;
- depending on the country affected, only personal possessions are likely to be insured;
- there are likely to be impacts on home-based enterprises as homes are often not be reconstructed;
- there are very few established methods of assistance for tenants.

Advantages

381. **General advantages for owner-occupiers with formal tenure:**

- the needs of each family are relatively easy to identify and quantify;
- additional records of land tenure and property deeds are often held by authorities;
- there is usually an established legal framework (» section 2.2.10) over rights;
- there are established methods of support;
- land and property are potential assets against financial loans; and
- owners may insure their property and receive insurance payments (» section 7.4).

Disadvantages

382. General disadvantages for all owner-occupiers:

- damage occurs to a significant financial asset;
- in apartments, it is difficult to restore the assets of single owners wishing to move, or reconstruct with those who remain;
- there is a continuation of pre-existing mortgages or debts related to the property or land; and
- there are impacts upon home-based enterprises.

5.3 Supporting each transitional reconstruction option

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This section presents an overview each of the transitional reconstruction options, and then provides a summary, in the context of reconstruction after disaster, of their strengths and weaknesses, and the opportunities and threats that each entails. In comparison with the section above, it gives a detailed and comparable analysis of each of the occupancy types. The obligation of governments, humanitarian organisations and local authorities is to support the reconstruction of each type of occupancy in such a way as to minimise risk and maximise opportunity this may involve assisting people to change their occupancy status.

5.3.1 Occupancy with no legal status

The occupant occupies land or property without the explicit permission of the owner.

Stakeholders in occupancy without legal status

383. Within illegal settlements, or settlements having no agreed or recorded legal status, there exists a range of stakeholders. These may include owner occupiers, tenants, subsistence landlords, absentee landlords, developers, rent agents and protection racketeers (» section 2.2.7).

Hazardous sites and unsafe structures

384. Whether occupiers are without legal status or illegal, they often live on hazardous land in structures that are unsafe (» section 7.4), whether in slums or elsewhere, for example in dense settlements by the side of rivers that may be prone to fires and to flooding.

Advocacy with government and local authorities

385. Successful operations involving occupiers without legal status following disaster require the government and local authorities to recognise rights to housing. Humanitarian and development organisations may support this process with capacity and advocacy. The objectives are to obtain secure tenure, support the reconstruction of safe homes, and recovery of livelihoods, as well as preventing unnecessary displacement.

Strength

386. Strength of occupancy without legal status:

- providing that secure tenure can be established, any transitional reconstruction may be able to occur on site, keeping the affected population near their livelihoods.

Weaknesses

387. Weaknesses of occupancy without legal status:

- securing land rights is often not possible or safe;
- settlements without legal status or illegal settlements are often located on vulnerable sites; and
- settlements without legal status or illegal settlements usually require upgrading through a master plan, which introduces better access roads, public services and risk mitigation measures, such as fire breaks.

Opportunities

388. Occupancy without legal status offers opportunities to:

- work with displaced community and local governments to formalise their status;
- identify and support existing local initiatives and mechanisms supporting the upgrading of settlements, whether initiated by communities, government or development organisations;
- advocate for inhabitants to remain close to their livelihoods through preventing eviction and obtaining secure tenure. All human beings have the right to be protected against arbitrary displacement from their homes or place of habitual residence, including after disasters (UN/OCHA, 1998);
- advocate for the rights of occupants during evacuation and displacement, if it is required for safety reasons, so that the evacuation takes place in accordance with the rights of the displaced (» section 1.5.2). In such cases, displacement should be for no longer than required by the circumstances, and should be carried out in a way that does not violate the right to life of the displaced population, as well as their dignity, liberty and security (UN/OCHA, 1998);
- it is important for governments to confer legal status on those who are not being protected against eviction, which includes all persons notwithstanding their type of tenure, in consultation with the affected population (COHRE, 2005);
- when permanent relocation is necessary, it is important for governments to allocate appropriate housing elsewhere, in more secure areas where livelihoods can be recovered, and for humanitarian and developmental organisations to support this process with capacity and advocacy; and
- government, supported by humanitarian and developmental organisations, should recognise and secure the rights of displaced occupiers on their return, including them in restitution programmes in a similar manner to those possessing formal ownership.

Threats

389. Threats to supporting occupancy without legal status:

- following a disaster, illegal occupiers may be removed forcibly from their homes;
- ultimately the local government needs to maintain effective settlement planning, with robust options for vulnerable populations, otherwise illegal settlements will still continue to develop in other potential hazardous areas in the future; and
- in some cases the only land available will be private land, which may need to be purchased by government, possibly with the support of humanitarian or developmental donors. An alternative is to lease land for a number of years so that it is available for rent at low cost, on which houses can be built and rented at low cost for a number of years, enabling recovery of livelihoods. It is important not to resort to long-term camps or collective centres (» section 4.2) when only private land is available.

5.3.2 House tenant

The house and land are rented by the occupant formally or informally.

Supporting tenants and occupiers

390. Successful operations involving house tenants require the provision of support to both tenant and owner in parallel. If this is not done, it is possible that the owner will not repair the dwelling, and thus the tenant will not be supported.

Informal tenants

391. Many tenants rent their house informally, and their rights may be difficult to establish following a disaster. It is vital that they are supported by government in establishing their rights to return, especially if support is being offered to the owner. Humanitarian and developmental organisations may support government in achieving this.

Integrating assistance

392. Integration of assistance to both tenant and owner requires carrying out advocacy for the rights of the tenant to stay in the dwelling for a reasonable and agreed amount of time following repair. Such an agreement should be formal and recognised by relevant parties. Where the house is insured, which is rare in many developing disaster-prone countries, insurance may provide compensation for the owner (» section 7.4). In this case, the owner may not need to be supported by assisting groups.

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Monitoring and technical advice

393. If support is offered to owners in order to repair or rebuild housing for their tenants, careful monitoring and technical advice will be required to ensure that the work is carried out, and that the work is to building codes, especially concerning risk reduction (» section 7.7), if they exist and are accessible.

Avoiding displacement

394. The displacement of tenants should be prevented as far as possible and safe, and support offered on site.

Strengths

395. Strengths of house tenancy:

- it is relatively easy for the affected family to relocate, if they choose to; and
- if the landlord agrees and the site is safe, transitional shelter may be supported on the existing site, keeping the affected family close to their livelihood.

Weaknesses

396. Weaknesses of house tenancy:

- there are very few established methods of supporting transitional reconstruction for tenants;
- governments and humanitarian organisations have limited experience of supporting tenants; and
- the landlord may not wish to rebuild.

Opportunities

397. House tenancy offers opportunities to:

- advocate on behalf of tenants to ensure that their rights are respected;
- provide periods of rent-free settlement;
- develop mechanisms against forced eviction;
- carry out financial disbursement; and
- assist tenants to become property owners.

Threats

398. Threats to operations involving house tenancy:

- it is often difficult to negotiate satisfactorily both an agreement for lease of the land that the house will be rebuilt on, and the ownership of the house itself. Ideally, the former tenant should become the owner of the rebuilt house. Negotiations may be complicated by the death of the owner and resultant complications over ownership; and
- it is often difficult to assess the needs of both (» section 7.3) tenants and owner(s). The owner(s) livelihood may be tied up with the rent obtained from the building.

5.3.3 Apartment tenant

The apartment is rented by the occupant formally or informally.

Supporting tenants and owners in parallel

399. Successful operations involving apartment tenants require the provision of support to both tenants and owners in parallel, as with house tenants. If assistance is provided to the owner of the building to rebuild the apartment block, the repair or rebuilding activities may be supported as required however a formal agreement must be drawn up if tenants are intended to remain in their apartments after the works have been carried out.

Strengths

400. Strengths of apartment tenancy:

- flooding may have less effect on apartment buildings than on individual houses; and
- if only some apartments are damaged and buildings are otherwise safe, affected families may be able to find transitional settlement in other apartments nearby (» section 4.3).

Weaknesses

401. Weaknesses of apartment tenancy:

- if the entire building needs to be rebuilt, transitional settlement for the affected families will need to be provided off-site, distancing people from their livelihoods;
- unless consensus is reached between all stakeholders, including every tenant, it can be very difficult to identify a support option;
- apartment buildings are often susceptible to more complex damage by earthquakes and fire than stand-alone houses; and
- apartment blocks are difficult and expensive to rebuild, the owner may not want to do so, and government and humanitarian organisations may not have the resources or capacity to do so. In this case, the affected population will be displaced, and will need to be supported in achieving a durable solution to their displacement.

Opportunities

402. Apartment tenancy offers opportunities to:

- support the rebuilding or repair of apartment blocks, which may be undertaken by government with the support of humanitarian or developmental organisations and donors;
- agree programmes for rebuilding or repair that spread responsibilities, capacities and costs, for example in insurance, compensation payments, tax deductions to owners and contractors, the supply of some materials, technical advice, pre-paid or guaranteed rents, and credit extensions. Such measures may be required for a number of years before the building can be returned to commercial arrangements between tenants and owners (» section 6.5 and 7.7);
- arrange periods of rent-free settlement;
- develop mechanisms against forced eviction; and
- carry out financial disbursement.

Threats

403. Threats to operations involving apartment tenancy:

- if an apartment building has been damaged it may be difficult to assess the needs of both occupiers, who may be a mixture of tenants and owners, and the building owner(s), whose livelihood will involve the building (» section 7.3); and
- the owner may not want to rebuild or repair, for example knowing that credit or insurance may become unaffordable.

5.3.4 Land tenant

The house is owned, but the land is rented.

Agreements for land tenants

404. Successful operations involving land tenants require advocacy for their right to rebuild on the land that they previously occupied, and the formalisation of agreements for them to stay on the land for an agreed length of time (» section 7.5). If such agreements can be reached, support in rebuilding or repairing can be offered in a similar way to house owners.

Strength

405. Strength of land tenancy:

- if the relationship with the land owner is formalised there are established support options for house reconstruction or repair.

Weaknesses

406. Weaknesses of land tenancy:

- land use rights are often not formally recorded and, if land ownership cannot be formalised, this option may be difficult to support; and
- land tenants are not common and may not be recognised well within support services offered by government or humanitarian organisations.

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Opportunities

407. Land tenancy offers opportunities to:

- support not only the rebuilding of houses, but also, depending on needs, supporting payment of rent. This support helps in turn landowners recover their livelihoods. In some circumstances, it may be appropriate to negotiate with the landowner for a lease to allow the tenant time for livelihood recovery;
- support security of tenancy and develop mechanisms against forced eviction; and
- arrange periods of rent-free settlement.

Threat

408. Threat to operations involving land tenancy:

- land owners may take advantage of the disruption caused by the disaster to evict land tenants and recover land for other purposes (COHRE, 2005), as there may be considerable demand upon safe land following a disaster.

5.3.5 Apartment owner-occupier

The occupant owns their apartment, a self-contained housing unit that occupies only part of a building, formally or informally.

A mix of occupants

409. The apartment block may contain dozens of apartments or be a building with only two or three. The building may contain a mix of owner-occupiers and tenants.

Supporting infrastructure

410. Successful operations must support infrastructure to all those living in the building, including both owners and tenants and to the owner of the building itself, where relevant.

Strengths

411. Strengths of apartment owner-occupancy:

- hazards sometimes result in damage that still allows safe habitation of some apartments, or parts of apartments (» section 7.3);
- families in undamaged apartments are sometimes able to offer transitional settlement to displaced families, keeping the affected population near their livelihoods; and
- providing that secure tenure can be established for those with insecurity of tenure, the affected population may be able to occur on site, keeping them near their livelihoods.

Weaknesses

412. Weaknesses of apartment owner-occupancy:

- it is more difficult than in single dwellings to identify methods of support, as consensus must be reached amongst all occupiers (» section 2.2.7), whose situations, needs, and resources vary, and who may be a mixture of owners and tenants, and including the landlords of the tenants, whose livelihoods will involve the building;
- the repair of individual apartments may be difficult without impinging on the layouts or space of some apartment units; and
- significant investment, skilled labour and contractors are required in reconstruction.

Opportunities

413. The apartment owner-occupier option offers opportunities to:

- work with both the affected community and local governments to identify pre-disaster land ownership and housing rights;
- involve the affected population in strategic planning (» section 2.2) and construction;
- advocate for the rights of the displaced during evacuation if it is required for safety reasons, so that it takes place in accordance with the rights of the displaced; and
- provide affected communities with information and advice (» section 6.5.10) on how to claim restitution, in cooperation with government.

Threats

414. Threats to operations involving apartment owner-occupancy:

- structural damage might be difficult to see and, as a result, owners unwilling to leave;
- reconstruction of the entire apartment block may require the off-site transitional settlement of all apartment occupiers, potentially moving them away from their livelihoods; and
- consensus must be reached amongst all occupiers.

5.3.6 House owner-occupier

The occupier owns their house and land or is in part-ownership, such as when repaying a mortgage or loan. Ownership may be formal or informal.

Slum dwellers

415. Successful operations involving house owner-occupiers following disaster require an integrated approach from government and humanitarian and development agencies, along with a flexible use of assistance methods (» section 6.5).

Strengths

416. Strengths of house owner-occupancy:

- providing that secure tenure can be established, there are recognised assistance methods for support;
- providing that secure tenure can be established, any transitional shelter may be able to occur on site, keeping the affected population near their livelihoods;
- some hazards may result in damage that still allows safe habitation of some houses, or parts of houses;
- there is an established legal framework of support in the case of formal owner-occupiers;
- there are established methods of funding and support including phased materials drops and financial disbursement;
- there is usually a high level of beneficiary involvement and control;
- the needs of each family are relatively easy to identify and quantify; and
- it is relatively easy to quantify the appropriate level of restitution in the case of formal owner-occupiers.

Weaknesses

417. Weaknesses of house owner-occupancy:

- the house will form a significant financial asset which may not be reimbursed in full by reconstruction;
- loss is likely to include personal items, such as furniture, that may not be replaced following the disaster;
- lack of mobility from site for affected population has impacts on livelihoods;
- continuation of pre-existing mortgages or debts related to the property or land may have severe financial repercussions; and
- there are likely to be impacts on home-based enterprises, such as farms or shops.

Opportunities

418. House owner-occupancy offers opportunities to:

- involve the affected population in strategic planning and construction;
- offer training to the affected population;
- work with the affected community and local governments to identify pre-disaster land ownership and housing rights;
- support affected communities with information and advice on how to claim restitution;
- support house owners to manage risks better and maintain and protect their houses; and
- support the establishment or salvaging of government cadastral or other appropriate systems for the registration of housing, land and property rights, depending on the individual case.

Threats (informal ownership)

419. Threats to operations involving informal house owner-occupancy:

- in situations where the government or local authorities don't recognise the legal status of informal owner-occupiers, they may be forcibly removed from their homes following the disaster; and
- ultimately the local government needs to maintain effective settlement planning, with robust options for vulnerable populations; otherwise informal settlements will still continue to develop in other potential hazardous areas (» section 7.4) in the future.

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Threats (formal ownership)

420. Threats to operations involving formal house owner-occupancy:

- if the house is located in a hazardous area, it may become necessary for the inhabitants to be displaced (» Principle 4). In this case, complications may arise from their unwillingness to leave, and from the need for them to be found alternatives sites. Usually they will receive compensation from the government and/or support from the international community. Negotiations may be required between humanitarian aid agencies and governments on the allocation of new land to inhabitants. It is unusual for humanitarian aid agencies to buy land, and they may instead fund governments to buy land; and

- loss of cadastres may have occurred, which complicates establishment of ownership rights. In such cases, humanitarian aid agencies can support the creation of documentation.

Implementing a response 6

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This chapter aims to provide guidance on implementing a response for each affected household. The first section introduces the approach of distinguishing and categorising the various situations, options, tools and solutions available to do so. In the following section, a timeline of events is presented, moving chronologically through the emergency and recovery phases of a response, detailing the activities to be supported in each phase. Response is described for both displaced and non-displaced populations, concluding with an overview of rebuilding, repair, retrofit and relocation alternatives. The chapter concludes with a list of the common methods that may be combined to offer programmes of assistance to the affected populations.

Implementing a response **Checklist 6.1**

1. **Identify and locate** affected populations.
2. **Assess** particular needs and circumstances.
3. **Identify** transitional shelter and reconstruction options.
4. **Determine** and create a transitional shelter response strategy and implementation plan.
5. **Determine** and create a recovery strategy and implementation plan.
6. **Incorporate** and utilise assistance methods for transitional settlement, transitional reconstruction and durable solutions.

6.1 Implementing a response for each affected household

Approach

421. This section summarises the approach for implementing a response to support each affected household.

Assistance package

422. Categories of options for displaced and non-displaced populations (» sections 4.1 and 5.1) are combined with categories of assistance methods (» section 6.5) in order to describe a clear package of support for each affected household or community. The options and assistance methods are combined in a sequenced order to determine a timeline for the response.

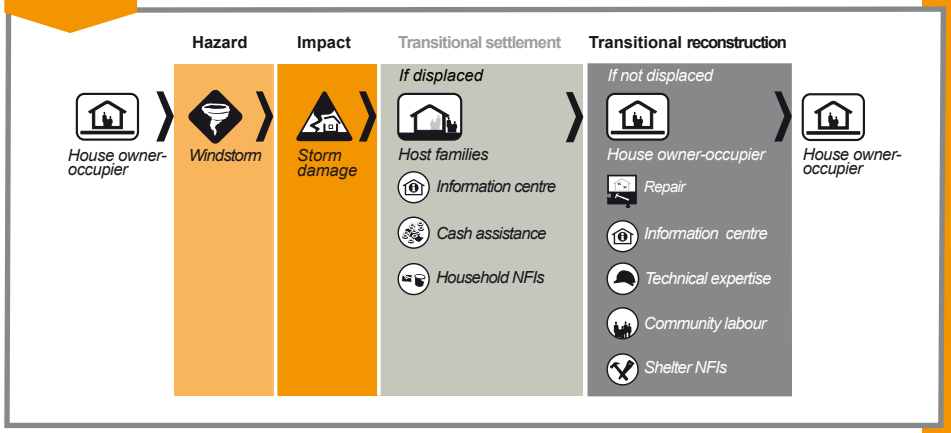
Combining options and methods

423. Categorising the options will help determine the particular needs of affected households and in the design of an appropriate support package. While there exists a limited number of settlement and reconstruction options and assistance methods, various combinations may be possible to meet the needs of affected populations.

An example of disaster and response

424. For example, a storm damages the home of a family and the records of house and land ownership are lost. In response to the damage, the family becomes temporarily displaced and finds shelter with a host family. Both host and affected families may need assistance with supplies or cash during displacement. With the support of humanitarian organisations, the affected family may take this opportunity to seek replacement records of home and land ownership, and to receive materials and tools for repair work. They may undertake the repair work themselves or with the help of their community and contracted labour.

Figure 6.1 Example of response following disaster



Detailed description

425. A more detailed description of settlement options for displaced populations is found in Chapter 4. Transitional reconstruction options for non-displaced populations are discussed in Chapter 5. Reconstruction and assistance methods are discussed in the last section of this chapter.

6.2 From emergency shelter to reconstruction

Timeline

426. This section presents a timeline for the assistance to the affected population, from which government and humanitarian organisations may understand how and when they should offer what type of support.

Responses of affected populations in the emergency phase

Priorities in the emergency phase

427. The emergency phase is the initial period of a disaster during which the immediate priority of the affected population is to ensure survival through obtaining shelter, food and clean water. This phase also includes transit, where some of the affected population may last a day or many weeks, depending upon:

- the type and severity of the disaster;
- how each household was affected;
- the resources available to them;
- the displacement and occupancy options available; and
- the speed and level of assistance offered.

Shock and concern with survival and possessions

428. Affected populations are likely to be in a state of shock, and concerned with their own and their families' survival and safety. They will be concerned to protect or recover their home and possessions, which also may be essential to their livelihoods, as well as key documentation and valued personal effects.

The decision to evacuate

429. People at risk from a disaster often resist evacuation and may ignore the nature or extent of the risks that they face in staying. Consequently, even when warnings are given in good time, not all of the population at risk will evacuate prior to the onset of the disaster. People will displace as near to their homes as they consider safe, as they wish to stay as close as possible to their homes and possessions.

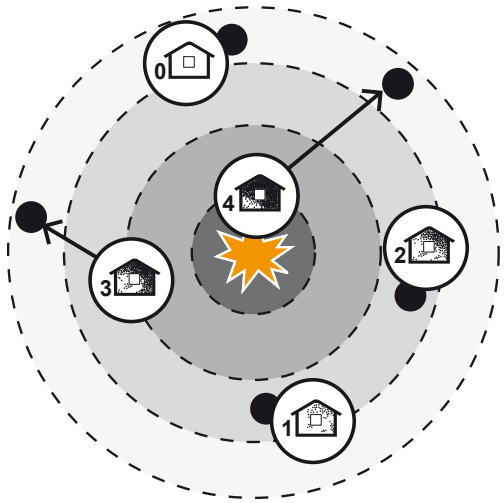
Evacuation from work and institutions

430. When a disaster impacts in daytime, the majority of people are likely to be at work or school, when families will be separated. Initial displacement may be mainly a result of affected individuals being unable to return home. If there is wider evacuation, the displaced will move rapidly though transitional settlement options seeking to reunite with their families. For resident institutions, such as hospitals and prisons, contingency planning and preparedness may not exist, and leadership and decision-making powers may not be sufficient to achieve safe and timely evacuation (» section 4.1).

Varied impacts and reactions

431. Populations affected will react very differently depending on the speed of onset of the disaster, the danger they perceive themselves to be in, and the damage sustained by their homes (» Figure 6.2). If the onset of a disaster is over hours, such as a flood, some people may evacuate only when it is too late to escape from the affected area. Following an earthquake, homes near the epicentre are likely to have been destroyed, while those farther away merely damaged.

Figure 6.2 **Example of zones of housing damage and movements between zones following an earthquake**



Family coordination

432. Depending on the speed of onset, before or after the disaster, families may coordinate with wider family members and form a plan, such as deciding on whether or not to evacuate. Some families may divide; some to look after the evacuation of the elderly and children, and others to take care of livestock and property.

Maintain community

433. People in communities that are forced to displace will often try to stay together and settle in close proximity. They will discuss and coordinate their response among themselves, with different parts of the community carrying out different tasks. Members of the community are also likely to arrive and leave throughout displacement, maintaining links with the affected area and other displaced people they know (» section 4.1).

Influence on displacement choice

434. The affected population may be subject to restrictions on their movement for a variety of reasons. Any displacement may be influenced by external groups and security threats, as well as by the hazard itself. As a result they may be displaced unwillingly into one or other transitional settlement option. However, they may also be positively influenced in their choices by information upon risk or the assistance offered by representatives of government or humanitarian organisations.

Responses of affected populations in the recovery phase

Priorities in the recovery phase

435. The recovery phase follows on from the emergency phase, once survival needs have been met. During the period after a disaster the priorities of the affected population turn to achieving a durable solution to any displacement and beginning transitional reconstruction and sustainable livelihoods. For some households, this may be:

- the day after the disaster, when they begin to salvage materials and possessions and begin repairs and rebuilding;
- after a few days of displacement in transit, once the risk has lessened and it is safe to return to their homes; or
- while they are in a displacement option, where they may live displaced for weeks or a number of years (» Chapter 4).

Movement between transitional settlement and reconstruction options

436. Members of the affected population are likely to consider or take up different transitional settlement or reconstruction options, and move from one option to another, depending on their livelihoods and community coping strategies. Other factors in moving between options include the degree of assistance made available, as well as the hardship resulting from the length of time spent in the original option selected (» section 4.1). For example:

- some members of a family who used to be tenants in an apartment may move to a camp to receive assistance, while others move to a neighbouring city to look for work;
- members of a family who were separated may trace each other and move together to self-settle in a damaged building in a town;
- some house owners may return to their damaged homes from living with host families; or
- some apartment owners living in the ruins of their apartment building may seek land upon which to build a house.

Those displaced begin to upgrade their shelter

437. For those displaced, once survival is assured priorities turn to improving their living conditions and recovering livelihoods, before seeking transitional settlement options that will end their displacement. The displaced quickly seek to upgrade their shelter and they do not wait for formal assistance, which may sometimes arrive many weeks later. Some displaced families may consider migrating permanently to another area that they consider to be at less risk.

Those not displaced begin to reconstruct

438. For those not displaced, repair and rebuilding begins very quickly after a disaster and does not wait until formal assistance begins, which may sometimes be many months later. Survival having been assured, those able to do so begin reconstruction activities immediately by clearing the site, recovering materials and adapting shelters for seasonal change. Displaced families, or individual members of such families, may return home and begin reconstruction activities (» section 6.4.2).

Priorities beyond occupancy

439. Survivors will also be concerned with matters such as education and health care, and community action is likely to begin before external assistance from government or humanitarian organisations.

Lack of money

440. There is often a lack of cash, as livelihoods are disrupted, and the prices of basic items may be inflated due to poor supply. People may be obliged to sell their possessions in order to raise funds to buy building materials and tools.

6.3 Implementing the six transitional settlement options

Main events

441. This section presents the main events likely to occur in implementing assistance for the six transitional settlement options of displaced populations, structured into the eleven activities for planning and implementing a response presented in Chapter 2.

Activity 1. Strategic planning objectives for displaced populations

442. The primary strategic planning objective for the emergency phase is to save lives, however, objectives such as ensuring comprehensive and equitable support to all those displaced should also be considered. In the recovery phase, mention must be made of the objective of achieving transitional reconstruction options for everyone displaced, along with supporting the displaced as they move between a choice of transitional settlement options (» Chapter 4).

Activity 2. Coordination of support to displaced populations

443. The coordination of support should inform and unite the capacities of the assisting stakeholders with the resources of the displaced in order to maintain assistance as each person moves between a series of locations, from evacuation and transit throughout the period of the displacement and their return.

Activity 3. Critical path analysis for displaced populations

444. The critical paths for displaced populations are likely to include:

- continued risk, such as from an aftershock or further flooding;
- distance to travel and existence or delays in transport;
- damage to road infrastructure or difficult terrain; and
- lack of capacity in safe and appropriate transitional settlement options.

Activity 4. Transitional settlement options of displaced populations

445. Agreement must be reached with the affected population, the host population and government over which transitional settlement options are safe and appropriate to support. Agreements must be reviewed throughout implementation, as needs and priorities will change. The upgrading of communal services and infrastructure, such as schools and roads, also requires implementation. Specialist technical input will be required, for example in site planning and appropriate shelter support to dispersed settlement (» section 4.3).

Activity 5. Resources for support to displaced populations

446. In the emergency phase, implementation supporting displaced populations may rely more upon kits of imported stockpiled shelter NFIs, as local materials are often more suited to repair and reconstruction. however, care must be taken that available stockpiled materials do not drive the response.

Activity 6. Schedule for implementation for support to displaced populations

447. The schedule for implementation should ensure that the capacity available can respond in time to trends identified in population movement. This requires the emergency provision and phased upgrading of shelter and infrastructure, as well as maintenance, final repairs and handover.

Activity 7. Participation with displaced populations

448. Both the displaced and local host communities should be involved in planning and decision making from the outset (📖 COHRE, 2005), supported with public outreach information campaigns to connect dispersed populations. It should be possible to employ labour from both the displaced and local communities, even through contractors, if they are involved in works (» section 6.5).

Activity 8. Assessment, monitoring and evaluation for support to displaced populations

449. Immediate assessment with ongoing monitoring are required of:

- risks from ongoing or new or localised hazards (» Chapter 3);
- the size and location of the entire displaced population;
- their sector needs along with those of their hosts, including for natural resource management and environmental recovery (» section 7.6.4);
- the capacity of government to support the displaced population and their return to durable occupancy;
- the capacity of the private sector to provide household and shelter NFIs, construction materials, construction labour and professions such as surveyors and engineers; and
- the contents and availability of household and shelter NFIs in stockpiles (» section 6.5.1).

Activity 9. Scenarios for displaced populations

450. Scenarios and indicators should be agreed specific to the response. However, for each group within the displaced population consideration may need to be given to:

- further risk from hazards, such as aftershocks or fires;
- communal violence or insecurity;
- protracted displacement, such as resulting from economic breakdown or political instability;
- protracted displacement for some groups, such as resulting from lack of support to tenants or occupiers without tenure, or lack of resolution of land rights (» section 5.1);
- gradual return, such as resulting from gradual or localised increases in safety; and
- rapid return, such as resulting from rapid increases in safety or concern over property or possessions.

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Activity 10. Legal framework for support to displaced populations

451. Consideration should be given to national, local authority and international law, codes, standards and principles relating to displaced populations (» section 1.5), for example over their rights if they:

- move across borders, or between provinces or states;
- gather in large groups;
- settle on land or occupy buildings that they do not own;
- build shelter, or undertake works in host families or collective centres;
- access public facilities and services, such as health care, especially in areas some distance from their homes;
- access utilities, such as electrical power and mains water supplies; and
- use natural resources, such as timber and water, from land that they do not own.

Activity 11. Handover for support to displaced populations

452. The government and humanitarian stakeholders responding to displaced populations may be different from those responding to the needs of non-displaced populations in durable occupation options, requiring the handover of case-load documentation for transitional settlement and reconstruction assistance. Case-load handovers may also be required between phases of response, and when there is movement between displacement options.

6.4 Implementing the six transitional reconstruction options

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6.4.1 Eleven activities for implementing transitional reconstruction

Main events

453. This section presents the main events likely to occur in implementing assistance for the six transitional reconstruction options, structured into the 11 activities for planning and implementing a response presented in Chapter 2.

Activity 1. Strategic planning objectives for non-displaced populations

454. The primary strategic planning objective for the emergency phase is to save lives; however, mention should also be made of ensuring comprehensive and equitable support to all, regardless of whether they own land or property. In the recovery phase, consideration should be given to the objective of response that integrates support both to communal services, such as water and sanitation, and to infrastructure, such as hospitals and schools (» section 1.2).

Activity 2. Coordination of support to non-displaced populations

455. The coordination of assessment, information and assistance should bridge from search and rescue response until handover to government line ministries, such as the housing ministry.

Activity 3. Critical path analysis for non-displaced populations

456. Beginning in the emergency phase, the critical paths to implementing assistance to transitional reconstruction options are likely to include:

- continued risk, such as from an aftershock or further flooding;
- difficulties in clearing rubble and debris, especially in urban areas, although the use of heavy plant such as bulldozers should be avoided as this often results in the removal of materials invaluable to reconstruction by the affected population;
- the availability of safe land and the time it takes to obtain it;
- establishing complete and credible damage assessment;
- achieving access to affected homes, if they are dispersed over a wide area;
- for occupants without legal status, proving land tenure or gaining the right to use land or property, and therefore to receive material assistance (» section 5.3.1);
- for those in apartments and land tenants, resolving how assistance will be offered (» section 5.3.3);
- achieving sufficient capacity in government;
- achieving sufficient specialist technical capacity in humanitarian organisations; and
- gaps in the availability of particular materials, such as timber, steel or cement.

Activity 4. Transitional reconstruction options of non-displaced populations

457. Agreement must be reached with the affected population and government over how each transitional reconstruction option will be supported, including how to incorporate risk reduction. The repair, rebuilding, retrofitting or relocation of communal services and infrastructure must also be implemented. Technical contributions will be required from specialists in transitional reconstruction response that must understand the local construction traditions, materials and economy, including in:

- risk and damage assessment;
- urban planning;
- hazard-resistant engineering;
- managing reconstruction programmes and projects; and
- consultation, coordination and information management at strategic, programme and project levels.

Activity 5. Resources for support to non-displaced populations

458. Stockpiled or locally-procured emergency shelter assistance is required to save lives, often through the distribution of household and shelter NFIs such as blankets, cooking sets, plastic sheeting and, where necessary, tents to set up on site. The key to resourcing throughout the response is integrating funding for transitional reconstruction (» sections 2.2.5 and 7.2). Sources include:

- the affected government;
- humanitarian bilateral and multilateral donors;
- developmental bilateral and multilateral donors;
- humanitarian and developmental organisations, such as from core funding or public appeals;
- remunerations of related communities or families working in other areas, or outside the country; and
- international financial institutions (IFIs) such as the World Bank, through all mechanisms, including grants and loans.

Activity 6. Schedule for implementation for support to non-displaced populations

459. The schedule for implementation should ensure that the financial, material and human resource capacities synchronise to support the sequence of reconstruction works prioritised in planning. Such schedules are technical and require specialists (» section 6.5.12).

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Activity 7. Participation with non-displaced populations

460. Government may make outreach and consultation processes a condition for project approval. Processes should include mechanisms for the resolution of land rights and tenure, and be maintained throughout the reconstruction period, which usually takes a number of years. Numerous examples exist of completed reconstruction projects that were not occupied by those they were built for, as a result of poor participation in project design (» section 2.2.7).

Activity 8. Assessment, monitoring and evaluation for support to non-displaced populations

461. Immediate assessment, with ongoing monitoring, is required of:

- risks from ongoing or new or localised hazards;
- the size and location of the non-displaced population, whether or not they have tenure;
- the contents and availability of household and shelter NFIs in stockpiles;
- the capacity of government to support the displaced population and their return to durable occupancy;
- the capacity of the private sector to provide household and shelter NFIs, construction materials, construction labour and professionals such as surveyors and engineers;
- local construction techniques and materials;
- local livelihoods and socio-economic recovery; and
- local environmental resources and impacts.

Activity 9. Scenarios for non-displaced populations

462. Scenarios and indicators should be agreed specific to the response; however, very different scenarios are likely for non-displaced populations in urban and rural areas. Likely scenarios in the recovery phase include:

- that all or part of the population is suddenly displaced, perhaps as a result of the recurrence or worsening of the threat posed by a natural hazard;
- that there is further damage and further hazards created by the damage, but the population remains in place;
- that the risk is lowered sufficiently for reconstruction to begin and, if there was displacement, there is return;
- there is insufficient capacity within government and the humanitarian community to determine the land and tenure rights of those affected, and interim alternatives must be agreed, such as transitional shelter; and
- there are insufficient funds to support the complete reconstruction of the damage, and priorities must be agreed.

Activity 10. Legal framework for support to non-displaced populations

463. Consideration should be given to national, local authority and international law, codes, standards and principles relating to planning, construction and land rights and tenure, for example (» section 1.5):

- the procedures to determine land and tenure rights;
- contractual obligations when reconstructing communal infrastructure, especially state-owned infrastructure such as schools;
- planning, zoning and building codes, including inspection and enforcement capacities, especially relating to hazard resistance;
- access to utilities, such as electrical power and mains water supplies;
- use of public facilities and services, such as health care; and
- the national and international legal frameworks to support response to future similar events, as contributions to reducing risk.

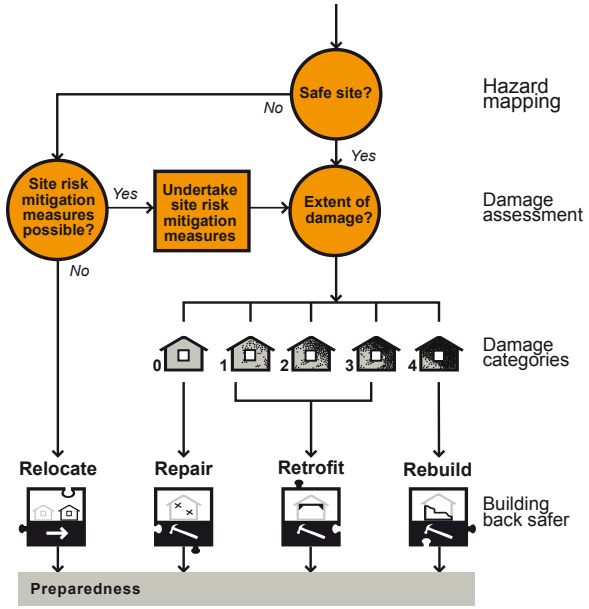
Activity 11. Handover for support to non-displaced populations

464. Case-load handovers may be required between different phases of response undertaken by humanitarian and developmental organisations and their donors. For all communal infrastructure, such as hospitals and schools, a period of handover to the managing authorities should be allowed for in the reconstruction project, which must be included in all relevant contracts and agreements. For larger infrastructure, this may be integrated into phased reconstruction over many years, or a maintenance contract.

6.4.2 Repair, rebuild, retrofit or relocate

465. When homes have been damaged or destroyed or are at risk from future hazards, the four alternatives for communities to recover with reduced risk are to repair, rebuild, retrofit or relocate (» Figure 6.3). The aim of these four alternatives is to adapt local building traditions only enough to improve risk management sustainably. This section presents assistance methods to support repair, rebuilding, retrofitting and relocation.

Figure 6.3 Building back safer



Repair

Possibility of repair

466. Depending on the location and severity of the disaster, and the underlying vulnerability of the built environment, buildings and infrastructure facilities may sustain only minor to moderate damage which may be possible to repair.

Need for technical surveys

467. Critical to selecting appropriate assistance methods (» section 6.5) is providing the affected communities with accurate and timely professional technical surveys of key communal infrastructure and housing.

Need for structural assessment

468. It is fundamental that early damage assessments, often carried out by non-specialists, are followed up with professional structural assessment, to ascertain what is repairable and what needs to be demolished. The affected population may underestimate their risk and start repairs on structures that are not safe.

Repair techniques

469. Repair techniques to reduce vulnerability include introducing appropriate elements to structures, such as ring beams and cross bracing.

Rebuild

Assessment of need for demolition

470. Structures that cannot be repaired need to be demolished and rebuilt. The assessment of the need for demolition should include a plan for recovering from the debris reusable construction materials.

Heavy machinery

471. Heavy machinery, such as bulldozers, should be used initially to clear emergency access only, and not for the indiscriminate removal of rubble and debris.

Assisting affected population

472. The affected population, which generally recovers materials, should be assisted both with tools and technical expertise. Recovered materials should only be used for certain rebuilding activities, for example steel reinforcement bars that have deformed should not be used again for reinforcement.

Identifying reasons for failure

473. Assessment must identify the reasons for the failure of those buildings that were destroyed or severely damaged: identify reasons for failure and incorporate solutions into the reconstruction. For example, a building can be made more resistant to wind by designing it to resist the force as an entire structure, not as unconnected components. Specialist technical expertise with an understanding of local construction and hazards must be engaged in order to determine the most appropriate solution in each case (» section 7.7).

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Retrofit

Protecting against future hazards

474. Unprotected buildings in risk areas need to be retrofitted against future hazards by having safety features installed. Buildings that have been damaged by the disaster may also need to be retrofitted, in addition to being repaired. Successful retrofitting programmes will require outreach to promote public awareness, clear technical guidance and incentives.

Retrofit techniques

475. Appropriate retrofit techniques are often similar to those used in repairing damaged buildings, such as adding cross bracing in areas exposed to high winds. In earthquake-prone areas, the epicentre is likely to change with each event, so retrofitting must be undertaken across the entire area at risk, rather than solely to areas close to the previous event (» section 7.7).

Relocate

Necessary relocation

476. Although most populations live in risk from hazards, some areas will be too hazardous and future settlement should be restricted. Relocation or resettlement to areas of reduced risk may be necessary (» section 7.6).

Avoiding relocation when possible

477. The relocation of entire communities to new settlements in areas a long way from their original hazardous areas should be avoided, wherever possible, because:

- populations will be some distance from their original livelihoods and, if their new location may not support alternatives, people will tend to migrate back to their original hazardous areas;
- communal services, such as hospitals and schools, and common infrastructure, such as roads and utilities, are likely to be inadequate or missing;
- in a recovering economy, the high cost of building or extending existing communal services and infrastructure to new settlements either diverts resources from other essential measures, or is not undertaken adequately; and
- when government capacity is overstretched, building and serving new settlements requires additional local government capacity at municipal level, which either diverts capacity from other essential activities, or is not undertaken adequately.

Need for hazard maps

478. Hazard maps will be required to avoid a situation in which people relocate to areas exposed to different hazards with which they are unfamiliar.

6.5 Common assistance methods

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The 12 assistance methods

479. The following 12 assistance methods are some of the common ways in which support is offered to both displaced and non-displaced households affected by natural disasters.

Combining assistance methods

480. These assistance methods are not alternatives, but should be combined in order to create assistance programmes supporting each transitional settlement or reconstruction option (» sections 4.1 and 5.1). For example, a household may:

- hear of the alternatives at a local information centre (method 10);
- receive NFIs, such as blankets and plastic sheeting, during the emergency phase (methods 1 and 2); and
- later, during recovery, receive phased cash disbursements supported by capacity-building training and on-site technical information (methods 7, 11 and 12).

6.5.1 Household non-food items

481. Household NFIs, such as cooking sets and blankets, are usually distributed in both the emergency and recovery phases to both displaced and non-displaced families affected by disasters. A series of standardised packages should be agreed, the contents of which are either standardised or determined by assessment and continual monitoring of factors such as:

- the survival and ongoing needs of different groups within the affected population;
- climatic conditions, including temperature and altitude;
- the resources and vulnerability of the affected populations; and
- the availability and price of the items in markets accessible to the affected populations.

Involving logisticians

482. Government and humanitarian procurement officers and logisticians should be involved from the outset in programme design, as well as in project implementation.

Factors in successful NFI distribution

483. Several factors are central to the success of planning and implementing household and shelter NFI distribution (» section 2.2.5), including:

- procurement capacities;
- secure all-weather access to distribution points, from the areas where natural materials are harvested or from the railways, ports and airports where imported materials arrive;
- logistics capacities in government, humanitarian organisations, and the private sector, such as for port handling;
- the coordination of distribution activities;
- an understanding of how climatic conditions and construction methods impact upon NFI needs and usage;
- the acceptability of the NFIs to the affected populations; and
- information on the use of items unfamiliar to affected populations.

6.5.2 Shelter non-food items

484. Shelter NFIs, such as construction timber and tools, are usually distributed in standardised packages, the contents of which are determined by assessment and continual monitoring of the same factors as for household NFIs, as well as additional factors such as:

- appropriate hazard-resistant construction techniques (» section 7.7);
- the types of rebuilding and repair works that will be undertaken and the construction techniques that may be employed; and
- construction traditions and skills.

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Phasing distribution

485. The distribution of both materials and tools is often phased, in order both to ensure that the materials are used for the activity agreed, and to inspect and inform progress. This continuous monitoring process offers an important opportunity to discuss key concerns, especially with more isolated beneficiaries in circumstances where access is difficult. Such discussions may include the impact of vulnerability or shortages of skills on their ability to make use of the support offered.

NFI distribution

486. Shelter NFI distribution projects require a larger procurement and logistics capacity than other sectors of humanitarian response, per family. Stockpiled emergency family shelter such as tents may need to be airlifted which, when combined with distribution, may cost more than the shelters themselves, or more than local solutions (UN/OCHA, 2004). Thatching materials for one house, for example, are much more voluminous and heavy than materials required to support water and sanitation. For this reason, the logistics capacity of the organisations involved may become the key opportunity or constraint in the implementation of response.

6.5.3 Transitional shelter

487. Transitional shelter provides a habitable covered living space and a secure, healthy living environment, with privacy and dignity, to those within it, during the period between a conflict or natural disaster and the achievement of a durable shelter solution (Corsellis and Vitale, 2005).

Strengths of transitional shelter programmes

488. Potential advantages in using transitional shelter as an assistance method include:

- maximising operational response through involving humanitarian organisations without significant capacity in transitional settlement or reconstruction, if they are able to engage sufficient consultant technical specialists and inspectors, as they build their capacity necessary for full reconstruction;
- costing a similar amount, on site, to tented accommodation over the same reconstruction period;
- most of the financial resources for assistance entering and circulating in the local economy, and specifically to construction materials production and supply, rather than to the manufacturing country if shelter or materials are imported;

- introducing and incorporating hazard-resistant construction principles and techniques, supported by technical supervision and inspection, that may inform reconstruction;
- developing with the affected population codes and standards that support significant differences in individual transitional shelters, depending upon factors such as family size, location, culture and the availability of materials; and
- supporting sustainable improvements in hazard-resistant construction methods, skills and capacities, and therefore a sustainable reduction in risk.

Characteristics shared with semi-permanent shelter

489. Transitional shelter shares many characteristics with semi-permanent shelter, including:

- using a design and materials of sufficient durability to last until the completion of reconstruction, which may take a number of months or even years;
- the opportunity to either upgrade the shelter, as part of permanent reconstruction, or re-use the majority of materials in the shelter for permanent reconstruction;
- offering assistance on the site where the affected household has land rights or tenure, supporting participation and the priorities of the affected household to stay near their home (» section 6.2);
- using rapid construction methods, simple tools and unskilled labour;
- using local materials and construction techniques that may vary but that may, through the use of agreed codes and standards, offer consistent standards of shelter and safety;
- integrating the phased development of water, sanitation and hook-up to other available utilities, such as water supply and storage, latrines and sewerage, and mains power;
- integrating the phased development of site works, such as surface water drainage and erosion control measures; and
- the materials for a shelter may be prepared and distributed as kits, which may be convenient for logistics chains, but also for affected families who need to transport them.

Designed to be relocated

490. One difference with semi-permanent shelter is that transitional shelter is designed so that it may be disassembled and relocated. The potential advantages of this approach include opportunities to:

- delay the resolution of the formal land rights or tenure of the household and the site of the transitional shelter until sufficient capacity in government is available to consider the case (» section 7.5);
- offer a consistent and therefore equitable assistance method for both displaced and non-displaced households in some options of transitional settlement and transitional reconstruction, including all three dispersed options for self-settled displacement (» section 4.3); and
- relocate the transitional shelter from a transitional settlement site to a transitional reconstruction site, as a continuous method of assistance, or if government judges the occupancy of a particular household of a particular site to be either unsafe or unlawful.

Weaknesses of transitional shelter programmes

491. Risks involved in using transitional shelter as an assistance method include:

- rights to land use or tenure never being resolved, possibly with government using assistance through transitional shelter as justification, and affected families living indefinitely as occupants of land with no legal status;
- no support being offered beyond transitional shelter, either because other methods of assistance were prioritised for resources, or because of lack of resources;
- poor or unsafe siting and construction resulting from implementation by humanitarian agencies with insufficient technical capacity or experience; and
- demand for key materials being greater than supply, either pushing up prices, or resulting in sub-standard shelter.

6.5.4 Community labour

492. Community self-help projects are possible when labour is available, the housing or transitional shelter design is relatively simple, communities have a tradition of self-building and there are no strict time pressures. Reconstruction work can be organised on a family self-help basis, or as a joint community reconstruction programme. Cooperative reconstruction is the mobilisation of a community to undertake reconstruction together. Materials are provided for the community as a whole, rather than for individual families (Barakat, 2003).

Community involvement

493. Properly supported, community labour can undertake all or part of community service and infrastructure projects, such as schools and unpaved roads, as well as housing.

Assessing labour availability

494. Before any project design is carried out, the availability of skilled and unskilled labour in the local and displaced populations should be assessed, as should the availability of building or engineering contractors and professionals from the private sector, who are usually registered with local authorities.

A mixture of labour options

495. In implementing response, it is usually appropriate to support a mixture of community labour, or self-help labour, and contracted labour. The correct balance should be identified on the basis of assessment of the most appropriate options for labour and its availability.

Involving displaced and local communities

496. Both the displaced and local communities should be involved in planning from the outset. Discussion with community leaders, as well as discussion with the communities themselves, can often identify individuals who have the necessary skills to manage or lead projects. Management skills and leadership skills are essential to the success of projects, especially when security is poor or the works are complex (» section 2.2.7).

Agreeing objectives

497. The objective of each activity within a self-help project should be agreed publicly or officially by the beneficiary household. This may involve a contract between the humanitarian organisation, the head of household and the local authorities. Any remuneration and NFIs, in the form of shelter materials, should be disbursed in phases which reinforce the achievement and monitoring of the agreed project activities.

Agreeing a schedule of works

498. A phased schedule of works should be agreed and recorded in the documentation. The schedule should include sufficient flexibility to allow labour within the beneficiary household to undertake other activities, and for beneficiary households to involve their wider social group in undertaking works (» section 2.2.6).

Supporting community labour

499. Community labour will require support, such as through remuneration or incentives, to ensure that each household affected receives the amount and type of labour that it requires. Special consideration is required for vulnerable households.

Engaging community labour

500. Coordinating structures and local authorities may have their own procedures and standards for engaging community labour, especially concerning pay scales. Most humanitarian and developmental organisations also have their own policies and guidelines, for example concerning the importance of offering equal employment opportunities to men and women. In most societies, it is usual for both women and men to undertake roles in the construction and maintenance of family shelter. However, traditional roles may be challenged by circumstances during displacement; different construction materials and methods; orthe loss of family members. Consider providing or supporting accessible and appropriate crèche facilities if the role of women envisaged in the construction activity compromises child care, and if families and communities cannot offer the necessary assistance unaided.

Assessing tool and equipment requirements

501. Assessments should include requirements for tools and equipment and monitoring to ensure that they are maintained in good working order. Care should be taken that transport is available to move them to the sites, and that community labour is not committed to other works or other contractors.

Heath and safety measures

502. Health and safety measures should be in place to safeguard the wellbeing of the workers, and to respect their rights. They are important for other reasons too: organisations need to maintain a good reputation, and local employment laws assign responsibility and liability for health and safety to the employer.

6.5.5 Contracted labour

503. Contracted labour is often used for construction projects after the emergency phase such as:

- large or complex engineered projects, such as apartment blocks;
- larger community infrastructure projects, such as hospitals or bridges;
- implementing specific hazard-resistant measures or constructing elements within projects that require specialist skills, such as roofing, or equipment, such as bulldozers;
- assisting vulnerable families in communities; and
- providing additional capacity, especially where damage or mortality levels are high, and when communities have no tradition of self-building.

Combining ways of engaging labour

504. The different ways of engaging labour can be combined within the same programme, or even within the same project. For example, some families may build their own houses; vulnerable families may be supported by contracted labour engaged by technical specialists in humanitarian organisations; or infrastructure for all families might be improved by using a combination of community and contracted labour.

Empowering beneficiaries

505. The key objective in engaging contracted labour in transitional settlement and reconstruction programmes is to ensure that programme and project design remain as much as possible in the hands of the beneficiaries themselves.

Technical expertise in managing contractors

506. To assist in achieving this objective, specialist technical expertise is required to engage and manage contractors. Some humanitarian organisations have standard procedures for contracting work to architects, engineers, builders and site managers, who are often hired locally. Using local professional services is important in order to ensure the overall effectiveness of the humanitarian organisation in transitional settlement support.

Project and site management

507. For larger construction and engineering projects, project and site management will be required. This may be done by technical specialists in the humanitarian organisation itself; by consultants hired directly by the humanitarian organisation; by sub-contracting to other specialist humanitarian organisations; or by engaging commercial project-management capacity from firms of architects, engineers or town planners.

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Tendering

508. Architecture and engineering firms can be selected on the basis of a public tender, an invited tender or an invited competition: practices vary in different countries and for different sizes of project. In an invited competition, several architectural or engineering firms are invited to conduct pilot studies of the work proposed. A panel appointed by the commissioning humanitarian organisation judges the competition. It may be necessary to pay a fee to firms that have submitted the required material and are not selected.

Appointing contractors without tendering

509. When projects must be started quickly, it may be possible to appoint an architectural or engineering firm directly without tendering or competition, depending on local laws and the policies of the commissioning humanitarian organisation. The appointment of a contractor may be made on the basis of recommendation, or reputation, or the strength of earlier works already carried out. The chosen contractor should be registered and authorised by the local authorities to undertake the scope of works required.

Appointing firms without tendering

510. If the works are very small in scale, it may also be possible to appoint the contractor, rather than submitting the job for tender. Local law or policies within humanitarian organisations usually offer guidance on the sum above which an appointment is not appropriate and tendering is required.

Independent site supervision

511. The capacity of contractors is often a problem following a natural disaster and contractors may over commit in order to secure contracts. Independent technical site supervision will be required. The quality, skills and experience of contractors varies considerably. Building codes will need to be enforced.

6.5.6 Direct labour

512. Humanitarian organisations may hire and manage labour directly to undertake a small project, for example in the emergency phase when rapid response is essential.

Technical capacity for management of labour

513. To engage direct labour for transitional settlement or reconstruction projects, the organisation should have technical specialist or consultant and capacity for management. The coordination and management of direct labour often depends on identifying experienced and trusted supervisors. Master craftspeople in various trades should also be identified and supported.

Involving labour from all groups

514. Care should always be taken to involve labour from all groups within displaced and local labour forces, in order both to prevent suspicions of favouritism or bias, and to prevent the control of the labour force by a particular group.

Involving community leaders

515. Leaders of local and displaced communities should be involved in public or official negotiations to agree the objective of each activity within a direct labour project. A contract may be drawn up between the humanitarian organisation, the community leaders and the local authorities.

Agreeing a phase schedule of works

516. A phased schedule of works should be agreed and recorded in the documentation. A system should be introduced to record work attendance for each worker on the building site. The system should also include records of recruitment, the pay roll, evaluations, any warnings and any dismissals. Ideally, to maximise capacity building within communities, this system should be managed by community representatives and monitored by representatives of the humanitarian organisation (📖 Barakat, 2003).

Contracts with individual workers

517. Direct labour sometimes requires contracts to be made with individual workers, such as skilled labourers or those who possess specific tools.

Phased distribution of remuneration

518. Any remuneration, incentives and NFIs in the form of shelter materials should be distributed in phases. This reinforces the monitoring of the project activities agreed.

6.5.7 Cash

519. Cash disbursements may be made directly to beneficiaries within the affected population. To ensure that the cash is used for the purpose it was given, disbursement may be undertaken in phases, with meeting project goals as the condition of the next payment. To ensure that project goals are met, it is usual to combine cash disbursement with technical information, such as through building inspectors or damage assessors (» section 6.5.12).

Case study 6.1

Yogyakarta earthquake

» Case study 2.1.

Cash-based assistance methods

In response to the earthquake, some organisations deployed volunteers to communities to encourage the formation of self-help groups. Phased funding was then transferred into a bank account in the name of the community group, for the purchase of tools and materials to build shelters. Community groups were then provided with instructions to construct their own shelters and supported by volunteers trained in building transitional shelters. In consultation with the groups, it was agreed that priority would be given to the most vulnerable. Continuous monitoring and programme revision ensured this provided successful support for affected populations.

Risks of cash disbursements

520. While cash is useful as a flexible resource for beneficiaries, risks include:

- limited value in the social insecurity of the emergency phase, or when communities remain isolated from materials or services such as by floodwater;
- inflating prices, in circumstances where materials and services are scarce;
- beneficiaries being concerned with the social stigma of receiving charity;
- dependency and a suppression of coping strategies, although this is disputed in many circumstances; and
- assistance being stopped when project goals are not met as a result of unexpected diversion of cash to higher immediate priorities for those affected, such as critical medical costs.

Disbursements to beneficiary families

521. Cash disbursements may be to beneficiary families for work on housing or to beneficiary communities for communal services.

Means of delivering cash

522. Cash delivery may take place through using government social security systems, local banking systems, local money transfer companies or direct payments by an implementing agency. In selecting the different options for disbursing cash, consideration should be given to:

- the existence or reliability of any systems in place, including the number of possible disbursement points in each affected area;
- the distance beneficiaries will have to travel to reach the disbursement point;
- how much cash will be transferred;
- how frequently payments will be required;
- what security risks will be faced by both beneficiaries and disbursing staff;
- how long will it take to establish disbursement arrangements; and
- the total cost of disbursement, including hidden costs, such as staff requirements and vehicles.

6.5.8 Vouchers

Use of vouchers

523. As an alternative to cash disbursement or distribution of materials, vouchers for materials or services may be given out. Vouchers can be exchanged for defined materials and services from traders, at distribution outlets, markets or special relief shop.

524. Vouchers are often used when cash disbursement is not feasible, for example because of:

- security concerns;
- a lack of banking facilities;
- if it is necessary to control the inflation of prices of materials;
- donor constraints; or
- the need to ensure that a particular material or service is used.

6.5.9 Loans and guarantees

525. When affected populations still have access to relatively stable supplies of materials and services, and where later repayment and collection are feasible, emergency loans are sometimes used to help people buy household and shelter NFIs. Emergency loans are most useful if available immediately following a disaster.

Asset replacement loans

526. Later, in the recovery phase, larger loans may be used to support housing reconstruction. Asset replacement loans may be offered to help households recover their livelihoods and businesses. The repayment of these loans generally starts after a fixed period and may be offered as a soft loan, with interest rates below the market level.

Microfinance initiatives

527. Microfinance initiatives are able to lend smaller sums than traditional lenders and offer additional services that extend the value of loans to poorer income groups.

Loan guarantees

528. Loan guarantees may be made as an assistance method, whereby an additional loan is offered to cover the down payment required by most lenders, which is often around 20 per cent.

Advantages of loans

529. Advantages of loans may include:

- commercial premises and farms may also be supported, whereas most other assistance is offered to housing and communal services and infrastructure only;
- financial independence for the beneficiary in implementing transitional reconstruction themselves, at their own pace and according to their own priorities;
- no stigma or problems associated with dependency; and
- the expansion of the credit sector, which may offer some support to economic development.

Disadvantages of loans

530. Disadvantages of loans may include:

- if the government regulation of lenders is ineffective, severe, unclear or unfair conditions on the loan may place the recipient under a financial burden that they are unable to support, or make the recipient unduly vulnerable to changes in circumstances such as market fluctuations; and
- the land or property of the recipient may be required by the lender as collateral for the loan, which will increase the vulnerability of the recipient.

6.5.10 Local information centres

531. In addition to the outreach and public information campaigns that are critical to all assistance strategies, programmes and projects, local information centres may be established to offer a constant presence and service in affected communities over the duration of response.

Local information centres

532. Local information centres should offer advice and guidance on what assistance is on offer and how to access it, for example how to set up a bank account, apply for a loan, mechanisms for land tenure dispute arbitration and hazard-resistant construction techniques.

Consultation and participation opportunities

533. In addition, centres should provide opportunities and support for consultation and participation, thereby offering a degree of accountability of assisting organisations to beneficiaries.

Other functions of information centres

534. Centres may also include other functions or services for the community, sometimes on a semi-commercial basis, such as for cash disbursements, money transfers or a central point for engaging construction labour.

6.5.11 Capacity building

535. Capacity building should comprise medium-term support packages that integrate training and the training of trainers with participatory workshops and additional capacity. Clear capacity objectives and indicators should be agreed that define and measure impact upon transitional settlement and reconstruction, rather than upon the number of persons trained.

Capacity building for all levels and groups

536. Capacity building for all levels and groups within the affected community may take the form of:

- training courses on subjects such as hazard-resistant construction techniques and financial and project management;
- consultation and information-sharing workshops, such as bringing together representatives and expertise from different communities; and
- additional capacity to support priority community activities or contribute to training and workshops, such as volunteer teams or bringing pneumatic drills from unaffected neighbouring towns.

6.5.12 Technical expertise

537. Technical expertise from humanitarian organisations or, more usually, nationally from the private sector may be made available to support all assistance methods for all transitional settlement and reconstruction options. Expertise may take the form of:

- damage assessors, for example to determine whether or not a structure must be demolished and, if not, the level and form of repairs required;
- risk assessors, able to map hazards and advise on mitigation and protection measures;
- technical inspectors, for example to sign off for the phased delivery of shelter NFIs or cash disbursement;
- professionals such as surveyors, engineers, planners and architects, able to work, advise and train upon building cadastres, hazard-resistant construction, settlement layout, building codes and project management; and
- master craftspeople, such as masons and roofers, able to work, advise and train supporting self-help projects.

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This chapter contains seven toolkits, each of which provides practical guidance on a distinct aspect of a humanitarian response.

Each toolkit includes information on which activities are required in each phase of the response, and on which stakeholders need to be involved.

The toolkits begin with a summary of the guidance provided and the target audience, and a checklist of required actions.

7.1 Coordination between government, national and international stakeholders

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This toolkit is a guide to the use of coordination mechanisms for developing a transitional settlement and reconstruction strategy (» section 2.2). The coordination mechanism can be instituted at different levels so that all stakeholders pool their resources and expertise for implementing the strategy.

The toolkit should help stakeholders, including government officials, representatives of international agencies and people working with NGOs and communities, to launch a consultative process and set up coordination mechanisms.

An effective coordination mechanism is one which facilitates international participation, recognises national capabilities and channels all the necessary resources for transitional settlement and reconstruction.

Government, national and international stakeholder coordination — Checklist 7.1

1. **Participate** in government/international coordination bodies.
2. **Participate** in coordinated damage and needs assessments.
3. **Develop and implement** a coordinated strategy with other stakeholders.
4. **Provide technical assistance and capacity-building support,** through professional inputs, knowledge resources, consultancy costs and networking support.
5. **Participate in establishing** a monitoring and evaluation system.

7.1.1 The need for coordination

Collaboration among stakeholders

538. A large-scale disaster creates a situation in which international humanitarian organisations collaborate with national and local actors, primarily governments and NGOs (» section 1.4). It is vital for the government to coordinate these multiple actors for the optimal utilisation of financial and human resources. Within the UN system, the coordination role has been assigned to the office of UN Resident/Humanitarian Coordinator. However, the coordination structures are not well defined for working with IFIs and other international NGOs, which may sometimes lead to operational overlaps and misallocation of resources.

Need for coordination at different levels

539. In the context of a humanitarian situation in which multiple agencies are involved at different levels, it is crucial to coordinate at different levels in developing a strategy.

Strengthening national and local capacities

540. Weak institutional support reduces the effectiveness of a reconstruction programme. It is important is to strengthen national and local capacities, which can include setting up a new reconstruction unit/agency, for handling multiple tasks of reconstruction.

7.1.2 Stakeholders at different levels

Stakeholders at different levels

541. In a programme for large-scale reconstruction of shelter and other community infrastructure, several stakeholders emerge at different levels and in different sectors.

International level

United Nations

542. The UN system, which intervenes through its specialised agencies, is represented by the Resident/Humanitarian Coordinator at the national level. The UN Office for the Coordination of Humanitarian Affairs (UN/OCHA) supports the office of UN Resident/Humanitarian Coordinator in the initial stages of inter-agency response and coordination. The UN Resident/Humanitarian Coordinator works through UN agencies working at the national level, their regional offices and bureaus, and the headquarters.

IFRC

543. The International Federation of the Red Cross and Red Crescent Societies (IFRC) works in support of coordination in emergency shelter in close collaboration with the coordination bodies of UN agencies, in addition to the implementation capacities of the National Red Cross and Red Crescent Societies.

International financial institutions

544. International financial institutions, which include the World Bank and the regional development banks such as the Inter-American Development Bank, Asian Development Bank and other smaller regional banks in the Caribbean, Central America, Latin America and Africa, provide loans and technical assistance for reconstruction programmes. In addition to loans, these banks also provide technical assistance grants for implementing the reconstruction programme.

Bilateral and multilateral donors

545. A number of bilateral and multilateral donors provide assistance for reconstruction and form a critical part of the international humanitarian system. Most of these donors are members of the Organisation for Economic Co-operation and Development (OECD), though non-OECD countries too, such as China, Brazil and India are joining the ranks of donors. Most wealthy countries have their own aid organisations through which their international assistance is channelled. The Canadian International Development Agency (CIDA) and USAID are important bilateral donors from Canada and the US respectively, while most European countries provide significant international assistance through their own aid organisations. The European Commission (EC) has its disaster preparedness programme known as DIPECHO. These donors participate actively in the appeals processes and contribute to reconstruction assistance all over the world.

International NGOs

546. A number of international NGOs actively participate in reconstruction and recovery programmes, and have expanded their operations over the years. These international NGOs operate through their regional and field offices in many countries, and raise resources through their own appeals or the Consolidated Appeal Process (CAP) led by the UN system.

National level

National stakeholders

547. At the national level, the stakeholders are the national government, the corporate sector and national NGOs. The jurisdiction of national governments extends to the ministries, departments and agencies working under its supervision. All the important decisions related to international assistance, resource planning, coordination structure and strategy development are taken by the national government as part of its sovereign responsibilities. The major responsibilities are as follows:

- organise the immediate response to the disaster and provide immediate relief;
- invite the UN system to coordinate international assistance from bilateral and multilateral donors;
- set up a facilitation centre for all the assistance coming from other countries;
- conduct a damage and needs assessment (» section 7.3);
- develop a resource mobilisation plan;
- approach IFIs for a reconstruction loan;
- allocate its own resources for reconstruction;
- coordinate with all the humanitarian organisations, from within the country and abroad;
- develop guidelines, standards, and entitlements for reconstruction, particularly, housing; and
- set up an implementation structure in consultation with the local government.

Government involvement

548. The ministries, departments and agencies which need to be involved at the national level vary from country to country. However, the following are generally involved in decision making at the national level:

- ministry of foreign affairs;
- ministry of finance/economic affairs;
- ministry of home/security;
- housing department/agencies;
- critical infrastructure organisations/agencies;
- ministry/department of school education; and
- ministry/department of public health.

Government coordination

549. Government agencies need to coordinate among themselves on all the responsibilities listed above. A formal coordination structure is necessary to bring these agencies together for planning and implementing the reconstruction programme. A detailed proposal for reconstruction is prepared at this level and submitted to the government for final approval and allocation of resources.

Other national organisations

550. The corporate sector and the national NGOs, the other stakeholders at the national level, need to work closely with the national government. The corporate sector makes a substantial contribution through commitment of resources, expertise, and participation. NGOs mobilise their own resources and work with communities in organising transitional settlement and recontruction activities. The government needs to coordinate with these stakeholders at the policy and implementation levels, and such coordination needs to be organised on an institutional basis.

Local level

Stakeholders

551. At the local level, stakeholders comprise local government, NGOs, and communities.

Local government

552. Local government includes multiple governance structures at the local level: state/provincial governments, municipalities and village councils. All stakeholders at the international and national levels always seek active participation and cooperation of local government for implementing transitional settlement and reconstruction programmes.

NGO participation at local level

553. NGOs, whether international or national, actively participate at the local level, with support from donors. Furthermore, NGOs interact with local government on key issues such as settlement planning, identification of beneficiaries, selection of design and layout, and construction technology. NGOs also interact with communities in implementation.

Affected communities

554. Communities are the most important stakeholders at the grassroots level (» section 2.2.7). All the other stakeholders participate with the support of communities. It underlines the need for an institutional mechanism through which community participation can be facilitated.

7.1.3 Coordination approaches

Coordination of disaster risk management

555. In disaster risk management, coordination refers to establishing working relations between independent stakeholders. While coordination is vitally important during all phases of disaster risk management, it is even more critical for transitional settlement and reconstruction. It allows efficient allocation of resources and responsibilities among a large number of stakeholders, who are keen to contribute to transitional settlement and reconstruction efforts.

Coordination of transitional settlement and reconstruction

556. Coordination in transitional settlement and reconstruction has become increasingly critical in view of several emerging trends:

- settlement patterns are producing greater concentrations of people, making disasters affect larger populations and increasing the level of damages and losses. An organised and coordinated response to disasters has become imperative;
- communities' socio-economic profile is also becoming diverse, and their expectations of the government and other humanitarian actors too are increasing. Their changing expectations make it imperative for a transitional settlement and reconstruction programme to address differential needs of these communities;
- as mentioned above, a large number of stakeholders work as humanitarian actors in disaster situations. These stakeholders have varying mandates, timelines and levels of functioning. Strong coordination brings their complementary resources and expertise together. On the other hand, a lack of coordination among them makes the transitional settlement and reconstruction effort chaotic and wasteful;
- a large number of professionals participate in transitional settlement and reconstruction, and establishing networks and partnerships among them brings a bigger pool of expertise to transitional settlement and reconstruction efforts; and
- transitional settlement and reconstruction are resource-intensive. They cannot be accomplished by government or international agencies through their own resources. A number of stakeholders must pool their resources. Similarly, an increased level of coordination also brings higher standards of accountability and transparency in the use of resources.

Working with common purpose

557. Coordination does not mean integration of resources or systems. In coordinated programmes, stakeholders do not merge their identities; they work with a common purpose, and pursue shared objectives (» section 2.2.1). Coordination is always aimed at producing synergy in action and harmonising efforts.

Voluntary or mandated coordination

558. Coordination, in the setting of a transitional settlement and reconstruction programme, may be voluntary or mandated. Voluntary coordination usually emerges in response to mutual needs at the community level. Mandated coordination responds to the coordination needs of a wide range of stakeholders with diverse mandates and jurisdictions. In such a coordination process, the tasks and responsibilities are allocated formally. Performances are reviewed on a regular basis. The entire process of coordination is recorded and documented.

Developing common goals

559. Coordination connects stakeholders at different levels: international, national and local. It pools and channels their resources in a common direction. It encourages participation of communities from diverse socioecnomic backgrounds in transitional settlement and reconstruction programmes.

Promoting consensus

560. Coordination strives to develop consensus on planning for transitional settlement and reconstruction. It can match programme objectives and targets with the resources available from different funding mechanisms.

Developing partnerships

561. Coordination leads to the development of partnerships and networks among stakeholders. It develops shared goals and objectives around which stakeholders from different sectors come together and develop working partnerships.

Developing agreement

562. Coordination in the course of a transitional settlement and reconstruction programme develops standards, codes, and guidelines which the stakeholders come to agree and observe in their activities.

Administrative and financial support

563. Coordination processes need to be reflected in the administrative and financial systems of the transitional settlement and reconstruction programme. Stakeholders can work with greater flexibility with such programme management.

7.1.4 Coordination mechanisms

Government-led coordination

564. **National government's coordination role:** at the country level, it is the government which takes the initiative for requesting international assistance following a large-scale disaster. The government requests the UN system to coordinate international assistance, initially for relief efforts followed by mobilisation of resources for recovery and reconstruction.

Bodies created to coordinate

565. **Task force/empowered committee:** in the first few days, the regular ministries/departments of the national government coordinate the international and national response. Subsequently, coordination for transitional settlement and reconstruction is facilitated through an institutional setup located in the national government. It could be a task force or an empowered committee mandated specifically for laying down the guidelines and policies for disaster relief and recovery. Such a task force or empowered committee consists of the senior officials of the government and experts. The government could also designate an existing infrastructure/housing agency within the government to be tasked with new responsibilities.

Benefits of strong coordination

566. International agencies can negotiate the terms of delivery of assistance, extend technical support and monitor the progress of recovery if the coordination setup is well-defined. A weak implementation structure, on the other hand, cannot use international assistance effectively, and has little control over the direction of the recovery programme.

Coordination of UN bodies

567. **UN Resident/Humanitarian Coordinator's Role:** the UN Resident/Humanitarian Coordinator leads the process through which all the UN agencies mobilise their resources for responding to immediate relief needs, including those for transit and temporary shelter. The UN system may continue its support for the recovery and reconstruction phase for which the relevant UN agencies prepare plans and programmes and launch a separate resource mobilisation effort.

NGO participation

568. **NGO coordination:** NGOs at all levels require consistent support through coordination. The government can set up a coordination committee at the national or local level to assist NGOs with resource mobilisation as well as participation in transitional settlement and reconstruction programmes. The coordination committee decides the nature and scope of NGOs' participation. It provides NGOs with the necessary authorisation and support. It also sets specifications and standards. Such a coordination process avoids overlaps between NGOs, and uses their resources in the most efficient way. It also resolves a number of local issues related to interaction with local authorities, provision of land, development of resettlement plans, and so on.

UN coordination mechanisms

569. **National governments**, in coordination with the UN agencies, can set up coordination mechanisms for coordinating their transitional settlement and reconstruction programmes. These coordination mechanisms may be led by the national ministries/agencies dealing with the concerned sectors.

Arranging loans for recovery

570. **International financial institutions:** the national government approaches IFIs for reconstruction loans. The ministry of finance/economic affairs within the government is involved in the loan negotiations with the IFIs. Since it involves borrowing and repayment, it is always an exclusive financial arrangement between the government and the IFIs, with no other external agency involved in these negotiations. However, other international agencies can join the IFIs as co-financers.

Involving affected populations

571. **Local-level coordination:** national or local government may set up coordination committees at the local level to seek the participation of the private sector, professional groups such as architects, resettlement planners and structural engineers, and NGOs. These forums help in optimal allocation of resources for reconstruction. Furthermore, they bring these stakeholders in direct contact with the affected communities, and provide them more information about their entitlements and choices in respect to shelter.

Coordination activities

572. A sequence of activities which reflects coordinated processes needs to be organised for planning and implementing the transitional settlement and reconstruction strategy. These activities are described in the following checklist.

Checklist 7.2 Coordination for planning and implementing transitional settlement and reconstruction

1. **Conduct a rapid humanitarian needs assessment:** the national government may conduct a rapid appraisal of humanitarian needs, which may be done in coordination with international agencies, such as UN agencies and NGOs (» section 7.3).
2. **Conduct damage and needs assessment:** the government may decide to carry out damage and needs assessment following a disaster through deploying a multi-sector team. The UN may decide to field an inter-agency/multi-donor mission to conduct damage and needs assessment, usually within a month of the disaster event. Based on a visit of sufficient duration (approximately one to two weeks), the mission team prepares a report, which forms the basis for resource planning and an international appeal for recovery and reconstruction (» section 7.3).
3. **Develop a project preparation and implementation plan:** national government in consultation with international agencies, NGOs and other stakeholders can develop a project preparation and implementation plan. The plan describes the broad scheme of entitlements and assistance, stakeholders' participation and mode of implementation. It includes timelines, budget and mode of implementation for all the components included in the project (» Chapter 2).
4. **Establish a project management unit:** a more efficient way of implementing a project assisted with international resources is setting up a new reconstruction agency or a project management unit (PMU) within an existing department, which is headed by an experienced professional. Such an agency or a PMU may be supported by an inter-disciplinary team of engineers, architects, community participation managers, procurement experts, and finance and accounts officials. The PMU may draw its resources from the private sector and different agencies/departments, and implements the entire shelter component in a project mode. The budget may be released to this new agency, which would have full authority and responsibility for planning and expenditure.
5. **Invite NGOs to participate in transitional settlement and reconstruction.** NGOs specialise in different areas and the government may allocate sectors and geographical areas in accordance with their areas of specialisation and interest.
6. **Prototype memoranda of understanding** (MOUs) must be prepared and signed with all the NGOs participating in the reconstruction programme. The MOU should include activities to be undertaken, support to be provided, concessions to be given and a timeframe for implementation. The MOU defines the terms of NGOs' participation. Design, architecture and building materials provided by NGOs must conform to standards laid down by the PMU.

Checklist 7.2 Coordination for planning and implementing transitional settlement and reconstruction

7. **Institute a mechanism for consultations with the community:** a shelter reconstruction programme requires interaction and consultation with the people it is addressed to. An institutional process of community participation should be set up, whereby a NGO/consultants/social workers are involved in bringing the community and construction team together (» section 2.2.7).
8. **Develop a financial disbursement system:** emergency reconstruction projects require a strong positive cash flow and special attention to the design and implementation of disbursement arrangements. To meet these requirements, resources made available through international assistance should be quick-disbursing and supported by strong financial and accounting systems within the project (» section 6.5).
9. **Procurement and audit systems** based on competitive bidding must be followed. Except for those construction projects where NGOs themselves are involved, all works need to be implemented by inviting bids and awarding contracts in an open and transparent way. All the expenditures incurred need to be subjected to internal and external audits.
10. **Implement quality control and assurance** preferably engaging third party inspection of all the works, through technical/engineering consultants.
11. **Prepare a database and reporting system** to help monitor the transitional settlement and reconstruction programme in terms of delivery of benefits. Furthermore, a reporting system helps the government, international agencies and donors to monitor the progress of project on a regular basis.
12. **Provide technical assistance and capacity-building support** through grants facilities made available by the UN system or IFIs. This can assist the government in securing much-needed support for resource planning, the PMU, community participation, financial disbursement, procurement and audit issues, and quality control and assurance. The support may be extended in the form of professional inputs, knowledge resources, consultancy costs and networking support.
13. **Set up a monitoring and evaluation** system for transitional settlement and reconstruction. Such a system helps the government to improve accountability and transparency in the use of international assistance.

7.1.5 Coordination timeline

Timeline

573. A timeline for the various activities involved in coordination from the day of the disaster is suggested in the table below.

Table 7.1 Activities involved in coordination

	Activities		
Timeline and objectives	Government: ministries/departments/ agencies	National stakeholders: NGOs/corporate sector/ civil society groups	International agencies: UN system, IFIs, IFRC, donors
1–15 days **Formation of task force/ empowered committee**	Set up a task force/ empowered committee for coordination and strategic planning of recovery and shelter and infrastructure reconstruction	Participate in task force/ empowered committee/ UN coordination. Provide information, and offer contribution and support	Convene the meetings of UN coordination bodies Deploy coordination staff
1–15 days **Humanitarian needs assessment**	Conduct rapid assessment of humanitarian needs in consultation/partnership with NGOs and international agencies. Organise relief and essential supplies including those of transit and temporary shelter	Assist the government with rapid assessment. Provide essential supplies for meeting relief needs as well as provision of transit and temporary shelter	Facilitate international assistance for relief and provision of transit and temporary shelter
15–45 days **Damage and needs assessment report**	Produce a damage and needs assessment report: focus on shelter losses, social, infrastructure and economic sectors. Three kinds of losses need to be described: asset losses/ direct damage (loss of stocks of wealth); output losses/indirect damage (loss of flows of goods and services); and fiscal costs/ secondary effects	Assist the government with the estimation of direct and indirect losses, particularly economic losses in trade, industries and services sectors. Find out insurance protection for properties damaged during the disaster. Set up an inter-agency assessment team to conduct damage and loss assessment	Set up an inter-agency assessment team to conduct the damage and loss assessment. Sources of information are: government, rapid reconnaissance, press coverage, cartography, interviews with key stakeholders, secondary data, aerial photography, remote sensing images, etc
15–90 days **Transitional settlement and reconstruction project preparation and implementation plan**	Undertake project preparation and implementation plan for transitional settlement and reconstruction of the communities and settlements affected by the disaster Develop timeline, budget and mode of implementation for all the components included in the plan	Conduct an assessment of their own resources and capacities. Develop a strategy and action plan for participating in the transitional settlement and reconstruction programme. Take necessary steps for capacity development in this area	Provide international expertise, policy support, and technical assistance for project development Set up pilot/demonstration programmes so that the national strategy can include its lessons for implementing transitional settlement and reconstruction

Activities involved in coordination **Table 7.1**

15–90 days **Policy for stakeholder participation**	Lay down the policy for participation of donors, international agencies, corporate sector and NGOs in transitional settlement and reconstruction	Develop a shared understanding of the transitional settlement and reconstruction policy	Facilitate the participation of international agencies through UN coordination bodies Contribute to the development of policy through international best practices
30–20 days **Project management structure**	Develop a project management structure, supported by professionals drawn from different sectors: government, private sector, NGOs, etc	A project management consultancy, engaged through the private sector resources, could provide valuable support to project management	Provide financial support for management and technical consultants
60 days **Project implementation period Community participation policy and framework Develop policy for community participation**	Set up institutional mechanisms for community participation: a coordination committee of citizens or community leaders Appoint agencies to facilitate community participation at different levels	NGOs, civil society groups and professionals to associate with consultative committees Women's groups to participate actively in these initiatives Organise forums for empowering community through dissemination of information and knowledge	Support these processes and institutional mechanisms International assistance/ participation to be channelled through these community-led mechanisms
60 days **Project implementation period Technical assistance and capacity-building programme**	Organise technical assistance and capacity-building programme Hire experts and consultants to develop capacity among officials Emphasise information management and reporting. Develop a web-based reporting system	Assist the government with experts, consultants and technical assistance Organise interaction with academia, NGOs and civil society. Support through workshops, and training and orientation programmes	Provide financial assistance and expertise for capacity-building Extend adequate computer and communications support to the project
90 days **Project implementation period Construction standards, building codes, technical audit and quality assurance**	Set construction standards, and building code specifications Set up a quality assurance mechanism Appoint an external technical auditor who provides an independent feedback on the quality of construction	All participants/stakeholders need to abide by these standards and specifications. Jurisdiction of technical audit and quality assurance mechanism to extend to their projects as well Independent technical feedback to be made available to all	Provide international standards and building codes for references Support the reconstruction programme with expertise in reconstruction Provide financial assistance for technical audit and quality assurance experts and consultants
120 days **Project implementation period Performance indicators**	List performance indicators Develop performance indicators at two levels: programme objectives (rehabilitation, livelihood, etc.) and project objectives (procurement of contracts, progress in construction and disbursement)	Assist in the development of performance indicators Submit information related to performance indicators Participate in the review of performance indicators	Link the performance indicators to the disbursement/ reimbursement of assistance Request that the review of performance indicators should be an open process

7.2 Financial resource planning and coordination

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This toolkit describes the financial tools and mechanisms which are available at different levels for raising resources and financing transitional settlement and reconstruction programmes. The toolkit is also directed at setting up a financial tracking system (FTS) which provides information on the inflow of resources as well as their use for transitional settlement and reconstruction.

The guidance is aimed at all stakeholders associated with transitional settlement and reconstruction.

To ensure a smooth flow of funds, a coordinated process must be launched as quickly as possible.

Checklist 7.3 **Financial resource planning and coordination**

1. **Undertake coordinated** damage and loss assessments (» section 7.6) prior to developing financial resource plans.
2. **Participate** in a coordinated appeals process, including development of long-term strategies (» section 2.1). Although financial resource planning is primarily the responsibility of the national government, it is strengthened through the participation of humanitarian actors and contributions from the corporate sector and private citizens.
3. **Explore, with government,** the possibilities of obtaining funds from all funding mechanisms available to respond to the needs of the affected population from transitional settlement to reconstruction.
4. **Participate** in FTSs to monitor, on a real-time basis, all the aid delivered and its utilisation.

7.2.1 The need for coordinated financial planning

Assessing requirements

574. Affected by a large-scale disaster, the national government of a country seeks to mobilise resources for recovery and reconstruction. The damage and loss assessment (» section 7.3) conducted after the disaster provides a basis for estimating resource requirements. These requirements are met through international assistance as well as national resources.

Responsibility of government

575. Governments seek to meet the cost of transitional settlement and reconstruction through several international funding mechanisms as well as national sources. This process must be coordinated, based on assessment, and international appeals launched as quickly as possible.

Affordable assistance

576. The cost of transitional settlement and reconstruction programmes is often added to the national debt burden. Careful planning is therefore required to raise resources following a major disaster event. Many financial tools and mechanisms are required to undertake transitional settlement and reconstruction in a feasible and affordable way.

International assistance

577. Disaster-affected countries seek international assistance with financial resources as well as technical expertise. The flow of assistance to these countries is guided by assessment of loss and damage, and appraisal of transitional settlement and reconstruction needs. The flow of resources becomes very smooth when the national authorities and international agencies coordinate their efforts for response, while developing consensus on the use of knowledge and expertise.

Limited Insurance coverage

578. The insurance coverage for disaster losses is thin and inadequate in developing countries, and in some developed countries, especially for those affected people, who rent. The limited coverage of insurance companies places a big responsibility on the national government to provide financial assistance for transitional settlement and reconstruction programmes in the country.

Family resources

579. Families also need to find their own resources, to rebuild their homes and assets, and to revive their livelihoods. The assistance they receive from the government or NGOs may not be adequate. They need to pool available resources, including their savings, remittances from relatives or friends living abroad and loans. In only a small number of cases, families benefit from insurance pay-outs. Families' access to finance is thus an important indicator of their resilience when faced with a disaster.

7.2.2 How financial planning is coordinated

International humanitarian system

580. In recent times, financial resource planning has been positively influenced by the emergence of an international humanitarian system, comprising UN agencies, IFIs, multilateral and bilateral donors and international NGOs. This has transformed the dynamics of post-disaster response and recovery worldwide.

UN system supports government

581. The national government usually initiates this process by requesting the UN system to facilitate international assistance. The UN system plays the roles of catalyst, advocate and focal point in securing the resources of the international humanitarian system to the affected country. In cases of large-scale disasters, the national government requests the IFIs to provide emergency lending assistance for recovery and reconstruction. International NGOs raise their own resources and contribute to the programme through their national and local counterparts. The Consolidated Appeal Process (CAP), donors' conferences, and multi-donor trust funds (MDTFs) have emerged as important mechanisms through which international agencies and national authorities coordinate for financial resource planning (» section 7.2.3).

National stakeholders

582. Government at the national level plans the transitional settlement and reconstruction programme, which is implemented by the local government, NGOs and communities. The national government provides assistance for the programme, but these resources need to be supplemented at the local level. In some cases, the national government implements the transitional settlement and reconstruction strategy directly with the assistance of the local government. In many other cases, however, the assistance is provided in cash or materials to the affected communities, which cover the cost of reconstruction on a bare minimum basis.

A partnership with NGOs and the private sector

583. The private sector and NGOs establish partnership with the government for implementing the strategy. They raise resources on their own, which they commit either independently or in partnership with government. They find support from different sources, both national and foreign. They are supported by contributions from private citizens, the corporate sector and humanitarian donors.

7.2.3 International funding mechanisms

Financing transitional settlement and reconstruction

584. International financial assistance, available to developing countries to meet their transitional settlement and reconstruction needs, is secured through processes and mechanisms described below.

International appeals

The appeal process

585. National, regional and international relief systems are able to mobilise and respond to large-scale disasters that require a system-wide response to humanitarian crises by launching appeals. The best known international appeals are those of the UN system ('Flash Appeals' launched by the United Nations Office for the Coordination of Humanitarian Affairs), and of the International Federation of Red Cross and Red Crescent Societies (IFRC), the International Organization for Migration (IOM), NGOs, and bilateral donors as well as appropriate national and regional structures. The appeal needs to be launched at the earliest possible moment to catch the attention of international humanitarian community (examples may be found at www. reliefweb.int).

Requesting assistance

586. The initial request for assistance in the case of a disaster must come from the government of the affected country. The appeal is used for providing resources as well as personnel on a short-term or long-term basis, depending upon the needs identified by the in-country coordination structure. On certain occasions, the UN system in a country, working through the IASC Country Team, can launch an international appeal for mobilising funds for transitional settlement and reconstruction (www. humanitarianinfo.org).

International donors' conferences

Donors' conference

587. An international donors' conference may be organised as soon as possible by the in-country coordination structure or at international level, preferably within the first three months following a large-scale disaster or complex emergency. The UN system, IFIs and international NGOs may organise an international donors' conference, either individually or together. Donors commit resources for humanitarian needs as well as long-term recovery and reconstruction in keeping with their own strategic priorities.

Need for long-term plans

588. The negotiations over international assistance require an assistance and implementation strategy (» section 6.5). It is thus necessary that adequate preparations precede the donors' conference. The damage and loss assessment, followed by a detailed transitional settlement and reconstruction plan, may be presented at the donors' conference. The information related to institutional set up for implementation, the national and local capacities, budget and the timeframe for implementation are discussed in detail. The success of donors' conferences is measured in terms of the financial commitments made by the donors.

Assistance from international financial institutions

IFIs' financial assistance

589. International financial institutions, such as the World Bank and regional development banks (including the Inter-American Development Bank and the Asian Development Bank), have been increasingly engaged in providing lending and non-lending services to developing countries for post-disaster transitional settlement and reconstruction. These banks provide emergency financial assistance in response to the request of their borrower countries. The financial assistance, generally provided through their soft loan windows and special facilities, is used to rebuild physical assets including private housing. In a few cases, the IFIs have used their grants facility for supporting emergency response. Non-lending assistance from IFIs includes damage and loss assessments, acting in an advisory role and other forms of technical assistance.

IFIs and other donors

590. IFIs have demonstrated their ability to work with donors in a shared response and have adapted policies and procedures to ensure that assistance can be delivered expeditiously. Joint assessments have become an important mechanism for engaging with other donors and ensuring that borrower needs are met without overlaps. In almost all major disasters in the recent past, IFIs have been one of the most important sources of financial assistance for transitional settlement and reconstruction (» section 6.4).

Global funding mechanisms

New global funding mechanisms

591. New global funding mechanisms are supporting transitional settlement and reconstruction. Though these funds only provide small grants, they offer valuable assistance for transitional settlement and reconstruction. Disaster-affected countries are able to seek assistance from the global funding mechanisms listed below.

Central Emergency Response Fund (CERF)

592. The Central Emergency Response Fund (CERF) is a global facility created by the UN to provide predictable and equitable funding to those affected by natural disasters and other humanitarian emergencies. Though it is provided to meet life-saving needs, CERF funds can be used for the construction of transitional shelter. The CERF is funded by voluntary contributions from Member States of the United Nations, private businesses, foundations and individuals. It is administered by the Emergency Relief Coordinator, Head of the Office for the Coordination of Humanitarian Affairs (UN/OCHA) (http://ochaonline.un.org/cerf).

Global Facility for Disaster Reduction and Recovery (GFDRR)

593. In June 2006, the World Bank established a Global Facility for Disaster Reduction and Recovery (GFDRR) in partnership with the United Nations International Strategy for Disaster Reduction (UNISDR) to help developing countries fund development projects and programmes that enhance local capacities for disaster prevention and emergency preparedness. The GFDRR pursues its objectives at global, regional and country levels and it addresses disasters both before and after they occur through its three tracks of financing. Track III is deployed to strengthen mobilisation of international assistance for disaster recovery and supports primarily low-income countries to accelerate recovery operations (www. gfdrr.org).

Multi-Donor Trust Funds (MDTFs)

594. In many countries affected by large-scale disasters, Multi-Donor Trust Funds (MDTFs) have been set up to channel donor resources in a coordinated way and in accordance with national priorities. The MDTF provides a convenient way of pooling donor resources and avoids setting up a multiplicity of bank accounts and programmes.

How MDTFs work

595. Expenditures from the MDTFs are primarily initiated, planned and implemented by governments, while allocations of the fund are endorsed by a steering committee with government, donor and civil society membership. The role of the fund's trustee is to ensure that monies are disbursed, accounted for and spent in accordance with objectives, measurable outputs and transparent procedures. The trust fund earns interest as it awaits disbursement. The World Bank has been asked to serve as the trustee for most multi-donor funds for reconstruction situations around the world.

7.2.4 National funding mechanisms

Reallocation of budget

596. Governments provide resources for transitional settlement and reconstruction through reallocation of their budget. Such a reallocation upsets their regular development plans. Governments have therefore developed special mechanisms such as calamity funds or reconstruction funds for this purpose. These mechanisms have evolved recently, and they are at best a partial solution to the resource needs. They still leave a huge gap which governments seek to address through international assistance. These national mechanisms are described below.

Calamity funds

Calamity funds

597. The objective of a calamity fund is to provide funds immediately for meeting the emergency needs following a disaster. Governments set up these funds as a separate entity, with a special account. It could be funded through budgetary sources or contributions from donor organisations. The advantage of creating such a fund lies in not having to request a new budgetary provision in the middle of a fiscal year to address post-disaster transitional settlement and reconstruction needs. By using resources accumulated before disaster strikes, these funds smooth government expenditures at the municipal, local, national and even regional levels during a crisis. Additionally, the calamity fund could also support specific ex ante investment in risk reduction. A number of countries, such as Colombia, India, the Philippines and Fiji have set up calamity funds.

Limitations of calamity funds

598. Calamity funds are usually used mainly for meeting emergency relief needs. They provide limited funds for recovery and reconstruction.

Reconstruction funds and bonds

Reconstruction funds/bonds

599. Governments can set up special funds for transitional settlement and reconstruction with their own resources. Such a fund can be set up through levy of a tax surcharge. In Germany, for example, a special disaster relief and reconstruction fund, Sonderfonds Aufbauhilfe, was set up after the Elbe floods of 2002. It was created by means of tax rises regulated by a special flood help solidarity law. Another way in which the national government can raise resources is by floating reconstruction bonds. The Japanese Government floated reconstruction bonds and provided subsidies and assistance for recovery to private house-owners, following the Kobe earthquake in 1994.

The Mexican Fund for Natural Disasters

600. In 1996, the Government of Mexico established a Fund for Natural Disasters (FONDEN), composed of three separate funds. The infrastructure fund provides for the repair of uninsured infrastructure. The agriculture fund provides immediate assistance to restore the productivity of low-income farmers. The assistance fund provides relief to low-income victims of disasters. However, FONDEN has not been capitalised sufficiently to cover its obligations. The World Bank provided a large loan in 2002 to re-capitalise FONDEN and support wide-ranging activities related to disaster management.

Municipal development and environmental funds

601. In Latin America and the Caribbean there are municipal development and environmental funds that can allocate resources for the prevention and mitigation of catastrophe events in addition to their normal activities.

Safeguards

602. The funding, legal structure and operating principles of these funds derive from their intended objectives. Safeguards against misuse, autonomy of operations and sustainability of these funds are critical issues for their effectiveness.

7.2.5 Families' and communities' access to finance

Financial mechanisms for assistance

603. A number of financial mechanisms derived from market-based and social interventions have emerged, which families or communities can access for transitional settlement and reconstruction assistance. Though these mechanisms could be used for several purposes, they have become relevant as sources of assistance to disaster-affected families and communities. These mechanisms are described below.

Private insurance

Private insurance

604. In wealthy countries, such as the United Kingdom and the United States, assistance is provided to individual house-owners for reconstructing and repairing private houses. It is the responsibility of the individual house-owners to repair these houses with their own resources or insurance pay-off. The government encourages house-owners to insure their houses and support their own reconstruction, with public funds being made available for repairs and reconstruction of infrastructure.

Mandatory insurance

605. In a few other countries, governments have launched mandatory insurance for houses, and the annual premium is collected in a central pool. In case of a disaster, funds from the central pool are made available to individual house-owners for reconstructing and repairing. Such central pools can be managed by the government itself (e.g. France) or by a private company (e.g. Turkey).

Limited risk insurance in developing countries

606. In developing countries, the coverage of catastrophic risk insurance is limited by both demand and supply side problems. On the demand side, the major obstacle is that governments tend to bail out uninsured parties in the aftermath of a disaster for legal and political reasons, while on the supply side the risk pool is often too small to make insurance viable. The premium for property insurance is most often unaffordable for a large number of households. For instance, in Mexico City, which is highly prone to earthquakes, insuring a house may represent around 3 per cent of the annual income of the average Mexican, which is unrealistically high for households that have to spend most of their income on basic necessities.

Public-funded insurance programmes

Public sector interventions

607. In keeping with global trends, occurrences of large-scale disasters have increased in developed countries, with losses mounting during a number of recent disasters. As a result, catastrophic risk insurance has become expensive in these countries. For these reasons, natural disaster insurance is frequently characterised by some form of intervention by the public sector. In France, New Zealand and Spain, insurance for catastrophic risks is provisioned by public sector-owned insurance companies.

Insurance programmes in the United States

608. In the United States, the National Flood Insurance Policy is the largest example of a public-funded insurance policy. In 1991 California set up an insurance pool, which was replaced with the California Earthquake Authority (CEA) in 1996. Some 70 per cent of the market for earthquake insurance participates in the CEA. Hawaii created a voluntary homeowners' catastrophe fund in 1993. Florida's 1994 catastrophe fund is a reinsurance fund that reimburses insurance companies when disaster-related losses exceed certain levels.

Combined public and private insurances

609. These new trends in disaster insurance show that catastrophic risk insurance offered by the private sector may only be a partial solution in developing countries. A more comprehensive approach to insurance, which combines both public and private sector resources with risks shared by a very large pool of insurers, could be a more feasible solution to the risk financing needs at the level of families and communities. The Turkish Catastrophe Insurance Pool set up after the Marmara earthquake of 1999, supported by the Government of Turkey, World Bank and a private sector reinsurance company, is an example of a public-private partnership providing catastrophic risk transfer and financing facilities. All the insured homeowners obtain financial assistance from this pool for reconstruction if an earthquake damages their home, while the uninsured do not receive any financial assistance from the government for this purpose.

Social funds

Instruments for social protection

610. Social funds have established themselves as important instruments for social protection in many parts of the developing world, though their application in disaster risk management is very recent. Almost 50 countries, mostly in Latin America and Sub-Saharan Africa, operate social funds or similar entities. Generally, social funds are not coping instruments. Instead, they are they are most widely known for their investments in social infrastructure, particularly health, education, water supply and sanitation. However, some social funds have been used to respond to emergencies, including Hurricane Mitch in Central America and drought in Zambia.

Helping communities rebuild

611. In both Honduras and Nicaragua, social funds played a key role in helping communities cope and rebuild after Hurricane Mitch in October 1998. The Honduran Social Investment Fund (SIF) decentralised its operations immediately by deploying its senior staff as part of the emergency response teams in the most heavily damaged areas. They worked closely with communities and municipalities to assess immediate needs for shelter, sanitary water, sanitation systems, road access and bridge rehabilitation. In Nicaragua too, SIF teams quickly decentralised, setting up offices in four regions. A task force of architects and engineers was deployed to the affected areas, to secure places for refugee camps to settle the homeless, provide water and sanitation systems for them, open rural roads and rehabilitate bridges.

Viability of social funds

612. Social funds are generally guided by their specific objectives. They may not be sufficiently broad-based to cover a large number of risk reduction measures. Their viability and sustainability also is dependent upon public sector resources.

Microfinance

Microfinance services

613. Microfinance services are targeted at poor households that are excluded from the formal banking sector. These services were started in Bangladesh with setting up of the Grameen Bank, which later expanded to a number of countries with different institutional models. The programme component initially consisted of credit, but subsequently came to include savings and insurance as well. Though microfinance has been strongly linked to poverty alleviation efforts for more than a decade, its potential for helping households in crisis or disaster situations has been recognised only recently, in particular after the devastating Bangladesh floods in 1998.

Microfinance institutions

614. Microfinance institutions (MFIs) can provide both financial and institutional support to their client households in helping them rebuild their houses by providing temporary loans to undertake repairs or housing loans for reconstruction. They can also provide assistance to encourage their clients to move to safer areas and to invest in more durable housing. A number of microinsurance products have been developed, which can be used for insuring private houses. Housing portfolios are being developed by MFIs, as part of their credit services, though this is an area requiring considerable innovation in terms of services and products.

A combination of mechanisms is required

615. None of the financial mechanisms discussed above are adequate for meeting large-scale transitional settlement and reconstruction needs. A combination of these mechanisms needs to be used in a post-disaster situation. The selection of specific mechanisms would vary from country to country, based on economic situation and socio-economic profiles of the communities. While international assistance and national funding continue to be important, families and communities need other sources of finance as well. Public-funded insurance programmes and market-based financial services would therefore become increasingly important in the context of resource constraints for recovery and reconstruction.

7.2.6 Financial tracking system

Web-based FTSs

616. A web-based FTS can be launched within the government or the office of the UN Resident/Humanitarian Coordinator. It provides information on the total aid received from different sources, expenditures incurred by different agencies, and sectoral physical and financial progress. An FTS is a well-recognised tool for monitoring humanitarian aid, and it can be used for monitoring the financial progress of the transitional settlement and reconstruction programme as well. It does not, however, include the information on the IFIs' loan assistance. The disbursement and use of IFI loans would be monitored through a separate financial system suggested under the credit agreement.

Audit systems

617. All the expenditures incurred on the transitional settlement and reconstruction programme are subject to annual audit. It is necessary to institute an audit system, internal or external, for the programme. Audit reports need to be in the public domain. A monitoring and evaluation system aided by annual audit would improve accountability and transparency in the programme implementation.

7.2.7 Financial resource planning timeline

Timeline

618. The timeline for various activities involved in financial resource planning for the transitional settlement and reconstruction programme is represented in the following table.

Table 7.2 Timeline for financial resource planning activities

Timeline and objectives	Activities: Government: ministries/departments/ agencies	Activities: National stakeholders: NGOs/corporate sector/ civil society groups	Activities: International agencies: UN system, IFIs, IFRC, donors
1–15 days **Mobilisation of resources for provision of transit/shelter and other life-saving needs**	Release of money from calamity/emergency funds Reallocation of funds and materials within government for urgent life-saving needs Request assistance from international agencies and corporate sector	Mobilisation of assistance in cash and kind for provision of basic facilities; seek donations and contributions from international and national donors, private citizens and corporate groups.	Release of assistance from the CERF (through UN/OCHA) Seek access to emergency funds from their own agencies
1–30 days **Assessment of temporary shelter and emergency repair needs and provision of immediate assistance**	Approach IFIs for loan assistance, if necessary. Release of special assistance for construction/supply of temporary shelter and other emergency repairs needs. Provision of funds for special needs	Commitment of resources for transportation of shelter material/ construction of temporary shelter and other essential relief supplies	Appeals for specific relief supplies, including the provision of temporary shelter Mobilisation of resources for emergency shelter and other critical transitional needs
15–90 days **Transitional settlement and reconstruction needs assessment and resource planning**	A detailed assessment of sector-wise damages and losses. Projection of funding requirement for transitional settlement and reconstruction in each sector	Mobilisation of resources Planning transitional settlement and reconstruction support on the basis of availability of funds	Deployment of inter-agency assessment team Formulation of early recovery programme on the basis of the assessment report
30–120 days **Preparation of transitional settlement and reconstruction programme and funding arrangements**	Development of a comprehensive transitional settlement and reconstruction programme Total funding requirement projected Strategy development for resource mobilisation Initial negotiations with the IFIs for transitional settlement and reconstruction loans	Assessment of resource availability with each of the stakeholders through different sources Development of co-financing and partnership arrangements with government and international agencies	Launch of International Appeal for Early Recovery Engagement with donors for the mobilisation of resources Setting up of MDTFs Preparation of IFIs' project appraisal report
45–180 days **Implementation of transitional settlement and reconstruction programme**	Budgeting and release of funds to specific agencies Channelling of international assistance Loan agreement with IFIs Development of disbursement system to the beneficiaries	Develop special assistance schemes for disaster-affected communities and families in consultation with financial institutions Availability of concessional loans/grants through NGOs and donors	Flow of international assistance Memoranda of understanding signed with government agencies for utilisation of international assistance IFIs' development credit available and project operational
90 days–date of project completion **Financial systems for transitional settlement and reconstruction programme**	Actual disbursement to agencies and beneficiaries Reporting system for expenditure and utilisation Accounting support Conduct an audit of expenditures under the programme	Provide information upon the flow and utilisation of financial resources Release of funds to the beneficiaries Preparation of audit and evaluation reports for the expenditures incurred	Project management and financial system operational Systematic disbursement to recipient agencies Mid-term review Audit of expenditures Preparation of implementation completion report

7.3 Assessing damage and the needs and resources of the affected population

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This toolkit is a guide to the process of assessing damage and the emergency, transitional and permanent sheltering needs of affected populations. It offers:

- step-by-step guidance on when and how to undertake shelter, housing and settlements damage and needs assessments in the aftermath of a sudden crisis or shock, including both initial rapid and subsequent in-depth assessments;
- a framework on which coherent damage assessment can be based; and
- managing some of the constraints to effective needs assessment (e.g. access) and suggestions on specific tools and resources to use to collect the information.

This toolkit should help field-based relief and recovery planners and managers with no specific technical knowledge, as well as those responsible for coordinating and implementing post-disaster needs assessments. It assumes limited experience with post-disaster needs assessment processes.

By undertaking these assessment activities, strategic and programme plans will be better informed and more suited to the response. It is also important to collaborate with other organisations in undertaking assessments and to share data to ensure an equitable, comprehensive and integrated response.

Checklist 7.4 **Damage, needs and resources assessments**

1. **Review** existing information to determine the extent of further assessment necessary.
2. **Coordinate** with others to undertake joint assessment wherever feasible.
3. **Identify** stakeholders and possible vulnerable groups.
4. **Decide** information needed.
5. **Prepare** for fieldwork, including capacities and resources plans and budgets.
6. **Select** areas that provide a representative sample of the affected region to visit.
7. **Choose** suitable tools and methods to collect data.
8. **Gather** the information.
9. **Analyse** the information to identify particular needs and gaps in current assistance.
10. **Validate** the findings by cross-checking data if possible.
11. **Conclude** and make recommendations, to improve future response.

7.3.1 Overview and principles of needs and damage assessment

Importance of continuous assessment

619. Systematic and continuous assessment is important to sector activities to achieve an accurate understanding of the situation of the affected population or to assess how the situation and priorities have changed over time (» section 2.2.8).

Avoiding bad programmes

620. While good information does not always guarantee a good programme, poor information almost certainly guarantees a bad one.

Problems resulting from bad assessment

621. Poor assessment in previous responses have caused problems such as: providing tents when tools, building materials and/or cash would have been more appropriate; designing houses that are culturally inappropriate or difficult to maintain; neglecting to install essential water and sanitation services or access roads; or missing the most vulnerable and marginalised groups in targeting the assistance.

Assessment principles

622. The toolkit is based on principles that:

- sheltering assistance should enable affected households and communities to incrementally upgrade from emergency to durable solutions as soon as possible; and
- affected households and communities should be supported to identify and implement their own shelter solutions to the fullest extent possible in a coordinated manner.

Short and longer term

623. It provides advice on how to organise assessments, with the aim of designing appropriate short- and longer term shelter, housing and settlement solutions that build on the knowledge and experience gained from each stage of the response to the next.

Assessment good practice

624. The following checklist is adapted from *Guidelines for Emergency Assessment* (IFRC, 2005):

1. **consult the people affected.** Encourage the people affected by the emergency to explain how they view the situation. Even in rapid-onset emergencies it is possible to seek the opinions of the local people;
2. **consider the particular needs of different groups and individuals** (women, men, the elderly, children, etc.). People will be affected differently by the emergency and their needs will also differ;
3. **consider the reliability of information.** Information may be 'fact' (definitely true), 'opinion' (depends upon the perspective of the person giving the information) or 'rumour' (based on unverified information);
4. **consider bias.** Everybody is biased. Take into account the perspectives of the informants and those carrying out the assessment;

1 Principles and coordination
2 Planning for response
3 Responding to hazards
4 Transitional settlement: displaced
5 Transitional reconstruction: non-displaced
6 Implementing a response
7 Toolkits
8 Resources

5. **look for marginalised groups and ensure that their interests are taken into account.** Consider who has power and whose voice is not heard. Marginalisation may be based on gender, ethnicity, social status and/or many other characteristics;

6. **look for changes and trends that affect society.** Try to understand what is causing these changes;

7. **look out for the unexpected.** Be prepared to have your assumptions challenged. Be alert and try to find out what issues are most important to the people you are talking to;

8. **consider the impact of certain issues on society as a whole.** For example, HIV/AIDS is not just a health issue. In many parts of the world, it has a devastating social and economic impact;

9. **throughout the assessment, think about how the information will be used.** Ask yourself what sort of programme might be appropriate to deal with the issues being raised. Consider the potential positive and negative effects of a programme; and

10. **time field visits carefully.** Try to avoid times when people are particularly busy or when there is a holiday or celebration. Some people are absent during particular seasons, and activities and vulnerabilities may vary from season to season.

7.3.2 When to undertake assessment

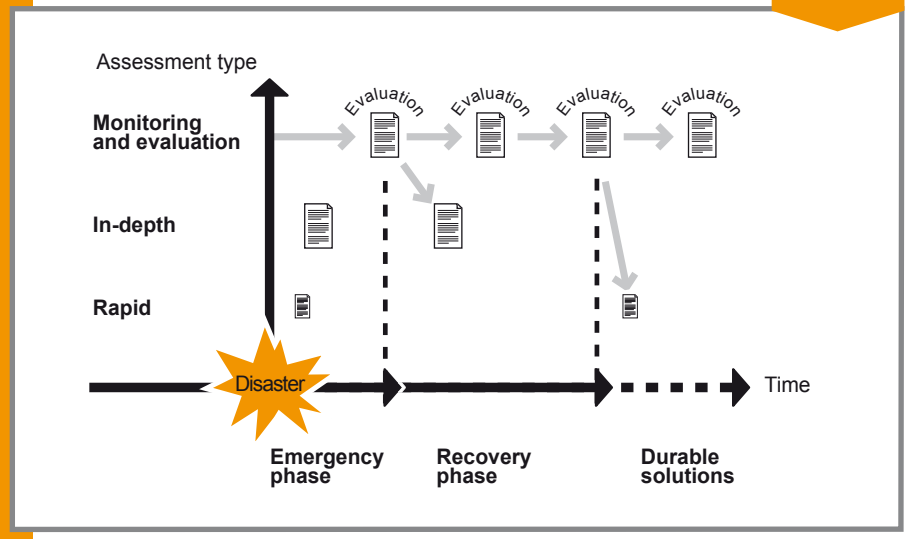
Avoiding costly mistakes

625. Many responding agencies base strategic shelter and/or housing assistance planning and programming decisions on a one-off assessment carried out a few days or weeks after the disaster. It is only after the programmes have been completed that an evaluation is conducted and costly mistakes that could have been avoided are discovered.

Implementation and assessment in parallel

626. Implementation, however, cannot be postponed until a thorough assessment is carried out. Assessment and implementation must run in parallel. A profile of those affected should be started as early as possible during the emergency response. It is important, though, that this profile is added to and updated as responding agencies find out more about the situation and its impact on people over time.

Needs assessment process **Figure 7.1**



Continuous needs assessment

627. Post-disaster needs assessment should be viewed as a continuous process of:

- consulting with the affected population and other stakeholders (» section 2.2.7);
- monitoring for changes to their needs and circumstances; and
- checking that assumptions being made are still accurate; and updating the programming strategy accordingly.

Unstable situations

628. This is particularly important when the situation is unstable or evolving rapidly, such as when a natural disaster occurs in a conflict-affected area.

Assessing opportunity for reconstruction

629. Post-disaster damage assessment should be viewed as a vital basis from which to develop a coherent and comprehensive plan for recovery and reconstruction. Undertaking damage assessment can prevent organisations putting funds and resources into responses that are unsuitable, such as providing tents when it would be cheaper and more appropriate to provide tools or materials to repair existing housing.

Rapid, in-depth AME

630. The specific timeframe and methods used for conducting assessments following a rapid-onset natural disaster will vary, subject to contextual factors such as: the security situation; physical access to the affected area; and/or the financial and human resources available. However, assessments can be broadly grouped into three categories: rapid assessment, in-depth assessment and continual assessment which includes monitoring and evaluation (AME).

Rapid assessment

Rapid assessment

631. A rapid assessment provides information about the immediate needs of the affected population, possible response types and resource requirements, and the extent of damage to housing and shelter. It normally takes one week or less. The assessment should be carried out as soon as possible after the disaster occurs, at the same time as any life-threatening or other critical needs are being addressed. It should form the preliminary basis of establishing baseline information about the affected population, confirming or adjusting strategic objectives and identifying desired programming outcomes.

Immediate response

632. Even in the midst of an emergency response, it is still possible to begin the process of collecting key data. During the initial 24–72 hours, this may be limited to recording observations. These observations, if systematically gathered using simple pre-designed standard forms, can be an invaluable source of information for planning both ongoing emergency shelter and transitional and permanent housing programmes. Some sample forms can be found in tables 7.3 and 7.4. This information can be combined with secondary data and some key informant interviews over the course of the first week following the disaster.

Source for tables 7.3 and 7.4: IFRC, 2005.

Example first 24 hours rapid field assessment form **Table 7.3**

First 24 Hours — Type of disaster: / GPS coordinates:

Rapid Field Assessment Form (B)

1. Geographic area		Approximate number of inhabitants	
2. Community assessed		Approximate number of inhabitants	
3. Assessment team leader's name:		4. Name of contact person in the community and contact info:	
5. Date	6. Time		
7. Persons	# Injured	# Dead	# Missing
8. Homes affected	# Minor damage	# Moderate damage	# Destroyed
9. # of families (provide % if number is not possible within 4 hours)	Currently known displaced evacuated	Projected displaced evacuated	
10. How are people being sheltered? Shelter/host families/camps/other	Describe shelter situation		

Urban ☐ Peri-urban ☐ Rural ☐

Describe damage and access

11. Status of roads. Best way to access affected area		
12. Conditions / access of: (as applicable) • Rail • Bridges • Water facilities • Sewage systems • Schools • Health facilities • Electricity • Telephones • Airport • Seaport		Concerns for Hazardous materials ☐ Toxic spills ☐ Oil spills ☐ Other:

17. Expected needs:

(OBSERVATION) Describe livelihood losses

13. Effect on urban settings (if applicable):	Commercial buildings	Business / factories	Government buildings
14. Brief description of livelihood groups and how they are affected (secondary information)			
15. What are the specific physical losses in agriculture? (if applicable)	Crops/gardens	Animals (e.g. livestock, poultry, etc.)	Tools
16. What are the specific physical losses in fishing? (if applicable)	Boats	Nets	Tools

17.
a. Is the local government active in the disaster response? Yes ☐ No ☐ Don't know ☐
b. Is the community responding to the disaster? Yes ☐ No ☐ Don't know ☐
c. Are NGOs responding in the disaster area? Yes ☐ No ☐ Don't know ☐
Who?_____

Minor damage: Building can be safely occupied but needs minor repairs.
Moderate damage: Building cannot be safely occupied and requires major repairs.
Destroyed: Obviously destroyed and requires rebuilding.
Note: If necessary, sketch a map to show location.

Table 7.4 Example first 72 hours field assessment form

First 72 Hours

Field Assessment Form (B)

Type of disaster:
GPS coordinates:

Urban ☐ Peri-urban ☐ Rural ☐

1. Geographic area:		Approximate number of inhabitants	
2. Community assessed:		Approximate number of inhabitants	
3. Assessment team leader's name:		4. Name of contact person in the community & contact info:	
5. Date	6. Time		
7. Persons (Update)	# Injured	# Dead	# Missing
8. Homes affected (Update)	# Minor	# Moderate damage	# Destroyed
9. # of families (update) (provide & if number is not possible within the 72 hours)	Currently known displaced / evacuated		Projected displaced / evacuated

(OBSERVATION) Describe conditions

10. How are the manes of communication functioning? Land line, mobile phone, VHF, HF, etc.	

11. Relief

What are the climatic factors?	Is the current shelter resistant to rain, wind, sun, cold?
What is the physical status of existing structures?	How many people lack adequate shelter?
What is the immediate risk to life? How many are at risk? Which social groups are most at risk and why?	What is the customary provision of clothing, blankets and bedding for women, men, children and infants, pregnant and lactating women and older people?
What did a typical household used to have?	

17. Expected needs:

12. Food and nutrition

Is food available in the disaster area? Yes ☐ No ☐ What kind?	Is there enough for the potential number of people affected? Yes ☐ No ☐ Explain:
Is this food accessible to all the affected people, or do only a few have access?	Explain:
Do people have access to cooking facilities? **Utensils**: None ☐ Few ☐ Many ☐ **Fuel**: None ☐ Few ☐ Many ☐ **Pots**: None ☐ Few ☐ Many ☐ **Other:**	Do people have access to a safe place to prepare and eat? Yes ☐ No ☐ Describe
What are people's dietary habits (main food products they normally consume)?	
Are there specific groups that face difficulties in obtaining food in this site? If so, who and why?	

13. Health

What was the health and nutritional situation of the people before the disaster? Explain:	Is there a health emergency? What is its nature? How is it likely to evolve?
How many people are experiencing serious trauma or other psychological effects since the disaster?	Describe access and conditions to health facilities:
Is any disaster-related problem affecting health facilities? Equipment: Medicines: Consumables: Vaccines: Number of staff:	
What health activities should the Red Cross Red Crescent engage in to supply needs/resources?	Number and kind of specific health target/vulnerable population

Table 7.4 Example first 72 hours field assessment form

14. Safety, security & protection

Have families been separated? Yes No Approximate number: Has registration of affected people been undertaken? Yes No	Are there any potential security threats?
Have families been separated? Numbers: Locations: Details of registration process: Are there unaccompanied minors?	Explain:
Restoring family links Is there any need for restoring family links? Yes ☐ No ☐	Explain:
Are people subject to: Physical abuse: Sexual abuse: Gender-based or psychological intimidation: Insecurity: Discrimination:	Explain:

15. Water and sanitation

Are diarrhoeal diseases above normal? Are they increasing or decreasing?			
Water supply Are people getting enough water for: Drinking Yes ☐ No ☐ Bathing Yes ☐ No ☐ Cleaning Yes ☐ No ☐	Are people using unsafe water sources as alternatives? Why?	How is water carried and in household?	Do people treat water at home by: Filtering Yes ☐ No ☐ Boiling Yes ☐ No ☐ Chlorinating Yes ☐ No ☐
Excretal disposal Where do people defecate/urinate at present?			
Hand washing Are there adequate hand washing/bathing facilities at key points and are they used? Is soap or an alternative available?			

16. Sheltering

Impact on people's homes and key services: Houses: low ☐ medium ☐ high ☐ Water: low ☐ medium ☐ high ☐ Sanitation: low ☐ medium ☐ high ☐ Electricity: low ☐ medium ☐ high ☐ Health: low ☐ medium ☐ high ☐ Community centres: low ☐ medium ☐ high ☐	If homes have been severely damaged or destroyed, where are people living? On the site of their former homes? Yes No Approximated numbers: With friends or family? Yes No Approximate numbers: In camps? Yes No Approximate numbers:
Do people use their homes for	Did people use their homes to
productive activities? Yes? No? Have they lost access to this space to produce goods? Yes ☐ No ☐ Are they unable to run small businesses? Yes ☐ No ☐ Has the disaster affected their productive activities? Yes ☐ No ☐	store: Tools or equipment Yes ☐ No ☐ Provide shelter or food for animals? Yes ☐ No ☐ How has the disaster affected this use? Explain:

Shelter requirements – climatic factors: Need to resist heavy rain: Yes ☐ No ☐ Need to resist heavy wind: Yes ☐ No ☐ Need to resist hot weather: Yes ☐ No ☐ Need to resist cold weather: Yes ☐ No ☐	Describe the physical status of shelters:

17. Livelihoods

What are the main types of activities households use to make a living? (e.g. farmer with smallholding, office worker, wage labourer, remittances, a combination of activities, etc.)	What were the main sources of income and food prior to the disaster?
What are the main agricultural activities? Who does what on the land and who owns it?	What has happened to households that run shops? What were the main sources of income and food prior to the disaster?
Have communities lost key items (assets) that they need for their work (e.g. fishing or farming equipment, means of transport, tools or equipment, etc.)? Explain:	
Have important environmental assets been damaged or destroyed which may affect people's future ability to make a living?	Briefly explain:

Update damage and access

18. Status of roads. Best way to access affected area		
19. Conditions/access of: (as applicable) • Rail • Bridges • Water facilities • Sewage systems • Schools • Health facilities • Electricity • Telephones • Airport • Seaport		Concerns for Hazardous materials ☐ Toxic spills ☐ Oil spills ☐ Other:
20. a. Is the local government active in the disaster response? Yes ☐ No ☐ Don't know ☐ b. Is the community responding to the disaster? Yes ☐ No ☐ Don't know ☐ c. Are NGOs responding in the disaster area? Yes ☐ No ☐ Don't know ☐ Who?_____		

Minor damage: Building can be safely occupied but needs minor repairs.
Moderate damage: Building cannot be safely occupied and requires major repairs.
Destroyed: Obviously destroyed and requires rebuilding.
Note: If necessary, sketch a map to show location.

In-depth assessment

In-depth assessment

633. Within a few days to a few weeks after the disaster, when the immediate life-saving needs have been addressed, it should be possible to conduct a more detailed assessment of the situation of the affected population. Detailed assessments generally take about one month, but could take less or more time depending on the size of the area, the complexity of the issues and the resources available to carry them out.

Importance of evaluation

634. Evaluations say that involving people improves project impact. Humanitarians say accountability is also a fundamental right and value.

Opportunities from in-depth assessment

635. An in-depth assessment allows more time to undertake consultations with stakeholders, especially the affected communities. A greater number of locations can be visited and a wider number and range of people interviewed. Gaps in information can be filled, including the identification of gaps in the assistance already being provided and/or planned. Agreement can be negotiated with the stakeholders on the selection criteria and methods by which the objectives of the assistance will be achieved, as well as the performance indicators to measure progress towards their achievement.

Monitoring and evaluation

Ensuring needs are met

636. Disaster situations tend to be volatile and dynamic. Once a detailed assessment has been carried out and agencies are fully operational in the affected area, information should be continuously collected and analysed by programme personnel to ensure that programmes remain relevant and effective. This includes inviting feedback from beneficiaries and reporting to them on progress against indicators and about the issues they raise. The creation of a formal complaints mechanism is also an effective (and essential) way of finding out whether programmes are actually working well and meeting the needs of affected people.

Allowing for changing needs

637. Regular monitoring allows managers to identify emerging problems, follow trends and determine the effect of their responses. When a change is identified, another needs assessment may be undertaken to determine the nature of the need or circumstances. In some cases, this may lead to a shift in strategy or programming.

Case study 7.1

Indian Ocean tsunami

» Case study 1.2.

Assessing needs

An analysis of information flow to tsunami-affected populations in Aceh Province in August 2005 found that there was a serious lack of information about reconstruction reaching affected communities. People who did not know how to register for jobs or who to ask about housing or land loss compensation were not in a good position to use the services available to them, or to understand the range of options when making decisions about, for example, whether to move home or stay in a barracks.

Assessment, undertaken during the implementation of transitional shelter and reconstruction programmes, enabled agencies providing assistance to identify low-cost, technologically and culturally appropriate means of improving outreach to affected people.

Formal evaluations

638. Formal and independent reviews and evaluations should also be carried out at periodic intervals, using established performance indicators (e.g. midway through programme implementation, upon completion and two to three years after a programme has finished). The lessons learnt must be made accessible and widely known. This will help to find out whether the objectives and expected results of the programme have been achieved and to document lessons learned.

7.3.3 Assessment activities

Various means of assessment

639. There are many ways to conduct damage and needs assessments, and the exact requirements of each situation will depend on the circumstances. Following is a description of the activities which need to take place.

1 Principles and coordination
2 Planning for response
3 Responding to hazards
4 Transitional settlement: displaced
5 Transitional reconstruction: non-displaced
6 Implementing a response
7 Toolkits
8 Resources

Activity 1. Review existing information

Levels of assessment

640. There are two key levels of assessment. The first level is that of communities and groups within communities which are affected by a disaster. The second level is that of organisations involved in responding to a disaster. This includes government, non-governmental and private organisations that provide external assistance and support. Experience shows that those providing disaster relief and those directly affected by a disaster often have different perceptions of the impact of the disaster and corresponding relief and recovery needs. Identifying these different perceptions and then consolidating them into one set of issues and actions will improve the efficiency of relief and recovery efforts.

Secondary information

641. A considerable amount of time and money can be saved by reviewing what secondary information is already available. In rapid-onset emergencies, particularly in conflict-affected areas, collecting information can sometimes be difficult or dangerous, so secondary information is also a practical alternative where access is limited.

Sources of secondary information

642. Secondary information can come from a wide variety of sources. If coordination or information dissemination mechanisms have been activated in the country, these will be key resources for maps (e.g. damage, loss), shelter coverage information and operational standards and protocols. It will also include consultation with development agencies, which often have a rich knowledge of poverty, vulnerability and capacities, as well as knowing what have been successful approaches to assistance in the past.

Need for field assessment

643. It may be decided at this stage that a field assessment is not possible due to access issues or is not needed, as existing information is adequate or other agencies are already gathering the data required.

Activity 2. Coordinate with others

Sharing information

644. Humanitarian and development organisations should coordinate closely from the outset of a disaster response to gather and share information, so that the analysis and planning for emergency and transitional shelter can be directly linked to the analysis and planning for permanent housing and settlements.

Joint assessment

645. If it is decided that assessment is required, whenever possible, undertake joint assessments with other agencies. Resources can be used more efficiently, information and decisions shared, and assessment fatigue reduced. Repeated assessment of the same places is wasteful and can have negative impacts on accuracy and security.

Facilitating joint assessment

646. Joint assessment works best when the participating agencies share common values and operational principles and use the same or compatible assessment methodologies. Without a common format, the comparison of assessments, monitoring and evaluation results becomes difficult if not impossible. Wherever possible, establish formal agreements specifying the roles and responsibilities of each agency when carrying out joint assessments. If a joint assessment is not feasible, it is still essential to know who else is making assessments.

Activity 3. Identify stakeholders and vulnerable groups

Stakeholder consultation

647. Stakeholder consultation, both with those directly and indirectly affected by the disaster, is important to have a clear understanding of factors that may positively or negatively impact on the implementation of emergency, transitional or permanent shelter solutions. Identification of possible vulnerable groups with special needs (e.g. single parents, orphans, landless tenants) should be undertaken, through discussions with key informants. It is also desirable to develop and maintain an ongoing relationship between stakeholders.

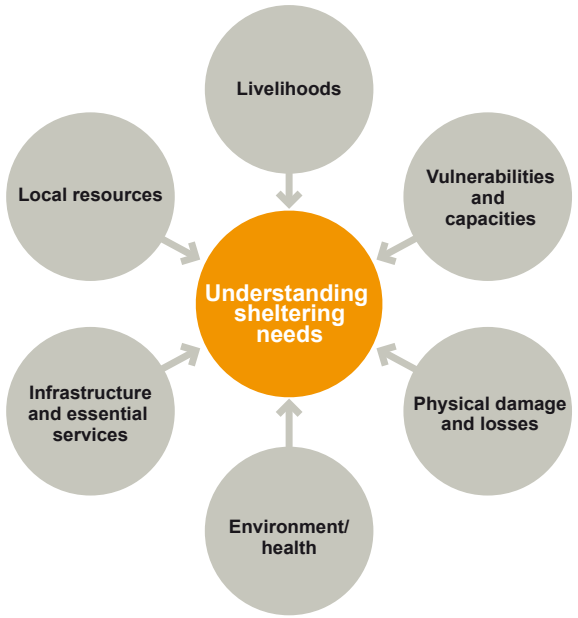
Activity 4. Decide what information to collect

Holistic approach to information

648. Housing and human settlements are particularly subject to economic, social and cultural specificities and these can vary between villages, neighbourhoods and even families. This implies taking a more holistic approach to sheltering needs assessment, and trying to understand the situation from the perspective of the affected communities. Such an approach includes information on the:

- socio-political and cultural context;
- the impact of the disaster on affected people's livelihoods;
- health, the environment and key infrastructure;
- the capacities of the affected population to recover; and
- their vulnerabilities to present and future hazards.

Figure 7.2 **Some key elements of sheltering needs assessments**



Selecting information

649. Choosing exactly what information is most important to collect, given time and resource limitations, can be challenging. The choices made will depend on the specific context, the nature and scale of the disaster and the mandate of the organisation. Good cross-sectoral cooperation, coordination and information-sharing are essential, as all key sectors are linked to and influence each other.

Pre- and post-disaster changes

650. For all stages of assessment, it is important to focus on the changes between the situation before the disaster and the situation after the disaster, and to obtain regular updates. In addition to data on damages, losses and numbers of people affected, some categories of information that have been found to be important include the following:

- **profile of affected population.** Obtaining a general overview of the geographical, social, cultural, political and economic environment that existed in the affected area before the disaster and identifying any changes as a result of the disaster is fundamental. Information on the age, gender and diversity of the affected population allows for more accurate targeting of assistance to ensure that it is equitable and reaches the most vulnerable and marginalised. It is equally important to understand existing power relations – e.g. who has access to and control over resources and decision making within a community and who does not, in order to profile also vulnerabilities and;
- **protection and safety.** Following a natural disaster, affected people who were already poor and socially vulnerable may become at greater risk of: violence, theft, misappropriation of land and violation of land rights and forced resettlement, among other things (» section 7.7);

Case study 7.2

El Salvador earthquake

On 13th January 2001, an earthquake with a magnitude of 7.6 on the Richter scale struck El Salvador. A month later, a second earthquake struck, with a magnitude of 6.6. Some 844 people were killed, and 108,000 houses were destroyed.

Tackling women's vulnerability

After the 2001 earthquakes, single women insisted that the sheeting provided for temporary shelters be opaque and strong. In the past, it had been translucent, making it easy to see when they were alone. Given that it could easily be cut with a machete, many women had been raped.

- **livelihoods.** Homes and settlements are usually located where they are accessible to work places, whether these are fields or factories. For many poorer and more vulnerable groups, home-based enterprises are a key source of livelihoods. Likewise, if the home included storage spaces for crops and shelter for valuable animals, the loss of these can have a significant impact on increasing a household's vulnerability (» section 1.1);

- **infrastructure.** Understanding how the disaster has affected key services, such as roads, water and sanitation systems, electricity, or access to important community services such as health, education and local markets is key in order to reduce the vulnerability of the population to future disasters, by planning infrastructure reconstruction on appropriate sites and with hazard-resistant construction technologies;

- **environment and health.** The affected population may have displaced to areas where malaria or other diseases are common, and they may require relocation to safer areas or special assistance. Additionally, it is important to assess what environmental damage the assistance potentially could reduce or increase, through, for example, the choice of construction materials or the siting of settlements in relation to key natural resources such as forests and mangroves;

- **sheltering options being used by the affected population.** People will take up different temporary housing strategies, depending on their needs and circumstances. Likewise, the sheltering strategies adopted or preferred by affected people will usually be quite different in urban settings to those in rural settings. Understanding these differences is fundamental to identifying the most appropriate programming options and approaches;

- **coping strategies, capacities and vulnerabilities.** Describe the physical, social, environmental and or/economic risks, shocks and hazards faced by the affected communities prior to the disaster; the impact of the disaster on the vulnerability of affected people; the strategies being used to cope with the current disaster and their effectiveness; and any added risks associated with these coping strategies;

- **local resources.** Understanding what local capacity is available to implement shelter and housing programmes is vital. Generally speaking, the greater the ability to use local resources, the better the chances become of designing appropriate, cost-effective and sustainable programmes (Barakat, 2003). Mapping what public and private financial contributions, cash or in-kind, are available to support shelter and housing programmes, what is the institutional capacity of communities and assisting agencies to provide assistance, and how are local banking and financial institutions functioning, are elements on the basis of which the implementation strategy must be tailored. What types of unskilled and skilled labour are available for construction? What building materials are available and are they affordable, in sufficient quantity and acceptable to recipient communities? What are the risks of inflation? What are the local housing and settlement designs and building techniques? How safe are these designs and techniques in relation to local hazards? Questions should be asked regarding land ownership, title and rights. People without secure title to land or who are renting are often more likely to be excluded from shelter assistance. Agencies that undertake reconstruction on sites where property rights are not clear can risk losing the investment; and

- **needs and priorities of affected communities.** Most important of all is to ask affected people, including host households and communities in situations of displacement, how they feel and what they want to see happen (» section 2.2.7).

Case study 7.3

Pakistan earthquake

» Case study 3.1.

Lack of support for tenants

Following the Pakistan earthquake of October 2005, the government provided funding to house owners whose homes had been destroyed. One report observed that landlords, who had themselves suffered financial losses from the earthquake, were reluctant to use the money to rebuild accommodation occupied by tenants. In other cases, landlords collected compensation for damage to their tenants' homes, but passed only a fraction of this money to the tenant (Adams and Harvey, 2006).

Activity 5. Prepare for field work

Planning the assessment

651. Planning the assessment involves setting the objectives, establishing the terms of reference (TOR) and selecting team members. The objectives, the expected outputs, the questions that must be answered and the activities that will be carried out should be defined as specifically as possible. The TOR should explain why the assessment is being done and what is expected to be achieved.

Ensuring a variety of specialists in the team

652. It is very important that the composition of the team is multi-disciplinary, including expertise in areas such as: shelter, water and sanitation, livelihoods and community participation. Local knowledge and previous experience of disasters in the country or region are equally critical. Assessment teams should include local expertise and be gender balanced (as women often will talk more freely with other women about certain issues).

Ensuring sufficient resources

653. The plan and budget for the assessment should also project the number of local people needed to support the team to conduct the needs assessment – as a general rule, the more limited the time available and/or difficult the terrain, the greater the number of surveyors needed. Resources and constraints to carrying out the assessment should be identified, such as skills available, condition of roads, time available, security or seasonal factors. If possible, inform the local community and local authorities well before the assessment takes place.

Activity 6. Select the areas to visit

Representative sampling

654. It is rarely possible to visit the entire region affected by an emergency. Statistical methods may not be feasible when conducting an initial rapid assessment because of time and access constraints. Representative places must, therefore, be selected to be visited from among the most affected areas (IFRC, 2005).

Purposive sampling

655. The first step is to identify areas most affected, using secondary information and key informants (key informants are individuals who are considered knowledgeable about the affected population). Secondly, the most vulnerable groups should be selected through rapid, on-the-spot consultation with different stakeholders. Finally, random or purposive sampling techniques can be used to select individual and group informants. In random sampling, each individual in the affected population has an equal chance of being selected to be included in the assessment, through a semi-structured interview. In purposive sampling, particular groups of interest are selected, such as children, tenants or host families.

Wider sampling for in-depth assessment

656. For in-depth assessments, it is possible to select a wider range and number of places to visit. In addition to focusing on the area and/or population directly affected by the disaster, it is useful to also include areas and/or populations indirectly affected (e.g. neighbouring communities economically affected) and areas and/or populations unaffected or minimally affected (e.g. communities with little or no loss of housing stock or infrastructure). Visiting the latter can provide useful comparisons of 'normal' housing and human settlement patterns, which is important when trying to design rebuilding strategies in ways that will not create tensions between or within communities.

Activity 7. Choose tools and methods

Selecting appropriate tools

657. The ability and the means to gather information will vary with the context and circumstances. The selection of appropriate tools is best undertaken in a team discussion, consulting or involving as many stakeholders as is practical. Some tools require specific training, access or information from specific sources, so an analysis should be made of the resources available and the likely constraints before selecting suitable tools (Corsellis and Vitale, 2005).

Methods of assessment

658. There are three broad methods for collecting information:

- researching: studying printed or published material, such as agency and government reports, maps, books, newspapers and websites;
- talking to people: formal or informal interviews with individuals or groups including community meeting and focus groups; and
- looking: quantitative measurement or qualitative assessments based on personal observation.

These methods have been combined into a wide variety of data-gathering guidelines and tools used by many aid organisations.

Damage assessment

659. For damage assessment, categories have been developed, from conflict situations such as the Balkans, to facilitate the identification of the level of damage to housing stock, based on a quick visual judgement. These categories can be applied in natural disaster contexts too. The categories are described in the following table.

Table 7.5 Damage assessment categories for visual surveys

Category 0

- No damage

Category 1

- Undamaged or minor damage
- Broken tiles, doors and windows
- Will require assistance

Category 3

- Partial damage
- Up to 30 per cent roof damage
- Can be repaired

Category 4

- Severe damage, need for replacement of roof, floors, doors and windows
- Over 30 per cent roof damage
- Can be repaired

Category 5

- Destroyed
- Needs complete reconstruction
- Cannot be repaired

Source: adapted from UNHCR damage assessment forms for assessments undertaken in the Balkans (2000).

Using assessment tools correctly

660. No matter how good or simple the tools or methodologies used, the people carrying out damage and needs assessments will almost always need appropriate training on and experience of their use. At a minimum, team members must be briefed to ensure a common understanding of the TOR, survey methodology, information being sought and responsibilities. If interpreters are being used, then special attention must be given to ensure that they understand the concepts and terminology being used in the assessment and do not accidentally introduce their own views or opinions into the interpretation.

Variety of sources

661. Another key consideration in reducing the risk of bias is to ensure that the information collected can be triangulated, that is, it is collected through three or more different sources and compared to check for accuracy. These sources should be as diverse as possible. If several different sources provide the same information, it is probably correct.

Activity 8. Gather the information

Steps in undertaking assessment

662. Every day in the field is different and must be planned accordingly. There are a number of basic steps, however, that the team should follow:

- prepare for each day's work (usually the evening before);
- talk to the local authorities upon arrival in a location. Explain the reason for the visit. This can include providing a pre-prepared sheet that describe the organisation(s) and gives contact details, a good way of increasing transparency and accountability;
- take an informal walk around the area accompanied by local people. This will give an initial impression of the community. Identify groups or individuals to talk to in order to gather the required information; and
- arrange to meet with all members of the assessment team at given times during the day to share ideas and resolve any problems.

Activity 9. Analyse the information

Using results of assessment

663. The analysis of the information gathered should facilitate better understanding of:

- the interactions of shelter with other key sectors and the broader context in terms of reducing or increasing people's vulnerability and ability to cope;
- the special needs of particular groups or communities, such as minorities;
- people's own assessment of their key needs and highest priorities;
- the capacity of communities, government, NGOs, the private sector and international agencies to respond;
- any stakeholders, policies or processes that may positively or negatively affect the ability to respond to the priority needs identified by the affected communities; and
- what other organisations are doing, so that programmes or activities are not duplicated.

Obtaining results from the assessment

664. Information from all the different sources will need to be synthesised in order to answer the following:

- what are the main problems? Who is affected by these problems?
- how well can the affected population cope with the problems?
- is other assistance currently available to the affected population? What are the gaps? and
- is there a need to provide assistance? If so, what type of assistance is required?

Activity 10. Consolidate and validate the findings

Informing stakeholders of finding

665. Field assessments are among the first stages of direct engagement with stakeholders and where the process of trust-building begins. During and after completion the assessment, the team should agree on how to inform the stakeholders of the findings, particularly the affected communities. This should include outlining the limitations of the assessment and any planned follow up. Care should be taken to identify community structures that will help the information to reach those who may be excluded from formal decision-making arenas.

Workshops to verify data

666. For in-depth assessments, workshops can be held towards the end of the field phase to cross-check and verify the data. A workshop involving selected representatives of the government, civil society, the affected population and the private sector will provide another opportunity for feedback, while creating more ownership for the needs assessment process and its results.

Activity 11. Conclude and make recommendations

Acting on findings

667. The most important outcome of investing the time and effort into conducting good needs assessment is to act on the findings and recommendations. The results of the needs assessments should be used to inform and adjust ongoing strategic planning processes, particularly resettlement or reconstruction planning and implementation. Many needs assessments and evaluation forms and reports end up sitting on a shelf in the office, unused.

Informing response implementation

668. The process, all data and findings should, wherever possible, be documented to inform future assessments, monitoring and evaluations. Monitoring the programmes and strategy is necessary to ensure the programmes remain relevant, and will need to ensure the assessment findings are up-to-date.

Learning lessons

669. Relevant documentation, including lessons learnt, should be made available within each organisation and preferably published or made available online.

7.4 Risk management

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This toolkit provides guidance on:

- how to understand the nature of risk in relation to the broad pre- and post-disaster context of shelter/housing continuity;
- how to ensure that the safety of lives, livelihoods, local economies, property and the natural environment is a priority concern in decision making in the sheltering process; and
- how to manage risk.

The toolkit should help affected households, communities, districts or nations to analyse and manage risk.

In most cases a balanced combination of three options is required in order to manage risk:

- accept the risk;
- transfer the risk; or
- reduce the risk.

Checklist 7.5 **Risk mapping and risk management**

1. **Identify and assess risks.**
2. **Implement risk reduction measures.**
3. **Identify and assess secondary disaster risks and new risks.**
4. **Manage shelter and reconstruction.**
5. **Address management risks associated with project implementation.**

7.4.1 Understanding risk and prioritising safety

Pre-disaster contexts

670. Understanding the nature of risk in pre-disaster contexts involves:

- identifying, assessing, measuring, monitoring and responding to risks in relation to the sheltering process;
- reducing the risks posed to vulnerable dwellings and human settlements; and
- reducing risks as a result of early warning systems and evacuation programmes. However, such measures may expand other risks.

Post-disaster contexts

671. Understanding the nature of risk in post-disaster contexts involves:

- identifying, assessing and managing ongoing or secondary risks following disaster impact;
- managing risks associated with exposure to the elements due to the loss of shelter;
- managing new risks associated with the delivery of shelter and housing reconstruction programmes;
- managing human created threats to new settlements. These include fires/civil strife and violence/criminal activity/sexual attacks and harassment on residents; and
- managing any environmental risks associated with shelter or reconstruction programmes such as deforestation for fuel wood and ground, water and air pollution.

Prioritising safety

Building a safety culture

672. The building of a safety culture requires that an entire society accepts the responsibility to create and maintain safe conditions.

Three contexts for improving safety

673. The concern to improve the safety of dwellings and other buildings against earthquakes and other hazards needs to occur in three contexts, each offering different opportunities for successful risk reduction:

- retrofitting programmes are by far the most difficult context to address since the extent of the existing built environment is so vast and even within wealthy countries there is rarely a political commitment to allocate the resources needed for this task (» section 6.4.2);
- repairs and reconstruction performed to enhanced safety standards are the most feasible context to address since there is normally a strong political commitment for enhanced safety, and consequent resources to implement safety standards. However, the risk is that supervision is inadequate to ensure that quality is maintained (» section 6.4.2); and
- new construction with safe building measures may add 25 per cent to the building cost. Cost benefit arguments will indicate that this additional cost is well justified when compared with the social and financial costs of building reconstruction and repair costs as well as relief costs.

Further risks in shelter and housing programmes

674. In addition to protecting lives there are other risks to recognise with transitional settlement and reconstruction programmes. These relate to the management of threats to livelihoods, local economies, property and the natural environment.

Risk management

Three options for addressing risk

675. In addressing the risks noted above there are three options open to any affected household, community, district or nation:

- they can accept the risk and seek to live with it by making various adjustments to their perceptions, living patterns, assets, livelihoods and economies;
- they can transfer the risk through means of insurance, so that the risk is spread; or
- they can reduce the risk through a range of structural and non-structural measures.

Risk can generally not be eliminated

676. In most cases the solution to risk is to develop a balanced combination of the three options above. One option that is not generally feasible is to eliminate the risk, since this is rarely financially, socially, politically or technically feasible.

7.4.2 Identifying, assessing and managing risks

Defining acceptable risk

677. Defining acceptable risk: this is a decision made on political, economic and social grounds. It concerns the frequency of the event to design against, for example, whether to build dykes or levees against a 200-, 500- or I,000-year frequency flood. The calculation also relates to levels of protection in structural design, for example, whether to protect a building or water supply system against a 4.0 or an 8.0 earthquake on the Richter scale.

Safe collapse

678. In relation to technical safety standards for safe buildings, a more specific definition describes acceptable risk as being used: 'to assess structural and non-structural measures undertaken to reduce possible damage at a level which does not harm people and property, according to codes or "accepted practice" based, among other issues, on a known probability of hazard' (UN/ISDR, 2004). This definition is often abbreviated to the standard of safe collapse. High levels of damage may be acceptable, or inevitable, but neither injuries nor deaths are acceptable.

Identifying risk

679. Identifying risks involves collecting and analysing data concerning hazards, vulnerabilities and capacities within a given community, as described in Figure 7.3.

Risk identification within a community Figure 7.3

Risk assessment as an ongoing process

680. The systematic and ongoing diagnosis of risk is the key to the design and implementation of effective risk reduction measures at the community level as well as at national levels. The more information that can be gained about historical experience of hazards the better the risk assessment process. This involves three sequential processes:

Assessing risk – geographical context

- through available topographical maps;
- through existing census data; and
- through community profiling in terms of its history, economy and politics.

Assessing risk – hazard mapping

- identifying the types of natural and human made hazards that threaten the community in question;
- identifying where the hazards occur and establishing contours indicating high, medium and low risk areas of a given community;
- identifying the severity of the hazards. This is measured in various ways, such as: the depth of flood water or its velocity, the cyclone wind speed or accompanying flood surge depth, the earthquake scale of impact on the Richter scale, the extent of drought conditions;
- identifying the frequency of the hazards;
- identifying the duration of the hazards. This particularly applies to the duration of seismic aftershocks and duration of a drought or existence of flood waters; and
- identifying the characteristics of the hazard and the impact the hazard had on people, livelihoods, property and the natural environment.

Assessing risk – vulnerability and capacity assessment

A community's resilience to hazards

681. Who or what is at risk from the hazards identified by hazard mapping, and what capacities exist to create resilient communities? Where there is sufficient 'capital' or 'assets' for the community to be resilient to hazard impact (» section 7.3).

Ways of undertaking risk assessment

682. Risk assessment can involve professional teams comprising experts such as engineers, hydrologists and seismologists using advanced risk assessment methodologies such as a GIS. At the other end of the scale it is possible to de-professionalise the entire assessment process using members of the population at risk. The value of this lies in their gradual 'buy-in' to the process of understanding risks that can then naturally lead on to them having a key role in promoting risk reduction measures (» section 6.5.11).

Risk reduction planning cycle

683. The entire process of risk assessment as summarised above takes place within a cyclical risk reduction planning cycle, described in Figure 7.4.

Risk assessment within the risk reduction planning cycle Figure 7.4

Post-disaster risk assessment and monitoring

An essential process

684. Post-disaster risk assessment is an essential, but often neglected process. It should be combined with damage, needs and capacity assessments that form the basis for effective assistance.

Purpose of post-disaster risk assessment

685. One of the main purposes of post-disaster risk assessment is to identify any secondary risks requiring urgent actions, such as evacuations of vulnerable communities in order to save lives and protect property and the environment.

A continual process

686. Monitoring of risks is essential and is a continual process since risks continually change. The process therefore requires ongoing funding and institutional support.

Monitoring implementation

687. It is essential to monitor progress with DRR measures and both shelter and housing reconstruction programmes for quality control purposes. These processes are essential since they enable on-course corrections to be made to reconstruction practices.

A continual process

688. To be effective the monitoring system starts at the physical and financial planning stage.

Evaluation only comes with future hazard impact

689. One inherent problem with evaluating the implementation of DRR is that the ultimate test of all the measures will only come with a future hazard impact. Thus all other forms of evaluation remain partially effective.

Management of risks in disaster risk reduction, shelter and housing programmes

Management risks

690. In managing shelter or housing reconstruction programmes there are a series of management risks to recognise, and where possible anticipate and address, since to ignore them can jeopardise an entire project.

Minimising strategic risks

691. Strategic risks are related to major political changes, changes in donor reconstruction policy and the impact of secondary disasters on programmes. These risks can be minimised by careful and flexible planning, accurate damage assessments, needs and capacity assessments, and maintaining broad political support.

Minimising financial risks

692. Financial risks relate to economic changes in society, the failure of promised recovery funds to materialise, fluctuating currency exchange rates, changing interest rates, and risks of corrupt practice with funds being misappropriated. These risks can be minimised by careful professional financial planning and monitoring, and by establishing ample contingency funds to enable project managers to 'ride out' the turbulence of economic fluctuations.

Operational risks

693. Operational risks relate to failures in operational effectiveness or service delivery that may emerge in monitoring and evaluation. They result from ineffective planning or poor quality of inexperienced or incompetent staffing in the management of projects.

Project risks

694. Project risks can often be tracked back to unrealistic designs set within unrealistic timetables that fail to recognise the potential for delays that result from excessive demands on professionals, the work force, government officials and suppliers of building materials. A further culprit is often from reformist innovations that take time to be introduced.

7.4.3 Risk management throughout the response

Checklists

695. This section provides a series of checklists for risk management in mitigation, preparedness, relief response management and sustainable recovery and reconstruction.

Risk mitigation **Checklist 7.6**

1. **Identify and assess risks.**
2. **Define acceptable levels of risk,** fixing design standards.
3. **Design hazard-resistant housing and infrastructure.**
4. **Implement disaster risk reduction measures.**
5. **Monitor** to ensure that **safety standards** have been met.

Diverse approaches

696. Implementing DRR measures, comprises structural and non-structural measures, which together constitute the 'chain of safety', as described in Figure 7.5.

Figure 7.5 The chain of safety, integrating risk reduction elements

Chain metaphor

697. All structural and non-structural risk reduction measures need to be integrated. Any chain is only as strong as its weakest link. Thus, a given society may have good building bylaws to require safe building but if there is no enforcement, or training of builders to implement safe building measures then safety is inevitably compromised.

Checklist 7.7 Risk preparedness

1. **Identify and assess risks.**
2. **Define acceptable levels of risk,** fixing planning standards.
3. **Develop preparedness measures,** such as:
   - national and local disaster plans;
   - early warning systems;
   - evacuation planning and evacuation centres; and
   - measures to protect dwellings and infrastructure.
4. **Implement preparedness measures.**
5. **Monitor/evaluate whether effective preparedness is in place.**

Checklist 7.8 Risk management in relief response

1. **Assess damage, needs and capacities.**
2. **Manage secondary risks,** such as disaster induced fires/ water contamination, post-earthquake induced landslides, seismic aftershocks etc.
3. **Manage relief and the sheltering process,** by managing risks associated with exposure to the elements due to the loss of shelter.
4. **Develop awareness of risks within relief management,** by managing new risks associated with the delivery of shelter and housing reconstruction programmes and by managing human created threats to new settlements.
5. **Monitor** to ensure that effective response is being implemented.

Checklist 7.9 Risk management in sustainable recovery and reconstruction

1. **Revisit risk assessment and monitoring** to identify changes in risk profiles following disaster event.
2. **Re-define levels of acceptable risk** fixing design standards for shelter/reconstruction.
3. **Revise building codes and land-use planning controls,** including revisions to enforcement provision.
4. **Implement** safe reconstruction.
5. **Monitor** to ensure that safety standards are being met in reconstruction.

7.5 Land use, planning and tenure

7.5.1 Impacts and role in wider programming 226

7.5.2 Operations timeline 227

7.5.3 Incorporate land issues into strategic planning 232

This toolkit sets out a step-by-step guide to ten activities that will assist land use, planning and tenure programmes after a rapid-onset disaster, addressing three main issues: tenure security, disaster risk reduction and protection of the vulnerable.

The toolkit should help authorities and humanitarian organisations to ensure effective and equitable practices, and facilitate economic recovery, longer term development and preparedness for future disasters.

Security of tenure is required to ensure property and reconstruction rights. Disaster risk reduction is a necessary component of building back better and safer, and requires integrated land-use and spatial planning.

Checklist 7.10 **Land use, planning and tenure**

1. **Incorporate** land issues into strategic planning and needs and damage assessments.
2. **Advocate and support** property rights and measures to secure tenure and promote land administration, as well as legal identity and inheritance rights.
3. **Incorporate** land use and planning issues into risk and vulnerability assessments.
4. **Support** micro and macro land-use plans to mitigate future hazard risks.
5. **Support** access to land for informal, insecure, or illegal tenants.

Stakeholders involved in land use, planning and tenure activities **Table 7.6**

Stakeholder organisation	Job title of individual within organisation	Activities supported by the toolkit
National government ministries, including land ministries, and disaster management authorities	Officials responsible for land administration, use and planning Officials responsible for planning and coordination of emergency response and recovery	Integration of land issues and emergency response in strategic planning Incorporation of land issues into coordination of emergency response after disaster Development of rapid mechanisms to restore legal identity records, provide tenure security and determine rights to land Micro and macro land-use plans to mitigate further disaster risk and minimise the potential for resettlement of affected persons Settlement and tenure upgrading through the reconstruction process
NGOs and CBOs	Policy and advocacy officers Land experts Emergency recovery experts and technical officers	Advocacy regarding the housing, land and property rights of displaced and non-displaced persons, and of landowners and landless Incorporation of land issues into rapid (and ongoing) needs, damage and institutional assessment
UN bodies	Emergency response and recovery experts and officers Displacement and protection officers Humanitarian affairs officers Shelter and physical planning officers Land tenure officers	Incorporation of land issues into rapid (and ongoing) needs, damage and institutional assessment Development of rapid mechanisms to restore legal identity records, provide tenure security and determine rights to land Support micro and macro land-use plans to mitigate further disaster risk and minimise the potential for resettlement of affected persons
Red Cross Movement	Emergency response and recovery officers and experts Housing, land and property officers	Incorporation of land issues into rapid (and ongoing) needs, damage and institutional assessment Incorporate land use and planning issues into risk and vulnerability assessments prior to housing reconstruction
Other international organisations and international NGOs	Policy and advocacy officers Housing, land and property advisers Shelter and physical planning officers	Incorporation of an land issues into rapid (and on-going) needs, damage and institutional assessment Incorporate land use planning issues into risk and vulnerability assessments prior to housing reconstruction
Multilateral development agencies (e.g. IFIs)	Land experts Legal officers Sustainable development officers	Incorporation of land issues into rapid (and ongoing) needs, damage and institutional assessment Development of rapid mechanisms to restore legal identity records, provide tenure security and determine rights to land Micro and macro land-use plans to mitigate further disaster risk and minimise the potential for resettlement of affected persons Settlement and tenure upgrading through the reconstruction process

7.5.1 Impacts and role in wider programming

Ten activities complementing wider programming

698. The activities in this toolkit are designed to complement wider programming for disaster recovery and reconstruction. Using this toolkit will facilitate the following programming impacts.

Strategic planning and assessments

- Understanding of damage to the land administration system, including lost records, staff and equipment.
- Awareness of potential protection gaps relating to housing, land and property rights.
- Measures to increase institutional capacity relating to land use, planning and tenure.
- Responses to incentive structures that may create institutional or landowner resistance to policy measures.
- Alliances with suitable civil society organisations for local advocacy and information-sharing measures.
- Planning for the key land issues of tenure security, DRR and protecting the vulnerable.
- Responses to tenure security risks and groups at risk of losing access to land.

Housing, land and property rights

- Protection of housing, land and property left behind by displaced persons.
- Reassurance to displaced victims that their house, land and property rights will be protected.
- Rapid provision of tenure security prior to house reconstruction, including the option of community-based tenure documentation.
- Restoration of lost or damaged personal identity records, and provision of new records for those without identity papers prior to the disaster.

- Inclusion of inheritance issues in information awareness, advocacy and resettlement programmes, particularly in relation to women and children's inheritance entitlements.
- Institutional support and training for rapid inheritance determinations.
- Access to land and housing for renters, and illegal or informal land occupiers.
- Stronger land rights for illegal or informal land occupiers.

Land-use planning and disaster risk reduction

- Inclusion of informal, illegal and customary settlements in land-use planning.
- Mapping of hazardous areas prior to house reconstruction (» section 7.4).
- Micro and macro land-use planning to reduce future disaster risks.

Land acquisition

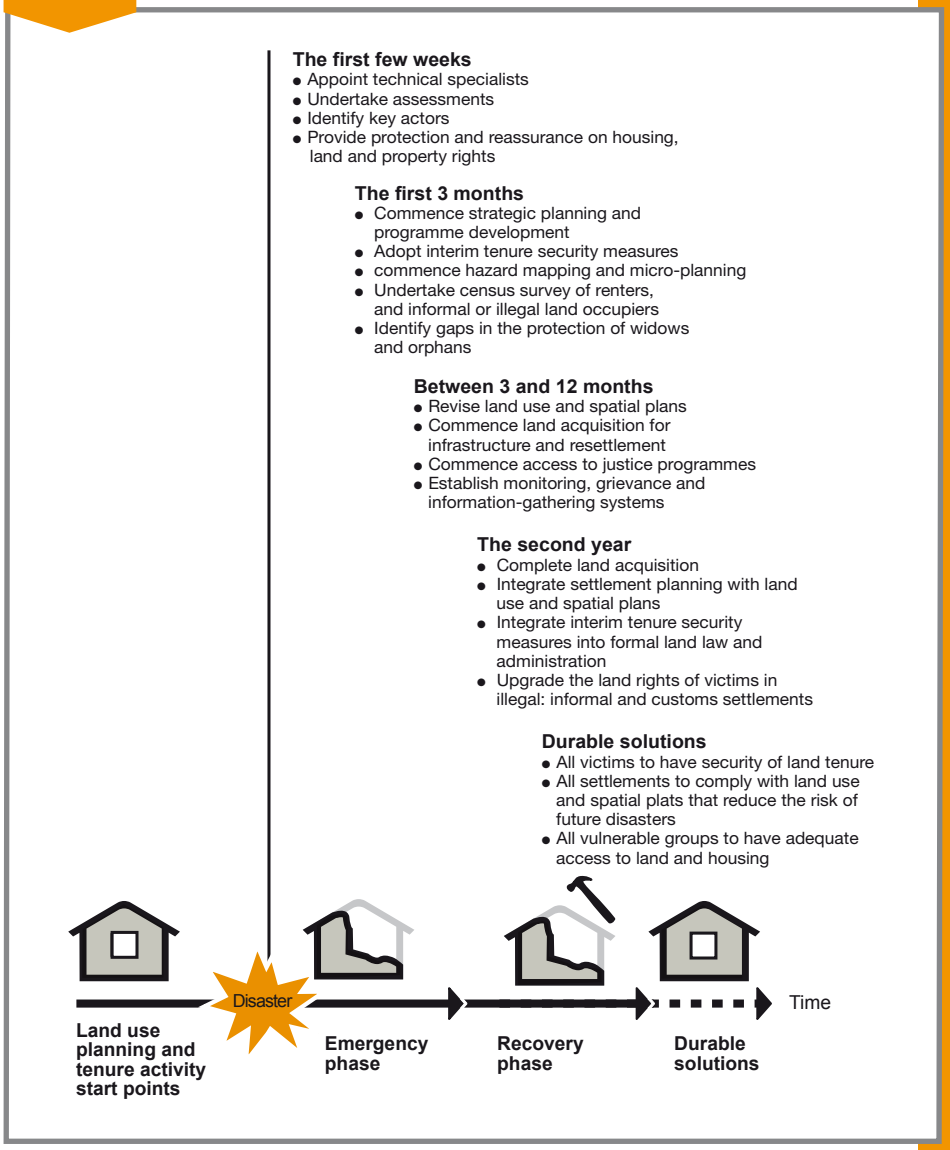
- Institutional support and analysis to facilitate land acquisition for infrastructure and sustainable settlements.

7.5.2 Operations timeline

Tackling land issues at every stage of the response

699. It is essential that land issues are incorporated into every stage of emergency response, early recovery and durable solutions. The commencement period for necessary activities are summarised in Figure 7.6 and set out in more detail in the sections that follow.

Figure 7.6 **Phases of operation**



Land use, planning and tenure activity start points

700. The following timeline indicates commencement points for land use, planning and tenure activities. Many of these activities should be undertaken on an ongoing basis through the early recovery period until durable solutions are reached.

Emergency response: the first few weeks

Emergency response

701. Key steps in the first few weeks after a disaster include:

- appoint international and national technical land specialists;
- include land issues in rapid needs and damage assessments (» section 7.3);
- reassure victims of disaster that their housing, land and property rights will be respected;
- assess land use, planning and tenure institutions; and
- identify key land policy actors in government and civil society, and form a specialised working group on land issues.

Early recovery: the first three months

First three months

702. Key steps in the first three months after a disaster include:

Strategic planning and programme development

- incorporate land issues and responses into strategic planning (» Chapter 2);
- allocate responsibility for programme development and implementation; and
- establish consultation mechanisms in relation to planned land programmes.

1 Principles and coordination
2 Planning for response
3 Responding to hazards
4 Transitional settlement: displaced
5 Transitional reconstruction: non-displaced
6 Implementing a response
7 Toolkits
8 Resources

Tenure security and documentation

- restore personal identity records;
- adopt interim tenure security measures; and
- support rapid determination of inheritance entitlements.

Land-use planning

- engage technical experts to map hazardous areas (» sections 1.4 and 7.4.2); and
- commence micro-planning with communities as to settlement reconstruction, including hazard-reduction criteria for relocation of housing.

Renters and illegal or informal land occupiers

- undertake census survey of renters, and informal or illegal land occupiers;
- seek stakeholder agreement on renter and squatter entitlements to land and housing; and
- determine policy frameworks and incentives for reconstruction of rental housing.

Widows and orphans

- assess housing, land and property protection gaps facing widows and orphans;
- support local civil society organisations providing advocacy and monitoring services in relation to women and children's housing, land and property rights; and
- design and obtain funding for programmes to facilitate access to housing, land and property for women and children.

Early recovery: between three and twelve months

Three to twelve months

703. Key steps within three and twelve months of a disaster include:

- implement interim tenure security prior to commencement of house reconstruction;
- support rapid inheritance determinations based on family agreements, in parallel with house reconstruction;
- revise land-use and spatial planning instruments to facilitate safe reconstruction;
- design and obtain funding for programmes to make land and housing available to renters, and informal or illegal occupiers;
- identify suitable land for infrastructure and resettlement (» section 7.6);
- advocate and support improved regulatory frameworks for land acquisition;
- commence access to justice programmes focused on housing, land and property rights;
- establish monitoring, grievance and information-gathering systems relating to housing, land and property rights; and
- commence upgrading of tenure security in illegal, informal and customary settlements.

Towards durable solutions: the second year

Second year

704. Key steps in the second year include:

- integrate interim tenure security measures into formal land law and administration;
- ensure that all housing assistance beneficiaries receive secure forms of land tenure;
- integrate micro-planning for settlements with macro land-use and spatial planning; and
- complete land acquisition for infrastructure and resettlement.

7.5.3 Incorporate land issues into strategic planning

Ten activities

705. While strategic planning can commence within hours of a rapid-onset disaster, the initial incorporation of land issues will take at least a few weeks. The ten activities described below should be undertaken in chronological order.

Checklist 7.11 Incorporation of land issues into strategic planning

1. **Appoint** technical specialists.
2. **Form an ad hoc working group** on land issues.
3. **Agree** on basic land-use, planning and tenure objectives.
4. **Agree** on basic steps to achieve objectives
5. **Establish** consultation mechanisms in relation to planned land programmes.
6. **Continuously update,** modify and evaluate strategic planning on land issues.

Land issues and assessments

706. It is important to incorporate land issues into rapid (and ongoing) needs, damage and institutional assessments (» section 7.3). Rapid needs and damage assessments should include the following land-title related questions.

Incorporation of land issues into assessments **Checklist 7.12**

1. **Assess number of parcels of land affected,** and extent of registration in the formal land administration system.
2. **Assess numbers of landowners affected,** numbers of dead and missing.
3. **Assess extent of destruction** of land and personal identity records.
4. **Assess degree of landholding and landlessness** among displaced persons.
5. **Assess number of renters, and informal or illegal settlers** displaced.
6. **Assess numbers of women** who are displaced and/or renters or residents of informal settlements.
7. **Assess numbers of female-headed households** among displaced and non-displaced.
8. **Assess operation of land institutions** prior to disaster, including efficiency and effectiveness in ensuring tenure security, access to land, and protection of human rights relating to housing, land and property.
9. **Assess response** of land institutions to disaster.

Special protection and reassurance measures

707. International standards (» section 1.5.4) require the protection of housing, land and property rights after a disaster. The loss of rights or access to land can increase the potential for social conflict, and delay recovery for the vulnerable. Quick action is necessary to prevent land-grabbing and premature return to hazardous areas. Both displaced and non-displaced populations should be reassured that their housing, land and property rights will be respected.

Checklist 7.13 Incorporation of special protection and reassurance measures in relation to housing, land and property rights

1. **Ensure that transport is available** to all displaced persons to monitor their vacant housing, land and property.
2. **Establish media monitoring and advocacy programmes** to publish cases of land-grabbing.
3. **Encourage relevant government officials** to issue public statements reassuring displaced and non-displaced victims that their house, land and property rights will be respected.
4. **Identify gaps in government programming,** and conduct land policy advocacy, information awareness and research programmes.

Need for early establishment of tenure

708. Early establishment of tenure certainty is necessary to ensure that reconstruction occurs in the right place, for the right people. Community-based mechanisms provide a rapid means to confirm rights and boundaries so as to allow settlement planning and house repair or reconstruction. Community-based mechanisms are particularly useful where land records are limited or have been destroyed. They can include signed statements of ownership that are confirmed by neighbours and local government officials, and verified against existing documentary records. Over time, community-based tenure documentation must be consistent with legal records and requirements, and integrated into formal land administration systems. Heirs will need verification through legal mechanisms. Boundaries will require surveying by authorised land officials. Community-based mechanisms must also include safeguards relating to the rights of women and absentee landowners.

Checklist 7.14 Incorporation of rapid mechanisms to provide security and certainty of tenure for reconstruction

1. **Initiate community-based** mechanisms for confirming land rights and boundaries prior to house reconstruction.
2. **Incorporate safeguards** in community-based tenure documentation relating to absent landowners and women's participation.
3. **Advocate regulatory mechanisms** to support community-based tenure documentation.
4. **Cross-check community-based tenure** documentation with local government officials and existing legal records (if any).
5. **Where necessary, request survey** (or re-survey) of boundaries by the government land administration agency.
6. **Advocate integration** of verified community-based tenure documentation into formal land titling records.

Rapid restoration of records and rights

709. Support rapid mechanisms to restore legal identity records and determine inheritance rights to land, with special measures to protect the entitlements of women and children.

Checklist 7.15 Restoration of proof of identity

1. **Restoration and extension** of personal identity records.
2. **Inclusion and monitoring** of safeguards relating to privacy and abuse of government power.
3. **Information awareness campaigns** regarding proof of identity restoration efforts and safeguards regarding privacy and abuse of power by government agencies.

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Risks to women and children

710. Securing inheritance rights is essential in all contexts, but particularly where there is a high mortality rate. Inheritance entitlements must be ascertained as part of tenure security measures, and in order to avoid future conflict and inequality of access to land.

Checklist 7.16 **Securing inheritance rights**

1. **Establish and support** programmes aimed at improving access to justice and including legal aid.
2. **Support advocacy and information campaigns** directed at women and children.
3. **Integrate family-based inheritance agreements** with mechanisms to restore tenure security prior to reconstruction.
4. **Support mobile courts** to verify and legalise family-based agreements and resolve disputes.
5. **Support information campaigns** on the rights of widows and children.

Assessments

711. Building back better and safer requires rapid assessment of risk and vulnerability in proposed settlement areas (» section 7.7). This assessment should include modern satellite technology, and be tailored to the type of disaster that poses the greatest risk of recurrence (» section 7.4). Particular issues include soil and geological stability, and low-lying vulnerability to floods, cyclonic surges or tsunami.

Checklist 7.17 **Incorporation of land issues into vulnerability and risk assessments**

1. **Support mapping** of hazardous areas using satellite and aerial photography technology.
2. **Back up** satellite results with participatory mechanisms and expert assessments.

Micro- and macro-planning

712. Micro-planning is a participatory method that facilitates building back better at the community level. It can involve adjustments to land boundaries, in order to improve public facilities or increase public safety. Macro-planning is a government-led process that stipulates the use of land and public spaces. It can involve restrictions on reconstruction through green belts, buffer zones and the like. While effective planning is essential to reduce the risk of future disasters, comparative experience suggests that resettlement induced by planning should be avoided wherever possible.

Checklist 7.18 **Minimisation of potential for resettlement**

1. **Establish participatory mechanisms** to undertake micro-planning of settlements at the community level.
2. **Advocate regulatory mechanisms** to support micro-planning, including adjustment of land boundaries with landowner consent in accordance with law.
3. **Integrate micro-planning** for settlements into macro land-use and spatial plans.
4. **Incorporate risk assessments and hazardous area mapping** into land-use and spatial planning.
5. **Support land-use restrictions** (e.g. in relation to forestry) that reduce vulnerability without disproportionately harming livelihoods
6. **Advocate public participation** in land-use and spatial planning.
7. **Advocate minimisation of resettlement** induced by land-use and spatial planning.

Tenure for all

713. Most disaster recovery efforts are characterised by residual caseloads of displaced persons who are not able to return to their pre-disaster places of residence. Invariably, this residual category of displaced persons includes:

- renters or other secondary rights-holders, who cannot afford to pay rents or are otherwise refused access to their former land (» section 5.2);
- squatters on public or private land who cannot return because access is denied, or because their house will not be rebuilt due to alleged illegality (» section 5.3.1); and
- those who were without access to land or housing before the disaster.

Securing land

714. All victims of a disaster are entitled to assistance to secure access to housing, land and property. Access to land for victims who are not landowners may be secured in a number of ways, including:

- reconstruction or repair of rental housing on condition that the pre-disaster tenant be restored (» sections 5.3.2 and 5.3.4);
- purchase of land on the private market (perhaps with assistance from government, donors or civil society);
- acquisition of land by the government;
- grant of land by friends, neighbours or relatives; and
- in the case of customary or communal land systems, grant of land with the consent of the community.

Incorporation of the needs of illegal or informal land occupiers — **Checklist 7.19**

1. **Undertake socio-economic survey** of renters, and illegal or informal land occupiers (building on rapid needs assessment census survey).
2. **Advocate equality of access** to land and housing for renters, and illegal or informal land occupiers.
3. **Appoint technical experts** experienced in ensuring land and housing access for renters, and illegal or informal land occupiers.
4. **Seek stakeholder agreement** on the best mechanism to provide land and housing access to renters, and illegal or informal land occupiers.
5. **Support monitoring programmes** relating to land and housing access for renters, and illegal or informal land occupiers.

Secure tenure as part of building back safer

715. A disaster offers the opportunity to build back safer (» section 7.7). Building back safer includes the provision of tenure security for all victims of a disaster. Well-planned settlements (» section 7.6) with secure forms of tenure, and adequate access to infrastructure and services, are less vulnerable to future disasters.

Upgrading of insecure, informal or illegal tenure through reconstruction — **Checklist 7.20**

1. **Include a land tenure specialist** in all settlement reconstruction projects.
2. **Liaise with government** officials to identify obstacles to tenure upgrading proposals.
3. **Incorporate tenure upgrading conditions** into settlement reconstruction or repair proposals.
4. **Support all housing assistance beneficiaries** to prepare the documentation necessary for legal security of tenure.
5. **Advocate tenure security** for all as a goal of recovery and reconstruction.

Land for resettlement and infrastructure

716. Land will be required for resettlement and infrastructure development after most natural disasters. The acquisition of land by governments has the potential to cause conflict and delay recovery. Early action is required to identify suitable sites and affected landholders, and to facilitate due process and participation mechanisms for the land acquisition process.

Checklist 7.21 **Advocating timely land acquisition for infrastructure and resettlement**

1. **Undertake an audit of public lands** in and adjacent to the disaster zone.
2. **Identify suitable public land for infrastructure** and resettlement.
3. **Provide a number of suitable sites** for infrastructure and resettlement projects, to keep the price of land acquisition at manageable levels.
4. **Support consultation and participation** mechanisms, with assistance from civil society organisations.
5. **Support incentives to minimise corruption** and ensure suitable site selection by land acquisition agencies.
6. **Appoint a technical expert** to prepare a manual on the acquisition of private land for infrastructure or resettlement.
7. **Advocate community-based resettlement** options through the provision of local or communal land.
8. **Ensure that land acquisition** complies with **international resettlement standards,** including as to due process and adequate compensation.

7.6 Permanent settlement planning

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This toolkit is a guide to the process of developing a comprehensive settlement plan following a natural disaster. The settlement plan takes into account not only physical needs but also social, economic, cultural, environmental and institutional issues.

The guidance is relevant to a wide cross-section of professional expertise, including those working in line ministries and their local offices, NGOs and research establishments. Coordination and cooperation should also be maintained with international donors, UN agencies and those IFIs with a particular interest in post-disaster transitional settlement and reconstruction planning (» sections 1.4 and 7.1).

In most disasters at least some of the population will relocate to new settlements or new locations in their existing settlements. This toolkit aims to provide guidance for post-disaster settlements where they become inevitable.

Settlement planning activities **Checklist 7.22**

1. **Assess** damage, needs, resources and risk.
2. **Identify and coordinate** with stakeholders on capacities available and resources required.
3. **Identify** and select site options.
4. **Consider** social, cultural and environmental factors.
5. **Involve** sector professionals.
6. **Support** existing legal and policy frameworks and institutional structures.

7.6.1 Planning for durable solutions

Multiple support options

717. While loss of life, particularly from weather-related disasters, has been reduced through improved preparedness, early warning and evacuation, economic and infrastructural losses have been steadily on the increase. Housing constitutes a major part of this loss and therefore occupies a significant part of post-disaster recovery and reconstruction.

Social, economic and cultural needs

718. Post-disaster settlement planning to meet the shelter and housing needs of the affected population is a major challenge, demanding regular revisions and adjustments to known strategies. While much learning has occurred there is still need to promote post-disaster shelter provision that emphasises the social, economic and cultural needs of the population and not just the purely physical and technical ones.

Longer-term implications

719. The tendency for post-disaster settlement projects to be conceived mostly as a collection of houses that do not meet these other needs of the affected population results in inappropriate and unsustainable settlements. At best many houses and settlements are altered by their occupants; at worst they are abandoned. The longer-term implications of social, economic, cultural and environmental considerations on the future of the affected population have often been overlooked or even dismissed on the basis that such considerations are 'unimportant', too costly, too complex, too time consuming to plan and execute or too socially and politically sensitive.

Holistic settlement planning

720. A comprehensive planning process that pays attention not just to housing but these other concerns of beneficiaries should form the basis of all post-disaster settlement planning. The process should involve a complex set of actors, including the beneficiaries themselves, local authorities, NGOs, CBOs, and private business, that may have a role in planning, executing or using the settlement. While the ultimate say should rest with beneficiary families and communities, the responsibility for developing the strategy for settlment planning and the coordination of its delivery rests with the national and local authorities (» section 1.4).

7.6.2 Operations timeline

Longer term implications of decisions

721. The responsible authorities in the affected country as well as humanitarian and development agencies should coordinate closely from the outset of a disaster response to gather and share information, so that the analysis and planning for emergency and transitional shelter and settlements can be directly linked to the analysis and planning for permanent housing and settlements.

Chronological list of settlement planning activities to be undertaken following a natural disaster Table 7.7

Timeframe (measured from disaster)	Activities
1 week–2 months	Assess the magnitude and pattern of damage and loss for housing and related social, economic and physical infrastructure Assess what has survived and can be reused, repaired and what needs rebuilding
2 months	Assess the needs and resources (financial, human, institutional, material, etc.) for housing and related economic, social and physical infrastructure as part of the wider transitional settlement and reconstruction planning
3 months	Identify transitional and permanent shelter solutions on offer and their status Establish/review beneficiary lists eligible for permanent housing, and their distribution for the various housing and resettlement options Determine beneficiaries and establish their rights to benefit from resettlement and inform them of their rights
3–6 months	Review available sites and land for settlements Assess ownership of land/tenure Assess hazard risks, environmental conditions, economic viability, logisticstatus, etc. of sites
Throughout	Community consultation on settlement location, social and economic viability, etc Various stakeholder consultations
6–9 months	Develop a strategy for resettlement planning as part of wider transitional settlement and reconstruction plan Set up an institutional framework (national and international) for funding and implementing resettlement plans

7.6.3 Settlement planning options

New settlements should be familiar and safer

722. Settlements that get damaged by natural disaster may have characteristics that will determine to a certain extent the nature of new settlements. Affected populations will generally want to live in types of settlement similar to those they lived in before the disaster, but safer and with better facilities (» section 3.1).

Classifying settlements

723. Settlements can generally be classified as:

- **small hamlets and villages** with basic social and physical infrastructure, that have a rural economic base from subsistence farming to cash crops and animal husbandry, often with strong social networks to be maintained;
- **medium-sized towns** with some economic activities and some social and physical infrastructure; or
- **densely populated urban to mega-city neighbourhoods** with housing, industry and significant social and physical infrastructure; rarely will a large city be destroyed.

Layout of the previous settlement

724. Following a disaster, affected people should be kept in their original locations as much as possible (» section 1.2). Most human settlements evolve over time, reflecting a combination of economic, social and cultural conditions. It is difficult to replicate such conditions in new settlements, especially under the time pressures of a post-disaster humanitarian response.

Options for supporting settlements

725. A number of options exist to support people after disasters:

- **in the original settlement,** where most social and physical infrastructure has survived, houses can be repaired or rebuilt, and a full settlement planning process may not be necessary. Such situations may require a careful assessment of what is missing from the existing settlement, what future disaster risks need to be reduced, what needs upgrading or retrofitting to make it a safer and more suitable settlement for its residents (» section 7.3);
- **next to or as an extension of existing settlements,** when this is politically acceptable to the local authorities and socially acceptable to host communities. Such an extension of existing settlements can make more efficient use of existing infrastructure. However, this needs to be supported and extended to accommodate the newcomers. Careful 'social engineering' is generally required to increase acceptance. Host communities should be supported in the upgrading of their living conditions even though they may be unaffected by the disaster (» section 4.2). Consultation with both communities is essential for the success of the plan; and
- **in a new settlement,** where future risk from multiple hazards can be eliminated or mitigated and people provided with a sustainable environment.

Size and density

726. The choice of location must be handled carefully in order to ensure that the housed population gains access to employment markets. Smaller settlements are more manageable, particularly for humanitarian agencies and CBOs and are likely to settle into existing communities.

Environmental degradation and social tensions

727. Large settlements increase the risk of environmental degradation and social tension, and present increased maintenance and management problems. Local authorities should be left to plan and manage them. Humanitarian and developmental organisations should focus their input on supporting government capacity, financially or with technical expertise as required (» section 1.4).

Location

728. Most local planning authorities will have settlement expansion and land-use plans prior to the disaster. Post-disaster reconstruction will provide an opportunity to revive such plans especially in terms of reducing future disaster risks.

7.6.4 Actions and steps

Planning steps

729. The steps that describe the process of planning are generic, and need to be adapted to different circumstances.

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Damage and loss assessment

Damage and loss assessment

730. **Damage and loss assessment** (» sections 2.2.8 and 7.3) forms the basis of transitional settlement and reconstruction lanning, and is therefore fundamental to devising a strategy for settlement. In addition to housing, an assessment of the social and physical infrastructure damage, environmental damage and livelihood losses is necessary for comprehensive settlement planning.

Needs and resource assessment

Needs and resources assessment

731. **Needs and resource assessment, including environmental assessment,** includes looking at economic, social and cultural characteristics that can vary from place to place and even between families of the same neighbourhood (» sections 2.2.8 and 7.3). This implies taking a more holistic approach to sheltering needs assessment; one that includes information on the socio-political and cultural context, and the key social and physical infrastructure needs of the affected population.

Capacities and resources assessment

732. A separate capacities and resources assessment is essential covering the institutional, human and financial capacities of the national and local governments to plan, coordinate and manage settlement planning; the resources of the affected population to recover; and the humanitarian agencies and community based organisations to support them.

Environmental resources assessment

733. A separate environmental resources assessment to determine options for water, sewage, disposal of waste, land to sustain rural livelihoods, climatic conditions, etc.

Environmental objectives

734. Environmental objectives for settlement planning also include the following:

- to minimise irreversible impacts on the environment;
- to promote the sustainable use of natural resources; and
- to exploit the sustainable potential of natural resources to give maximum benefit to the population.

Hazard and risk assessment

Hazard and risk assessment

735. **Hazard and risk assessment** (» section 7.4): due to the impact of disaster on the physical terrain and the likelihood of future disasters in highly risky areas, it may not be feasible for some communities to rebuild on the original sites.

Settlement of affected zones

736. While it is important to protect at-risk communities from future hazard events, past experience clearly shows that a total ban of the affected zones from settlement is neither feasible nor sustainable.

A practical approach

737. A practical approach would be to undertake hazard and risk assessments in order to identify when return to original sites is or is not technically feasible. These assessments should involve community representatives working with social and technical specialists, to assess the suitability of the original site for rehabilitation, including reducing vulnerability to various natural hazards, environmental risks, etc.

Stakeholders' identification and consultations

Stakeholders' consultation

738. **Stakeholders' identification and consultations** (» section 2.2.7): a wide cross-section of professional expertise has a role to play in the process of settlement planning, including line ministries and their local offices, NGOs and research establishments, particularly for risk assessment. Coordination and cooperation should also be maintained with international donors, UN agencies and those IFIs with a particular interest in post-disaster transitional settlement and reconstruction planning (» sections 2.2.2, 7.1 and 7.2).

Affected and host populations

739. Consultation, both with those directly affected by the disaster and with potential host communities is important to have a clear understanding of acceptable settlement solutions.

Private sector

740. The private sector, as suppliers and implementers of settlement plans, should be a part of the main stakeholders.

Land, location and site selection

Site selection

741. Land provision can be a major delaying factor in settlement planning as it will be a scarce commodity after a disaster. Checking all the necessary conditions to be met can take considerable time. Land is usually allocated by the government through the local authorities and can take many forms:

- transfer or allocation of public land;
- private land purchasing;
- expropriation from private landowners;
- partnership lease, sale, rent agreements with private land-owners/host settlements; and
- development of vacant and underdeveloped land.

Social and cultural considerations

Planning and plot allocation

742. The planning and development of post-disaster human settlements influence the way in which affected populations rebuild and develop their communities, both as they arrive and later on. It is important to support families to rebuild and develop their communities, reinforcing traditional coping strategies so that they can help each other (» section 3.1). Planning and plot allocation need to be coordinated so that related families and families from the same community can settle in close proximity, which will support community development. Cultural issues, such as those related to gender, should become part of the design considerations of the settlement plans, and profiles of communities should be established for this purpose.

Sectoral considerations

Avoid duplicating existing infrastructure

743. A comprehensive human settlement draws from the various sectors of the wider transitional settlement and reconstruction planning and is influenced by their effectiveness. Sector professionals should be consulted from the onset of a plan to define the requirements for social and physical infrastructure to support the delivery of their services, such as education, health and a water supply system (» section 7.1.3). The planning of post-disaster human settlements should integrate such services into a wider strategic and programmatic response. Where possible, and where politically expedient, existing services should be reinforced in a sustainable manner.

Avoiding parallel infrastructures

744. Parallel infrastructures should be avoided when some already exist, both because this may undermine the existing infrastructure, and also because the parallel infrastructure may not be sustainable. Infrastructure should be designed in such a way that it can be upgraded and extended within the financial and technical capabilities of the authorities and the communities.

Cost of improving services

745. Upgrades and better services often come with a cost that is not known to the communities from the start. Issues such as the cost of improved services to the population, their future maintenance and staffing, should be well understood and discussed with the beneficiary authorities, who will have the ultimate responsibility to provide salaries teachers or maintenance to roads.

Social and physical infrastructure

746. Key areas for social and physical infrastructure are:

- **water and sanitation.** Key factors to consider when planning water and sanitation schemes are sources and population density, because these will determine access to sanitary and waste disposal services. It may also be necessary to take into account traditional hygiene practices, for instance when choosing between the construction of family or communal facilities;
- **education and health.** Infrastructure support must be provided with the full participation of sectoral specialists and all stakeholders, based on an understanding of communities' education and health systems and traditions. In small settlements, such facilities may be shared with other settlements, in which case the location of new sites and new facilities has to be carefully considered. Staffing and maintenance of schools and clinics need to be negotiated with local authorities and communities;
- **roads and access paths.** Constructing or maintaining all-weather roads is often the highest single cost in supporting settlements that authorities and agencies often fail to budget for. Providing for road infrastructure and maintenance, as well as access to affordable transport, are fundamental aspects of site selection and settlement planning;
- **waste management.** Specific considerations when selecting the site and planning settlements should be given to refuse collection and disposal;
- **market places and commercial facilities.** Access to markets in site selection, including creating sufficient and appropriate areas for use as markets in large settlements, is essential to livelihoods and community development. Businesses and small shops will proliferate in time and the settlement plan must include sufficient space and structures for their development. In rural areas communal space for livestock and storage of harvest should also be considered as part of the plan; and
- **cemeteries and mourning areas.** Specific considerations when planning should be given to the customs of the displaced population, maintaining traditions and dignity.

Coordination on legal issues

747. Legislative, legal and policy frameworks as well as institutional structures must be supported when carrying out post-disaster transitional settlement and reconstruction planning. The following are required for a successful outcome: organisation and coordination of the planning and implementation process; sharing and maintaining information; establishment of standards and equity; and sustainable funding and involvement of the relevant authorities, particularly those that are at the local level.

Long-term inputs

748. Coordination of the various inputs into settlement planning is essential and are not easy without a coordination framework (» sections 1.4, 2.2.2 and 7.1). An authority to oversee long-term post-disaster transitional settlement and reconstruction is often assigned or established after large-scale disasters. Settlement planning policies and frameworks should coordinate with the work of these bodies and integrate rather than duplicate. Local and international humanitarian organisations should maintain their dialogue among themselves and with the authorities for enhanced impact from their work.

Post-disaster settlement planning actions **Checklist 7.23**

1. **Support resettlement** only if voluntary.
2. **Perform thorough assessment** of beneficiary needs and preferences.
3. **Consult communities** when selecting sites, locating or prioritising services.
4. **Assess capacities** of communities and of national stakeholders.
5. **Respect social structures and cultural sensitivities,** especially when relocating families.
6. **Maintain equal standards of assistance** amongst various settlements and act upon opportunities for social equity and change.
7. **Support the creation of livelihoods** opportunities.
8. **Respect the environment.**
9. **Coordinate with stakeholders** and synchronise actions/inputs for a comprehensive settlement plan; work as a team to avoid duplication.
10. **Apply policy, legal and institutional frameworks.**
11. **Provide security and reduced future disaster risks.**
12. **Provide essential social and physical infrastructure** as was or to an improved level as before the disaster.
13. **Allow for potential and opportunity** to expand the settlement.
14. Think of **future sustainability** and maintenance of the settlement and its provisions.
15. **Plan flexibility** to address changing needs and conditions.
16. **Apply the *Guiding Principles on Internal Displacement*** when responding to complex emergencies (📖 UN/OCHA, 1998).

7.7 Building back safer

7.7.1 Disaster risk reduction within strategic planning 253

7.7.2 Implementation strategies 255

This toolkit provides a concise guide to 'building back safer' through post-disaster transitional shelter and settlement planning. It includes information on:

- disaster risk reduction within strategic planning; and
- implementation strategies.

The toolkit should help all stakeholders involved in rebuilding affected communities to implement effective disaster reduction strategies and to build back safer, including humanitarian agencies, governments, UN bodies, IFIs and the private sector, such as construction companies, local builders and individual homeowners.

Building back better and safer ensures that risks are not rebuilt during recovery from the impact of disasters, so that future risks are reduced.

Checklist 7.24 **Disaster risk reduction (DRR) strategy**

1. **Incorporate** risk reduction into strategic planning. Analyse damage patterns – what survived/did not survive – including land, siting, design, structures, materials and maintenance. Determine hazards, vulnerabilities, future risks and their location.
2. **Assess** needs, resources and capacity. Identify both institutional and community needs, resources, and capacity for recovery.
3. **Incorporate** spatial and land-use planning into risk, vulnerability and capacity assessments prior to reconstruction of housing.
4. **Inform and train** on risk reduction and safe construction techniques. Inform the public on safe construction, siting and building maintenance; advocate DRR with the public and the authorities. Give training and information dissemination on DRR; integrate DRR into design and implementation of housing and settlement planning.
5. **Transfer** risk through insurance and micro-insurance to the public and the authorities.

7.7.1 Disaster risk reduction within strategic planning

Better and safer in the post-disaster context

749. Disaster risk reduction (DRR) measures should be incorporated into the overall strategic plan and ideally implemented as soon as any reconstruction begins, and promoted continuously throughout the entire reconstruction process (» section 1.2). The DRR strategy will need to be implemented by all those involved in rebuilding, including humanitarian agencies, governments, and the private sector, such as construction companies, local builders and individual homeowners.

An opportunity for risk reduction

750. It is important to make best use of the 'window of opportunity' for risk reduction, which becomes available after a disaster, as:

- residents and officials are thinking about the problem of risk when they do not normally do so;
- disaster may already have forced some changes (for example by destroying unsafe buildings, infrastructure);
- the community has to make decisions about recovery; and
- technical and expert advice and resources become available from government and NGO sources.

Informing communities

751. It is necessary to ensure that post-disaster housing and settlement planning address safety issues very early on: communities must be informed of the principles of hazard-resistant design, construction and maintenance and some basic guidelines on how to rebuild their homes to make them more resistant very early on, while governments legislate and enforce building codes and land use, and international actors promote and support DRR as part of the wider recovery process.

Need for training on DRR

752. Without information and training affected households might build on the same vulnerable sites in the way they have always built prior to the disaster, leaving them equally vulnerable to damage and collapse from future disasters.

Construction in urban areas

753. Similarly, in urban areas, people will attempt to use newer high-tech materials, but without the know-how needed to employ these correctly. This can make new construction even more hazardous than the original construction.

DRR as an obstacle to recovery

754. There is the risk that DRR can sometimes be seen as an obstacle to effective programming rather than an important objective. This may happen for various reasons, such as lack of specific knowledge, pressure to shelter affected people, limited availability of safe land, complexities of risks identification or need to spend funds rapidly.

Coordinated activities

755. DRR activities need to be coordinated to be effective. A single activity, in the form of land-use planning for example, will only be effective if other initiatives such as safe siting and safe construction of buildings are in place.

Table 7.8 **Stakeholders involved in building back safer**

Stakeholder organisation	Job title of individual within organisation	Activities supported by the toolkit
National government ministries, including housing and land ministries, and disaster management authorities **Local authorities** **Special transitional settlement and reconstruction authority**	Transitional settlement and reconstruction coordinators Shelter and housing programme managers Officials responsible for strategic plans	Integration of DRR strategies into post-disaster shelter/housing and settlement planning as part of overall transitional settlement and reconstruction plan Integration of DRR measures into design and implementation of shelter/housing and settlement planning Development of legal and institutional frameworks for DRR Public information strategies on DRR Damage, risk, vulnerability and capacity assessments Land-use plans and micro-zonation to mitigate further disaster risk and minimise the potential for resettlement of affected persons
NGOs and CBOs	Transitional settlement and reconstruction coordinator/manager Shelter and housing coordinator and manager shelter and housing programme officer	Integration of DRR measures into design and implementation of shelter/housing and settlement planning Advocacy and public information dissemination Training of local builders, small construction companies
UN agencies and IFIs	Shelter and housing coordinator and managers DRR advisors Task team leaders Disaster management officers	Integration of DRR strategies into post-disaster shelter/housing and settlement planning as part of overall transitional settlement and reconstruction plan Incorporate land-use and planning issues into risk, vulnerability and capacity assessments prior to housing reconstruction

Comprehensive approach

756. The integration of DRR into housing and human settlement planning should involve the complex set of actors that may have a role in promoting, planning or executing DRR measures: the beneficiaries; national and local authorities; NGOs; CBOs; private business, including local builders and construction companies; academic and research establishments.

7.7.2 Implementation strategies

Taking any opportunity

757. Progress with the various DRR activities may happen at different pace and require good coordination among stakeholders. Below are the ranges of DRR activities that impact upon building back safer.

Critical issues for successful DRR

758. Promotion and implementation of DRR involve a complex set of issues to be considered. Some of those that are critical for post-disaster shelter and settlement planning cover:

- risk identification;
- risk reduction; and
- risk transfer.

Risk identification

Assessing vulnerability

759. Before any DRR activities are initiated it is important to carry out a number of assessments to determine the causes and patterns of damage; hazards that may affect the area; what is at risk from these hazards; and what makes buildings and settlements vulnerable. An understanding of the risks and their sources will form the basis for the DRR strategy (» section 7.4).

Damage assessment

760. A rapid survey of the damage pattern provides an understanding of such matters as: what survived and what is damaged; how different building materials, structures and techniques survived better; and which locations were the worst affected and why. This review will give a good understanding of what to avoid and what to promote. Real examples are usually more effective in disseminating the message of safety with the public and builders. The opportunity should be rapidly seized before the debris is cleared and 'evidence' erased. This rapid survey needs to be further substantiated by a more thorough and technical assessment by experts (» section 7.6).

Assessing hazard, risk, vulnerability and capacity

761. A multiple hazard assessment is necessary to determine areas suitable for construction, and those to avoid. Displacement can result in avoiding one type of hazard at a cost of being exposed to another. Safety requirement can be overlooked, especially when land is limited. In the case of existing settlement areas, hazard maps should be used to prioritise investments in strengthening or relocating buildings and infrastructure. In the case of sites identified for new development, hazard exposure should be factored into site selection criteria.

Integrated land use

762. Based on the observations of damage patterns and assessment of hazards and risks, the safety of available land and siting can be identified. It should be noted that lack of available land and difficulties in establishing ownership can delay the process of reconstruction. Identification of safe land to build on can be the single biggest factor in delaying reconstruction and sustainable recovery, especially given the time it takes to determine safety (for example, through macro- and micro-zonation in the case of earthquake-prone areas). Considerations for safety can also be in conflict with sources of livelihood and should be carefully considered in determining what will be acceptable to affected communities.

Indicators for risk identification

763. The indicators that represent risk identification are:

- systematic disaster and loss inventory;
- hazard monitoring and forecasting;
- hazard evaluation and mapping;
- vulnerability and risk assessment;
- public information and community participation; and
- training and education on risk management.

Risk reduction

Spatial planning

764. Post-disaster settlement plans that take into account safe siting of buildings, protect infrastructure, conserve environmental assets, and provide escape routes and safe public buildings to be used as hazard-proof shelters, can contribute to the safety of inhabitants.

Safe construction

765. Assuring disaster-resistant reconstruction and undertaking repairs and retrofitting to strengthen existing buildings will reduce future disaster risks. Each brick or stone laid in the recovery process can either contribute to risk reduction or to future disaster. Schools, health facilities and other critical infrastructure are expected to be rebuilt to the highest standards.

Training and education

766. Training of the general public, local builders and the construction industry in safe construction techniques is an important activity (» sections 3.2.3 and 6.5.11). The education of relevant professionals (engineers, architects and planners) contributes to safer design, planning and construction.

Communicating building for safety Table 7.9

Communication in planning	Respect local knowledge and aspirations
	Involve the beneficiaries at all stages
	Before trying to teach, find out how people learn
Educational materials	Concentrate on one or two essential messages
	Adapt educational techniques locally
	Identify clear targets and educational contexts
	Use demonstration buildings or models.
	Invest in staff
Illustrating building for safety	Draw literally, as people unused to reading pictures will interpret the images very literally
	Avoid abstraction
	Use three dimensions
	Stress relevant detail, and avoid unnecessary detail
	Avoid unfamiliar symbols and conventions and explain symbols
	Only use cartoons if understood and not seen as patronising
	Where possible, avoid connections and sequences, as images are generally read individually
	Cultural associations: identify the codes of respectability and avoid things which are alien
Pre-production testing	Always test new materials with representative samples of the target audience

Source: adapted from Dudley and Harland, 1993.

Advocacy and public awareness

767. The post-disaster period is the time when interest in knowing about future disaster risks is high and rumours spread. Where knowledge that contributes to an understanding of risks exists, it is often fragmented among various institutions, may be the domain of academic and research organisations, or not always be communicated to the public for practical action. Well prepared advocacy campaigns inform the public on: safe construction; siting and future maintenance of houses; repairs and retrofitting of existing homes; and advocate DRR with the public and the authorities (» section 6.5.10). Both training and advocacy materials should be carefully planned and designed to ensure that messages are effectively communicated and are technically and culturally appropriate.

Legal framework

768. Safety standards and building codes should be developed or improved where they exist. Local and national authorities need to respond appropriately when such standards are not met, by monitoring the effectiveness of inspection and enforcement systems.

Institutional framework

769. Relevant policies and organisational structures should be put in place. Once the hazard and mitigation information is available and relevant categories of people have been trained to carry out safe reconstruction, it is necessary to check that standards are being applied. This requires the administrative and technical capacity to review plans and to inspect constructions on site. A basic indicator of this capacity could be the percentage of communities served by building regulatory offices.

Indicators for risk reduction

770. The indicators that represent risk reduction are:

- risk consideration in land-use and urban planning;
- hydrographic basin intervention and environmental protection;
- implementation of hazard-event control and protection techniques;
- housing improvement and human settlement relocation from prone-areas;
- updating and enforcement of safety standards and construction codes; and
- reinforcement and retrofitting of public and private assets.

Risk transfer

Limiting responsibility

771. Financing of post-disaster shelter has become a critically important issue in view of the increasing cost of disaster losses. Following major disasters the cost of post-disaster shelter and reconstruction are often borne by governments and the international community. Increasingly governments want to limit their own responsibility for post-disaster recovery and transfer the responsibility to individual households through various financial risk transfer instruments.

Introducing insurances and micro-insurances

772. An insurance mechanism in principle establishes and expands national catastrophic risk management and risk transfer capabilities by making finance readily available to owners of damaged or destroyed dwellings; reducing government fiscal exposure; and reducing government dependency on public funds and international donor financing. This approach also influences a more owner driven and private enterprise led process of reconstruction of housing, and recovery in general. Disaster insurance is seldom indexed to employment of risk reduction measures by homeowners but risk-based premiums are potentially be a powerful tool for integrating DRR into housing (» section 7.2).

Timeline for building back safer activities Table 7.10

Timeline and objectives	Activities
1 week–6 months	**Risk identification** Analyse damages patterns, needs capacities, hazards, vulnerabilities and risks
1 week–continuous	**Risk reduction** Development of localised educational materials for public awareness and builder-training
3 months–1 year	**Advocacy** Public awareness and education Training of builders Land-use planning Safe construction and observation of safety standards Legal frameworks Institutional frameworks
6 months–5 years	**Risk transfer** Insurance and microinsurance

Resources 8

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8.1 Glossary of terms

Aftershocks Earthquakes that follow the largest shock of an earthquake sequence. They are smaller than the main shock and occur within a distance of one to two rupture lengths from the main shock. Aftershocks can continue over a period of weeks, months or years. In general, the larger the main shock, the larger and more numerous the aftershocks, and the longer they will continue (USGS, http://earthquake.usgs.gov).

Apartment owner-occupier For the purposes of these guidelines, this term describes the transitional reconstruction option where the occupant owns their apartment, a self-contained housing unit that occupies only part of a building, formally or informally.

Apartment tenant For the purposes of these guidelines, this term describes the transitional reconstruction option where the apartment is rented by the occupant, formally or informally.

Assistance methods For the purposes of these guidelines, this term describes the variety of material or service contributions that are combined and offered to beneficiaries in implementing a transitional settlement or reconstruction project.

Collective centres

For the purposes of these guidelines, this term describes a transitional settlement option, consistent with the following definition. Collective centres, also referred to as mass shelters, are usually transit facilities located in pre-existing structures, such as community centres, town halls, gymnasiums, hotels, warehouses, disused factories and unfinished buildings. They are often used when displacement occurs inside a city, or when there are significant flows of displaced people into a city or town (Corsellis and Vitale, 2005).

Complex emergency

A humanitarian crisis in a country, region or society where there is total or considerable breakdown of authority resulting from internal or external conflict and which requires an international response that goes beyond the mandate or capacity of any single agency and/or the ongoing United Nations country programme (IASC, from www.unisdr.org).

Contour planning

An approach to the layout and development of settlements, including the planned and self-settled camps of refugees and IDPs, that follows or reflects the topography of the site (Corsellis and Vitale, forthcoming 2008).

Disaster

Any natural or man-made event causing much suffering, distress or loss, e.g. earthquake, drought, flood, fire, hurricane, tornado, tidal wave, explosion, epidemic (UN-Habitat, 1992).

Disaster contingency planning

A process that results in an organised, planned and coordinated course of action to be followed in case of an accident or disaster that threatens society or the environment. Such plans clearly identify the institutional and organisational arrangements that come into play in the event of a disaster that disrupts the usual coping mechanisms of communities and societies (UN/ISDR, forthcoming 2008).

Disaster risk management

The systematic process of using administrative decisions, organisation, operational skills and capacities to apply strategies, policies and coping capacities of the society and communities to lessen the impacts of natural hazards and related environmental and technological disasters. This comprises all forms of activities, including structural and non-structural measures to avoid (prevention) or to limit (mitigation and preparedness) adverse effects of hazards (UN/ISDR, forthcoming 2008).

Disaster risk reduction (disaster reduction)

The conceptual framework of elements considered with the possibilities to minimise vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development.

A disaster risk reduction framework is composed of the following elements, as described by the International Strategy for Disaster Reduction and the Hyogo Framework for Action:

1. policies, institutions and national plans: to ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation;
2. risk identification: to assess, map and monitor disaster risks (hazard and vulnerability/capacity analysis) and enhance early warning, including forecasting, dissemination of warnings, preparedness measures and reaction capacities;
3. risk awareness and knowledge development through education, training, research and information sharing to build a culture of resilience at all levels;
4. reduce the underlying risk factors and apply disaster reduction measures in different related domains, such as environmental management, land-use and urban planning, protection of critical facilities, application of science and technology, various forms of partnership and networking, and the use of financial instruments; and
5. strengthen disaster preparedness to reduce the impact of disaster and ensure effective response at all levels. (UN/ISDR, forthcoming 2008.)

Dispersed settlement

For the purposes of these guidelines, this term describes the three transitional settlement options of host families, rural self-settlement and urban self-settlement that are available to populations displaced by conflicts or natural disasters.

Scattered, isolated groups of houses often in rural areas (UN-Habitat, 1992).

Displaced populations

Persons who, for different reasons or circumstances, have been compelled to leave their homes. They may or may not reside in their country of origin, but are not legally regarded as refugees (UNDHA, 1992).

Durable solutions Although not defined formally, for the purpose of these guidelines this term describes the point at which permanent settlement and shelter for both displaced and non-displaced populations have been rebuilt and established, sufficient for communities to support their own livelihoods.

Emergency phase Although not defined formally, for the purposes of these guidelines this term describes the period immediately following a disaster during which those members of the affected population who have not been displaced will be living in homes which have damage to varying degrees and who have varying requirements to ensure their survival and wellbeing.

Family plot A small piece of land allocated to an individual family for their own management (Corsellis and Vitale, 2005).

Grouped settlement For the purposes of these guidelines, this term describes the three transitional settlement options of collectives centres, self-settled camps and planned camps that are available to populations displaced by conflicts or natural disasters.

Hazard A potentially damaging physical event, phenomenon or human activity that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.

Hazards can include latent conditions that may represent future threats and can have different origins: natural (geological, hydro-meteorological and biological) or induced by human processes (environmental degradation and technological hazards). Hazards can be single, sequential or combined in their origin and effects. Each hazard is characterised by its location, intensity, frequency and probability (UN/ISDR, forthcoming 2008).

Host families For the purposes of these guidelines, this term describes a transitional settlement option, consistent with the following definition, 'sheltering the displaced population within the households of local families, or on land or in properties owned by them' (Corsellis and Vitale, 2005).

House owner-occupier For the purposes of these guidelines, this term describes the transitional reconstruction option where the occupier owns their house and land or is in part-ownership, such as when repaying a mortgage or loan. Ownership may be formal or informal.

House tenant For the purposes of these guidelines, this term describes the transitional reconstruction option where the house and land are rented by the occupant formally or informally.

Housing Lodging or shelter for human habitation. The immediate physical environment, both within and outside of buildings, in which families and households live and which serves as shelter. Also, a government project to provide shelter to low-income groups (UN-Habitat, 1992).

Influx Although not defined formally, for the purpose of these guidelines this term describes the number of displaced people arriving at a certain point at a given time.

Informal owner-occupier For the purposes of these guidelines, this term describes the transitional reconstruction option where the occupant owns their house, but has no formal land ownership.

Internally displaced persons (IDPs) Persons displaced from their habitual place of residence by disaster, fear of persecution or fear of physical harm, but remaining within the territorial limits of their country of origin. Like refugees, IDPs have no internationally defined legal status (DFID, 2003).

Land tenant For the purposes of these guidelines, this term describes the transitional reconstruction option where the house is owned, but the land is rented.

Liquefaction Process by which water-saturated sediment temporarily loses strength and acts as a fluid. This effect can be caused by earthquake shaking (USGS, http://earthquake.usgs.gov).

Livelihoods The ways in which people manage their lives in order to access the resources that they need, individually and communally, such as food, water, clothing and shelter (Corsellis and Vitale, 2005).

Local infrastructure The facilities of a local or host population to meet their communal needs, such as schools, hospitals, water-distribution systems, electricity grids, market services, roads and bridges (Corsellis and Vitale, 2005).

Mass shelter See 'collective centres'.

Mitigation Any structural measures (such as physical flood defences and reinforcement of infrastructures) or non-structural measures (such policies and regulations in terms of building codes, land use, community knowledge planning and behaviour) undertaken to limit the adverse impact of natural or other hazards, environmental degradation, or potential disaster losses (UN/ISDR, forthcoming 2008).

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Natural hazards Natural processes or phenomena occurring in the biosphere that may constitute a damaging event.

Natural hazards can be classified by origin namely: geological, hydrometeorological or biological. Hazardous events can vary in magnitude or intensity, frequency, duration, area of extent, speed of onset, spatial dispersion and temporal spacing (UN/ISDR, forthcoming 2008).

Non-food item For the purposes of these guidelines, this term describes the basic goods and supplies required to enable families to meet personal hygiene needs, prepare and eat food, provide thermal comfort and build, maintain or repair shelters (adapted from The Sphere Project, 2004).

Occupancy with no legal status For the purposes of these guidelines, this term describes the transitional reconstruction option where the occupant occupies property without the explicit permission of the owner.

Physical planner The UNHCR term for an aid worker specialising in temporary settlement and shelter, and specifically the layout of camps [supported temporary settlements]; also termed 'site planner' and 'camp planner' (UNHCR, 2002).

Plan A plan is a report which presents a detailed course of action in response to a profile. It should identify which organisation is to undertake which particular activity, and over what period. Plans must be constantly revised, both through monitoring processes and through integration with other plans at different planning levels (Corsellis and Vitale, 2005).

Planned camps For the purposes of these guidelines, this term describes a transitional settlement option, consistent with the following definition. 'Planned camps are places where displaced populations find accommodation on purpose-built sites, and a full services infrastructure is provided' (Corsellis and Vitale, 2005).

Prefabricated shelters Shelters made in separate parts which need to be assembled on site upon delivery (Corsellis and Vitale, 2005).

Preparedness Activities and measures taken in advance to reduce or avoid possible damages from potential or impeding threats and to be ready to assist those who have been adversely affected by a disaster and need help beyond their coping mechanisms. This includes the issuance of timely and effective early warnings and the temporary evacuation of people and property from threatened locations (UN/ISDR, forthcoming 2008).

Prevention Activities to provide outright avoidance of the adverse impact of hazards and means to minimise related environmental, technological and biological disasters.

Depending on social and technical feasibility and cost/benefit considerations, investing in preventive measures is justified in areas frequently affected by disasters. In the context of public awareness and education, related to disaster risk reduction changing attitudes and behaviour contribute to promoting a 'culture of prevention' (UN/ISDR, forthcoming 2008).

Profiles Understanding the social and physical contexts of a conflict, natural disaster, or complex emergency is essential to developing plans of action to implement responses. This understanding must be developed into a 'profile', or an analysis of current circumstances (Corsellis and Vitale, 2005).

Programme plans Although not defined formally, for the purpose of these guidelines this term describes a series of plans, agreed by all stakeholders, that is consistent with the strategic plan, and that integrates project plans in order to describe programmes that respond to transitional settlement and reconstruction needs.

Project plans Although not defined formally, for the purpose of these guidelines this term describes a series of plans, agreed by all stakeholders, that is consistent with the strategic plan, and that contributes to programme plans that respond to transitional settlement and reconstruction needs.

Pyroclastic flows Fast-moving avalanches of hot ash, rock fragments and gas that can move down the sides of a volcano during explosive eruptions or when the steep side of a growing lava dome collapses and breaks apart. These pyroclastic flows can be as hot as 1,500 °F (820 °C) and move at speeds of between 100 miles (160 km) per hour and 150 miles (240 km) per hour. Such flows tend to follow valleys and are capable of knocking down and burning everything in their path (USGS, 2000).

Reception centre Although not defined formally, for the purpose of these guidelines this term describes places providing clean water, cooked food, non-food items, full medical screening, full registration, and wider assistance and social services to displaced populations.

Reconstruction Introduced in these guidelines, this term describes the rebuilding of entire communities, including livelihoods, such that they are able to support themselves and have reduced vulnerability to future natural hazards.

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Recovery Decisions and actions taken after a disaster so that survivors are able to re-build their lives and livelihoods in a manner that reduces further exposure to disaster risks. This necessarily includes the organisation of post-disaster interventions from a risk reduction perspective (UN/ISDR, forthcoming 2008).

Recovery phase Although not defined formally, for the purpose of these guidelines this term describes the period between the major influx of displaced people and the point when every member of the displaced population has reached a durable solution. For non-displaced populations, and those returning home, it is the period during which reconstruction begins.

Refugee Due to the length of the full definition of the term 'refugee', only the key passage is reproduced here. 'For the purposes of the present Convention, the term 'refugee' shall apply to any person who [...] owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it' (UNHCR, 1951/1967).

Relief The provision of assistance or intervention during or immediately after a disaster to meet the life preserving and basic subsistence needs of those people affected. It can be of immediate, short-term or protracted duration (UN/ISDR, forthcoming 2008).

Relocation See 'resettlement'.

Repair Restoration to sound condition or working order following decay, damage or partial destruction. Making of additions or alterations as required to restore property to conditions in conformity with standards and specifications (UN-Habitat, 1992).

Resettlement Actions necessary for the permanent settlement of persons dislocated or otherwise affected by a disaster to an area different from their last place of habitation (UNDHA, 1992).

Response See 'recovery'.

Response, programme and project activities Although not defined formally, for the purpose of these guidelines this term describes the series of activities that make up response, programme and project strategies.

Retrofitting (or upgrading) Reinforcement of structures to become more resistant and resilient to the forces of natural hazards.

Retrofitting involves consideration of changes in the mass, stiffness, damping, load path and ductility of materials, as well as radical changes such as the introduction of energy absorbing dampers and base isolation systems. Examples of retrofitting includes the consideration of wind loading to strengthen and minimise the wind force, or in earthquake-prone areas, the strengthening of structures (UN/ISDR, forthcoming 2008).

Risk The possibility of harmful consequences, or expected losses (deaths, injuries, damage to livelihoods property, economic activity disrupted or environment damaged) resulting from interactions between natural or human-induced hazards and vulnerable conditions.

Beyond expressing a possibility of physical harm, it is crucial to recognise that risks are inherent or can be created or exist within social systems. It is important to consider the social contexts in which risks occur and that people therefore do not necessarily share the same perceptions of risk and their underlying causes.

Conventionally risk is expressed by the notation Risk = Hazards x Vulnerability. Some disciplines also include the concept of exposure to refer particularly to the physical aspects of vulnerability (UN/ISDR, forthcoming 2008).

Risk - acceptable The definition of acceptable risk, also referred to as 'safe collapse', is used to assess structural and non-structural measures undertaken to reduce possible damage at a level which does not harm people and property, according to codes or 'accepted practice' based, among other issues, on a known probability of hazard (UN/ISDR, 2004).

Risk assessment or risk analysis A determination of the nature and extent of risk by analysing potential hazards and evaluating existing conditions of vulnerability that could pose a potential threat or harm to people, property, livelihoods and the environment on which they depend (UN/ISDR, forthcoming 2008).

Risk reduction See 'disaster risk reduction'.

Rural self-settlement For the purposes of these guidelines, this term describes a transitional settlement option, consistent with the following definition. 'Rural self-settlement takes place when displaced families settle on rural land that is owned collectively, rather than privately' (Corsellis and Vitale, 2005).

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Self-settled camps

For the purposes of these guidelines, this term describes a transitional settlement option, consistent with the following definition. 'A displaced community or displaced groups may settle in camps, independently of assistance from local government or the aid community' (Corsellis and Vitale, 2005).

Settlement

A community of covered living spaces providing a secure, healthy living environment with privacy and dignity for the groups, families and individuals residing within them (Corsellis and Vitale, 2005).

Shelter

A habitable covered living space, providing a secure, healthy living environment with privacy and dignity for the groups, families and individuals residing within it (Corsellis and Vitale, 2005).

- Shelter is a critical determinant of survival in the initial stage of an emergency. Beyond survival, shelter is necessary to provide security and personal safety, protection from the climate and enhanced resistance to ill health and disease. It is also important for human dignity and to sustain family and community life as far as possible in difficult circumstances. Shelter and associated settlement and non-food item responses should support communal coping strategies, incorporating as much self-sufficiency and self-management into the process as possible (The Sphere Project, 2004).

- Shelter and housing post-disaster are not understood simply as a multiple of family units, but instead consider the context of settlements, impacting the security, society, economy and environment of communities, and of their neighbours. For example, considerations of shelter and housing do not necessarily cover schools or the siting of entire communities away from hazards (UN/OCHA, 2006).

- Shelter post-disaster is not understood as either evacuation centres or 'on-site shelters' built next to damaged houses, but instead considers the full range of settlement options adopted by those affected by disasters. For example, previous understandings of shelter do not necessarily include supporting those living with host families, self-settling in urban and rural areas, and when necessary, siting and developing appropriate infrastructure for unplanned or planned camps (UN/OCHA, 2006).

- Shelter, adequate: immediate environment for all aspects of family life, providing protection from the elements, secure tenure, personal safety, access to clean water and sanitation, proximity to places of employment and educational and health care facilities (UN-Habitat, 1992).

Shelter non-food item (NFI)

An item that meets a need related to transitional settlement or shelter but is not structural, such as blankets, mattresses, mosquito nets, stoves and fuels (Corsellis and Vitale, 2005).

Siting

In these guidelines, this term describes how and where something is located, usually the land used for a settlement or structure.

Squatter

A person occupying an otherwise abandoned housing unit or land without legal title to that unit or land. For example, persons who take up residence in unused or abandoned dwellings or buildings are squatters (UN-Habitat and OHCHR, 2003).

Storm surges

Although not defined formally, for the purpose of these guidelines this term describes rises in water elevations caused by strong onshore winds pushing water against the coast as severe storms approach. However, the phenomenon of storm surge is also influenced by a variety of other factors including water depth and wave heights.

Strategic plan

Although not defined formally, for the purpose of these guidelines this term describes a single coordinated approach to developing and implementing the contribution of the sector, agreed by all stakeholders and usually maintained at national level by or in partnership with the government. The strategic plan integrates programme and project plans in order to describe the entire response to sector needs.

Subsidence

Lowering of the ground's surface in a particular area due to the removal of subsurface support. In earthquakes this is typically caused by shifting of the subsurface near fault lines.

Tent

Portable shelter with a cover and a structure (UN/OCHA, 2004).

Transit

Transfer of displaced populations from a border area, front line or hazardous area to a safer location (Corsellis and Vitale, 2005).

Transit centre

Transit centres provide short-term accommodation, usually overnight only, as well as clean water, cooked food, basic medical screening and preliminary registration. There is usually a complete day's travel between one transit centre and another, or between a transit centre and a reception centre. They should be set up on the route from a border or area of conflict to a transitional settlement (Corsellis and Vitale, 2005).

Transitional reconstruction

Introduced in these guidelines, this term describes the processes by which populations affected but not displaced by conflict or natural disasters achieve durable solutions to their settlement and shelter needs.

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Transitional settlement

In these guidelines, this term describes the processes by which populations affected and displaced by conflict or natural disasters achieve settlement and shelter throughout the period of their displacement, prior to beginning transitional reconstruction.

- Settlement and shelter resulting from conflict and natural disasters, ranging from emergency response to durable solutions (Corsellis and Vitale, 2005).

Transitional shelter

In these guidelines, this term describes family shelter which provides a habitable covered living space and a secure, healthy living environment, with privacy and dignity, for both displaced or non-displaced occupants over the period between a conflict or natural disaster and the completion of transitional reconstruction, that is intended to be relocated, upgraded, or disassembled for materials, and that may be supported as an assistance method.

- Shelter which provides a habitable covered living space and a secure, healthy living environment, with privacy and dignity, for those within it, during the period between a conflict or natural disaster and the achievement of a durable shelter solution (Corsellis and Vitale, 2005).

Urban self-settlement

For the purposes of these guidelines, this term describes a transitional settlement option, consistent with the following definition. 'Displaced populations may decide to settle in an urban settlement, or in parts of it unaffected by the disaster, occupying unclaimed properties or land, or settling informally' (Corsellis and Vitale, 2005).

Vulnerability

The characteristics of a person or group in terms of their capacity to anticipate, cope with, resist and recover from the impact of a natural or man-made hazard (IFRC, 1999).

8.2 Acronyms

ALNAP	Active Learning Network for Accountability and Performance in Humanitarian Action
AME	assessment, monitoring, evaluation
CBO	community based organisation
COHRE	Centre on Housing Rights and Evictions
CAP	Consolidated Appeal Process
CEA	California Earthquake Authority
CERF	Central Emergency Response Fund
CIDA	Canadian International Development Agency
CRS	Catholic Relief Services
DHA	United Nations Department for Humanitarian Affairs (now UN/OCHA)
DFID	Department for International Development of the UK Government
DIPECHO	Disaster Preparedness European Community Humanitarian Aid department
DRR	disaster risk reduction
EC	European Commission
ECLAC	Economic Commission for Latin America and the Caribbean
EIA	Environmental Impact Assessment
ERC	Emergency Relief Coordinator
FAO	Food and Agriculture Organization
FONDEN	Mexican Fund for Natural Disasters
FTS	financial tracking system
GFDRR	Global Facility for Disaster Reduction and Recovery
GIS	geographic information system
IASC	Inter-Agency Standing Committee
ICRC	International Committee of the Red Cross
IDP	internally displaced person
IFI	international financial institution

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IFRC	International Federation of Red Cross and Red Crescent Societies
IO	international organisation
IOM	International Organization for Migration
MDTF	multi-donor trust funds
MOU	memorandum of understanding
MFI	microfinance institutions
NFI	non-food item
NGO	non-governmental organisation
ODI	Overseas Development Institute
OECD	Organisation for Economic Co-operation and Development
OHCHR	Office of the High Commissioner for Human Rights
PMU	project management unit
SIF	Honduran social investment fund
TOR	terms of reference
UN	United Nations
UNDAC	United Nations Disaster Assessment and Coordination (teams) of UN/OCHA
UNDP	United Nations Development Programme
UNEP	United Nations Environment Programme
UN-Habitat	United Nations Human Settlements Programme
UNHCR	United Nations High Commissioner for Refugees
UNHRP	United Nations Housing Rights Programme
UN/ISDR	United Nations International Strategy for Disaster Risk Reduction
UN/OCHA	United Nations Office for the Coordination of Humanitarian Affairs
USAID	United States Agency for International Development

8.3 Key references

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8.3.2 Bibliography and sources 276

This selected bibliography is a resource of materials that are readily accessible, in order to inform humanitarian transitional settlement and transitional reconstruction response.

As the primary purpose of these guidelines is to support humanitarian response, this bibliography does not include all of the documents referred to in the development of these guidelines, or to the great wealth of research into the topics considered.

8.3.1 Annotated resource list

www. **ALNAP** (2003). *Participation by Crisis-Affected Populations in Humanitarian Action: a Handbook for Practitioners*, Overseas Development Institute, London (www.alnap.org).

The ALNAP Global Study responds to a growing consensus that the consultation and participation of disaster-affected populations during the planning, monitoring and evaluation of humanitarian action, is critical to the accountability and performance of the humanitarian sector.

www. **COHRE** (2005). *The Pinheiro Principles*, Centre on Housing Rights and Evictions, Geneva (www.cohre.org).

This handbook provides practical guidance to all those working on housing and property restitution issues.

www. **Corsellis, T. and Vitale A.** (2005). *Transitional Settlement: Displaced Populations,* Oxford, Oxfam (www.shelterlibrary.org).

These guidelines offer coordinators and specialists a common tool to develop and implement settlement and shelter strategies for the 20 million refugees and 25 million internally displaced persons (IDPs) estimated worldwide.

www. **The Sphere Project** (2004). *Humanitarian Charter and Minimum Standards in Disaster Response*, The Sphere Project, Geneva (www.sphereproject.org).

These guidelines integrate standards for each sector for coordinated disaster response. The aim is to guide and inform decisions at all levels of response in a humanitarian emergency, to improve the quality of assistance, and to enhance the accountability of implementing agencies to both beneficiaries and programme donors.

www. **UNHCR** (2007). *Handbook for Emergencies*, United Nations High Commissioner for Refugees, Geneva (www.unhcr.org and www.shelterlibrary.org).

The handbook aims to provide guidelines for the provision of protection to those covered by the mandate of UNHCR, to meet the shelter-related and settlement-related needs of persons who are of concern to UNHCR, and to ensure that the necessary assistance reaches the affected population in good time.

8.3.2 Bibliography and sources

Abarquez, I. and Murshed, Z. (2004). *Field Practitioners' Handbook: Community Based Disaster Risk Management,* Asia Disaster Preparedness Centre, Bangkok.

AC Consulting Group Ltd and New Zealand's International Aid and Development Agency (2006). *Improving Seismic Resistance of Small Buildings, Houses and Community Infrastructure*, AC Consulting Group Ltd and New Zealand's International Aid and Development Agency, New Zealand.

Action Contre la Faim – ACF International Network (forthcoming). *How to Make Projects Sustainable and Successfully Disengage in Vulnerable Contexts, Paris.*

www. **Adams, L. and Harvey, P.** (2006). Issue Paper 4: 'Cash and Shelter' in *Learning from Cash Responses to the Tsunami*, Humanitarian Policy Group/Overseas Development Institute, London (www.odi.org.uk/hpg).

www. **All India Disaster Mitigation Institute** (2007). *2007 Floods in South Asia: from Impact to Knowledge,* Southasiadisasters.net, Special Issue 39 (www.southasiadisasters.net).

www. **ALNAP (2003).** *Participation by Crisis-Affected Populations in Humanitarian Action: a Handbook for Practitioners*, Overseas Development Institute, London (www.alnap.org).

www. **ALNAP and ProVention Consortium** (2007a). *Slow-onset disasters: drought and food and livelihoods insecurity: Learning from previous relief and recovery responses* (www.alnap.org).

www. **ALNAP and ProVention Consortium** (2007b). *Flood disasters: Learning from previous relief and recovery responses* (www.alnap.org).

Arya, A.S. (2005). *Guidelines for Earthquake Resistant Reconstruction and New Construction of Masonry Buildings in Jammu & Kashmir State,* Ministry of Home Affairs, New Delhi.

www. **Asian Disaster Preparedness Centre** (2005). *A primer: Integrated flood risk management in Asia*, Asian Disaster Preparedness Centre, Bangkok (www.adpc.net).

www. **Aursnes, I.S. and Foley, C.** (2005). *Property restitution in practice: The Norwegian Refugee Council's experience,* Norwegian Refugee Council (www.reliefweb.int).

Aysan et al. (1993). *Developing Building for Safety Programmes*, Intermediate Technology Development Group Publishing (ITDG Publishing), London.

Aysan, Y. and Davis, I. (1993). *Rehabilitation and Reconstruction Disaster Management Training Programme,* United Nations Development Programme and United Nations Department for Humanitarian Affairs, Geneva and New York.

Aysan, Y. and Oliver, P. (1987). *Housing and Culture after Earthquakes: A Guide for Future Policy Making on Housing in Seismic Areas*, ODA and Oxford Polytechnic, Oxford.

www. **Barakat, S.** (2003). *Housing reconstruction after conflict and disaster,* Network Paper No. 43, Overseas Disaster Institute/Humanitarian Practice Network, London (www.odihpn.org).

www. **Barenstein, J.D.** (2006). *Housing reconstruction in post-earthquake Gujarat: A comparative analysis*, Network Paper No. 54, Overseas Development Institute/Humanitarian Practice Network, London (www.odihpn.org).

Berstein, P.L. (1996). *Against the Odds. The Remarkable Story of Risk,* Wiley, Chichester.

Binder, A. and Witte, J.M. (2007). *Business Engagement in Humanitarian Relief: Key Trends and Policy Implications*, Humanitarian Policy Group of the Overseas Development Institute, HPG Background Paper, London.

Birkmann, J. (ed.) (2006). *Measuring Vulnerability to Natural Hazards. Towards Disaster Resilient Societies,* United Nations University Press, Tokyo.

www. **Blondet, M., Garcia G. and Brzev, S.** (2003). *Earthquake-Construction of Adobe Buildings: a Tutorial*, Earthquake Engineering Research Institute, Oakland, and International Association for Earthquake Engineering, Tokyo (www.world-housing.net).

British Medical Association (1987). *The British Medical Association Guide to Living With Risk,* Penguin Books, London.

Brzev, S. (2007). *Earthquake-Resistant Confined Masonry Construction,* National Information Center of Earthquake Engineering, Kanpur, India.

www. **The Camp Management Project** (2008). *The Camp Management Toolkit*, Norwegian Refugee Council (www.nrc.no/camp).

www. **Chalinder, A.** (1998). *Temporary Human Settlement Planning for Displaced Populations in Emergencies,* Overseas Development Institute/Relief and Rehabilitation Network, London (www.odihpn.org).

www. **Choularton, R.** (2007). *Contingency Planning and Humanitarian Action: a Review of Practice*, Network Paper No. 58, Humanitarian Practice Network, Overseas Development Institute, London (www.odihpn.org).

Christoplos, C. (2006). *The elusive 'window of opportunity' for risk reduction in post-disaster recovery,* Discussion Paper presented at ProVention Consortium Forum 2006, 2–3 February 2006, Bangkok.

Cleary, S. and Malleret, T. (2006). *Resilience to Risk. Business Success in Turbulent Times*, Human and Rousseau, Cape Town.

www. **Clinton, W.J.** (2006). *Key Propositions for Building Back Better. Lessons Learned from Tsunami Recovery,* Office of the UN Secretary-General's Special Envoy for Tsunami Recovery, New York (www.reliefweb.int).

Coburn et al. (1993). *Technical Principles of Building for Safety*, Intermediate Technology Development Group Publishing (ITDG Publishing), London.

Coburn, A. and Spence, R. (2002). *Earthquake Protection* (Second Edition), Wiley, Chichester.

www. **COHRE** (2005). *The Pinheiro Principles*, Centre on Housing Rights and Evictions, Geneva (www.cohre.org).

Cooper, M. (ed.) (1985). *Risk, Man-made Hazards to Man*, Clarendon Press, Oxford.

www. **Corsellis, T. and Vitale, A.** (2005). *Transitional Settlement: Displaced Populations,* Oxfam, Oxford (www.shelterlibrary.org).

Corsellis, T. and Vitale, A. (forthcoming, 2008). *Camp Planning Guidelines,* Shelter Centre (www.shelterlibrary.org).

www. **Creti, P. and Jaspars, S.** (2006). *Cash-Transfer Programming in Emergencies*, Oxfam, Oxford (www.oxfam.org.uk).

www. **Davidson, C.H., Johnson, C., Lizarralde, G., Dikmen, N. and Sliwinski, A.** (2007). 'Truths and myths about community participation in post-disaster housing projects' in *Habitat International*, March 2007.

www. **Davis, A.** (2007). *Concerning Accountability in Humanitarian Action,* Network Paper No. 59, Humanitarian Practice Network, Overseas Development Institute, London (www.odihpn.org).

www. **Davis, I.** (2007). *Learning from Disaster Recovery Guidance for Decision Makers*, International Recovery Platform (www.unisdr.org).

Davis, I. and Murshed, Z. (2006). *Critical Guidelines Community Based Disaster Risk Management*, Asia Disaster Preparedness Centre, Bangkok.

www. **DFID** (1999). *Sustainable Livelihoods Approach Guidance Sheets*, Department for International Development, London (www.livelihoods.org).

DFID (2003). *Glossary of Development Terms and Abbreviations*, Department for International Development, London (www.dfid.gov.uk).

Dudley, E. and Harland, A. (1993). *Communicating Building for Safety: Guidelines for methods of communicating technical information to local builders and householders,* Intermediate Technology Development Group Publishing (ITDG Publishing), London.

www. **Economic Commission for Latin America and the Caribbean** (2003). *Handbook for Estimating the Socio-economic and Environmental Effects of Disasters,* United Nations Economic Commission for Latin America and the Caribbean (www.proventionconsortium.org).

www. **Emergency Capacity Building Project** (2007). *Impact Measurement and Accountability in Emergencies: The Good Enough Guide*, Oxfam (UK) for the Emergency Capacity Building Project, Oxford (http://publications.oxfam.org.uk).

www. **Environmental Planning Collaborative and TCG International** (2004). *Participatory Planning Guide for Post-Disaster Reconstruction* (www.tcgillc.com).

www. **FAO** (2005). *Access to rural land and land administration after violent conflicts*, Food and Agriculture Organization of the United Nations, Rome (www.fao.org).

www. **FAO, NRC, IDMC, UN/OCHA/IDD, OHCHR, UN-Habitat, UNHCR** (2007). *Housing and Property Restitution for Refugees and Displaced Persons Implementing the 'Pinheiro Principles* (www.fao.org).

www. **GeoHazards International** (2001). *Global Earthquake Safety Initiative (GESI) Pilot Project*, Final Report (www.geohaz.org).

GeoHazards International and Central Asia Earthquake Safety Initiative (2005). *Seismic-Safety for Adobe Homes: what everyone should know,* GeoHazards International and the Central Asia Region Earthquake Safety Initiative, Palo Alto.

GeoHazards International (2007). *Preparing Your Community for Tsunamis: a Guidebook for Local Advocates,* Working Draft Version 2 (www.geohaz.org).

Gilbert, R. (2001). *Doing More for Those Made Homeless by Disasters*, Disaster Risk Management Working Paper Series No. 1, The World Bank.

Gilbert, R. and Kreimer, A. (1999). *Learning from the World Bank's Experience of Natural Disaster Related Assistance*, Disaster Management Facility, The World Bank, Washington DC.

www. **Green, R., Sungay, B., Paci, Z., Sezan, S. and Petal, M.** (2005). *Structural Awareness for Seismic Safety Curriculum,* Handbook, Multimedia Presentation and Instructor Guide, Disaster Preparedness Education Programme, Kandilli Observatory and Earthquake Research Institute, Boğaziçi Üniversitesi, Istanbul, Turkey (www.ahep.org).

www. **Green, R., Sungay, B., Çaliskan, O., Sezan, S. and Petal, M.** (2005). *Non-Structural Risk Mitigation Curriculum*, Handbook, Multimedia Presentation and Instructor Guide, Disaster Preparedness Education Programme, Kandilli Observatory and Earthquake Research Institute, Boğaziçi Üniversitesi, Istanbul, Turkey (www.ahep.org).

www. **GTZ** (2004). *Practical Guide to Multilateral Needs Assessments in Post-Conflict Situations,* a joint UNDG, UNDP and World Bank guide (www.worldbank.org).

Harvard Business School (2004). *Crisis Management. Master the Skills to Prevent Disasters*, Harvard Business School Press, Boston.

Haq, B. (1999). *Battling the storm: Study on Cyclone Resistant Housing*, German Red Cross, Dhaka.

Holmes, A. (2002). *Risk Management,* Capstone Publishing, Oxford.

Humanitarian Practice Network at ODI (2007). Humanitarian Exchange Magazine, No. 38.

www. **International Association for Earthquake Engineering** (2004). *Guidelines for Earthquake Resistant Non-Engineered Construction* National Information Centre of Earthquake Engineering, India (www.nicee.org).

www. **Inter-Agency Procurement Services Offices** (2000). *Emergency Relief Items: Compendium of generic specifications* Vols 1 and 2, United Nations Development Programme, New York.

www. **IASC** (2001). *Inter-Agency Contingency Planning Guidelines for Humanitarian Assistance*. Inter-Agency Standing Committee Reference Group on Contingency Planning and Preparedness (www.reliefweb.int).

IASC (2006). *Women, girls, boys and men – Different needs, Equal opportunities*, IASC workshop summary report on Gender Mainstreaming in Humanitarian Action, an IASC Handbook Development Workshop, 6–7 April 2006, New York.

IASC (2007). *Benchmarks for Durable Solutions for Internally Displaced Persons*, Brookings Institution-University of Bern Project on Internal Displacement, Washington DC.

www. **IASC** (2006). *Protecting persons affected by natural disasters – IASC Operational Guidelines on Human Rights and Natural Disasters,* Brookings Institution-University of Bern Project on Internal Displacement, Washington DC (www.humanitarianinfo.org/iasc).

IASC (forthcoming 2008) Guidelines and toolkit on addressing post-disaster land issues.

IFRC (1999). *Vulnerability and Capacity Assessment: An International Federation Guide*, International Federation of Red Cross and Red Crescent Societies, Geneva.

www. **IFRC** (2003). *International Disaster Response Laws, Principles and Practice: Reflections, Prospects and Challenges*, International Federation of Red Cross and Red Crescent Societies, Geneva (www.ifrc.org).

www. **IFRC** (2005). *Guidelines for Emergency Assessment*, International Federation of Red Cross and Red Crescent Societies, 2nd edition, forthcoming 2008, Geneva (www.proventionconsortium.org).

IFRC (2007a). *Guidelines for Vulnerability and Capacity Assessment,* International Federation of Red Cross and Red Crescent Societies*,* Geneva (www.ifrc.org).

IFRC *(*2007b). *Two project reports on community reconstruction – the Maldives and Sri Lanka* (www.proventionconsortium.org).

www. **IFRC** (2007c). *Law and Legal Issues in International Disaster Response: A Desk Study*, International Federation of Red Cross and Red Crescent Societies, Geneva (www.reliefweb.int).

IFRC/ICRC (1995). *The Principles and Rules for Red Cross and Red Crescent Disaster Relief,* International Federation of Red Cross and Red Crescent Societies and International Committee of the Red Cross, Geneva.

www. **IFRC/Oxfam** (2007). *Plastic sheeting: a guide to the specification and use of plastic sheeting in humanitarian relief*, International Federation of Red Cross and Red Crescent Societies/Oxfam International (www.shelterlibrary.org).

Indian Standard Codes (1993). *IS 1983, Earthquake Resistant Design and Construction of Buildings – Code of Practice; IS 13827, Improving Earthquake Resistance of Earthen Buildings;* and *IS 13828, Improving Earthquake Resistance of Low Strength Masonry Buildings,* Bureau of Indian Standards, New Delhi.

www. **Intermediate Technology Development Group – South Asia** (2004). *Guidelines for planning in the re-building process*, ITDG – South Asia, Colombo (http://practicalaction.org).

Kreutner, H.V., Kundermann, B. and Mukerji, K. (2003). *Guidelines for Building Measures after Disasters and Conflicts,* Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH*,* München.

www. **Kelly, C.** (2005). 'Checklist-Based Guide to Identifying Critical Environmental Considerations' in *Emergency Shelter Site Selection, Construction, Management and Decommissioning,* Benfield Hazard Research Centre/CARE, London (www.benfieldhrc.org).

www. **Langenbach, R.** (2008). *Don't Tear It Down: Preserving the Earthquake Resistant Vernacular Architecture of Kashmir,* United Nations Educational, Scientific and Cultural Organization, New Delhi (www.traditional-is-modern.net).

www. **Langenbach, R. and Dusi, A.** (2006). *The Victims' dilemna: When Doing Good may be Doing Wrong*, Proceedings of the 2006 International Disaster Reduction Conference, ICCROM Workshop on the integration of traditional knowledge systems and cultural heritage into risk management, Davos, August 2006 (www.conservationtech.com).

www. **Lloyd-Jones, T.** (2006). *Mind the Gap! Post-disaster reconstruction and the transition from humanitarian relief*, a report produced for the Royal Institution of Chartered Surveyors (RICS) by the Max Lock Centre at the University of Westminster (www.rics.org).

Lofstedt, R. and Frewer, L. (eds) (1998). *The Earthscan Reader in Risk and Modern Society*, Earthscan Publications, London.

Murty, C.V.R. (2005). *Earthquake Tips, Learning Earthquake Design and Construction,* IIT-Kanpur and Building Material and Technology Promotion Council, Kanpur, India.

www. **National Society for Earthquake Technology in Nepal** (2006). *Demonstration of the effectiveness of seismic bands in unreinforced masonry,* Kashmir video (www.traditional-is-modern.net).

Pan American Health Organization, (2004). *Guidelines for Vulnerability Reduction in the Design of New Health Facilities,* Pan American Health Organization, Washington DC.

www. **ProVention Consortium and International Institute for Applied Systems Analysis** (2006). *Disaster Insurance for the Poor? A review of microinsurance for natural disaster risks in developing countries* (www.proventionconsortium.org).

www. **ProVention Consortium** (2006). *Risk Reduction Indicators,* Tsunami Recovery Impact Assessment and Monitoring System (TRIAMS) initiative, Working Paper (www.proventionconsortium.org).

www. **ProVention Consortium** (2007). *Tools for Mainstreaming Disaster Risk Reduction: Construction Design, Building Standards and Site Selection*, Guidance Note 12 (www.proventionconsortium.org).

Pusch, C. (2006). 'Preventable Losses: Saving Lives and Property through Hazard Risk Management. A Comprehensive Risk Management Framework for Europe and Central Asia', The World Bank, 2004, in Kryspin-Watson, J. et al., *Mainstreaming Hazard Risk Management in Rural Projects*, Disaster Risk Management Working Paper Series No. 13, April 2006.

www. **Red Cross Red Crescent Climate Centre** (2007). *Red Cross Red Crescent Climate Guide* (www.climatecentre.org).

Roche, C. (1999). *Impact Assessment for Development Agencies: Learning to Value Change*, Oxfam, Oxford.

www. **Savage, K. and Harvey, P.** (eds) (2007). *Remittances During Crises: Implications for Humanitarian Response*, Humanitarian Policy Group, Overseas Development Institute, London (www.odi.org.uk/hpg/).

Shaw, R. and Okazaki, K. (eds) (2003). *Sustainability in Grass-Roots Initiatives: Focus on Community Based Disaster Management*, United Nations Centre for Regional Development, Kobe.

Shaw, R. and Okazaki, K. (eds) (2004). *Sustainable Community Based Disaster Management Practices in Asia. A User's Guide*, United Nations Centre for Regional Development, Kobe.

Sheppard, S. and Hill, R. (2005). *Economic Impact of Shelter Assistance in Post-Disaster Settings*, CHF International, USAID.

Sprent, P. (1988). *Taking Risks. The Science of Uncertainty*, Penguin Books, London.

Swiss Development and Cooperation and French Red Cross (2007). *Bhatar Construction, an Illustrated Guide for Craftsmen,* Swiss Development and Cooperation and French Red Cross, Mansehra (www.traditional-is-modern.net).

www. **The Sphere Project** (2004). *Humanitarian Charter and Minimum Standards in Disaster Response*, The Sphere Project, Geneva (www.sphereproject.org).

Twigg, J. (2004). *Disaster Risk Reduction,* ODI Good Practice Review No. 9, Overseas Development Institute, London.

www. **Twigg, J.** (2006). *Technology, Post-Disaster Housing Reconstruction and Livelihood Security*, Disaster Studies Working Paper No. 15, Benfield Hazard Research Centre, London (www.benfieldhrc.org).

www. **Twigg, J.** (2007). *Characteristics of a Disaster-Resilient Community,* DFID Disaster Risk Reduction Interagency Coordination Group, London (www.benfieldhrc.org).

United Nations (2006). *On Better Terms: a Glance at Key Climate Change and Disaster Risk Reduction Concepts*, United Nations, Geneva.

www. **UNDHA** (1992). *Internationally Agreed Glossary of Basic Terms Relating to Disaster Management*, United Nations Department of Humanitarian Affairs, Geneva (www.reliefweb.int).

www. **UNDRO** (1982). *Shelter After Disaster: Guidelines for Assistance,* United Nations Disaster Relief Office, Geneva (www.shelterlibrary.org).

www. **UNEP and SKAT** (2007). *After the Tsunami: Sustainable building guidelines for South-East Asia,* UNEP Sustainable Buildings and Construction Initiative; Swiss Resource Centre and Consultancies for Development (SKAT) (www.unepsbci.org).

UN-Habitat (1992). *Multilingual Glossary of Human Settlements Terms*, UN-Habitat, Nairobi.

UN-Habitat (1998). *Sustainable Resettlement Planning Manual*, UN-Habitat, Nairobi.

www. **UN-Habitat** (2001). *Guidelines for Operational Programme Formulation in Post Disaster Situations: A Resource Guide,* UN-Habitat, Nairobi (www.unhabitat.org).

www. **UN-Habitat** (2003a). *The Challenge of Slums. Global Report on Human Settlements 2003*, Earthscan, London (www.unhabitat.org).

www. **UN-Habitat** (2003b). *Rental Housing: an Essential Option for the Urban Poor in developing countries,* UN-Habitat, Nairobi.

www. **UN-Habitat** (2007). *Building Houses, Rebuilding Communities*, UN-Habitat, Indonesia (www.unhabitat-indonesia.org).

www. **UN-Habitat and OHCHR** (2003). *Monitoring Housing Rights*, UN-Habitat and Office of the United Nations High Commissioner for Human Rights, Nairobi and Geneva (www.unhabitat.org).

www. **UNHCR** (1951/1967). *Convention and Protocol Relating to the Status of Refugees,* United Nations High Commissioner for Refugees, Geneva.

www. **UNHCR** (2002). *Refugee Protection: a Guide to International Refugee Law*, United Nations High Commissioner for Refugees, Geneva (www.unhcr.org).

www. **UNHCR** (2005). *Handbook for Self-reliance*. United Nations High Commissioner for Refugees, Geneva (www.reliefweb.int).

www. **UNHCR** (2006). *The UNHCR Tool for Participatory Assessment in Operations,* United Nations High Commissioner for Refugees, Geneva (www.unhcr.org).

www. **UNHCR** (2007). *Handbook for Emergencies*, United Nations High Commissioner for Refugees, Geneva (www.unhcr.org and www.shelterlibrary.org).

www. **UNHRP** (2003). Working Paper No. 1: *Monitoring housing rights: Developing a set of indicators to monitor the full and progressive realisation of the human right to adequate housing,* United Nations Housing Rights Programme, Nairobi (www.unhabitat.org).

UN/ISDR (2004). *Living with Risk. A global review of disaster reduction initiatives. Annex 1. Terminology of Disaster Risk Reduction*, United Nations International Strategy for Disaster Reduction, Geneva.

www. **UN/ISDR** (2005). *Hyogo Framework for Action (HFA) 2005–2015 Building the Resilience of Nations and Communities to Disaster*, United Nations International Strategy for Disaster Reduction, Geneva (www.unisdr.org).

www. **UN/ISDR** (2007). *Handbook on Good Building Design and Construction – Aceh and Nias Islands,* The Secretariat of the International Strategy for Disaster Reduction/United Nations Development Programme Centre in Bangkok (www.unisdr.org).

UN/ISDR (forthcoming, 2008). *Terminology on disaster risk reduction,* Secretariat of the International Strategy for Disaster Reduction.

www. **UN/OCHA** (1998). *Guiding Principles on Internal Displacement*, United Nations Office for the Coordination of Humanitarian Affairs, Geneva (www.ohchr.org).

www. **UN/OCHA** (2004). *Tents. A Guide to the Use and Logistics of Family Tents in Humanitarian Relief*, United Nations Office for the Coordination of Humanitarian Affairs, Geneva (www.shelterlibrary.org).

www. **UN/OCHA** (2006). *Exploring key changes and developments in post-disaster settlement, shelter and housing, 1982–2006,* United Nations Office for the Coordination of Humanitarian Affairs, Geneva (www.shelterlibrary.org).

United States Agency for International Development (1998). *Mitigation Practitioner's Handbook*, U.S. Agency for International Development Bureau for Humanitarian Response Office of U.S. Foreign Disaster Assistance Prevention, Mitigation, Preparedness and Planning Division, Washington DC.

www. **United States Agency for International Development** (2005). *Land and Conflict: a toolkit for intervention*, United States Agency for International Development, Washington, DC (www.usaid.gov).

www. **USGS** (2000). *Fact Sheet FS-071-00*, United States Geological Survey, Denver (www.usgs.gov).

Von Kotze, A. and Holloway, A. (1996). *Reducing Risk, Participatory Learning Activities for Disaster Mitigation in Southern Africa*, Oxfam Publishing, Oxford.

www. **Wall, I. with UN/OCHA** (2005). *"Where's My House?" Improving communication with beneficiaries: an analysis of information flow to tsunami affected populations in Aceh Province,* United Nations Office for the Coordination of Humanitarian Affairs, Geneva (www.humanitarianinfo.org).

Wamsler, C. (2006). 'Managing Urban Disasters', Special Issue of *Open House* Vol. 31 No. 1 2006.

Wisner, B., Blaikie, P., Cannon, T. and Davis, I. (2004). *At Risk, People's Vulnerability and Disasters* (Second Edition), Routledge, London.

www. **World Bank** (2006). *Hazards of Nature, Risks to Development*, An Independent Evaluation Group (IEG) Evaluation of World Bank Assistance for Natural Disasters (www.worldbank.org).

8.4 Internet resources

Active Learning Network for Accountability and Performance in Humanitarian Action (ALNAP)
www.alnap.org

All India Disaster Mitigation Institute (AIDMI)
www.southasiadisasters.net

Asia Disaster Preparedness Centre (ADPC)
www.adpc.net

Asian Disaster Reduction Centre (ADRC)
www.adrc.or.jp/top.php

Benfield UCL Hazard Research Centre
www.benfieldhrc.org

Central Emergency Respond Fund (CERF)
http://ochaonline.un.org/cerf/

Centre on Housing Rights and Eviction (COHRE)
www.cohre.org

Disaster Assessment Portal
www.disasterassessment.org

Economic Commission for Latin America and the Caribbean (ECLAC)
www.eclac.org

The Emergency Events Database (EM-DAT)
www.em-dat.net

Food and Agriculture Organization (FAO)
www.fao.org

GeoHazards International
www.geohaz.org

Global Facility for Disaster Reduction and Recovery
www.gfdrr.org

Good Humanitarian Donorship Initiative (GHD)
www.goodhumanitariandonorship.org

Humanitarian Accountability Partnership – International (HAP-I)
www.hapinternational.org/en/

Humanitarian Information Centres
www.humanitarianinfo.org

Information and Research for Reconstruction
www.grif.umontreal.ca/pages/irecpublicns.html

Internal Displacement Monitoring Centre (IDMC)
www.internal-displacement.org

International Federation of Red Cross and Red Crescent Societies (IFRC) www.ifrc.org

International Institute for Environment and Development (IIED)
www.iied.org

International Recovery Platform (IRP)
www.recoveryplatform.org

Multidonor Fund
www.multidonorfund.org

National Oceanic and Atmospheric Administration (NOAA), Vulnerability Assessment Techniques and Applications (VATA)
www.csc.noaa.gov/vata/

Overseas Development Institute
www.odi.org.uk

Pacific Disaster Center
www.pdc.org

Pan American Health Organization (PAHO)
www.paho.org

ProVention Consortium
www.proventionconsortium.org

PreventionWeb
www.preventionweb.net

ReliefWeb
www.reliefweb.int

Red Cross Red Crescent Climate Centre
www.climatecentre.org

Shelter Centre
www.sheltercentre.org; www.shelterlibrary.org

The Sphere Project
www.sphereproject.org

United Nations Development Programme (UNDP)
www.undp.org

United Nations Environmental Programme (UNEP)
www.unep.org

UN-Habitat
www.unhabitat.org

United Nations Housing Rights Programme (UNHRP)
www.unhabitat.org/categories.asp?catid=282

United Nations International Strategy for Disaster Risk Reduction (UN/ISDR)
www.unisdr.org

United Nations Office for the Coordination of Humanitarian Affairs (UN/OCHA)
http://ochaonline.un.org

US Geological Survey (USGS) Earthquake Hazards Program
http://earthquake.usgs.gov

US Geological Survey (USGS) Landslide Hazards Program
http://landslides.usgs.gov

US Geological Survey (USGS) Volcano Hazards Program
http://volcanoes.usgs.gov

World Housing Encyclopedia
www.world-housing.net

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2 Planning for response
3 Responding to hazards
4 Transitional settlement: displaced
5 Transitional reconstruction: non-displaced
6 Implementing a response
7 Toolkits
8 Resources

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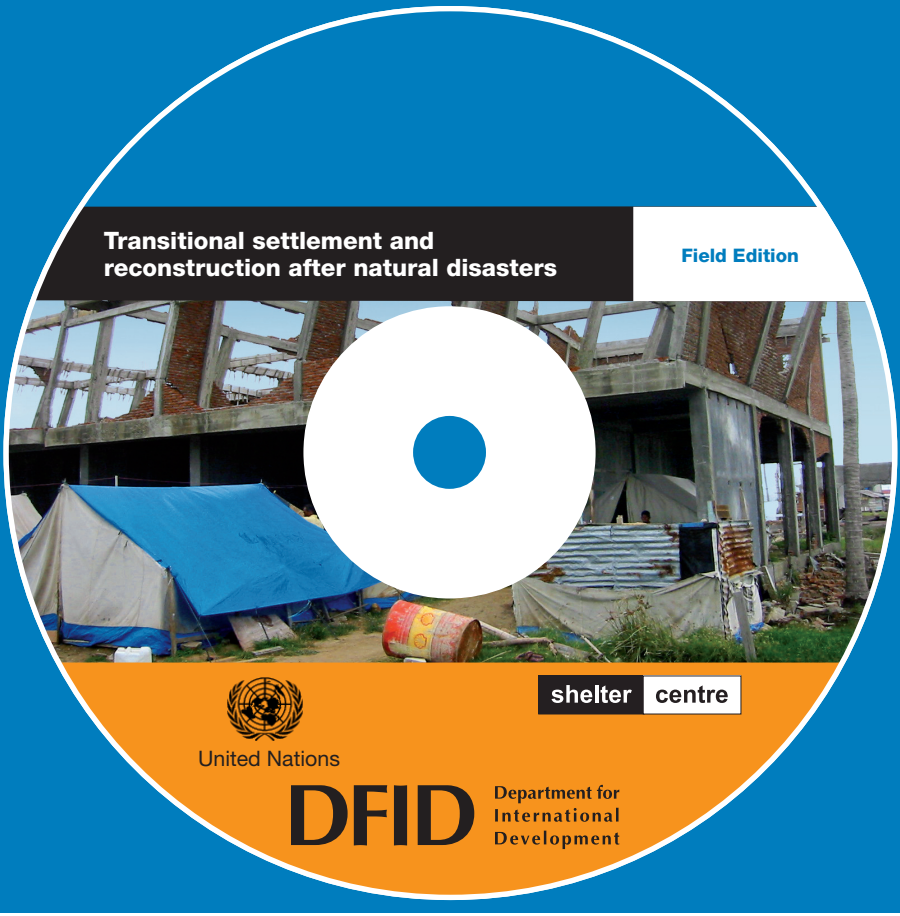

The resources on this CD support the first edition of the guidelines *Transitional settlement and reconstruction after natural disasters.* The CD contains the following information:

- ***Transitional settlement and reconstruction after natural disasters***
  A complete PDF version of these guidelines

- **A library of key publications that support the transitional settlement and reconstruction sector**
  The bibliography from *Transitional settlement and reconstruction after natural disasters*, including electronic versions of some of the publications.

The CD launches a webpage automatically on your computer when it is inserted. The CD does not require installation to run, but a PDF viewer such as Adobe Reader is needed to view PDF files. The contents may be copied onto computers or CDs.

The fully trialled and revised edition of *Transitional settlement and reconstruction after natural disasters*, to be published in 2009, will contain the above resources, as well as:

- A larger digital library supporting the sector
- Standardised and modular training for the sector

The contents of this CD can be accessed online at www.shelterlibrary.org.
Further free-to-use services can be found at www.sheltercentre.org.

1 Principles and coordination
2 Planning for response
3 Responding to hazards
4 Transitional settlement: displaced
5 Transitional reconstruction: non-displaced
6 Implementing a response
7 Toolkits
8 Resources

Transitional settlement and reconstruction after natural disasters

These guidelines are aimed at assisting all stakeholders, including governments and humanitarian and developmental organisations, in agreeing and implementing together integrated strategies for transitional settlement and reconstruction, in support of the varied needs, resources and capacities of communities affected by natural disasters.

This field edition is the result of an extensive, consultative review process. The guidelines cover the transition following a natural disaster from the emergency shelter needed for survival to durable solutions for communities – a period often lasting several years.

The entire population affected must be supported to rebuild their homes, communities and livelihoods, with reduced vulnerability. When homes are damaged or destroyed by a natural disaster people may be displaced for a short period, but are more likely to remain. Their home may have been in an apartment or a house, which may have been rented, owned or occupied without legal tenure.