

HOUSING



PDNA GUIDELINES VOLUME B



# CONTENTS

■ INTRODUCTION	2
■ ASSESSMENT PROCESS	3
■ THE SCOPE OF THE HOUSING AND SETTLEMENT ASSESSMENT	3
■ BASELINE INFORMATION	6
■ ASSESSMENT OF DISASTER EFFECTS	8
■ ASSESSMENT OF DISASTER IMPACT	18
■ THE SECTOR RECOVERY STRATEGY	19
■ STAKEHOLDERS' CONSULTATION	25
■ KEY ASSUMPTIONS AND CONSTRAINTS	26
■ RECONSTRUCTION AND RECOVERY NEEDS, INCLUDING BUILDING BACK BETTER	27



## INTRODUCTION

The aim of the Post-Disaster Needs Assessment (PDNA) is to assist governments to understand the full extent of a disaster's effect and impact, and the needs of the affected population. By informing the Recovery Roadmap and the Recovery Action Plans, and by defining a strategy for mobilising the financial and technical assistance required, the PDNA ensures that the housing and settlement response is appropriate to the needs and that the overall response is adapted to the evolving circumstances.

The PDNA, being a rapid and comprehensive multi-sectoral assessment of an event, provides the required overarching approach and orientation to initiate the recovery planning process. It refers and builds on previous assessments of the same event, existing plans and local profiles, takes into account people's livelihoods, and identifies their capacities and available resources to reach recovery and initiate reconstruction. The PDNA examines areas such as the actual access to services, expertise and goods for recovery and reconstruction. It builds on humanitarian assessments conducted in the early aftermath of disasters, and will typically last 6 to 12 weeks depending on the scale of the disaster and other factors.

The general objective of the sector assessment is to assist the government at all levels in understanding the effects and impact of the event on the Housing Sector and to improve the quality of outcomes from the recovery process in housing and settlement reconstruction.

The PDNA should describe the context and provide a broad outline, guidance and a framework as well as for any programming intervention. Among some other more specific housing and settlement assessments, it is recommended to consult the Handbook for Post-Disaster Housing and Community Reconstruction (ISDR, World Bank, GFDR, 2009) and Analyzing the Social Impact of Disasters, Vol. 1, Methodology and Vol. 2, Tools' (World Bank, GFDRR, 2011).

# THE ASSESSMENT PROCESS

While undertaking a PDNA, there may not be enough time to collect all the necessary information in all affected locations. It is essential to collect the primary data regarding the effects of the event, which is the responsibility of the national and local government. The primary information gathered can be supplemented by secondary information and local services. It is important to choose the sample sites for rapid assessment carefully because often it is not possible to visit all sites to verify data received. Similarly, it is important to consult as diverse a group of people as possible because it is not always possible to conduct many interviews within tight time deadlines.

If the Inter-Agency Standing Committee (IASC) cluster system has already been activated, the Shelter Cluster Leads and their coordination team should ideally be consulted in the PDNA process very early in order to best utilize their expertise, avoid duplication, and to engage them in the development and implementation of the Recovery Roadmap and the recovery action plans.

The PDNA process will build upon information from the emergency phase and any relevant field surveys. It will generally address the following key elements:

- Baseline information
- Disaster effects
- Disaster impact
- The Recovery Strategy
- Recovery Initiatives.

# THE SCOPE OF THE HOUSING AND SETTLEMENTS ASSESSMENT

The PDNA for the Housing and Settlements Sector covers public and private housing, whose scope is to:

- describe the characteristics of the Housing Sector through the collection of baseline information on the sector in order to compare pre- and post-disaster conditions (housing stock, normal construction materials used, etc.);
- assess damage and disruption to housing, land and settlements, including for temporary and long term housing requirements and the change in flows in income/revenue in the sector as a result of the event;
- determine the extent to which disaster has affected governance and social processes relating to the sector (sector ministries and local governments, their infrastructure and staff, community-based organisations, the private sector, particularly the construction service delivery and finance sectors, etc.);
- analyse the impact of the effects on the Housing Sector and on the wider economy and society;
- assess coping mechanisms and recovery sources and capacity;

- measure the immediate and recurring risks facing the population needing shelter/housing, and identify what is required for building back better (BBB);
- develop a recovery and reconstruction strategy that reflects the housing and settlements needs of the affected community.

The specific objectives of the PDNA Housing and Settlements sector include providing the following:

A. A comprehensive analysis of the country's policy and institutional frameworks for the Housing Sector and the land administration system, with particular emphasis on:

- national housing policy;
- urban planning and development policy;
- local governance: the adequacy of these frameworks under normal conditions and their ability to be adapted to the demands of the post-disaster housing reconstruction process; the implications of operating within a weak state and/or with a high level of informality;
- land use and administration, including statutory, customary and informal rules and institutions and the implications of operating in an urban or rural environment;
- housing construction system and practices, which includes the actual capacity of the organisations involved in the housing reconstruction, and the specific challenges that have already arisen, or may be expected to emerge as the post-disaster housing reconstruction programme is planned and executed;
- insurance and housing finance, which covers the possibility of financial supports and different mechanisms to achieve best results for all segments of the housing market;
- local infrastructure construction and operation;
- risk management policies including risk reduction.

B. Concrete and specific recommendations on how to improve the response to the disaster in such areas as:

- policy, legal and regulatory modifications;
- institutional roles and responsibilities;
- coordination mechanisms;
- needs for institutional strengthening, including capacity-building activities;
- financial strategies, which include budgeting and financial management;
- information management, monitoring and evaluation, and communication;
- land-related issues such as land tenure, land use and land administration;
- water and sanitation linked to housing and settlements.

## ASSEMBLING THE PDNA HOUSING AND SETTLEMENTS SECTOR TEAM

The Assessment Team should have appropriate expertise and representation. Team members should receive training on conducting a PDNA and be familiar with their operation and the specifics of the assessment methods.

Ideally, it should be a multidisciplinary team conducting the assessment. Local expertise is invaluable, including local knowledge and/or previous experience of a disaster in the country or region, which greatly facilitates the process. Experience of the PDNA process is also invaluable. The Sector Team is led by the government and, whenever feasible, it should include technical staff who can collect and provide local information on housing typologies, building materials, and cost of construction, basic service standards and providers, land administration system staff, etc. This information should ideally be correlated with other local relevant actors, including the private sector (e.g. building construction companies and real estate agencies).

Regardless of the magnitude of the assessment operation, the composition of the team should be multi-disciplinary and gender-balanced, including expertise in areas such as:

- social and cultural structures, for example, families and communities;
- housing, typologies and use;
- settlements, evolution and development;
- land tenure and land use;
- construction, skills, technologies and markets;
- housing services including water and sanitation, facilities and practices;
- household finances, livelihoods and credit;
- informal systems.

The objectives, expected outputs, the assessment questions and the activities that will be carried out should be defined as precisely as possible and clear to all team members. The schedule or terms of reference should explain why the assessment is being performed and what is expected to be achieved. Resources for carrying out the assessment should be identified, such as skills available, a list or map of accessible roads, as well as possible constraints such as time, the road access conditions, security and seasonal factors.

Reviewing available secondary information can save a considerable amount of time and money, especially where access is limited. The source of the information needs to be considered; different sources will have different perceptions. Care needs to be given to identifying these different perceptions and then consolidating them into one set of issues and actions. If coordination or information dissemination mechanisms have been activated in the country, these will be key resources for maps (e.g. damage, loss), shelter assistance coverage information, and operational standards and protocols.

Irrespective of how good or simple the tools or methodologies used may be, the people carrying out the PDNA will almost always need appropriate training. Team members must be briefed to ensure a common understanding of the terms of reference, survey methodology information sought and responsibilities. If interpreters are being used, then special attention must be given to ensure that they understand the concepts and terminology

used in the assessment. The main purpose of training is to ensure consistency throughout the response and across sectors. The training may also be used as a forum to discuss with the assessors any suggestions for modifications (e.g. additions and revisions) to tools and methodologies for this particular context.

## **STAKEHOLDERS IN THE HOUSING AND SETTLEMENTS SECTOR ASSESSMENT**

Stakeholders in the Housing and Settlements Sector PDNA are identified and contacted at the very beginning of the assessment and selected according to the participatory principle. Additional stakeholders, unknown in the first phase, may be identified and involved as soon as possible. It is important to prioritise inclusion over simplification, while remaining within feasibility limits.

Primary stakeholders include disaster-affected communities, such as government bodies, line ministries for housing and planning, local authorities, civil defence and disaster management agencies.

Secondary stakeholders include coordinating bodies such as the IASC Shelter Cluster, other relevant IASC Clusters in country, the World Bank, the European Commission, international financial Institutions and major donors, local and international non-governmental organisations (NGOs) and local construction sector representatives.

External stakeholders include other service providers, academic institutions, and corporate and financial sector organisations.

# **BASELINE INFORMATION**

## **PRE-DISASTER BASELINE INFORMATION AND SECTOR OVERVIEW**

For the Housing and Settlements Sector Assessment, the PDNA uses the following baseline information:

- data on the number and characteristics of the existing housing unit stock in the area affected by the disaster, as well as of its typical household goods contents, broken down by urban and rural areas;
- data available in the most recent Population and Housing Census and current household surveys and poverty assessments;
- prevailing unit costs for repair and construction of housing units and replacement value of typical household goods, prior to the time of the disaster;
- average values of monthly rental of housing units in the affected area.

The typology of housing units is based on:

- location, such as urban or rural;
- type, i.e. houses, apartments, precarious housing, others;
- size;
- type of construction materials and technologies used;



- occupancy types (owned, rented, others);
- housing services and infrastructure.

Three to five housing types are generally defined, depending on the diversity of housing in the country. Estimation is made based on available reports and surveys of how many units of each type have been affected, as follows:

- completely destroyed buildings or those beyond repair;
- partially destroyed buildings with a possibility of repair;
- unaffected buildings or those with only minor damage.

The destruction or damage to household furniture and equipment is similarly categorised. For dwellings, a pre-disaster value is estimated on a square metre basis or per housing unit, based on local information from construction industry chambers, housing funds, NGOs involved in the sector, housing cooperatives, classified advertisements, etc.

## **TYOLOGY AND CONDITION OF HOUSING STOCK**

Below is a list of important baseline information used for the assessment of the Housing and Settlements Sector:

- typical types of housing units in the affected areas, with descriptions of their size (in square metres), layout, etc.;
- main construction materials and technologies used in the affected areas;
- tenure type – owner, leasehold, rental, informal rights, etc.;
- number of existing dwelling units in the affected areas, categorised by province, district, village, etc.;
- value of monthly rentals;
- typical household goods and equipment in each type and size of housing units;
- prevailing unit costs for repair and construction of housing units prior to the time of the disaster;
- unit costs or replacement value of household goods and equipment;
- overall construction sector capacity, per month or per year, etc.;
- settlement and planning hierarchy and current state of settlements plans;
- typology of informal settlements in urban areas;
- housing services and infrastructure, typologies and costs (household water management, sanitation, cooking and heating, etc.).

## **HOUSING TYPOLOGY**

It is important to identify the prevailing technologies and materials used for housing in the disaster-affected area to feed into a recovery strategy that should take into account the reduction of future risks posed by the design

as well as construction factors such as material strength and construction standards. The first step is to classify the housing stock according to construction types, such as single-storey, multi-storey, reinforced concrete, brick masonry, adobe, metallic structures, hybrid, size, multi-family arrangements and access to services. Typologies should be illustrated with photographs of examples. Where possible typologies should match existing classification in the Population and Housing Census so as to enable a rigorous gap analysis of what existed before and what currently exists in the aftermath of the disaster.

## **HOME OWNERSHIP/TENURE STATUS**

The assessment should also gather information on tenure – owners, long-term leaseholders, renters, informal settlement occupants and pastoralists. Data should be collected on the number of female-headed households and women's land and property rights. Landlessness, where prevalent, should also be noted. It is important to develop a typology of land tenure in the affected area that includes statutory, customary, religious and informal tenure types. While estimating the extent of tenancy in the affected areas, it would be useful to determine the rental value for different kinds of houses. It is an important basis for calculating losses due to rental income forgone.

Ensure spatial analysis of housing and settlement issues, including density, displacement and risk.

# **ASSESSMENT OF DISASTER EFFECTS**

## **DAMAGE TO INFRASTRUCTURE AND PHYSICAL ASSETS**

In the PDNA, the following dimensions of disaster effects are measured during the assessment:

- Effects on physical infrastructure and assets;
- Effects on the production, delivery and access to goods and services;
- Effects on governance;
- Effects on risks and vulnerabilities.

## **ASSESSMENT OF THE DISASTER EFFECTS**

In assessing the effects on physical infrastructure and assets, the following definitions of damage and change in flows should be used:

- **Damage:** total or partial destruction of physical assets existing in the affected area. Damage occurs during and immediately after the disaster, and is measured in physical units (i.e. square metres of housing, kilometres of roads, etc.). Its monetary value is expressed in terms of replacement costs according to prices prevailing just before the event (GFDRR, 2010b, Vol. 2: 2).
- **Change in flows** (or what was earlier termed 'losses') are defined as changes in the normal economic flows of the economy that may arise in all sectors of economic and social activity due to the external shocks caused by the disaster, which may continue until full economic recovery and reconstruction has been achieved, and are expressed in current values.

The value of damage should be estimated as the cost to repair and rebuild the housing units in the public and private sectors that have been partially or totally destroyed, plus the cost of replacing the destroyed household goods and restoring household services. To this end, the number of units in each type of housing must be multiplied by with the estimated pre-disaster repair and reconstruction unit costs that would enable rebuilding the units to the same (pre-disaster) level of quality and extent. The costs of replacing the destroyed household goods are similarly calculated and added to this estimation of damage.

The unit costs for repair, reconstruction and replacement of destroyed and damaged assets are those prevailing prior to the time of the disaster, still unaffected by scarcity or speculation. Adjustments for eventual multi-year inflation will be introduced later on when reconstruction needs are estimated.

Tables 1 to 3, adopted from a PDNA experience of 2012 Cyclone Evan in Samoa, show how the value of damage and loss is calculated as well as the recovery and reconstruction costs for each defined typology.

**Table 1.** Housing Type and Values in Samoan Currency (SAT)

Category	Area (m <sup>2</sup> )	Unit Cost (SAT/m <sup>2</sup> )	House Value (SAT)
Open Samoan fale	90	200	18,000
Open Samoan fale	120	250	30,000
Closed Samoan fale	90	250	22,500
Closed Samoan fale with extension	120	250	30,000
Open European	90	400	36,000
Open European with extension	120	400	48,000
Closed European	90	800	72,000
Closed European with extension	120	800	96,000
Closed European, 2 floors	190	1,000	190,000
Samoan fale, 2 floors	190	800	152,000
Faleoo	25	250	6,250
Falepa Latiti	25	250	6,250
N.D.			58,917

Source: Estimations by assessment team using official information

**Table 2.** Estimated Damage and Loss Caused by Cyclone Evan, Samoa, in the Housing Sector (thousand SAT)

	Damage	Loss	Total
100% of destroyed housing unit cost	9,616.0	n.a.	9,616.0
50% of significantly damaged housing unit cost	9,001.4	n.a.	9,001.4
15% of damaged housing unit cost	14,830.2	n.a.	14,830.2
Destroyed household goods	4,903.7	n.a.	4,903.7
Demolition of household goods	n.a.	1,72.4	1,672.5
Temporary shelter costs (already spent)	n.a.	1,602.9	1,602.9
Rental losses	n.a.	1,728.0	1,728.0
Total	38,351.3	5,003.3	43,354.5

Source: Estimations made by assessment team on the basis of official and private information. Note: n.a.=not applicable.

1 Fale is a traditional house in Samoa

2 Source: post disaster needs assessment report Cyclone Evan 2012

**Table 3.** Estimated Post-disaster Requirements for Recovery and Reconstruction (thousand SAT)

Activities	Recovery	Reconstruction	Total
Demolition and debris/mud removal	1,672.4	n.a.	1,672.4
Development and transfer of reconstruction standards	500.0	n.a.	500.0
15% of damaged housing unit cost	n.a.	14,502.5	14,502.5
Destroyed household goods	n.a.	13,548.7	13,548.7
Demolition of household goods	n.a.	14,850.2	14,850.2
Temporary shelter costs (already spent)	n.a.	4,903.7	4,903.7
Total	2,172.4	47,805.1	49,977.0

Source: Estimations made by assessment team on the basis of damage and loss. Note: n.a.=not applicable.

### CATEGORIES OF HOUSING UNITS AND REPLACEMENT COSTS

The estimates of damaged or destroyed household goods can be established on the basis of a sample survey or any other household survey or census that had been previously conducted on the ownership of household goods. The cost of household goods can be worked out on the basis of market inquiries. Based on damage, varying percentages can be applied to different types of households.

**NOTE:** If a building type is extremely vulnerable, even without suffering any damage, it may be categorised for replacement or retrofitting to benefit from technical and financial support, as a mitigation approach to the housing stock (Pakistan 2005 earthquake experience). However, this will not be included in the estimate of the effects of the event nor the estimate of the value of damage and change in flows. It may be introduced as part of recovery needs.

### ASSESSMENT OF CHANGE IN FLOWS

In order to estimate the value of the change in flows, an estimated calendar of repair and reconstruction should be made, as the estimation of such also includes a temporal dimension.

The assessment of change in flows is based on an examination of the construction sector's capacity in the affected country or area, which takes into consideration local availability of construction materials, equipment and labour, as well as other possible constraints for reconstruction (such as timely availability of financing, preconditions such as risk mapping or urban planning). The assessment should provide the time frame for the duration and phased discontinuation of any temporary shelter scheme, and the normalization of sector conditions.

The following change in flows are typical of the Housing Sector:

**TEMPORARY HOUSING:** The cost of temporary accommodation that may need to be provided while definitive housing solutions are being prepared must also be estimated. The number of temporary solutions must coincide with the number of families who have lost their homes, and not necessarily with the number of dwellings destroyed (which may have housed more than one family per unit), as temporary solutions generally do not allow more than one family to be housed per unit. Temporary solutions may include rental or hosted options requiring financial or material support, temporary measures to make damaged buildings habitable, or temporary shelter constructed by the affected population.

Shelter alternatives may consist of temporary shelters in buildings normally used for other purposes or ad hoc constructions. When existing facilities such as schools, churches or sports venues are pressed into use, one

must estimate the cost of repairing any resulting damage once the facility has been returned to normal use, as well as the cost of not carrying out the activities for which the buildings are normally intended. This cost must be registered under the corresponding sector (such as schools under education) rather than under housing and human settlements.

When temporary camps or shelters are built, it will be necessary to estimate the cost of construction and related services, such as the provision of water, latrines and electric power. These costs are normally estimated on the basis of the number of square metres and the unit cost of construction of each temporary housing solution, combined with the number of dwellings or homes involved.

**DEBRIS DEMOLITION AND REMOVAL:** These costs may represent significant portions of total estimation of the value of the effect, depending on the type of disaster damage. These costs are different from the emergency-related costs incurred during the emergency stage, when certain components of buildings must be demolished or some debris removed in order to locate, rescue and assist victims. Non-rescue demolition costs are highly variable, depending on the type of materials used in the construction of damaged dwellings, their location and the demolition methods. To facilitate estimates, specialists often use overall unit cost estimates by type of dwelling, multiplied by the number of units affected. The costs of removing debris are often estimated based on the volume to be removed, the unit cost of removing and disposing of debris and the number of each type of affected dwelling units. Estimates may include the preparation of disposal and recycling facilities.

**HOUSING AND HUMAN SETTLEMENT VULNERABILITY REDUCTION:** After a major disaster occurs, a decision may be taken to protect dwellings and other buildings and settlements against the possible occurrence of similar phenomena in the future. The cost of land stabilisation, flood protection and structural reinforcement should be estimated as part of the described change in economic flows associated with the event, and presented as part of the housing reconstruction plan. Given the wide range of possible endeavours, it is not possible to adopt a single estimate procedure. However, we recommend determining the main work required for each type of dwelling, and estimating a unit cost per dwelling.

**RELOCATION OF DWELLINGS:** Estimates must be made of all costs for temporarily or definitively relocating human settlements to less vulnerable areas if such relocation is necessary. This calculation should not include the cost of evacuation incurred during the emergency stage.

The costs that must be included under this heading include the following:

- the value of the land where new dwellings are to be located;
- the cost for the provision of access, water, sanitation, power, telecommunications and related basic services;
- the cost of land documentation;
- settlement planning and demarcation costs;
- the cost of transporting furniture and equipment to their new location;
- the cost of new dwellings.

All these costs can be obtained per square metre of construction or as an overall total per housing unit, and then multiplied by the number of households to be relocated.

## GOVERNANCE AND SOCIAL PROCESSES

The scope of the assessment of governance and social processes in the Housing Sector is to:

- describe the policies and regulatory instruments guiding the production and management of housing, land and settlements;
- with particular emphasis in the zone affected by the disaster, provide an overview of the roles and responsibilities of central, local, and any intermediate levels of government, the state of both operational and fiscal decentralisation in the country, and the normal mechanisms for fiscal mobilization and distribution;
- describe the pre-disaster situation of the municipalities, including information on financial, human, and technical capacities;
- provide information on losses and damage of the municipality caused by the disaster, the functioning of the municipality after the disaster, and coping strategies;
- based on the roles and responsibilities defined in the legal framework, analyse the capacity and magnitude of central and local government to comply with its obligations.

## LAND

Responsibilities for land are often fragmented between different government bodies. Different tenure systems operate in parallel – statutory, customary, religious and informal. Each tenure system may have its own governance and administration system.

In urban areas, existing regulatory frameworks and development plans may not be feasible or appropriate for current conditions and may not be enforced. Informal settlements may be home to a high proportion of the urban population, much of which is without legally recognised land or property rights. Settlements may be located on land with contested ownership. Others may have developed in hazardous or environmentally sensitive locations such as steep slopes, flood plains, forests and coastal areas.

In rural areas of many countries, most land rights are not surveyed or registered. In countries with customary law, the traditional authorities often have an in-depth historical knowledge of who has the land rights and where the lands are located. In general, rural land ownership is less contentious, although there are many rights-holders that may not be immediately apparent, including the mobility rights of pastoralists. Rural populations may also face issues of natural hazards or environmental sensitivity.

The following is a list of land issues that may affect the implementation of a housing and settlements recovery plan:

- Land and property registers may not be up-to-date and there is limited coverage in the affected area, or records have been damaged or destroyed.
- Land and property documents may be lost, damaged or destroyed.
- There is limited government capacity to recover/restore land records or civil documentation.

- The affected area may include significant populations living in informal settlements without legally recognised land rights and/or whose building standards do not conform to planning regulations and building codes.
- Significant numbers of affected populations live on hazardous land.
- The affected area may include significant populations holding land under customary or informal tenure that is not legally recognised by the government.
- There may be a previous legacy of conflict between, or discrimination against, communities in the affected area.
- Land may be rendered uninhabitable or may simply disappear due to landslides or changed watercourses. Property boundaries may have disappeared and may need to be.
- There may be limited public awareness of administrative procedures and weakened capacity of land institutions to respond to the surge in demand for their services.
- There may be a need to identify land for camps or transitional shelter, or for relocation and reconstruction.
- People may occupy land and property left behind by families who have fled or who are deceased. Eviction of occupants and tenants may increase.
- Women and orphaned children may be at risk of disinheritance.
- Boundary and ownership disputes can be common, including between rural communities.
- Unrealistic land-use regulations (e.g. no-build zones) or relocation programmes may be promoted in the name of risk reduction.



Some of the main land-related data that may be required are shown in Table 4.

**Table 4.** Land records-related data required for a PDNA

Issue	Data Required
Lost or hazardous land (that cannot be recovered)	<ul style="list-style-type: none"> <li>• Number of parcels affected</li> <li>• Land area affected (size in ha)</li> <li>• Number of households affected</li> <li>• Estimated land value for lost and hazardous land</li> </ul>
Reduced government capacity	<ul style="list-style-type: none"> <li>• Damage to government buildings and equipment</li> <li>• Deceased/injured staff</li> </ul>
Damaged/destroyed land records	<ul style="list-style-type: none"> <li>• Measures to secure government records</li> <li>• Number of government records to be replaced</li> <li>• Staff, equipment, time and cost to replace government records</li> <li>• Cost to individuals to replace their land and property records</li> </ul>
Land for temporary or transitional shelter or camps	<ul style="list-style-type: none"> <li>• Estimated land area required for different shelter uses</li> <li>• Value of land</li> <li>• Compensation to occupants</li> <li>• Support to adjacent communities</li> <li>• Land demarcation and layout costs</li> <li>• Service provision</li> <li>• Total cost of serviced land delivery</li> </ul>
Occupancy type	<ul style="list-style-type: none"> <li>• Number of occupancies with no legal status</li> <li>• Number of house tenants</li> <li>• Number of apartment tenants</li> <li>• Number of apartment owner-occupiers</li> <li>• Number of house owner-occupiers</li> </ul>
Land tenure types	<ul style="list-style-type: none"> <li>• Number of land tenants</li> <li>• Number of land owner-occupiers</li> <li>• Number of land part-owners</li> </ul>
Informal settlements land types	<ul style="list-style-type: none"> <li>• Number of houses built informally on public land</li> <li>• Number of houses built informally on private land</li> <li>• Number of households living in informal settlements</li> </ul>
Displacement status	<ul style="list-style-type: none"> <li>• Number of households displaced</li> <li>• Reasons of displacement</li> <li>• Number of households in need of relocation</li> </ul>
Potential relocation	<ul style="list-style-type: none"> <li>• Number of households declared by the government as requiring immediate permanent relocation</li> <li>• Number of households declared by the government as requiring immediate temporary relocation</li> </ul>
Potential land disputes	<ul style="list-style-type: none"> <li>• Number of each type of land disputes</li> <li>• Number of households for which the dispute can be settled temporarily</li> <li>• Number of households for which the dispute can be settled permanently.</li> </ul>

In parallel, a more detailed institutional assessment will be required. Tools for such assessments are available in: Land and Natural Disasters: Guidance for Practitioners (UN Habitat, 2010).

## HOUSING SECTOR POLICIES AND FINANCING

The Housing and Settlements Sector PDNA needs to provide an understanding of the principal elements of housing sector policy, particularly with respect to housing construction and financing; and the roles of the central, regional, and local governments. It also needs to assess government policies and capacities towards the



provision of housing to low-income and vulnerable populations, including any subsidy programmes or direct provision efforts that might be relevant to the reconstruction process.

Other component parts of the Sector PDNA involve the description of the procedures for approving and issuing building permits for reconstruction, repair and retrofitting of damaged houses; and the analysis of the construction practices used prior to the disaster, construction sector capacity, operations, regulations and quality assurance.

The Housing Sector PDNA needs to assess the policies and regulatory frameworks related to the spatial distribution of housing including residential and urban development and planning, densities, livelihoods, and linkages to services and infrastructure.

## **LOCAL INFRASTRUCTURE CONSTRUCTION, PROVISION AND OPERATION**

Summarise the principal elements of policies that govern the provision and regulation of basic local infrastructure, particularly with respect to operations and financing (both capital and operational), and the roles of the central, regional and local governments or other entities.

Analyse the requirements and/or any programmes already contemplated for post-disaster infrastructure reconstruction and the suitability of these programmes for the reconstruction of local infrastructure in the communities affected by the disaster, for both in-situ reconstruction and relocated housing.

Ensure that similar information has not been already been collected by other sector teams such as the Infrastructure Team.

## **CAPACITY FOR SECTOR RECOVERY**

The assessment will need to collect information to determine the capacity for recovery and reconstruction in terms of administrative capacity, financial capacity, market capacity, pre-existing projects and ongoing housing projects. It must also determine what is needed to strengthen the capacity of the government authorities managing housing and other relevant government institutions to lead, manage and coordinate the short- and long-term recovery of the Housing and Settlements Sector. The following capacities need to be assessed:

- The capacity of the government and/or other sectors in terms of the necessary technical and administrative capacity to lead and manage recovery efforts, including regulation of private housing reconstruction. Since housing is a usually a large proportion of reconstruction activity, modified institutional arrangements may be needed to address the increased capacity required.
- One of the capacities needed to support recovery and reconstruction is the availability of building skills. Civil/structural engineers, building contractors, masons and carpenters need to guide the process of reconstruction, and their availability in the affected area is an indicator of technical and professional capacity. The knowledge and skill level of this labour force will also need to be taken into consideration.
- The Construction Sector is also described in terms of capacities for building material production and fabrication, and in plant and equipment, which includes locally extracted materials such as sand, gravel and timber.

## **SOCIAL PROCESSES**

An assessment of the locally present social hierarchy, social cohesion and presence of community-based organisations (CBOs) is an important aspect of all sectors covered in a PDNA, but is particularly important for Housing and Settlements Sector assessment. Previous experience of disasters, and perceived priorities and intentions for the emergency phase and for reconstruction are needed both to inform the reporting on the impact of the disaster on households and groups within the community and the housing baseline on housing typologies. These typologies include the processes involved in housing construction, social structures pertaining to household tasks, household incomes and resources, settlement history and development dynamics.

The level of social cohesion or fragmentation has implications for a number of issues such as: protection of vulnerable sections of community; the resolution of disputes on land and tenure; decentralised monitoring of the recovery programme; and training of community members for participating in recovery operations. This information can be obtained through semi-structured interviews with key informants, focus group discussions and direct observation of how the human settlement has been constructed. See social impact assessment methodology in World Bank's GFDRR, Vol. 1 (2010a).

Social assessments can help analyse the role and perception of government authorities in housing and area development. They may also analyse how the local agencies are organised, as well as the presence, capacity and acceptance of religious, political, international and national NGOs and media organisations that were operational before the disaster or that newly arrived after the disaster.

## **PRIVATE SECTOR CAPACITY**

Data to be gathered include previous experiences of disaster, emergency response, recovery and reconstruction within the private sector. The sector comprises international and multinational actors who are present in the affected country and national small-, medium- and large-scale enterprises, including importers, distributors, producers, fabricators, vendors, and providers of goods and services. In the Housing Sector this includes construction materials, tools and equipment, and transport. It includes water, fuel and energy providers analysed further under Infrastructure Sector assessments. Coordination with national professional institutes can inform the assessment of private sector technical professional capacity such as engineers, architects, project managers and quantity surveyors. Built environment professional institutes may participate in the PDNA and in further roles supporting recovery planning and management. Construction labour force capacity may also be assessed including a prediction of migrant worker numbers and sources to supplement the local workforce.

## **BROADER GOVERNANCE ISSUES IN THE SECTOR**

If the initial assessment reveals that the damage to the houses has been caused by faulty construction or improper land use, then the compliance of improved building and site planning standards becomes vital to ensure the inclusion of disaster risk reduction (DRR) in the recovery process. In this context, it is necessary to review the existing housing policies, urban development policies, planning, the building code and by-laws, and the capacity of the Housing Ministry national and local government and the national Construction Sector to enforce the building codes and their technical capacity to support housing construction. This requires a vigilant monitoring of construction and site planning standards at all the important stages of recovery. It also requires a robust build-

ing regulation system to be in place. The information on this element can be obtained by reviewing the local building and town planning by-laws as well as interviews with local government officials, construction sector representatives and homeowners.

## **INCREASED RISKS AND VULNERABILITIES**

The assessment in the Housing Sector relating to risks has two key objectives:

- o To assess immediate disaster risks to shelter and housing in order to avoid new threats or deteriorating conditions.
- o To assess pre-existing vulnerabilities and factors that contributed to damage and loss in the sector in the current disaster.

In the Housing Sector, a key element of the assessment is to identify immediate risks, particularly risks to the population caused by the lack of housing. This may include the risk of additional hazards such as landslides, heavy rains or further tremors, which can threaten greater loss of housing and cause more displacement. Below are some key indicators that must be assessed:

- additional hazards and risks that may further destroy housing and hamper the recovery process. These risks may be due to landslides, upcoming rainy season, hurricane season, further tremors, etc., They also include environmental risks, socio-political risks, including conflict risk due to displacement and lengthy stays in camp sites;
- new vulnerabilities such as lack of a sense of security among men and women for lack of privacy in housing. Other camp- and displacement-related risks include exploitation and gender-based violence (GBV).
- fear of robbery of possessions left behind in their housing, preventing people from leaving damaged housing sites;
- safety risks related to the continued presence of severely damaged structures, the occupation of damaged buildings from unsafe repairs;
- health risks from increased exposure to weather conditions and from poor sanitation and hygiene, and poor cooking facilities in temporary shelters and in damaged buildings;
- socio-economic status and profile of displaced households to assess their capacity to participate in housing recovery;
- priority mitigation measures needed to avoid another disaster or the further deterioration of housing conditions.

**NOTE:** Cyclones and flooding can affect productive assets differently from earthquakes; for example, the risks to livelihoods and prioritisation of activities are different. In addition, since flooding lasts longer, lack of access to the flooded area may affect the accuracy or timing of assessments. Urban and rural livelihood damage and recovery will show different characteristics, which should be also considered.

# ASSESSMENT OF DISASTER IMPACT

Impact refers to the consequences of the effects in terms of its short-, medium- and long-term implications. These consequences may be described through 'business-as-usual' scenarios, worst-case scenarios and best-case scenarios. The Housing Sector Assessment Team must make additional estimations that would suggest in what way the effects evident in the Housing Sector would have an impact at the macro- and micro-levels of the economy and the society.

For the macro-economic analysis, the Housing Sector Assessment Team provides the macro-economist with the following values:

- the imported component of housing reconstruction costs (comprising the items that are not produced locally, but must be imported from abroad); expressed in percentage terms (%) of the total reconstruction needs once they have been estimated. This information is to be used for the analysis of impact on the balance of payments;
- the estimated share of the central government of the costs for the humanitarian temporary shelter scheme, and of the cost of demolition and removal of rubble. This information is to be used for analysis of impact on the fiscal budget;
- the estimated loss of rental revenues that the private sector owners will sustain while rented houses are being repaired or rebuilt. This information is to be used by the macroeconomist for the estimation of GDP impact.

For the analysis of personal or household impact, make the following estimates and submit them to the appropriate expert:

- the value of any increase on rental payments that families must meet when rented homes have been destroyed and cannot be used until reconstructed;
- rent costs for displaced families (previously owner occupiers);
- any higher cost of transportation incurred by family or household members during their temporary occupation of shelter camps or alternative housing arrangements;
- any loss of household-based livelihood facilities and the cost of temporary arrangements to operate.

## THE HUMAN DEVELOPMENT IMPACT

Disasters can also have a lasting socio-economic and human development impact that should be assessed during the PDNA.

For poor and middle-income populations, housing/shelter may be the most important asset owned by the household. It may be used as the location for micro-enterprises such as backyard gardens and other home-based enterprises. Therefore, loss of shelter may be a double loss to many of the poorest in the society, because it also involves not only loss of shelter, but also loss of income.

Populations affected by disasters may experience a significant loss of employment and income, a deterioration of livelihood options and opportunities, a decline in the provision of and access to critical services, increased prices and other negative effects. This may increase the number of people living below the poverty line in the affected areas and in the country as a whole. Natural disasters that significantly affect the Housing Sector including land are likely to have serious consequences for increased poverty, particularly for small and marginal households. The assessment team should estimate the effect on national and regional poverty levels over time and by rural and urban sectors, as well as the criteria for determining poverty levels.

The proportion of household income spent on shelter- and housing-related needs is a key criterion to monitor.

Disaster-induced poverty will also affect the time necessary to achieve the Millennium Development Goals (MDGs) at the provincial and national levels. To estimate the human development impact of the disaster, it is useful to:

- determine the proportion of households/persons who are now living in sub-standard housing conditions as a result of the event (compared to those living in such conditions before the event) as this can be an indicator of the human and social impact of the event;
- analyse the performance on human development components before the disaster utilising a pre-crisis baseline (pre-disaster human development trends, including key challenges, and the salient features of the policies implemented pre-crisis that influenced the condition of human development for affected populations);
- project/forecast human development performance into the future (both for the year in which the disaster occurred and for the following year/s) based on past performance had the disaster not occurred, utilising clearly stated assumptions.

## THE SECTOR RECOVERY STRATEGY

This section outlines the key elements of the Sector Recovery Strategy. Housing rehabilitation/reconstruction is one of the key elements in closing the gap between emergency relief and sustainable recovery. It restores people's sense of normalcy and is a first step towards reactivating the productive economy. Building the capacity of national and local authorities to promote, supervise and guide planning and construction processes is essential for a successful and sustainable reconstruction process. The local authorities should be enabled to set up legislative and regulatory frameworks to promote local initiatives and local involvement in planning and construction issues. In defining the strategy for the Housing Sector, the following issues may arise:

- policy and regulatory framework and institutional capacity building;
- land and property;
- financing;
- labour and implementation;
- technology and construction practices;
- architectural design;



- the cost of restoring access to goods and services, such as those provided within the housing sector by the public and private sectors, including access to credit, construction materials, training, etc.;
- the cost of restoring governance and social processes through capacity building or technical support as required, so that government authorities that manage the Housing Sector can lead and coordinate the process, and civil society can actively participate in the process.

The priority in a housing reconstruction strategy should be to address housing needs according to the degree of post-disaster shelter and housing vulnerability. This involves mitigating the scale, duration and displacement, addressing the needs of those left without homes due to complete destruction and ensuring households with the least recovery capacity are assisted.

**RELOCATION OF FAMILIES:** Often, in the aftermath of a disaster, there is a growing concern among experts and government officials to promote a safer location for settlement of people at risk. Experience shows, however, that relocation is a complex issue and presents major challenges. Most relocation efforts fail. If relocation is being considered it should be only on the grounds of clear and immediate public safety issues and with due regard for social and economic as well as physical criteria.

### **VISION AND GUIDING PRINCIPLES**

The principles that guide all PDNAs, can be found in Chapter 1 of the Volume A PDNA guidelines. In addition, the following principles are specific to the Housing and Settlement Sector:

- Immediate housing and settlement priorities are identified.
- Reconstruction and rehabilitation begins as soon as possible following the disaster.
- Reconstruction is carried out according to BBB, regardless of type – retrofitting, repairing, rebuilding or relocating and in accordance with agreed safe building practices.
- Relocation must be limited to the enforcement of safety from hazards.
- Relocation must be voluntary.
- Housing and settlement assessment monitoring and recovery planning are strongly interdependent.
- Participation and local programme ownership are actively promoted at all levels.
- Minorities, gender and age discriminations are addressed during assessment and in the recovery strategy.
- Security of housing and land tenure of all people affected by natural disaster are protected.

### **TIMEFRAME: EARLY AND LONG-TERM RECOVERY AND LINKS TO DEVELOPMENT**

Realistic timeframes should be estimated, and this strongly depends on the context and magnitude. However, it is imperative to be realistic.

Within a longer-term view of recovering from a disaster, rather than addressing the immediate shelter and settlement needs of the affected population, the Recovery Roadmap outlines the timeline for the achievement of the intended outcomes of the Recovery Plan and is directly linked to a monitoring and evaluation system.

Long-term sector strategies focus on development and implementation of permanent reconstruction for affected communities, but also assist in rebuilding community confidence and the support structure for civic responsibility and urban governance through participatory planning and delivery of reconstruction processes.

The development of disaster-resistant housing is a major factor in reducing vulnerability to natural disasters. But mitigation issues go beyond the structural aspect. Rights to ownership and security of tenure make an enormous difference to the development, management and maintenance of housing, particularly in urban areas. When people have security where they live, they are better able to manage space and invest in safety, and engage in activities that will reduce rather than increase their vulnerability.

Managed urbanisation, including compliance with development control, planned land use and improved infrastructure can significantly increase a community's capacity to address the impact of natural hazards.

## **INTENDED OUTCOMES**

The intended outcomes of the Housing Sector are:

- The reconstruction, repair, retrofitting or relocation of the housing stock are addressed according to the identified priority needs, and technical standards intended to provide disaster mitigation and vulnerability reduction.
- Protection of land and property rights of affected populations is ensured (if properly working prior to the event), and longer-term solutions developed for land and property dispute resolution to reduce conflict potential. Any land and property issues arising from the disaster are addressed, dispute resolution mechanisms for affected populations are established, and continued long-term progress on the securing of land and property rights and responsibilities is ensured.
- Potential skills and human and material resources that are available in country are optimized, thus capitalising on the always-limited external assistance, empowering the affected community and revitalising the local economy.
- Employment is created through the reconstruction process, reinforcing the local Construction and Building Sector.
- Technical capacity is built within the national government designated bodies, and supporting the adoption of DRR procedures both in urban planning, urban management and infrastructure and in building construction, with the longer-term outcome of achieving the development of national preparedness and contingency plans, in disaster-prone countries.
- Land records and information are secured. While only a minority of the total land rights is recorded, these are important legal documents and must be physically secured and conserved.
- In rural areas, community-based approaches to land adjudication are promoted using neighbours' statements to enable people to rebuild their homes.
- In urban areas, a citywide approach is adopted to policies aimed at addressing informal settlements and land-use planning, and at securing the full range of durable solutions for displaced populations—return, relocation and local integration – in order to ensure the most effective and efficient use of land and to minimise further displacement.



- Public information is disseminated and legal assistance provided on land and property rights, including how to obtain replacement documents and implement other administrative procedures.

## RECOVERY COSTS

Costs are calculated once recovery priorities have been identified with their corresponding interventions, outputs and final intended outcomes. Typically, costs are calculated for each of the expected outputs and intended outcomes included in the Recovery Strategy.

The initial estimated costing of outputs should be carried out by the Sector Team and subsequently shared with other relevant sector teams to compare and ensure comprehensive coverage without double counting, as some interventions can address needs in more than one sector. To assist with this coordination among sectors, it is important that the various sector teams meet regularly during the assessment and planning process.

For estimating recovery and reconstruction needs, costs can be calculated using unit cost of replacement or management costs. Unit cost is the established cost of an item or service based on the standard of living index in the country or an agreed schedule of costs used by the sector ministries for development planning. There would also be a standard increase in the unit cost to allow for BBB or risk reduction measures. In certain cases, a new project would be developed, the cost of which would depend upon the actual cost of intervention rather than replacement value.

Unit costs may change due to a disaster. Given the demand and the possibility of decreased supply, unit costs of items may increase significantly. In the absence of standard unit costs, the costing process generally used in planning projects can be used to develop the costs. Project costs can be used for interventions such as provision of skills training to a specified population group, media campaigns for awareness, or the development of an information management system and other elements such as administration, and logistics, among others. Settlement mitigation costs may be calculated per household unit cost or as a project cost.

## IMPLEMENTATION ARRANGEMENTS

In the PDNA Housing and Settlements Sector report, implementation arrangements currently take the form of recommendations on different areas of intervention such as:

- Policy and regulatory framework
- Institutional capacity building
- Land and property
- Land use and land administration
- Reconstruction financing and housing financing
- Regulatory framework
- Institutional capacity building
- Labour capacity and capacity building
- Technology

- Architectural design
- Community participation.

## **PARTNERSHIPS, COORDINATION AND MANAGEMENT**

Building strategic partnerships among all stakeholders, civil society, national/local governments, private sector, media and national/international support agencies is both a shared challenge and responsibility. If successful, this contributes to the development of a coherent framework for sustainable recovery of human settlements in post-crisis situations.

As soon as possible, partnerships and counterparts should be identified both within the national government's line ministries and any in-country disaster response coordinating mechanism, such as the IASC Cluster Approach System. Participation in the PDNA diagnostic and in discussion on the recovery framework can be a key step to securing broad ownership and active partnerships.

The national government will make arrangements for the management, coordination and monitoring of the reconstruction process in collaboration with developmental partners.

## **CROSS-SECTORAL THEMES**

Care should be taken that all Housing and Settlements Sector's cross-sectoral themes described in Section 6 of this chapter are included in the PDNA and in the Recovery Plan. DRR and gender issues will be addressed thoroughly within the Sector Recovery Plan. Water Management, WASH and Environment, since they normally fall under the competence of other sectors, will be included when gaps are identified in coverage and capacities. In such as event and to avoid impeding the implementation of the Sector Recovery Plan, suggestions will be made on the actions to be taken to bypass potential bottlenecks.

The Housing and Settlement Recovery Plan will seek to promote economic and social recovery aspects in the sector including income generation, skills development, knowledge and awareness, representation and participation.

## **MONITORING AND EVALUATION**

A PDNA is a snapshot of the situation at a single point in time. The needs after a disaster will change from day to day; therefore, the specific timeframe and methods used to carry out assessment, monitoring and evaluation operations following a natural disaster will vary. In a carefully designed assessment, assessment, monitoring and evaluation should be a continuous process that informs, and when necessary modifies, the Sector Recovery Strategy and Plan so that they remain relevant and effective.

An effective and efficient monitoring system should include essentially:

- Baseline information
- Indicators related to activities, outputs and objectives.

Specifically, monitoring and evaluation are conducted to obtain an understanding of:

- the coverage of government disaster response capacity for housing and settlement reconstruction;
- the coverage of self-recovery response;

- how implementing mitigation procedures have reduced vulnerability to the risks that they were addressing (number of houses retrofitted, repaired or rebuilt according to standard);
- how many buildings within each damage category have been retrofitted, repaired or rebuilt;
- the coverage and effectiveness of training and information activities for safer housing reconstruction;
- the unmet needs that had already been identified;
- the residual needs that were not identified before;
- any emerging needs.

Monitoring is also a way of soliciting feedback from the affected communities including their indications on the evolving priorities and challenges, and reporting to them on the progress made.

## STAKEHOLDERS' CONSULTATION

This section provides guidance on how to develop a consultation process within the sector as part of the assessment. The guidelines should facilitate sector experts to identify key partners from government, civil society people representatives and others who may participate in a stakeholder consultation. It should provide guidance on the stakeholder consultation process, which is to share the effect and impact of the event and identify measures for recovery and reconstruction to be implemented in the short, medium and long term.

### SOCIAL PROCESSES

An assessment of the locally present social hierarchy, social cohesion and presence of community-based organisations is an important aspect of all sectors covered in a PDNA, but is particularly important for housing and settlements assessment. The level of social cohesion or fragmentation has implications for a number of issues including protection of vulnerable sections of the community, resolution of disputes on land and tenure, decentralised monitoring of the recovery programmes, training of community members for participating in recovery operations, etc. This information can be obtained through semi-structured interviews with key informants, focus group discussions and direct observations of how the human settlement has been constructed.

It may be required in certain situations to assess the presence, capacity and local acceptance of national NGOs in the affected area, because they may serve as intermediaries between the affected communities and the donors for the provision of training, as well as building the community's capacity in negotiating with the external actors for their entitlements.

### PRIVATE SECTOR CAPACITY

Data to be gathered include any previous experiences of recovery and reconstruction within the private sector, the current capacity of private construction companies, traders and producers of construction materials, as well as any available institutional facilities and resources, such as architecture and engineering schools and institutions, which can prove highly valuable for technical assessment and for later programme monitoring.

## BROADER GOVERNANCE ISSUES

If the initial assessment reveals that the damage to the houses has been caused because of faulty construction or improper land use, then the compliance of improved building and site planning standards becomes vital to ensure the inclusion of DRR in the recovery process. In this context, it is necessary to review the existing housing policies, urban development policies, planning, the building code and by-laws, and the capacity of the Housing Ministry and local government to enforce the building codes and their technical capacity to support housing construction. This requires a vigilant monitoring of construction and site planning standards at all the important stages of recovery. It also requires a robust building regulation system to be in place, the information on which can be obtained by reviewing the local building and town planning by-laws as well as interviews with local government officials and homeowners.

## KEY ASSUMPTIONS AND CONSTRAINTS

Constraints will vary from country to country, and key assumptions will depend on the assessors. It is important that they are clearly stated in the Sector Recovery Plan, and that recommendations are offered on how to overcome outstanding constraints blocking the recovery of the sector. Common assumptions for the Housing and Settlement Sector are as follows:

- The reconstruction will take place according to plan.
- Government counterparts will be available together with a working structure and capacity to engage with the recovery plan.
- Urban or physical planning is available to start reconstruction.
- Hazard mapping has been undertaken and is being enforced to reduce vulnerability.
- Self-recovery initiatives will follow the agreed standards and include mitigation measures.
- Technical assistance is made available to self-recovery initiatives upon request.
- Construction material will be selected in accordance to environmental considerations.
- Financing of reconstruction will be available when needed.

## RECONSTRUCTION AND RECOVERY NEEDS, INCLUDING BUILDING BACK BETTER

This section provides guidance on how to define needs for reconstruction and recovery derived from the recovery strategy, distinguishing the needs to restore and resume to pre-disaster levels from needs that will improve access to services and goods, revitalise the economy, build livelihoods, strengthen DRM of the government and communities, and reduce risks and vulnerabilities to future disasters. Such measures, as far as possible, should be specific to location and affected population.

**NOTE:** All BBB interventions contribute to the resilience of the government, systems and communities and should be aligned to/informed by pre-existing national development and/or poverty reduction strategies.

## **RECONSTRUCTION NEEDS**

Infrastructure and assets:

- Restore to pre-disaster level.
- Address priority needs for BBB for the reconstruction of infrastructure and physical assets.

## **RECOVERY NEEDS**

Service delivery and production, and access to services and goods:

- Restore service delivery and production capacity, and ensure access to services and goods.
- Address priority needs for BBB service delivery and production of goods, and access to services and goods.

Governance:

- Restore and/or strengthen governance capacity, including disaster risk management (DRM).
- Address the priority needs for BBB governance and DRM.

Addressing risks:

- Address pre-existing and new risks related to the disaster.
- BBB: Reduce risks and vulnerabilities to future disasters.

## **THE SECTOR RECOVERY PLAN**

### **PRIORITIZING AND SEQUENCING RECOVERY NEEDS**

This section provides guidance on developing the recovery strategy, and prioritisation and sequencing the recovery needs. Following the rationale of the recovery strategy, identify key outcomes, outputs and interventions, then prioritise and sequence them over time (in the short, medium and long term), and distinguish those interventions that are related to restore/resume from BBB interventions.

The following considerations should be taken into account for the prioritisation:

- Be informed by/aligned with a consultative process (explain briefly the consultations made) and with the national development objectives and policies, poverty reduction strategies, national development goals, etc. (i.e. BBB in recovery should not apply the national development agenda, nor be driven by international experts or development partners).
- Address and prioritise key risks and vulnerabilities that contributed to the extent of the effects/impact on communities, systems and infrastructure, and that can be avoided (The most obvious example regarding damaged infrastructure is to rebuild according to proper building codes or disaster retrofitting in order to protect investments in infrastructure reconstruction from future hazards).

- Where possible, the BBB should also have a positive contribution on the recovery from the current disaster.
- Consult and communicate with the other sectors in order to avoid contradictory recommendations, gaps or overlaps.

The following considerations should be taken into account for the costing:

- The costs for BBB should be proportionate to the costs of recovery and reconstruction needs, as well as the type of disaster; slow onset drought may have very low reconstruction needs, but high needs to invest in resilience/BBB).
- The costs for BBB should be realistic compared to the financial envelope pledged by the government and international development partners, taking into account that most funds will be needed for physical reconstruction and compensation of losses.
- The costs for BBB should be realistic toward the absorption capacity of the country and what is feasible to achieve over a three-year period.

## REFERENCES

Government of Samoa. 2013. SAMOA Post-disaster Needs Assessment Cyclone Evan 2012.

IASC. 2011. Operational Guidelines on the Protection of Persons in Situation of Natural Disasters. Inter-Agency Standing Committee, Geneva.

IASC. 2012. Operational Guidance for Coordinated Assessments in Humanitarian Crises. Inter-Agency Standing Committee, Geneva.

IASC Global Shelter Cluster. 2008. Local Estimate of Needs for Shelter and Settlements (LENSS) Toolkit: Field Version . Inter-Agency Standing Committee, Geneva.

International Recovery Platform. 2007. Post Disaster Recovery Needs Assessment and Methodologies, Experiences from Asia and Latin America. Kobe, Japan.

IFRC. 2008a. How to Do a Vulnerability Capacity Assessment. International Federation of Red Cross and Red Crescent Societies, Geneva.

IFRC. 2008b. Vulnerability Capacity Assessment Toolbox. International Federation of Red Cross and Red Crescent Societies, Geneva.

IFRC. 2010. Owner-driven Housing Reconstruction Guidelines . International Federation of Red Cross and Red Crescent Societies, Geneva.

UN, DFID and Shelter Centre. 2010. Shelter after Disaster, Strategies for Transitional Settlement and Reconstruction. Geneva.

UN-ECLAC. 2003. Handbook for Estimating the Socio-economic and Environmental Impact of Disasters. Santiago, Chile.

UNEP, World Bank, GFDRR. 2008. Environmental Needs Assessment in Post-Disaster Situations.

UN-Habitat. 2010. Land and Natural Disasters: Guidance for Practitioners. Nairobi, Kenya.

World Bank, GFDRR. 2010a. Analysing the Social Impacts of Disasters. Vol. 1, Methodology; Vol. 2, Tools. Washington, DC.

World Bank, GFDRR. 2010b. Guidance Notes for Damage, Loss and Needs Assessment. Washington., DC.

- Vol. 1, How to Conduct a Damage, Loss and Needs Assessment
- Vol. 2, How to Estimate Sectoral Damage and Loss
- Vol. 3, How to Estimate Post-disaster Needs for Economic Recovery and Reconstruction
- Vol. 4, How to Estimate Disaster Impact at Macro-economic and at Personal Levels.

World Bank, GFDRR. 2010c. Safer Homes, Stronger Communities—A Handbook for Reconstructing after Natural Disasters. Washington, DC.

#### USEFUL WEBSITES:

<http://www.gltm.net>

<http://www.gfdr.org>

<http://www.urban-response.org>

<http://web.worldbank.org>

<http://www.unitar.org/unosat/>

<http://www.recoveryplatform.org/pdna>

<http://www.gripweb.org>

<http://www.unisdr.org>

<http://www.idpguidingprinciples.org>

<http://www.alertnet.org>

<http://www.irinnews.org>

<http://www.disasterassessment.org>

<http://www.gdacs.org>

<http://www.reliefweb.int>

<http://www.humanitarianinfo.org>

<http://www.globalprotectioncluster.org/en/areas-of-responsibility/housing-land-and-property.html>

## ANNEXES

Example of Housing sector needs: Samoa Cyclone Evan 2012. Annexes are available online.