Introduction

Reconstruction of housing and communities following a disaster is a continuous process that begins immediately after the disaster, and often lasts for years. It is important to understand how affected populations and institutions will react after a disaster, and what roles and responsibilities stakeholders will take on throughout the post-disaster reconstruction process, so that institutions and affected populations can work in a coordinated and complementary way to accomplish their desired outcomes.

At the beginning of the response to a disaster, humanitarian agencies, including the United Nations (UN), are ordinarily the organizations that are most in contact with government, conducting initial assessments, mobilizing aid, and discussing options for how the recovery will be organized. The World Bank and other international financial institutions (IFIs), including regional development banks, may not be directly involved and may not commit resources this early in the process. However, it is essential that these organizations enter the process as soon as possible, especially so that they can be present during the early strategic planning with government that is normally led by the UN and the other humanitarian agencies, since—as discussed in this chapter—that planning will influence the entire reconstruction process.

The post-disaster reconstruction process almost always takes much longer than expected or planned. Except in life-threatening situations, compromises that ignore the need for integration, or for quality, safety, or good governance of the reconstruction, should not be made with the belief that they will save time. Time is rarely saved, and people will live for years with the consequences of those decisions.

This chapter introduces the context and process of reconstruction following natural disasters, referring to the guiding principles established at the beginning of this handbook, as well as to other handbook chapters. It offers guidance on assisting the entire affected population, both those who are displaced and those who are not displaced.

The chapter discusses such issues as the need to integrate housing and community reconstruction, the sequence of activities that reconstruction entails both for individuals and agencies, the roles and responsibilities of stakeholders and mechanisms of coordination, and the risk of losing continuity between the immediate response and long-term development and reconstruction.

Achieving People-Centered, Integrated Reconstruction

Post-disaster reconstruction is a complex process involving a number of interrelated activities. The level of complexity will vary, depending on the scale and nature of the disaster and the corresponding response of the population and the institutions involved. Like most humanitarian and development activities, the process tends to entail a cycle: assessment, planning, project development, implementation, and monitoring. Different project cycles are likely to be occurring simultaneously at different levels and for different purposes wherever people are organizing some element of the response. It can’t be emphasized strongly enough that the affected population should be at the center of the reconstruction process and should have a preferential right to make the decisions that will affect their lives. In one increasingly accepted vision of how post-disaster reconstruction should work (which the authors generally subscribe to), government’s first job after a disaster, with the help of humanitarian and development agencies, is to determine what the community wants to do and is capable of doing. The government should then do the rest.

This Chapter Is Especially Useful For:
- Policy makers
- Project managers
- Lead disaster agency
- Humanitarian agencies
This may be an oversimplification of a very complex process; however, adopting this approach means that there are two overriding project cycles that set in motion after a disaster: the one for the community’s work and the one for government’s work. Government has to conduct the macro-level assessments, set policy, coordinate nongovernmental organizations (NGOs) and humanitarian agencies who will support recovery, engage IFIs and other funders, organize the financing mechanisms, ensure all affected communities have adequate support, and so on. The community has its own work to do: assess its local needs, identify vulnerable members, salvage materials, develop a community-level plan, agree on housing designs and immediate infrastructure improvements, reconstruct its governance system, and plan how to manage reconstruction funds once they are available.

An integrated approach to reconstruction is one that harmonizes these efforts, simultaneously addressing both what needs to be done (with respect to land use, reconstruction approach, environmental management, infrastructure rehabilitation, choice of housing design and technology, and cultural and natural heritage conservation, for example) and how it will be done (including institutional roles, levels of citizen participation, and management of project financing). Each chapter in Part 2 of this handbook, Reconstruction Tasks and How to Undertake Them, covers one of these elements.

The Steps in Response and Reconstruction

The experience from recent disasters shows that common steps are generally followed by government to organize a large disaster response, as shown below. Steps where the affected population is likely to be involved are marked with *.

<table>
<thead>
<tr>
<th>Activity in response timeline</th>
<th>Description of activity</th>
<th>Time frame</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Coordination*</td>
<td>Development and maintenance of a coordination mechanism</td>
<td>From the disaster event through the end of reconstruction</td>
</tr>
<tr>
<td>2. Engagement*</td>
<td>Collaboration with stakeholders</td>
<td>From the disaster event through the end of reconstruction</td>
</tr>
<tr>
<td>3. Initial assessment*</td>
<td>Gathering of initial information and evaluation of local capacities</td>
<td>Week 1 following the disaster</td>
</tr>
<tr>
<td>4. Outline strategy*</td>
<td>Developing a framework for cooperation (see description below)</td>
<td>Week 1 following the disaster</td>
</tr>
<tr>
<td>5. Rapid appeal</td>
<td>First call for funding</td>
<td>Week 1 following the disaster</td>
</tr>
<tr>
<td>6. Emergency relief distribution</td>
<td>Coordinating emergency distribution based on the initial assessment activity</td>
<td>Throughout month 1</td>
</tr>
<tr>
<td>7. Program- and project-level work plan*</td>
<td>Specific shelter programs and projects</td>
<td>Periodic, starting in week 2</td>
</tr>
<tr>
<td>8. Program- and project-level implementation*</td>
<td>Implementation of the work plans based on work plan</td>
<td>Beginning week 2 through the end of reconstruction</td>
</tr>
<tr>
<td>9. Joint rapid needs assessment (such as Post-Disaster Needs Assessment [PDNA])*</td>
<td>Formally coordinated assessment based on initial assessment (see Chapter 2, Assessing Damage and Setting Reconstruction Policy, for a discussion of various assessment methodologies)</td>
<td>First 4-6 weeks</td>
</tr>
<tr>
<td>10. Full policy or strategy*</td>
<td>Detailed strategy built on outline strategy (see Chapter 2, Assessing Damage and Setting Reconstruction Policy, for a discussion of the parameters of a reconstruction policy)</td>
<td>First 4-6 weeks</td>
</tr>
<tr>
<td>11. Revised appeal</td>
<td>Further detailed calls for funding based on rapid needs assessment</td>
<td>First 4-6 weeks</td>
</tr>
<tr>
<td>12. Detailed assessments (generally sector-specific)*</td>
<td>Formally coordinated assessments building on rapid needs assessment (see Chapter 2, Assessing Damage and Setting Reconstruction Policy, for a discussion of various assessment methodologies)</td>
<td>Periodic, throughout reconstruction</td>
</tr>
<tr>
<td>13. Revised policy or strategy*</td>
<td>Revision of strategy based on detailed assessments</td>
<td>Periodic, throughout reconstruction</td>
</tr>
<tr>
<td>14. Public financing and additional appeals</td>
<td>Arrangement of multilateral and bilateral loans and grants, and ongoing humanitarian appeals</td>
<td>Periodic, throughout reconstruction</td>
</tr>
<tr>
<td>15. Achievement of agreed goals*</td>
<td>Completion of benchmarks set with government and communities in the strategies</td>
<td>End of reconstruction</td>
</tr>
</tbody>
</table>
By understanding and recognizing these common steps, different stakeholders can ensure better cooperation and coordination, which in turn will support a more consistent and efficient response that better meets the needs of the affected population.

**Who Does What? Stakeholder Roles and Responsibilities**

Following a major disaster, government frequently seeks external support, initially from the humanitarian community and later from IFIs, such as the World Bank. These same institutions are also involved in an increasing number of smaller-scale disasters, albeit in different ways. It is essential that these stakeholders work together in post-disaster reconstruction and that each understand the capacities, roles, responsibilities, and contributions of the others. Some specific efforts to improve coordination are mentioned in Chapter 14, International, National, and Local Partnerships in Reconstruction.

**The Affected Population**

People affected by a disaster are not victims; they are the first responders during an emergency and the most critical partners in reconstruction, undertaking the majority of work on their own recovery, without governmental, humanitarian, or IFI support. A good reconstruction strategy is one that focuses on empowering communities, families, and individuals to rebuild their housing, their lives, and their livelihoods. To make this work, community members should be partners in policy making and leaders of local implementation. They may need support to play these roles.

Real representation of the affected communities in the policy-making body and in all aspects of recovery is a must. At the same time, it is crucial that agencies do not succumb to the misconception that the affected population is a single entity, ignoring differences in needs and capacities. Communities are composed of numerous social and economic groups, each with its own characteristics, vulnerabilities, and ability to influence outcomes.

Key points about populations affected by disasters (with reference to the handbook’s Guiding Principles [GPs]) include the following.

- People affected by a disaster need to secure shelter and rebuild their livelihoods. Infrastructure such as roads, schools, and power generation is as fundamental to recovery and livelihoods as housing is. Also important is the rebuilding of the sense of community and of social capital. Responses should reflect an understanding that reconstruction is not only about shelters and homes but also about reconstructing entire communities. (GP 1)
- People affected must have shelter during the time in which reconstruction takes place. While a tent, for example, only lasts a year, other transitional shelter options can be employed that last until permanent housing is available. (GP 2)
- For people who have not been displaced, reconstruction begins almost immediately, usually with the recovery of materials to recycle in building their shelter. (GP 2)
- People’s expectations regarding the time frame for reconstruction are often overly optimistic; reconstruction and recovery will probably take a number of years. (GP 4)
- Some people will be displaced by the disaster and others won’t be, and the ways to help these two groups may differ. At the same time, people may not wish to return to their pre-disaster circumstances, depending on changes in their lives and in their livelihoods.
- Some social groups are more vulnerable than others. The most vulnerable, poorest, and hardest to reach members of society are usually those most affected and most in need. Gender and age are also determining factors when assessing vulnerability.

**Government**

Central government is always responsible and accountable for managing a disaster response and for establishing policy to guide the reconstruction program. This does not mean government will do everything, but it does mean that defining a strategy that establishes “who will do what and how” is a governmental responsibility. Government, however, is not a monolith; it consists of different branches; public entities with different levels of autonomy; and usually different levels, e.g., central, state, provincial, local. Even if government’s management capacity is adequate under normal circumstances, it can be overwhelmed immediately following a disaster, especially at the local level. These realities must be taken into account in developing the response and in defining the reconstruction policy. See Chapter 2, Assessing Damage and Setting Reconstruction Policy, for a discussion of the parameters of a reconstruction policy.
Dilemmas of Reconstruction

The most complex tasks for recovery managers are to determine and to implement the appropriate approach to reconstruction of buildings and infrastructure. Considerations include the wider political context, the operational requirements, and the expectations and preferences of the people most affected. Reconstruction poses many demands and dilemmas for officials. These include whether to emphasize short-term basic reconstruction needs or longer-term needs to reduce risk, whether to engage the affected population in rebuilding their own houses with technical guidance or engage professional building contractors to do the work, and whether reconstruction should be carried out in the original, disaster-prone location, or relocated to a new and possibly less vulnerable location.

Another important dilemma concerns the stages of shelter to employ before reaching permanent reconstruction. Experience demonstrates that it is generally better to avoid the process of building substantial temporary dwellings. Dialogue with the public may help identify more viable, and locally suited, immediate post-disaster shelter options. Without some intermediate step, extraordinary measures may be needed to accelerate the construction of permanent residential buildings.

None of these questions have easy answers, and much depends on the views of government officials responsible for the recovery process, relative to those of local people who will finally determine by their acceptance or rejection the success of any official decisions that are made.

In certain situations, especially after a large-scale emergency, government may establish a dedicated organization or taskforce to coordinate, reinforce, or in some cases temporarily replace the responsibilities of line ministries. The taskforce can sometimes better coordinate tasks among ministries and departments. The taskforce is usually created for a specific period of time and will return responsibilities to the relevant line ministries, either gradually or when specific objectives are met. For a detailed discussion of these options, see Chapter 13, Institutional Options for Reconstruction Management.

The National Military

The national military can sometimes be an effective partner in housing reconstruction. It may be able to quickly carry out initial rebuilding of bridges and essential infrastructure, and generally has better and faster logistics capability than any governmental entity, including rapid assessment capabilities and excellent communications. The military may maintain large stockpiles of goods and may be able to deliver materials even when roads are impassible by others. The military may also have high levels of local support, and can add a sense of security and order to early recovery.

There can also be challenges with military involvement. In some countries, the cost of the military’s support is high and it may get charged against assistance budgets. The military is not always used to operating in the complex, multi-stakeholder environment of a disaster recovery situation, and may have little experience in listening to community concerns or accepting civil authority. Having the military run camps is usually not an appropriate long-term strategy, although the military’s assistance in setting up these camps and their infrastructure can be crucial. Also, the military is generally not experienced in coordinating housing recovery and reconstruction, although there are notable exceptions, such as after the 2004 North Pakistan earthquake, where the military coordinated certain aspects of the inspection system for housing reconstruction. Lastly, where there is a prevalence of NGOs involved in reconstruction, conflicts may arise between the NGO culture (especially that of NGOs with pacifist origins) and the culture of the military.

The Humanitarian Community

Coordination of the response is the responsibility of government; however, support is often offered by the humanitarian community. Government usually establishes coordination mechanisms, and the humanitarian community, led by the Resident Representative or Humanitarian Coordinator assigned by the UN, often implements those mechanisms. A sector coordination team may involve information managers and technical specialists. There are two kinds of mechanisms used to establish coordination:

- Pre-agreed frameworks, such as those set up in contingency plans by government or the UN through the Inter-Agency Standing Committee (IASC) clusters system; and
- Ad hoc frameworks, such as those set up by government, the UN, other agencies, or communities at the national or local level when contingency plans do not exist and the cluster system is considered inappropriate.

Coordination within the humanitarian community has recently been reformed through the IASC and the creation of its 11 “clusters,” such as for “Emergency Shelter” and “Early Recovery,” which together constitute a framework of responsibilities at both global and response levels. UN agencies, international organizations, and the International Federation of the Red Cross and Red Crescent (IFRC) take the lead role in each cluster, with a series of partner agencies, representing other UN agencies, international organizations, and NGOs, supporting each cluster. Although this framework is intended to prevent overlaps and gaps in responsibility, operational coordination at the response level for reconstruction has not yet been clarified. A more detailed description of the cluster system, including a list of the cluster leads, is found in Chapter 14, International, National, and Local Partnerships in Reconstruction.
**United Nations agencies.** In most countries, the UN maintains its own presence and that of the United Nations Development Programme (UNDP), under a Resident Representative. In large emergencies, the UN may expand its capacity by including a Humanitarian Coordinator, while agencies like the United Nations Children’s Fund (UNICEF) and the United Nations Office for the Coordination of Humanitarian Affairs (UN OCHA) may also establish offices or increase capacity. Immediately following a disaster, a specifically mandated UN team often arrives to support coordination and assessment. The UN and the humanitarian community will agree together on a coordination structure and commitments as providers of last resort, in support of government.

Under the cluster system, UNDP works with government to coordinate “Early Recovery” activities following a disaster, including conducting a PDNA and developing an Early Recovery Framework. Assessments are discussed in Chapter 2, Assessing Damage and Setting Reconstruction Policy.

**The Red Cross Movement and international organizations.** Under the cluster system, the IFRC coordinates the activities of the Emergency Shelter Cluster following a disaster, although these responsibilities may be handed over to UN partners, such as the United Nations Human Settlements Programme (UN-HABITAT) and UNDP, for reconstruction and early recovery. For a detailed description of how the Emergency Shelter Cluster is mobilized following a disaster, see Chapter 14, International, National, and Local Partnerships in Reconstruction.

**National and international NGOs.** A number of national and international NGOs increase capacity after a disaster, offering—along with the IFRC and other international organizations—support for implementation of response and reconstruction programs. Additional NGOs without an established presence in the country often arrive in the days immediately after a disaster and may, or may not, maintain a presence until reconstruction is completed. (See Mind the Gap, below.) NGOs often play a major role in facilitating the activities of communities or in serving as executing agencies for all funding sources.

**Bilateral and Multilateral Donor Organizations**

Technical and nontechnical representatives of bilateral donor organizations, such as the United States Agency for International Development (USAID) (directly or through the Office of U.S. Foreign Disaster Assistance [OFDA]) and the UK Department for International Development (DFID), and of multilateral donor organizations, such as the Organisation for Economic Co-operation and Development (OECD)-Development Cooperation Directorate (DCD), UNDP, and the World Food Programme (WFP), often arrive almost immediately following a disaster, participating in coordination structures from the outset of the response. These agencies can be important partners with IFIs in reconstruction. In some policy areas, bilateral agencies, working alone and in partnership, have also successfully taken the lead in developing, analyzing, and promoting post-disaster best practices.3

**IFIs: The World Bank and Regional Development Banks**

IFIs traditionally became involved in reconstruction after a number of months. However, this time frame is changing, and many IFIs now become involved in the early stages of a response. The resources and mechanisms offered by IFIs are also evolving, in order to support a diversity of responses. For a description of World Bank mechanisms, see Chapter 20, World Bank Response to Crises and Emergencies.

**Defining the Outline Strategy**

Agreeing on a common strategy with government is key to ensuring that early decisions make a positive contribution to the longer-term reconstruction process, recognizing that reconstruction usually begins right away. In the absence of a common strategy, agencies that enter later in the process may be unaware or even discount the value of agreements made before they arrived; this is especially easy for larger agencies to do.

An outline strategy must be agreed to within the first weeks of the disaster for stakeholders to collaborate effectively and manage the needs of the affected population. It is generally developed by

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3. Many examples of recent analytical work by bilateral and multilateral organizations are listed in the Resources sections throughout this handbook.
government and the lead disaster agency, in collaboration with affected communities and with the support of humanitarian agencies. This strategy is then reviewed and updated regularly as new and more detailed assessment information becomes available, until a full policy or strategy is defined, as described in #10 in the “The Steps in Response and Reconstruction” table, above. See Chapter 2, Assessing Damage and Setting Reconstruction Policy, for a description of the assessment process and the content of a housing and community reconstruction policy.

Reconstruction strategies are agreed to on a response-by-response basis. Within the humanitarian community, certain topics are commonly included in strategy documents. The same themes are common in situation reports (“sitreps”) and funding proposals. Terminology will vary and additional topics are often included. The common elements of a reconstruction outline strategy include (1) introduction and context analysis, (2) goals (or strategic objectives), (3) needs assessment, (4) priorities for the sector, (5) activities, (6) projected outputs and outcomes, (7) projected impact (also called indicators), (8) intersector linkages, (9) timeline, and (10) resources.

While humanitarian agencies are likely to take the lead in helping government articulate the outline strategy, IFI participation (or, at a minimum, IFI review and revision of the strategy) is essential if IFI financing is expected to be utilized in reconstruction. It is only through early involvement that IFI knowledge and policy perspectives can be incorporated in early decisions.

**Urban versus Rural Disasters**

Disaster response and recovery in urban areas will be of larger scale, more concentrated, and more complex than in rural areas. Almost every aspect of reconstruction must be tailored to urban reality. Rural disaster programs pose their own unique problems. A disaster that has affected both urban and rural areas can be especially challenging to plan and execute.

Factors that influence the reconstruction approach in urban areas include:

- Higher population density and the resettlement options available to displaced persons
- More informal housing, much of it located in high-risk areas
- More multi-family housing and a larger proportion of renters
- Ownership and titling issues may require legal procedures to resolve
- More and generally more capable public sector organizations, including those responsible for disaster management, but often not used to working together
- Potential for disaster risk reduction (DRR) measures to be based on planning and regulation
- Higher income levels and living standards of the affected population, potentially requiring more generous assistance strategies
- Higher land values and less undeveloped land
- Unique and more challenging environmental risks
- Higher value and more infrastructure investments
- More complex social structures that are likely to give rise to conflicts and to complicate participation in reconstruction planning
- More clearly defined economic and social interests and more sophisticated political organizations
- Economic effects from the urban disaster that affect the rest of the country

Factors that influence the reconstruction approach in rural areas include:

- Lower land values
- Ownership and titling issues that can sometimes be resolved through negotiation
- The major role that the social structure plays in the dynamics of reconstruction
- The relative ease with which community participation can be achieved
- A higher sense of ownership
- The lack of institutional capacity for planning and regulation
- Housing that is usually designed and built by owners themselves or by masons, so DRR measures should be based on building awareness and on training construction workers

The differences between planning processes in urban and rural areas are discussed in more detail in Chapter 7, Land Use and Physical Planning. The case study on the 2003 Bam earthquake, below, describes the differential approach to reconstruction taken in urban and rural areas of Iran.
The Options Facing Displaced and Non-Displaced Populations

The process that people and households go through after a disaster to stabilize their housing situation can be quite lengthy, convoluted, and complex. People affected by the same disaster will be affected differently and will respond differently. Some will begin reconstruction of their partially damaged housing in the first days after the disaster, while others will be displaced for a period of time, even finding their situation changing from week to week for many months or even years. It is not uncommon that households affected by a disaster never again attain the level of prosperity and security they had before the event.

It is important to understand the range of options people face and not to impose artificial “phases” on diverse situations. These phases are sometimes more indicative of the bureaucratic practices and capacities of the agencies involved in response and reconstruction than they are of the priorities of the affected population. For example, in some past responses, support for reconstruction began only months after a disaster, after the affected populations themselves began rebuilding, because some agencies believed that reconstruction did not contribute to humanitarian objectives, or even distracted from them.

The following twelve options—six for displaced populations and six for non-displaced populations—are often used by the humanitarian community.

### The Six Options for Displaced Populations

People displaced from their original location have different sheltering options that are important to consider in planning and implementing reconstruction programs. The six options for displaced populations are listed and described below.

<table>
<thead>
<tr>
<th>Settlement option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host families</td>
<td>The displaced are sheltered within the households of local families, or on land or in properties owned by them.</td>
</tr>
<tr>
<td>Urban self-settlement</td>
<td>The displaced settle in an urban area, occupying available public or private property or land.</td>
</tr>
<tr>
<td>Rural self-settlement</td>
<td>The displaced settle in a rural area, occupying available public or private property or land.</td>
</tr>
<tr>
<td>Collective centers</td>
<td>The displaced shelter in collective centers, or mass shelters, often transitory facilities housed in pre-existing structures.</td>
</tr>
<tr>
<td>Self-settled camps</td>
<td>The displaced settle independently in camps, often without services and infrastructure.</td>
</tr>
<tr>
<td>Planned camps</td>
<td>The displaced settle in purposely-built sites, where services and infrastructure are offered by government or the humanitarian community.</td>
</tr>
</tbody>
</table>

Following disasters, it is imperative to minimize the distance and duration of displacement, while keeping safety in mind. This allows people to better maintain their livelihoods and allows households to protect their land, property, and possessions. The displacement typology should not be perceived as describing a phase of resettlement, but instead as describing subcategories of the affected population. Displacement can continue long after post-disaster risks have receded, due to (1) the inability of households to document their property rights, which may be a prerequisite to reconstruction; (2) inappropriate reconstruction strategies, such as one that ignores the variety of needs within the affected population; or (3) the lack of resources and capacities of government and agencies to assist the displaced population.

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The Six Options for Non-Displaced Populations

Households that were not displaced or that have returned also will be found in diverse situations, especially in urban areas, where the proportion of tenants to owner-occupiers often exceeds 50 percent. Although the situation and context vary greatly from disaster to disaster, six options to describe the status of non-displaced populations are generally accepted within the humanitarian community.5

<table>
<thead>
<tr>
<th>Settlement option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>House owner-occupant</td>
<td>The occupant owns his/her house and land, or is part-owner, such as when repaying a mortgage or a loan. Ownership may be formal or informal.</td>
</tr>
<tr>
<td>House tenant</td>
<td>The occupant rents the house and land, formally or informally.</td>
</tr>
<tr>
<td>Apartment owner-occupant</td>
<td>The occupant owns his/her apartment. Ownership may be formal or informal.</td>
</tr>
<tr>
<td>Apartment tenant</td>
<td>The occupant rents the apartment, formally or informally.</td>
</tr>
<tr>
<td>Land tenant</td>
<td>The occupant owns the house, and rents the land, formally or informally</td>
</tr>
<tr>
<td>Occupancy with no legal status (squatter)</td>
<td>The occupant occupies land or property without the explicit permission of the owner. Also called informal settlers.</td>
</tr>
</tbody>
</table>

Before the disaster, an affected household belonged to one of the categories listed above. After the disaster, it may move through one or more of the options for displaced or non-displaced population, and will eventually cycle back to one of the categories listed above. For example, the owners of an urban house that is badly damaged (house owner-occupant) may temporarily camp in another part of town (urban self-settlement), but eventually decide to resettle by buying an urban apartment (apartment owner-occupant). The number of paths through these options is almost infinite.

The ultimate goal of housing reconstruction is to ensure that all those affected by a disaster, whether they have been displaced or not, are eventually situated in a “durable solution.” If transitional resettlement has relocated a significant percent of the population away from the affected area, an effort may be required to ascertain how many plan to return, so that the housing need is not overestimated. If reconstruction begins spontaneously and is being carried out in a way that creates unacceptable risks, the reconstruction strategy may need to compensate families for work already done in order to enlist their collaboration in improving the safety of construction.

The implementation of the housing and community reconstruction policy must incorporate and equitably support the needs of those in all categories. See 4 Chapter 4, Who Gets a House? The Social Dimension of Housing Reconstruction, and 4 Chapter 6, Reconstruction Approaches, to see how these categories can be used when defining the assistance strategy.

Resolving property rights issues often needs to be a high priority at the beginning of reconstruction programs, requiring considerable capacity from national and international stakeholders. See 4 Chapter 7, Land Use and Physical Planning, for a list of strategies to address property rights issues and case studies of good practice.

The Transitional Shelter Approach

The transitional shelter approach can be used with both displaced and non-displaced populations.6 Transitional shelter is not a phase of reconstruction, but is a philosophy that recognizes that reconstruction usually takes years to complete and that shelter is required throughout this period. The transitional shelter approach responds to the fact that post-disaster reconstruction can take a significant amount of time and that it is the affected population that does most of it.

Transitional shelter is used to house affected households with habitable, covered living space and a secure, healthy living environment with privacy and dignity during the period between a natural disaster and the availability of a permanent shelter solution. Communities have differing capacities to cope until permanent reconstruction is completed. The decision to employ transitional shelter should be made in consultation with the affected populations, keeping in mind that the preference for transitional shelter may be community-specific.

5. Because the handling of displaced populations is not a focus of this handbook, most of the handbook uses categories similar to those for non-displaced populations.
Transitional shelter provides incremental support from the moment recovery begins, and gives households mobility and autonomy. Advocates seek also to coordinate all shelter efforts from immediately after the disaster. It is distinct from temporary shelter (which is occupied immediately after a disaster and understood to be time-limited), in that it offers shelter on-site until the completion of reconstruction for those not displaced or throughout the displacement period for those displaced. Transitional shelter shares some characteristics with what is called “semi-permanent shelter,” but, because it is generally movable, may provide more flexibility as conditions change after the disaster and during the reconstruction period. For an example of an ambitious temporary shelter program, see the [case study on the temporary housing built following the 2009 L'Aquila, Italy earthquake, below.](#)

**Strengths of Transitional Shelter Programs**

There are several potential advantages with transitional shelter as an assistance method from the point of view of executing agencies, including the following.

1. Transitional shelter programs can be implemented by humanitarian organizations without experience in transitional settlement or reconstruction. While the initial cost is similar to some traditional temporary solutions, such as tents, the operating costs may be significantly lower (compared to running a camp, for example).
2. Because the designs almost always use local materials, the resources that are spent in construction circulate in the local economy and help jump-start supply chains needed for the reconstruction phase, possibly reducing the need for purchasing and warehousing of building materials by agencies.
3. Production of shelters can start the process of educating builders and the public on hazard-resistant construction principles and techniques, which will later be employed in reconstruction.
4. The designs are sufficiently flexible to accommodate differences in family size, location, culture, and availability of materials.

Transitional shelter can be advantageous for the affected population as well, for the following reasons.

1. If transitional shelters are sufficiently durable to last until the completion of reconstruction, which may take a number of months or even years, the need for multiple moves by a family between the disaster and the completion of reconstruction is reduced.
2. Transitional shelters—being mobile, flexible, and under the control of the family—permit households to quickly return to the site where they have land rights or tenure, once it is deemed safe, allowing them to protect whatever assets still remain, to begin on-site reconstruction, to reestablish their livelihoods, and to preserve social networks.
3. The best designs allow the household to upgrade or incorporate the shelter into permanent reconstruction (for instance, as an extra room or a storage area), or permit the reuse of the majority of materials in permanent reconstruction.

The [case study, below, on reconstruction following the 2005 North Pakistan earthquake demonstrates how transitional shelter materials can be reused in permanent housing.](#)

With respect to design, transitional shelters can usually be constructed quickly, with simple tools and local, relatively low-skilled labor, including that of the family itself. While designed for local materials and construction techniques, transitional shelter designs should also reflect agreed-upon standards that provide adequate safety and protection to the users. Often, the materials for transitional shelters are assembled and distributed as kits, which is helpful for affected families who may need to transport them. In fact, transitional shelter is designed to be disassembled and relocated. This may be advantageous if there are delays in the resolution of land rights or tenure, households can’t return immediately to their land (until floodwaters recede, for example), decisions are pending as to whether a household must be resettled, or on-site reconstruction progresses to the point where the transitional shelter is in the way.

**Weaknesses of Transitional Shelter Programs**

There are risks and challenges involved in using transitional shelter as an assistance method, including the following.

1. A transitional shelter strategy does not exempt government from addressing the need for water, sanitation, and electricity at the sites where families locate their shelters. This may require providing interim services, such as water delivery and storage and latrines, until infrastructure and services are permanently restored.
2. Some families’ land rights may not be readily resolved, leaving families settled indefinitely occupying the land where their transitional shelter is located, but with no legal status.

3. Government may become complacent with the transitional shelter solution and offer no other support, especially if resources for reconstruction fall short during the “transitional” period.

4. Even if local materials are used, production of the shelters may overtax supply channels, driving up prices or extending production times.

5. The transitional shelters may themselves represent a risk, especially if there is insufficient experience among those implementing the program. Units may be poorly constructed or fabricated of unsafe materials, unsafely sited, or located in areas with insufficient basic services.

The case study, below, on the 2004 Indian Ocean tsunami reconstruction in Indonesia summarizes the findings of a transitional shelter program evaluation that showed that the positive economic impact of transitional shelter declined if it was occupied for too long.

**International Experience**

Transitional shelter is a rapidly evolving area of humanitarian assistance. Extensive technical resources are available and best practices continue to accumulate. Some knowledgeable organizations are listed in the Resources section of this chapter. Additional resources are available from the handbook Web site, http://www.housingreconstruction.org.

**Unequal Distribution of Resources within the Post-Disaster Cycle**

Viewing disaster management from a distance, one might think that each phase of the disaster cycle receives equal resources; this is not the case. The normal pattern in major disasters is for emergency response and relief to receive the overwhelming share of human, material, and financial resources. This can lead to funding shortfalls for reconstruction in certain regions or sectors over time and to bad decisions as agencies (including government) attempt to accelerate reconstruction, without sufficient planning, while resources for relief are still plentiful.

In addition, when resources are insufficient for reconstruction, funds for preventive and disaster risk reduction (DRR) measures may be severely constrained, so vulnerability is just built back. Overloading response and relief with resources, while short-changing DRR, is a serious reconstruction pitfall. Government must work with its funders to resolve this dilemma. The case study on the 1963 Skopje reconstruction, below, recounts how temporary housing was occupied for so long after the earthquake it eventually affected the physical development of the city.

**Minding the “Gaps”**

The gaps between the emergency lifesaving effort and post-disaster reconstruction are of particular importance in housing and community reconstruction and deserve careful management. The transitional shelter and reconstruction approach is an attempt to bridge these gaps by acknowledging that for affected families the division is artificial; therefore, interventions should be planned to better integrate response.

**The Funding Gap**

The first gap that may appear is in the continuity of funding between the contributions of the humanitarian community and funding from IFIs, such as the World Bank. The implementation of programs by government and the humanitarian community may face interruptions if this occurs. Some humanitarian organizations may even be forced to withdraw.

Throughout reconstruction, funding from different sources will go through peaks and troughs. Emergency contingency funds, such as the UN Central Emergency Response Fund (CERF), are made available almost immediately, while money from public appeals will flow early on, although not immediately. Government often injects substantial funding initially, although this funding is often reduced as funding from other sources, such as IFIs, including the World Bank, is mobilized.

To avoid this gap and to ensure consistent availability of funds, it is imperative that relationships with all funding sources are carefully managed and that funds are carefully programmed and tracked. The programming of funds should include, to the greatest extent possible, the funding of bilateral agencies and NGOs whose initial preference may be to operate outside of the government.
coordination system, since this funding is sometimes the most flexible and readily available. Other solutions are discussed in Chapter 15, Mobilizing Financial Resources and Other Reconstruction Assistance. Arrangements available through the World Bank are described in Chapter 20, World Bank Response to Crises and Emergencies.

The Planning Gap
Poor or uncoordinated strategic planning—the “planning gap”—may result in unnecessary costs. For instance, if more than one plan is developed, shifts in policy and funding approaches may take place. In the process, commitments made to the affected population may be forgotten. Involving IFIs as early as possible in the planning process both resolves this strategic planning gap and helps resolve the funding gap, by ensuring that one continuous plan is produced, rather than developing two or more plans for different “phases” that may not integrate adequately.

The Implementation Gap
Another gap concerns specialist implementation capacity. Some humanitarian agencies that are specialized in, or funded for, emergency lifesaving activities may need to withdraw after the post-disaster situation has stabilized. These entities should then hand over their responsibilities and caseloads to government or agencies involved in reconstruction, or the coordination, efficiency, and consistency of the response may be jeopardized. It is common that a number of agencies leave under these circumstances, so an effective coordination mechanism is essential to ensuring a smooth transition.

The British Royal Institution of Chartered Surveyors proposes, in its report, Mind the Gap! Post-Disaster Reconstruction and the Transition from Humanitarian Relief, that chartered surveyors, geographic information systems (GIS) technicians, disaster risk professionals, and other “built environment” experts with expertise in planning and management of complex projects can play a crucial role in closing the implementation gap between humanitarian relief and reconstruction and development.8

The Participation Gap
Another gap, which is often overlooked and is often the most significant, is in the capacity of the affected population itself to participate in the response. After the initial response, shock and trauma may limit the contributions of some members of the affected population. However, in the subsequent weeks, months, and years, the affected population constitutes the largest contributor of labor to the reconstruction effort. Yet as the population begins to recover its livelihoods, families affected by the disaster should not be forced to choose between reestablishing their financial independence and participating in reconstruction. This gap may come and go suddenly due to internal or external


factors, for example, the onset of a rainy season in a farming community or the decision to accept work opportunities elsewhere. Certain factors that may cause this gap, such as crop harvests, can be planned for. The Emergency Market Mapping and Analysis (EMMA) can be used to identify how the labor supply may fluctuate during the year. An explanation of the EMMA methodology is included in Chapter 15, Mobilizing Financial Resources and Other Reconstruction Assistance, Annex 1, Deciding Whether to Procure and Distribute Reconstruction Materials.

Good coordination by government, with support from the humanitarian community, can help mitigate these gaps. The indicators proposed by the OECD Development Assistance Committee (DAC) in 1991 for the evaluation of humanitarian programs (as updated) include an indicator for program “connectedness.” As explained by the Active Learning Network for Accountability and Performance in Humanitarian Assistance (ALNAP) in its evaluation guide based on these indicators, “connectedness” refers to the need to ensure that activities of a short-term emergency nature are carried out in a way that takes longer-term development requirements into account. However, the guide also states that while the need for linkages among humanitarian action, recovery, and development are well understood, no consensus exists on how lifesaving humanitarian action should support longer-term needs, mentioning natural disasters as an example of where this objective is particularly difficult to achieve.

**Recommendations**

1. Agencies should be cognizant and respectful of planning, strategies, and coordination mechanisms that have already been established when they begin operations in the disaster zone.
2. Agencies should realize that every disaster is unique in its complexity, impact, and cultural context, and should work toward an integrated approach that responds first and foremost to the needs of those affected.
3. Address the unique situations and requirements of those affected, whether displaced or not, without discriminating against any sub-group of the population.
4. Seriously consider implementing the transitional shelter approach, which addresses shelter needs over the entire period from the disaster to a permanent housing solution, rather than addressing needs in phases.
5. Make every effort to minimize the gaps between humanitarian programs and reconstruction and development, by getting all key funding institutions involved early in planning and by anticipating the transitions in delivery that will inevitably occur.
6. Expect reconstruction to take a long time, and encourage communities to think in those terms without undermining their determination to recover. Design interim shelter solutions based on realistic assumptions about time.
7. Don’t shortchange reconstruction. Adequate financial and material resources must be made available throughout the response, recovery, and reconstruction process. Governments should work with funding sources to plan the distribution of available resources over a realistic reconstruction period.

**Case Studies**

**1963 Skopje Earthquake, FYR Macedonia**

**The Influence of Early Decisions on Long-Term Recovery**

More than 1,000 residents of Skopje, Macedonia, perished in the 1963 earthquake, and more than 3,300 persons were seriously injured. With the vast majority of its 36,000 housing units destroyed or damaged, 76 percent of Skopje’s population was left without shelter. Decisions made immediately

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after the disaster had a major impact on Skopje’s reconstruction. Vladimir Ladinski, an architect and urban planner who lived in the city throughout the recovery process, has written a detailed, 30-year longitudinal study of the transition from relief to full reconstruction. He notes that the relief operation was probably one of the most efficient on record, with minimal aid being wasted and with authorities having very clear priorities. But despite such achievements, Ladinski raises “serious doubts [about] whether the rapid initial planning decision on the location of new settlements was correct.” His reference is to the decision, within a few days of the earthquake, to locate temporary housing in sites surrounding the city. It was naively expected that these temporary houses would be subsequently demolished to make way for permanent dwellings some nine months after the disaster. However, in modified form, many remained in place much longer and had a negative impact on the development of the overall city plan.


2004 Indian Ocean Tsunami, Indonesia
Evaluation of a Transitional Shelter Program
The 2004 Indian Ocean tsunami left more than 550,000 people displaced in the province of Aceh, Indonesia. The IFRC responded by implementing a transitional shelter program. From August 2005 to December 2007, some 19,920 transitional shelters were built for families that were still living in tents or shacks. The purpose of this transitional shelter program was to provide a solution that would “fill the gap” between an emergency shelter solution, such as tents, and permanent houses. The steel-framed houses with wooden walls and floor and a sheet-metal roof were intended to provide shelter for a period of 2–4 years. A study initiated by the IFRC and the Netherlands Red Cross showed that the program had a strong positive social impact and a slight positive economic impact on the beneficiaries. This positive impact continued even after the household moved to a permanent house, which shows that the benefits of transitional shelter can go beyond only being a temporary solution for housing after a disaster. However, the positive impact is seen only when a household lives in the transitional shelter for a relatively short period. Transitional shelter should be kept as a short-term solution because it does not meet the needs of a family over a longer period of time. There was a noticeable decrease in economic impact when a family lived in a transitional shelter for a longer period.

Source: S. G. van Dijk, 2009, A Socio-Economic Impact Study on a Transitional Housing Program. Case Study of a Red Cross and Red Crescent Housing Program in Indonesia (research report, Eindhoven University of Technology, in collaboration with the IFRC and Netherlands Red Cross).

2003 Bam Earthquake, Iran
Differences in Urban and Rural Shelter Approaches
The large-scale destruction caused by the 2003 earthquake in Bam, Iran, made it unlikely that affected communities would soon have permanent housing. Authorities estimated that at least two years of temporary shelter would be needed before permanent housing would be available, at least in urban areas. National relief agencies pushed to establish camps, despite the strong desire of the people to erect shelters on or close to their own land. The justification of the agencies was that camps would simplify the delivery of services and lower their costs. Yet worldwide, experience has shown that establishing camps for displaced people following disasters has negative socioeconomic impacts on reconstruction and long-term development, and only makes sense when concerns such as security make other alternatives impossible. Therefore, a national strategy for housing reconstruction was formulated and made public. It entailed (1) in urban areas, providing interim or transitional shelters—including prefabricated units on vacant urban lots or the family’s land—that would address housing needs for a 2-year period for the entire affected population, and (2) in rural areas, building permanent housing on original housing plots as soon as practicable. Permanent shelter in urban areas would not be built until the city master plan was updated and reconstruction guidelines were approved.

Prefab houses measuring 18 square meters were provided to all urban households who could prove (using, among other things, the testimony of other residents) that they lived in the area prior to the disaster. For households with more than four people, two prefab houses were provided. An additional unit was available for purchase. The cost for a prefab house was around US$2,000, including transport. Each was installed on the land designated by the household.

2005 North Pakistan Earthquake, Pakistan

Reusing Transitional Shelter Materials in Permanent Homes

In October 2005, a strong earthquake and several aftershocks struck Pakistani-controlled Kashmir, northern Punjab, and the North West Frontier Province, devastating poor communities in towns and villages located in harsh, mountainous terrain. Even with winter approaching, many homeless families decided not to leave their villages for government camps because of concerns about their land and livestock, the sources of their livelihood. To help these families, Habitat for Humanity Pakistan (HFHP) introduced a dome-shaped transitional shelter made with materials that could be reused later in permanent houses. The shelters consisted of a tubular pipe structure, galvanized corrugated iron sheets attached using metal ties, and foam insulation. The transitional shelters were easy to assemble and cost about as much as a tent. Approximately 400 of them were erected in the mountainous areas around Balakot and Muzaffarabad. During the spring of 2006, HFHP began building new, earthquake-resistant homes, following guidance from the government’s Earthquake Reconstruction and Rehabilitation Authority. Around Balakot and other villages in the Union Council area, HFHP implemented a new construction program that included recycling heavy timber from the destroyed houses into lighter wooden construction elements, using mobile sawmills that were transported from village to village. The galvanized corrugated iron sheets from the transitional shelters were used as roof elements in the new homes. More than 345 new homes were built and an additional 5,500 families were assisted with sawmill services.


2009 Abruzzo Earthquake, L’Aquila, Italy

Temporary Housing Solution Implemented by the Italian Civil Protection

Soon after the April 6, 2009, Abruzzo earthquake, whose epicenter was near the city of L’Aquila, Italy, the Italian government began to analyze the feasibility of a temporary housing project. The first estimate after the earthquake was that 20,000–25,000 people would need temporary shelter. Later, it was agreed that 4,500 units would accommodate the temporary housing demand of all families with three or more members whose houses were destroyed or severely damaged by the earthquake. Previous Italian experience with earthquakes had shown that reconstruction in a historical center can take 5–10 years, and sometimes longer, which creates a difficult situation for the affected population. While L’Aquila is in a cold mountainous area, the earthquake occurred in April, the beginning of six months of good weather for construction. This made the option of building comfortable temporary housing much more feasible. Another consideration was that, because there are approximately 15,000 students seeking housing in L’Aquila every year, the temporary apartments could eventually be reused as student dormitories.

Government approved the temporary apartments project, called Progetto C.A.S.E (Complesi Antisismici Sostenibili ed Eocompatibili or Antiseismic, Sustainable, and Ecofriendly [housing] Complexes), at a cost of 700 million euro (US$929 million). The aim was to build energy-efficient, seismically sound temporary apartments in 3-story buildings. A total of 16 firms won design contracts. The new houses needed to be available within six months and to have expected useful lives similar to normal houses. While different designers used different materials (timber, steel, or concrete), all the units were prefabricated and had to meet a rigid time completion schedule. The design criteria and construction process were planned to allow this accelerated construction schedule.

The foundations of the houses are composed of a double platform: the lower one is a foundation plate that rests directly on the ground, and the upper platform lies on more than 7,000 seismic isolators mounted on steel columns fixed at the foundation plates. The design drastically reduces seismic forces and makes the buildings almost completely earthquake-resistant. The covered area between the two plates is designed for underground parking. Besides paying for Progetto C.A.S.E., government is covering the repair costs, including seismic retrofitting, of all permanent housing.

Source: Prof. Mauro Dolce, General Director of Seismic Emergency Unit, Italian Civil Protection, 2009, personal communication.
Resources


International Federation of Red Cross Societies is the lead cluster agency with responsibility for shelter following natural disasters. http://www.ifrc.org.

International Recovery Platform (IRP) identifies gaps and constraints in disaster recovery and serves as a catalyst for the development of tools, resources, and capacity for resilient recovery. IRP has a range of resources that address reducing risks in recovery. http://www.recoveryplatform.org.


ProVention Consortium seeks to reduce the risk and social, economic, and environmental impacts of natural hazards on vulnerable populations in developing countries in order to alleviate poverty and to contribute to sustainable development. Excellent guidelines on earthquake recovery management. http://www.proventionconsortium.org.

UN-HABITAT promotes socially and environmentally sustainable towns and cities and adequate shelter for all. Its disaster management program helps governments and local authorities rebuild from war or natural disasters. http://www.unhabitat.org/categories.asp?catid=286.

United Nations Development Programme Crisis Prevention and Recovery (UNDPCPR) works around the world to restore the quality of life for people who have been devastated by natural disaster or violent conflict. http://www.undp.org/cpr/.


Information on Transitional Shelter Strategies

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