

Scoping Report: Addressing Land Issues after Natural Disasters

United Nations Human Settlements Programme



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Scoping Report: Addressing Land Issues after Natural Disasters

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I. Introduction

Land issues provide a powerful example of the link between human activity and natural disasters. Population growth has forced increasing numbers of people to settle in areas at risk from cyclones, floods, eruptions or earthquakes. Global climate change further heightens the vulnerability of many settlements to natural disaster risks. Approximately 32% of city-dwellers live in slums characterised by informal or illegal land tenures, and poor land planning and governance. Half of the world's population will live in cities by 2008.¹ There is little doubt that the vulnerability of a settlement to disaster, and its capacity to recover from a disaster, is closely connected to the quality of systems for land use, governance and tenure.

A. Overview of Project

In December 2005, the UN Inter-Agency Standing Committee (IASC) established a humanitarian cluster system to improve responses to complex emergencies and natural disasters. In 2007, the Early Recovery Cluster called for guidelines to address land issues after natural disasters. UNDP is the lead agency of the Early Recovery Cluster. In response, UN-HABITAT, together with FAO, is preparing a set of guidelines and a toolkit for addressing land issues following a natural disaster. This scoping report represents the first stage of this project.

The scoping report will:

- review international experience in addressing land issues after representative types of natural disasters;
- contribute to development of a common analytical framework for assessing national and international responses to land issues following natural disasters;
- identify potential disaster examples in which more detailed case studies will be prepared;
- provide a preliminary inventory of potential tools and methods that may be incorporated into the toolkit and its associated Internet portal; and

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¹ UN-HABITAT (2003). The Challenge of Slums. Global Report on Human Settlements 2003.

- develop a bibliography of relevant references.

In calling for guidelines on land responses after natural disasters, the Early Recovery cluster identified land as a key sector where gaps in humanitarian responses may develop. This report will describe land-related gaps that may arise in humanitarian responses, by reference to case-studies involving floods, cyclones, earthquakes and tsunamis. This brief case-study material will be developed into separate case-study reports by February 2008. A peer review meeting will consider the case-study reports, and contribute to the final guidelines and toolkit, in March 2008. The guidelines and toolkit are due for presentation to the IASC and the humanitarian community by April 2008.

The guidelines and toolkit will address land-related humanitarian response gaps by:

- establishing a normative framework to support future post-disaster land responses;
- supporting the humanitarian cluster system in relation to post-disaster land policy;
- providing practical recommendations and steps to enhance coordination among humanitarian agencies and disaster-affected governments; and
- identifying potentially useful post-disaster land tools to be adapted according to specific country contexts.

The guidelines and tool kit will be used by government officials, UN country teams and organisations, humanitarian NGOs and civil society groups. The "toolkit" approach is designed to link analytical frameworks with practical resources for implementing analytical findings in the field. The ultimate focus is on practical application in the field. While the users will not necessarily be land experts, the guidelines and recovery toolkit will allow them to understand how to:-

- analyse a post-disaster context from a land perspective;
- address land issues in a post-disaster context, including through the stages of emergency response, early recovery and sustainable solutions;
- ensure that national land governance systems incorporate measures to mitigate risk in the future; and
- incorporate all land responses and programmes into a rights-based framework for assisting victims of natural disasters.

B. Report Methodology

This scoping report is based on a review of the literature and informant interviews. The interviewees included key actors in UN agencies and humanitarian NGOs, both at the policy and operational levels. Interviews were conducted in person in Geneva, by e-mail and telephone, and through web-based discussion groups. A list of informants is set out in annexure 1. We are grateful to all those who took time out from their busy schedules to meet and respond.

The report was commissioned in August 2007, and is subject to certain information and time constraints. Some information was not forthcoming, or could not be obtained, in the time available. Some key informants in Geneva were away on mission or vacation. The disaster case-studies, in particular, were prepared on the basis of available literature and could not cover all relevant land issues in the time and space available. The case-studies will be developed further in the final case-study reports due by February 2008.

The report limits itself to rapid onset disasters. It does not cover gradual disasters, such as desertification in Africa. While the contribution of human activity to natural disasters is acknowledged, the report focuses on disasters that have a proximate natural cause such as floods, hurricanes, earthquakes and tsunamis. The report does not adopt distinctions in the literature between mega-catastrophes, catastrophes and disasters. Instead, it takes as a focal point natural disasters that (1) result in significant loss of life or displacement and (2) trigger requests for international humanitarian assistance.

C. Why Disaster Guidelines are Necessary: Distinguishing Post-Conflict and Post-Disaster Land Issues

A number of agencies, including UN-HABITAT, FAO, USAID and ODI have prepared operational guidelines and analytical frameworks to address land issues after armed conflicts.² The UN Guiding Principles on Internal Displacement encompass cases of natural disaster and armed conflict. While there are many similarities between land issues after conflict and disaster, there are important differences that underscore the need for a separate set of guidelines on land and natural disasters. The need for separate guidelines on post-disaster land responses, identified by the Early Recovery Cluster in 2007, is confirmed by heightened disaster risks as a result of global climate change, and increased human settlement vulnerability as result of global population growth.³

Post-conflict and post-disaster land issues can be similar because both situations tend to involve displacement, death and destruction. In both cases, the land governance system can enter a state of flux as a result of new needs, actors and incentives.⁴ Within this context of system change, the following land-specific risks can arise in cases of both conflict and disaster:-

² UN Food and Agriculture Organisation (2005) [Access to rural land and land administration after violent conflicts](http://ftp.fao.org/docrep/fao/008/y9354e/y9354e00.pdf), Food and Agriculture Organisation, Rome, available at: [ftp://ftp.fao.org/docrep/fao/008/y9354e/y9354e00.pdf](http://ftp.fao.org/docrep/fao/008/y9354e/y9354e00.pdf); USAID (2005) [Land and Conflict: a toolkit for intervention](http://www.usaid.gov/our_work/cross-cutting_programs/conflict/publications/docs/CMM_Land_and_Conflict_2004.pdf), U.S Agency for International Development, available at: http://www.usaid.gov/our_work/cross-cutting_programs/conflict/publications/docs/CMM_Land_and_Conflict_2004.pdf. The Overseas Development Institute (ODI) is presently developing guidelines as part of the project, Land tenure in conflict and post-conflict situations. UN-Habitat is preparing a manual on addressing land issues after armed conflict, which is due to be released in 2008. A further draft document of relevance is the Protection and Early Recovery Analysis Framework for Conflict-Induced IDPs (IASC Protection Cluster Working Group and Early Recovery Working Group).

³ International Institute on Sustainable Development, Land Ownership after Natural Disasters, 2005 ("the IISD Report").

⁴ See further Part F below.

- Temporary living centres may be built on inappropriate land.
- The process of return may be marked by land grabbing, ad hoc land occupation and political score-settling.
- A residual caseload of displaced persons may not be able to return (including renters, squatters and the landless).
- Land rights may be uncertain because of a lack of records, loss or destruction of records, or damage to community-based land governance systems.
- Uncertainty of land tenure may lead to disputes and delays in reconstruction, or to reconstruction in inappropriate locations.
- A failure to identify heirs in an authoritative manner may lead to family disputes, and delays in reconstruction and recovery.
- Powerful individuals may take advantage of inheritance uncertainty to deny entitlements and access to land for vulnerable groups, including widows and orphans.
- Land may be acquired for resettlement and infrastructure in inappropriate locations, or through methods that are productive of conflict.

Although there are many potential similarities, land issues after natural disasters can differ from armed conflict in a number of important respects:-

Government Capacity and National Politics

- While natural disasters can occur in a war-torn context, disasters that occur in the absence of war tend to be associated with less politicised and conflict-ridden circumstances. As a result, there may be more government capacity and greater political space to resolve longer term land issues. At the same time, a national government may be reluctant to confront deeper land-related social issues in a post-disaster context, and relatively less willing to request international assistance in cases of disaster than conflict, particularly in relation to land issues, because the request may imply a lack of capacity on its part. The government may also take an unduly short term view of land responses, in order to be seen to deliver quick recovery and reconstruction results

The Significance of Sudden Onset

- The shock to the land system tends to be shorter, but potentially sharper, in the case of sudden onset natural disasters than in the context of armed conflict.
- The deaths of land owners, and loss of land records (if any), will occur in a much more compressed period of time in the case of natural disasters.
- The generally localised or isolated impact nature of disasters can mean that surplus housing stock is available to absorb displaced persons.
- While it will be possible to identify high disaster risk areas, and engage in activities to reduce vulnerability in those areas, the sudden onset of disaster may reduce the ability to plan and prepare for particular cases of displacement.

- Sudden onset disasters can result in significant loss of land, due to landslides, flooding or other hazards that render land unsafe for habitation, livelihoods or other uses. Addressing the land needs of landowners who have lost land as a result of a disaster is often a distinctive imperative of post-disaster land programming
- The sudden onset of a disaster, and its relatively localised impact, may reduce the risk that abandoned land or housing will be occupied by persons other than the pre-displacement owner (i.e. the "secondary occupier" problem).

Landowner Return to Unoccupied Land

- A relative absence of secondary occupiers should facilitate return and re-occupation of land by pre-disaster landowners, because landowners can return without the need to evict secondary occupiers. This should reduce (but not eliminate) the need for specialist judicial institutions to adjudicate claims for property restitution (e.g. a land claims commission). At the same time, specialist institutions and responses may still be required to protect victims, including women and others with weaker forms of tenure, from the risk of land grabbing by neighbours, government bodies or social elites.
- A relative absence of secondary occupiers means that residual caseloads of displaced persons unable to return are more likely to be those who are not land owners (including renters, squatters and the landless). In other words, because landowners can return without the need to evict secondary occupiers, those who are unable to return are more likely to be groups who lacked access to land, or sufficient security of tenure prior to the disaster

The Need to Engage in Future Disaster Risk Reduction

- The greater risk to land restitution for displaced victims is not secondary occupation but the need to engage in future disaster risk reduction. The need to minimise the risk of future disasters may require spatial planning mechanisms that restrict reconstruction in inappropriate or unsafe locations.
- The need to minimise the risk of future disasters may lead to relocation of infrastructure and government facilities.

All these issues will affect analysis and assessment of land issues after natural disasters. It is important not to approach natural disasters from a "conflict" perspective, or at least a perspective that cannot adapt to the particular circumstances of natural disasters. Large-scale disasters can traumatise a land governance system at least as much as armed conflict. But the system itself may be in a relatively better position to recover and respond to emerging land issues, either because the disaster is more localised in effect or because the operating environment is less degraded by civil war or ethnic conflict. In other words, while there will be pre-disaster land governance problems that are magnified by the disaster, the risk of the system *as a whole* being thrown into chaos appears relatively lower in cases of disaster than armed conflict.

This said, two potential features of natural disasters will place more pressure on the land governance system than would be the case after armed conflict.

- The need to engage in disaster risk reduction demands a relatively high degree of capacity and coordination among land planning institutions. It also places stress on the institutions involved in relocation and resettlement, including those charged with ensuring consultation and participation by affected groups.
- The concentration of renters, squatters and the landless in residual caseloads of persons unable to return to their pre-disaster lands will highlight the social and legal conditions that restrict access to land and its ownership in the affected country. As a result, there may be a degree of governmental caution or paralysis because addressing the land needs of renters, squatters and the landless may open a Pandora's Box of claims outside the disaster zone.

II. Case-Studies

A. Earthquake: Pakistan 2005

1. Context and overview

On 8 October 2005 parts of Pakistan and India were hit by an earthquake measuring 7.6 on the Richter scale. By 8 November 2005, the official death toll for Pakistan was 73,206, and approximately 3.5 million were rendered homeless. Approximately 600,000 houses were destroyed or severely damaged. Most of the affected people lived in mountainous regions, leading to difficulties in aid delivery. The worst-hit areas were the North-West Frontier Province, and Pakistan-Administered Kashmir.

The formal system of land administration remained largely intact after the disaster. Land records were available and relatively widespread. The Revenue Department - the line agency responsible for land administration - has a high degree of capacity and expertise, but was overstretched after the disaster. UNDP has been working with the Government of Pakistan on natural disaster management for the last five years.

Emergency Response

The Earthquake Reconstruction and Rehabilitation Authority (ERRA) was established to undertake and coordinate reconstruction and rehabilitation. ERRA works with local authorities and the Revenue Department in relation to post-disaster land issues. Pakistan's government took the lead role in formulating land policy, with some assistance from UN-HABITAT.

Land Issues

The primary land issue arising from the earthquake involved housing assistance for tenants and landless groups. As at late 2007, approximately 5000 people remained in temporary living camps. Others remained displaced in other locations. The majority cite

landlessness as the reason they have not returned home.⁵ There are three groups in this residual "landless" caseload of displaced victims:

- Rural people who lost the land they occupied or cultivated as a result of the earthquake ("the rural landless").
- Urban people who either lost land as a result of the earthquake, or who are slated for resettlement because their land or houses are in a designated "red" zone that is unsafe for reconstruction ("the urban landless").
- Tenants in rural and urban areas who did not own land before the earthquake, and who are unable to return because they cannot afford the rent, or the landowner refuses to re-establish their rental rights ("urban and rural tenants").⁶

Further land issues included the following:-

- For reasons of custom, and fears of land grabbing, most families in NWFP left a male family member behind to protect land and property, even at high elevations. Those unable to leave men behind, including female-headed households, faced disproportionate risks of lost land or property.
- Many people in the affected area did not have identity cards, or lost them in the earthquake. Victims without identity cards faced obstacles accessing humanitarian relief and formal institutions relating to land. A lack of accurate maps available to humanitarian actors, particularly in militarily sensitive areas, also hindered identification of hazardous locations.
- Court cases were already subject to long delays prior to the earthquake. Land disputes formed a major part of the courts' backlog. Customary institutions lacked sufficient resources to process land claims and disputes that arose from (or were exacerbated by) the earthquake itself.

Land Responses

The rural landless. Approximately 10,000 rural families lost land a result of landslides and flooding after the earthquake. On 30 March 2007 ERRA, after some lobbying by international actors, approved the Rural Landless Policy. This policy provides rural landless families with Rs 75,000 (approximately US \$1200) to help them purchase new land to reconstruct their homes. The policy is implemented by the Revenue Department in partnership with decentralised Land Verification Units. Policy support and implementation assistance has been provided by UN-HABITAT with financial support from DFID. The policy aims to ensure that women will become co-owners of land purchased with the financial assistance. A computerised Landless Information Management System tracks the financial assistance provided to beneficiaries. After three

⁵ unknown, (2006) *Displaced Camp Residents Cite Landlessness as Main Obstacle to Return*, International Organisation for Migration, available at <http://www.iom.int/jahia/Jahia/pbnAS/cache/offonce?entryId=11983>, accessed 10 September 2007

⁶ See Oxfam *Overview on Landlessness*, December 2006 (notes provided by Dr Robin Palmer).

months of implementation, more than 2700 landless families had been registered, with verification of 128 families. The key challenges to the rural landless policy include the potential for verification delays, and the eligibility of families living on hazardous (but not destroyed) land.⁷

The urban landless. The urban landless will receive new land in urban resettlement locations (Balakot and parts of Muzaffrabad). To date there has been limited progress in the formal rebuilding of urban areas.

Urban and rural tenants. Rural tenants are receiving the ERRA housing reconstruction subsidy with or without the consent of their pre-disaster landlord. Urban tenants are not receiving direct land or housing assistance from ERRA, as it is assumed that they can restore their tenancies, or find rental accommodation elsewhere.

To replace lost identity cards, ERRA established mobile registration units that have received initial positive evaluations. ERRA has also developed a Social Protection Strategy (under which land issues were initially raised), a Rural Housing Reconstruction Strategy (under which rural land issues were initially addressed) and an Urban Development Reconstruction Strategy. These strategies address a number of land matters including zoning, as well as guidelines for relocation and compensation of occupants of land. The ERRA Annual Review for 2005-06 recognised the need to rationalise land use, infrastructure and service provision and the need for targeted interventions to support the vulnerable (including women).⁸ It also recognized that longer-term development initiatives in poverty reduction, land reform and housing provide opportunities to implement disaster risk reduction measures.⁹

B. Earthquake and Tsunami: Indonesia 2004

1. Context and overview

The Indian Ocean tsunami disaster killed over 150,000 people, damaged or destroyed over 200,000 homes and displaced over 500,000 in Indonesia alone.¹⁰ It also severely affected local systems of land administration. In the worst-hit province of Nanggroe Aceh Darussalam (“Aceh”), almost all land-related records were damaged or destroyed.¹¹ Large numbers of boundary markers were obscured or obliterated. The National Land Agency (BPN) lost most of its buildings, and up to 30% of its staff. At least 15,000 land parcels remain under water, and as much as 7000 ha of land have been irretrievably

⁷ See UN-HABITAT, ERRA Rural Landless Program... The Way Forward, Islamabad September 2007.

⁸ ERRA (2006) *Annual Review 2005-2006*, Earthquake Reconstruction and Rehabilitation Authority, Islamabad, Pakistan, p. 56.

⁹ See, ie ERRA (2006) *Annual Review 2005-2006*, Earthquake Reconstruction and Rehabilitation Authority, Islamabad, Pakistan, p.95.

¹⁰ Early Indonesian government figures were 126,602 people killed and 93,638 people missing. Some later reports give a lower figure for the number of missing: see e.g. the estimate of 36,800 missing in Tsunami Recovery Indicators: UNIMS and BRR December 2005. From 1 January 2006 the Syariah Court for Aceh began to declare all missing persons deceased.

¹¹ Some damaged records, most notably the land books (buku tanah) for Banda Aceh, were rehabilitated over a 12 month period using deep freeze techniques in Jakarta.

damaged by the effects of mud, salt, sand and erosion.¹² These devastating effects occurred after years of conflict between government forces and secessionist Acehese rebels - a conflict that had already displaced over 45,000 and seriously degraded most institutions of government.¹³

Emergency Response

In March 2005, the government of Indonesia established the Aceh and Nias Reconstruction and Rehabilitation Authority (BRR). While BRR has wide-ranging legal authority to undertake and coordinate recovery efforts, including in relation to land, the primary institution responsible for land administration remains the National Land Agency (BPN).

Land Issues

Land rights uncertainty. The tsunami disaster affected around 300,000 land parcels (170,000 urban, 130,000 rural). Approximately 60,000 affected parcels are registered with BPN. The remaining parcels are held under customary or local forms of land administration.¹⁴ Almost all records held by BPN, local government authorities, and landholders themselves were severely damaged or destroyed. Some records, most notably the BPN land books (buku tanah) for Banda Aceh (the capital city of Aceh), were rehabilitated over a 12 month period using deep freeze techniques.

Renters and squatters. In June 2006 BRR estimated that among some 70,000 people who remain in the barracks, 20,000 were pre-tsunami renters and squatters.¹⁵ In February 2007, BRR downgraded this estimate to 14,280 verified victim households remaining in the barracks, of which as many as 4,082 households were renters. No estimates were given as to the number of squatters. Most renters were unable to return to their pre-disaster locations because of greatly increased rentals, and an influx of labourers who required their own rental accommodation.

The landless. After the disaster, at least 13,000 families required resettlement because their land is submerged or uninhabitable. As with renters and squatters, these families were disproportionately represented in the barracks, and were among the last in line for housing assistance. While most programs focused on housing for landowners, housing for renters and squatters, and those who have lost land, became central to decommissioning the barracks.

Land Responses

In April 2005, the government of Indonesia issued its master plan for the reconstruction of Aceh and Nias.¹⁶ The master plan identified reconstruction of land rights as a key

¹² Supra note 2, p. II-5.

¹³ While Aceh - as with tsunami-affected Sri Lanka- qualifies as a post-conflict case, the tsunami disaster has been chosen as a case-study because of the severe damage to Aceh's land administration, and the wide-ranging nature of the international humanitarian response.

¹⁴ Aceh and Nias Two Years After the Tsunami, Progress Report, BRR and Partners, December 2006, www.e-aceh-nias.org/, p32.

¹⁵ Figures from BRR Special Unit on Barracks (September 2006).

¹⁶ Supra note 2.

element of the rehabilitation phase, which ran from April 2005 to December 2006.¹⁷ In May 2005, the government established the primary mechanism for restoring land rights after the disaster - the Reconstruction of Aceh Land and Administration System project ("RALAS"). RALAS adopted an innovative 2-stage response to land rights uncertainty after the disaster. First, through community-driven adjudication, each landowner signs a statement of ownership that is endorsed by her neighbours and the village chief. Second, BPN surveys boundaries and issues land title certificates on the basis of community-driven adjudications.¹⁸ While community-driven and adjudication has been successful in establishing sufficient tenurial documentation for house reconstruction, land titling has not attained its initial targets, and has often been irrelevant or subsequent to the house reconstruction process.¹⁹ There have also been concerns about the lack of comprehensive gendered disaggregated data, and relatively low rates of titling in the names of husbands and wives.

RALAS made no provision for recording or restoring the land rights of renters and squatters. Renters and squatters only received separate policy attention in June 2006, a delay that exacerbated the difficulties of decommissioning the barracks. BRR Regulation 21/2006 established a program of cash assistance to renters and squatters. The cash payment could be used for housing purposes only, either as a rental instalment or as a down-payment for land or housing on credit. In February 2007 BRR announced major amendments to Regulation 21/2006, after some local and international protests and concerns over the willingness of Indonesian banks to process the cash payments. These amendments substantially replaced the program of cash assistance with a policy of free land and housing for renters and squatters. A major site is now being developed to house renters and squatters near Banda Aceh. Key challenges include delays in verifying beneficiaries, and the need to plan and coordinate a sustainable settlement strategy.

Most families who lost land will also be resettled on locations acquired by the government. Because the process of land acquisition takes some time, BRR authorised (and funded) land acquisition by district governments before it had identified and verified victims had lost land and required resettlement. In some cases, land acquired by district governments was unsuitable for construction or livelihoods. The process of beneficiary identification and verification has also taken time because of opportunistic applications, and applications by groups who still had land but had not yet received housing assistance.

¹⁷ Regulation of the President of Republic of Indonesia Number 30 Year 2005 on Master Plan for Rehabilitation and Reconstruction for the Regions and People of the Province of Nanggroe Aceh Darussalam and Nias Islands of the Province of North Sumatra – Book 1 (“The Master Plan”) at II-10, available at <http://www.bappenas.go.id>

¹⁸ BPN RALAS Manual, Annexure 1. Inheritance and guardianship determinations are endorsed by a mobile Syariah Court that accompanies RALAS staff. The mobile Syariah Court is funded by UNDP.

¹⁹ The extent to which land titling supports long-term recovery in Aceh will be considered in the Aceh case-study report.

C. Hurricane Ivan: Grenada 2004

1. Context and overview

Grenada is a Small Island Developing State in the southeastern Caribbean Sea. It is made up of three tropical islands covered with mountainous rainforest, and has a hurricane season that runs from June to November. Hurricane Ivan was the strongest hurricane of the 2004 Atlantic hurricane season. It struck Grenada at Category 3 intensity with sustained winds of 115 mph on September 7th 2004. According to initial reports, 80% of the country was damaged and approximately 90% of housing stock was destroyed. The hurricane caused widespread damage to the agricultural sector by destroying crops and forest ecosystems. It also severely affected the tourism industry, an economic mainstay of Grenada.²⁰

Land tenure in Grenada is characterized by legal pluralism and a high degree of informality. In formal terms, land is held under a British-style tenure system, and is either Crown Land owned by the State, or private land owned by individuals or enterprises. Cadastral records are outdated and incomplete.²¹ There is a considerable degree of "squatting" on Crown land.²² Outside the formal system, there is so-called Family Land, which is governed by customary practices and is transmitted from generation to generation of the same family. Family Land is reportedly subject to some degree of conflict as, in many instances, individuals have died without leaving wills, and the nature of the "family" has become difficult to define. According to unofficial estimates, some 60 per cent of the population lives on untitled land, and approximately 60 per cent of this population are in female-headed households.²³ The total number of female-headed households in Grenada is estimated at 48 per cent.²⁴

²⁰ OECS (2004) *Grenada: Macro-Socio-Economic Assessment of the Damages Caused by Hurricane Ivan, September 7th, 2004*, Organisation of Eastern Caribbean States, available at <http://www.eclac.cl/portofspain/noticias/noticias/7/19587/gndreport3%20rev.pdf>, accessed 12 September 2007 p.x; and World Bank (2004) *Grenada, Hurricane Ivan Preliminary Assessment of Damages, September 17, 2004*, available at http://siteresources.worldbank.org/INTDISMGMT/Resources/grenada_assessment.pdf, accessed 12 September 2007.

²¹ USAID (2005) *Grenada: Land Tenure Situation* prepared by Chemonics International Inc., reviewed by United States Agency for International Development, available at http://pdf.dec.org/pdf_docs/PNADE013.pdf, accessed 20 August 2007., p.5

²² USAID (2005) *Grenada: Land Tenure Situation* prepared by Chemonics International Inc., reviewed by United States Agency for International Development, available at http://pdf.dec.org/pdf_docs/PNADE013.pdf, accessed 20 August 2007..

²³ UNIFEM, UNDP and ECLAC (2005) *Grenada: A Gender Impact Assessment of Hurricane Ivan – Making the Invisible Visible*, available at <http://www.eclac.cl/publicaciones/xml/7/23217/L.48.pdf>, accessed 5 September 2007, p. 30.

²⁴ UNIFEM, UNDP and ECLAC (2005) *Grenada: A Gender Impact Assessment of Hurricane Ivan – Making the Invisible Visible*, available at <http://www.eclac.cl/publicaciones/xml/7/23217/L.48.pdf>, accessed 5 September 2007, p. vi, vii.

Emergency response

At the time of Hurricane Ivan, Grenada had a dedicated emergency response agency, the National Emergency Relief Organisation (NERO), and an emergency preparedness agency, the Disaster Preparedness Office. The Caribbean has a regional inter-governmental agency, the Caribbean Disaster Emergency Response Agency (CDERA), which coordinates disaster response once it is requested to do so by a Participating State. NERO and the DPO were able to begin emergency response immediately, and CDERA was deployed within 24 hours of the hurricane striking Grenada. Regional agencies also responded within a short time frame. These agencies included the Canada International Development Agency, USAID, a number of UN agencies, the Pan American Health Organisation, Red Cross, the Organisation of Eastern Caribbean States, and CARILEC (the Caribbean Electric Utility Services Corporation).

Land Issues

The Organisation of Eastern Caribbean States prepared a damage assessment report in the immediate aftermath of the Hurricane ('OECS Report').²⁵ The OECS Report notes that many housing settlements destroyed by the hurricane were particularly vulnerable as they were poorly constructed and often built on steep hillsides, without adherence to building codes or land use guidelines.²⁶ A separate USAID-commissioned report on land tenure ('the Land Tenure Report') concludes that the hurricane had minimal, if any, impact on property rights and land tenure. Most people quickly returned to their original locations without a significant amount of conflict or tenure uncertainty. The Land Tenure Report states that "whatever impact the land tenure related issues may have in reconstruction efforts, they have not been caused by the hurricane but by long-standing pre-existing situations."²⁷

Widespread informal tenures, and a corresponding lack of documentary records, did create difficulties in terms of ascertaining housing entitlements. The lack of documentary records caused particular housing eligibility obstacles for female-headed households because of their disproportionate representation in informal or undocumented systems of

²⁵ OECS (2004) *Grenada: Macro-Socio-Economic Assessment of the Damages Caused by Hurricane Ivan, September 7th, 2004*, Organisation of Eastern Caribbean States, available at <http://www.eclac.cl/portofspain/noticias/noticias/7/19587/gndreport3%20rev.pdf>, accessed 12 September 2007 p.x; and World Bank (2004) *Grenada, Hurricane Ivan Preliminary Assessment of Damages, September 17, 2004*, available at http://siteresources.worldbank.org/INTDISMGMT/Resources/grenada_assessment.pdf, accessed 12 September 2007,

²⁶ OECS (2004) *Grenada: Macro-Socio-Economic Assessment of the Damages Caused by Hurricane Ivan, September 7th, 2004*, Organisation of Eastern Caribbean States, available at <http://www.eclac.cl/portofspain/noticias/noticias/7/19587/gndreport3%20rev.pdf>, accessed 12 September 2007 p.x; and World Bank (2004) *Grenada, Hurricane Ivan Preliminary Assessment of Damages, September 17, 2004*, available at http://siteresources.worldbank.org/INTDISMGMT/Resources/grenada_assessment.pdf, accessed 12 September 2007, p.17

²⁷ USAID (2005) *Grenada: Land Tenure Situation* prepared by Chemonics International Inc., reviewed by United States Agency for International Development, available at http://pdf.dec.org/pdf_docs/PNADE013.pdf, accessed 20 August 2007., p.4

tenure.²⁸ As a result, it seems that many donors did not insist on documentary proof of land ownership where that would have caused undue disadvantage.²⁹

The Land Tenure Report recommended:

- a comprehensive review of the legal system, with a view to streamlining land law and administration; and
- a simple set of interim measures to facilitate disaster relief and a “do no harm” approach to land rights issues.

The OECS Report recommended that priority be given to land use and urban planning, a review of building codes and standards, and regularization of informal settlements.³⁰ UNIFEM, UNDP and ECLAC recommended a mechanism to support poor female-headed households in securing land and housing entitlements.³¹ The extent to which these recommendations were implemented, and the lessons learnt from that implementation, is not apparent from a review of the available literature.

D. Flood: Mozambique 2000-1

1. Context and overview

In February and March 2000, Mozambique suffered its worst floods in 50 years. Flooding occurred after five weeks of heavy rainfall, which was followed by Cyclone Eline. Two million people were affected by the floods, 25,000 were made homeless and about 800 were killed. Approximately 113,000 small farming households suffered severe damage to their dwellings, land, crops and livestock. Around 1,400 km² of arable land was affected, with 20,000 head of cattle lost, and 90% of the country’s functioning irrigation infrastructure damaged.³² Mozambique again suffered massive flooding during

²⁸ UNIFEM, UNDP and ECLAC (2005) *Grenada: A Gender Impact Assessment of Hurricane Ivan – Making the Invisible Visible*, available at <http://www.eclac.cl/publicaciones/xml/7/23217/L.48.pdf>, accessed 5 September 2007, p.21.

²⁹ USAID (2005) *Grenada: Land Tenure Situation* prepared by Chemonics International Inc., reviewed by United States Agency for International Development, available at http://pdf.dec.org/pdf_docs/PNADE013.pdf, accessed 20 August 2007., p.5

³⁰ OECS (2004) *Grenada: Macro-Socio-Economic Assessment of the Damages Caused by Hurricane Ivan, September 7th, 2004*, Organisation of Eastern Caribbean States, available at <http://www.eclac.cl/portofspain/noticias/noticias/7/19587/gndreport3%20rev.pdf>, accessed 12 September 2007 p.x; and World Bank (2004) *Grenada, Hurricane Ivan Preliminary Assessment of Damages, September 17, 2004*, available at http://siteresources.worldbank.org/INTDISMGMT/Resources/grenada_assessment.pdf, accessed 12 September 2007, p.viii

³¹ UNIFEM, UNDP and ECLAC (2005) *Grenada: A Gender Impact Assessment of Hurricane Ivan – Making the Invisible Visible*, available at <http://www.eclac.cl/publicaciones/xml/7/23217/L.48.pdf>, accessed 5 September 2007, p. viii.

³² World Bank (2000) ‘Mozambique – Flood Emergency Recovery Project’, Project Documents, available at http://www-wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2000/04/26/000094946_00042005515411/Rendored/PDF/multi0page.pdf, accessed 20 September 2007; Author unknown (2000) ‘Mozambique: Country in Focus’, *Africa Recovery* 14(3), 13; and UNDP (2004) *Evolution of a Disaster Risk Management System: A Case Study from Mozambique*, Disaster Reduction Unit, Bureau for Crisis Prevention and Recovery, United Nations Development Program.

the flood season in February 2001. The 2001 floods carried away thousands of homes, inundated vast areas of farmland and destroyed 27,000 hectares of crops, including staples such as maize, rice and cassava. At least 400,000 were affected, with more than 40 people killed and 77,000 made homeless. The main regions affected were the central provinces of Zambezia, Tete, Maica and Sofala, which lie in the area drained by the Zambezi River and its tributaries.

Under the 1997 Land Law, rights to land are acquired either through:

- occupation by individuals and communities in accordance with customary rules and practices that do not contradict the Constitution;
- occupation by Mozambican individuals who have been using the land in good faith for at least ten years; or
- authorization of an application by individuals or corporate bodies for a statutory use rights (up to 50 years).³³

In accordance with the principle of non-discrimination in the 1990 Constitution, the 2004 Family Law recognizes equal rights for men and women, including in relation to land. In practice, however, women's access to and control of land can be limited by structural, cultural and material constraints.³⁴

Emergency response

The development of disaster management institutions in Mozambique has been praised as a model of good practice, with UNDP working with the government of Mozambique (GOM) to establish the National Institute for Disaster Management.³⁵ Nevertheless, the devastating nature of the 2000 floods, in particular, led the government to issue two appeals for humanitarian assistance (on 10 February and 24 February 2000). Responses were received from 55 countries, the United Nations, 52 NGOs, 27 religious organisations and 56 enterprises or institutions operating in Mozambique. The national government provided a coordinated framework for the resulting multi-party efforts.³⁶

³³ Chemonics (2006) 'Mozambique General Services Contract – Land Tenure Services – Final Report', available at <http://www.ccmusa.co.mz/downloads/6.8%20Land%20Tenure%20Services%20Chemonics%20Aug%2006.pdf>, accessed 20 September 2007; and Ikdahl, I. et al (2005) *Human Rights, formalization and women's land rights in southern and eastern Africa*, Studies in Women's Law No. 57, Institute of Women's Law, University of Oslo.

³⁴ Ikdahl, I. et al (2005) *Human Rights, formalization and women's land rights in southern and eastern Africa*, Studies in Women's Law No. 57, Institute of Women's Law, University of Oslo.

³⁵ UNDP (2004) *Evolution of a Disaster Risk Management System: A Case Study from Mozambique*, Disaster Reduction Unit, Bureau for Crisis Prevention and Recovery, United Nations Development Program.

³⁶ Matsimbe, Z (2003) *Assessing the Role of Local Institutions in Reducing the Vulnerability of At-Risk Communities in Búzi, Central Mozambique*, Disaster Mitigation for Sustainable Livelihoods Programme, University of Cape Town, and the United Nations Food and Agriculture Organisation; and Government of Mozambique. 2000. *Floods: Updated International Appeal of the Government of Mozambique for Emergency Relief and Rehabilitation in Collaboration with the United States Agencies*. Maputo, available at <http://www.reliefweb.int/rw/rwb.nsf/AllDocsByUNID/42e935012652164cc12568aa00651cef>, accessed

Land Issues

As is the case with many natural disasters, the floods magnified the problems of poor land management prior to the disaster.

Land use planning. While some disaster-affected areas had land use plans, including measures to mitigate against erosion and landslides, these plans were often not followed or enforced due to widespread poverty, weak institutions and relatively low levels of technical capacity.³⁷

Tenure Insecurity. Insecurity of land and housing tenure was a major issue for flood victims.³⁸ The German Technical Cooperation Corporation reported that some people refused to leave low-lying lands despite efforts to move them to safer locations.³⁹

In terms of post-disaster land issues, a joint mission by UN-HABITAT and the United Nations Environment Programme (UNEP) identified five main challenges:

- the property rights of flood victims who did not return to their pre-disaster locations;
- the property rights of people settled in new areas;
- the rights of inhabitants returning to their formal settlement without legal documentation;
- the rights of informal settlers affected by the floods; and
- the rights of communities and individuals (particularly women) in new resettlement locations.⁴⁰

The Joint Mission noted that the allocation of housing, and development of new settlements, lacked adequate technical support and at times did not comply with land legislation or customary law. As a result, it anticipated the emergence of numerous land disputes, not only between households affected by the floods, but also among communities and individuals in resettlement locations.⁴¹

These land issues were further complicated by the destruction of land records and cadastral offices and equipment. In the one province for which data is available (Gaza

21 September 2007; and UNEP/UNCHS (HABITAT) (u.d) [Joint Mission, Mozambique 2000 Floods](#), United Nations Environment Programme and United Nations Centre for Human Settlements.

³⁷ UNEP/UNCHS (HABITAT) (u.d), *Joint Mission, Mozambique Floods 2000*, United Nations Environment Programme and United Nations Centre for Human Settlements

³⁸ UNEP/UNCHS (HABITAT) (u.d), *Joint Mission, Mozambique Floods 2000*, United Nations Environment Programme and United Nations Centre for Human Settlements.

³⁹ Matsimbe, Z (2003) *Assessing the Role of Local Institutions in Reducing the Vulnerability of At-Risk Communities in Búzi, Central Mozambique*, Disaster Mitigation for Sustainable Livelihoods Programme, University of Cape Town, and the United Nations Food and Agriculture Organisation, p. 33-37

⁴⁰ UNEP/UNCHS (HABITAT) (u.d), *Joint Mission, Mozambique Floods 2000*, United Nations Environment Programme and United Nations Centre for Human Settlements.

⁴¹ UNEP/UNCHS (HABITAT) (u.d), *Joint Mission, Mozambique Floods 2000*, United Nations Environment Programme and United Nations Centre for Human Settlements.

Province), 5,400 records of land registration were destroyed. Around 4,000 of these dated from the colonial period, and the remaining 1,400 had been created since 1987. Office equipment such as computers, photocopy machines and furniture was also destroyed. It is believed that similar damage occurred in other affected provinces.

Land Responses

The Government of Mozambique, UN agencies and NGOs have attempted to address land and housing issues in the aftermath of the floods. UNEP, UNCHS and the GOM developed a project proposal: *Improving Security of Land Tenure and Housing Rights in Areas Affected by the Floods*. This Proposal aimed to:

- rehabilitate offices and providing the necessary equipment for institutions to deal with land registration;
- improve the technical capabilities of the Directorate of Geography and Cadastre and municipalities, and assist them to prepare maps of rural and urban settlements affected by the floods; and
- review the legal and institutional framework for governing rights to land.

The Joint Mission also recommended that land in new settlements be demarcated and registered, and that irregular allocations and unlawful occupations of land be remedied as quickly as possible.⁴²

UN-HABITAT and the GOM have implemented these proposals through a portfolio of projects, including:

- *Slum Upgrading and Vulnerability Reduction in Flood-prone Cities/Towns in Mozambique*.⁴³
- *Secure Tenure in Post Conflict Societies Programme*.⁴⁴
- *Security of Tenure and Policy Preparation*.⁴⁵
- *Sustainable Land Use Planning for Integrated Land and Water Management for Disaster Preparedness and Vulnerability Reduction in the Lower Limpopo Basin*.⁴⁶

⁴² UNEP/UNCHS (HABITAT) (u.d), *Joint Mission, Mozambique Floods 2000*, United Nations Environment Programme and United Nations Centre for Human Settlements.

⁴³ UN-HABITAT (u.d) *Land and Water Management for Disaster Preparedness and Vulnerability Reduction in the Lower Limpopo Basin*, available at: <http://www.unHABITAT.org/content.asp?cid=4599&catid=271&typeid=13&subMenuId=0>, accessed 24 September 2007.

⁴⁴ UN-HABITAT (u.d) *Secure Tenure in Post Conflict Societies Programme*, available at: <http://www.unHABITAT.org/content.asp?cid=898&catid=220&typeid=13&subMenuId=0>, accessed 24 September 2007.

⁴⁵ UN-HABITAT (u.d) *Security of Tenure and Policy Preparation*, available at: <http://www.unHABITAT.org/content.asp?cid=675&catid=220&typeid=13&subMenuId=0>, accessed 24 September 2007.

⁴⁶ UN-HABITAT (u.d) *Sustainable Land Use Planning for Integrated Land and Water Management for Disaster Preparedness and Vulnerability Reduction in the Lower Limpopo Basin*, available at: <http://www.unHABITAT.org/content.asp?cid=676&catid=220&typeid=13&subMenuId=0>, accessed 24 September 2007.

- *Land and Water Management for Disaster Preparedness and Vulnerability Reduction in the Lower Limpopo Basin.*⁴⁷

E. Earthquake: Bhuj, India 2001

1. Context and overview

On 26 January 2001, the Indian state of Gujarat was struck by an earthquake measuring 6.9 on the Richter scale. The epicentre was located at Bhuj, a city and municipality in Kachchh district. While damage estimates vary, Gujarat public administration authorities estimated that the quake killed around 13,800 people in India. More than 1.2 million houses were damaged or destroyed. There was widespread destruction of schools, hospitals and public facilities⁴⁸

Emergency response

India has well-established institutional and policy mechanisms for carrying out response, relief and rehabilitation. Soon after the earthquake, the Gujarat State Government formed the Gujarat State Disaster Management Authority (GSDMA), which took primary responsibility for coordinating reconstruction and long term disaster management capacity building. Immediate relief was the responsibility of the Office of the Relief Commissioner.⁴⁹ Gujarat State received an overwhelming response from a large number of organizations offering relief and reconstruction assistance. Several agencies combined their efforts, providing both material and in-kind support. Government, voluntary organizations, NGOs, civil society, donors and UN agencies all cooperated to provide technical and financial assistance.⁵⁰

Land Issues

The Gujarat State Government is responsible for land issues and administers numerous statutes governing land. Resettlement was not a major issue following the Gujarat earthquake. Out of 7600 villages affected, only 27 were completely relocated, and 30 more were partially relocated. Reconstruction was not permitted until planning and zoning in urban areas was completed.⁵¹ All displaced peoples have been relocated and there are none left in camps.⁵² Many people lost land titles and other documents during

⁴⁷ UN-HABITAT (u.d) *Slum Upgrading and Vulnerability Reduction in Flood-prone Cities/Towns in Mozambique*, available at: <http://www.unHABITAT.org/content.asp?cid=677&catid=220&typeid=13&subMenuId=0>, accessed 24 September 2007.

⁴⁸ GSDMA (u.d) *Gujarat Earthquake Reconstruction and Rehabilitation Policy*, Gujarat State Disaster Management Authority available at <http://www.gsdma.org/pdf/Earthquake%20Rehabilitation%20Policy.pdf>, accessed 25 September 2007.

⁴⁹ pers. comm. Thiruppugazh Venkatachalam, previously joint-Chief Executive Officer of the Gujarat State Disaster Management Authority

⁵⁰ Shaw, R., Gupta, M. and Sarma, A. (2003) 'Community recovery and its sustainability: Lessons from Gujarat earthquake of India', *Australian Journal of Emergency Management*, 18(2): 28-34

⁵¹ pers. comm. Thiruppugazh Venkatachalam, previously joint-Chief Executive Officer of the Gujarat State Disaster Management Authority.

⁵² pers. comm. Thiruppugazh Venkatachalam, previously joint-Chief Executive Officer of the Gujarat State Disaster Management Authority.

the earthquake, and there was no electronic register for land titles. The Government did, however, accept other documents evidencing land ownership, for example electricity bills and telephone bills, many of which were available from electronic records.⁵³

Land Responses

In 2001, GSDMA prepared the *Gujarat Earthquake Reconstruction and Rehabilitation Policy* (GERR Policy) with the support of the World Bank, Asian Development Bank, United Nations and other multilateral and bilateral agencies. The GERR Policy identified a number of sectoral programs, including ‘Housing’, which was the main vehicle for land-related programming. The following land programs were implemented under the housing policy.

1. *Mitigation and Resettlement.* Individuals and communities were generally given a choice between relocation or in-situ construction.⁵⁴ In either case, construction had to accord with new planning rules and development regulations that were aimed at decongesting urban areas and improving the urban landscape.⁵⁵ In most areas land availability presented no obstacle to relocation, as there was sufficient government land available for relocation. Many agencies and NGOs also bought land at market rates, or had it donated.⁵⁶ Displacement of non-victims (i.e. secondary displacement) was avoided, pursuant to conditions in World Bank loans that required that there be no secondary displacement.⁵⁷

2. *Landlessness, Secondary Rights and Tenure Security.* Housing assistance was provided irrespective of the pre-earthquake situation of individuals and communities, and as a result, some individuals would have obtained security of tenure after the earthquake where they had none before.⁵⁸

3. *Protection of Women's Rights to Land.* The GERR Policy states that the Government of Gujarat would “protect women’s rights and entitlement by registering the house in the joint names of the husband and wife” and by ensuring that housing entitlements would be passed on to widows rather than to any other male member of the family.⁵⁹

⁵³ pers. comm. Thiruppugazh Venkatachalam, previously joint-Chief Executive Officer of the Gujarat State Disaster Management Authority.

⁵⁴ pers. comm. Thiruppugazh Venkatachalam, previously joint-Chief Executive Officer of the Gujarat State Disaster Management Authority.

⁵⁵ GSDMA (u.d) *Gujarat Earthquake Reconstruction and Rehabilitation Policy*, Gujarat State Disaster Management Authority available at <http://www.gsdma.org/pdf/Earthquake%20Rehabilitation%20Policy.pdf>, accessed 25 September 2007., para. 2.4.4

⁵⁶ pers. comm. Thiruppugazh Venkatachalam, previously joint-Chief Executive Officer of the Gujarat State Disaster Management Authority.

⁵⁷ pers. comm. Thiruppugazh Venkatachalam, previously joint-Chief Executive Officer of the Gujarat State Disaster Management Authority.

⁵⁸ pers. comm. Thiruppugazh Venkatachalam, previously joint-Chief Executive Officer of the Gujarat State Disaster Management Authority.

⁵⁹ GSDMA (u.d) *Gujarat Earthquake Reconstruction and Rehabilitation Policy*, Gujarat State Disaster Management Authority available at

The GERR policy was also well sequenced with development programs, as disaster-related and longer-term development activities were all coordinated at the Gujarat State level, which greatly facilitated cooperation.

F. Earthquake: Bam, Iran 2003

1. Context and overview

On December 26, 2003, an earthquake measuring 6.6 on the Richter scale struck the city of Bam and the surrounding villages in Kerman Province, Iran. The earthquake left more than 30,000 people dead, 75,000 homeless, and destroyed about 85% of the houses and other buildings in Bam and surrounding villages. The 2,500 year-old historical citadel of Bam was almost completely destroyed.

Emergency response

Iran has three organizations responsible for disaster management under the Ministry of Interior – the Bureau for Research and Coordination of Safety and Rehabilitation Activities (BRCSR), the National Disaster Task Force (NDTF) and the Housing Foundation. The BRCSR is responsible for emergency preparedness and research on disaster management; the NDTF is an inter-organisational body chaired by the Ministry of Interior; and the Housing Foundation is an agency that responsible for disaster reconstruction and rural development, as well as implementation of government housing policy.⁶⁰ These Iranian authorities, the Iranian Red Crescent Society, and the international community (including various UN agencies, NGOs and the IFRC) were all quick to respond to the earthquake. The provincial government also set up a six-member committee chaired by the Governor-General of Kerman to coordinate the relief efforts in the affected area.⁶¹ In 2004 OCHA, in cooperation with the UN Country Team in Iran, organized a workshop to discuss the lessons learnt from the response, focusing in particular on the interaction between national and international institutions.⁶²

Land Issues

In 2002, slightly more than 81 per cent of families in Bam itself owned their homes, and the remaining 19 per cent of the population lived in rental housing.⁶³ Outside Bam, it seems that there was a significant degree of rural landlessness. The earthquake destroyed more than 85% of the buildings in Bam. It also destroyed large numbers of boundary

<http://www.gsdma.org/pdf/Earthquake%20Rehabilitation%20Policy.pdf>, accessed 25 September 2007., para. 2.4.3

⁶⁰ Fallahi, A. (2007) 'Lessons learned from the housing reconstruction following the Bam earthquake in Iran' *Australian Journal of Emergency Management*, 22(1): 26-35

⁶¹ Calvi-Parisetti, P. (2004) Report on the workshop of lessons learnt on the national and international response to the Bam earthquake, Kerman, Islamic Republic of Iran, 14-15 April 2004, available at <http://www.reliefweb.int/library/documents/2004/ocha-irm-15apr.pdf>, accessed 12 September 2007.

⁶² Calvi-Parisetti, P. (2004) Report on the workshop of lessons learnt on the national and international response to the Bam earthquake, Kerman, Islamic Republic of Iran, 14-15 April 2004, available at <http://www.reliefweb.int/library/documents/2004/ocha-irm-15apr.pdf>, accessed 12 September 2007.

⁶³ Ghafoury-Ashtiany M and Mousavi, R., (2005) "History, Geography, and Economy of Bam", *Earthquake Spectra*, Vol. 21, No. S1, pp. S3-S11

markers, and most land records and identity documents.⁶⁴ Further complications arose from the changes in the demography of Bam following the earthquake. The population of Bam prior to the earthquake was 142,736. The earthquake killed more than 30,000 people; and yet Bam's population today is around 280,000. In the aftermath of the earthquake, thousands of rural people moved into the city to receive assistance, and the destruction of documents meant that it was difficult for relief agencies to distinguish between local and non-local residents.⁶⁵

After the earthquake, it seems that significant numbers of widows were denied rights to land belonging to their deceased husbands.⁶⁶

Land Responses

A review of the literature did not reveal the government's response to (1) the problem of lost documentation, and identification of eligible housing beneficiaries, and (2) the land and housing needs of urban renters and landless rural groups. From the available literature, the most salutary land lesson from the Bam earthquake concerns tenure security and the siting of temporary shelters. In the days following the earthquake, more than 30,000 tents were constructed along the city streets to shelter survivors and the refugees from rural areas. Many victims moved these tents on to their own land, primarily so as to confirm their underlying property rights.⁶⁷ Camps were then built pending reconstruction of houses. Some victims refused to move into the camps because they were too far from their land and sources of livelihood. As a result, it is estimated that 10-20% of the temporary houses built in camps were never occupied.⁶⁸ Moreover, as houses were rebuilt, the residual caseload left in the camps increasingly consisted of non-local or landless people.⁶⁹

In order to minimise ownership disputes arising from the many thousands of deaths and the loss of documents, the government of Iran prepared legislation that prohibited the

⁶⁴ Meskinazarian, A (u.d) *Analysing Social Resilience in Reconstruction of Post-earthquake Bam*, online paper, available at <http://www.ehs.unu.edu/file.php?id=297>, accessed 14 September 2007.

⁶⁵ Meskinazarian, A (u.d) *Analysing Social Resilience in Reconstruction of Post-earthquake Bam*, online paper, available at <http://www.ehs.unu.edu/file.php?id=297>, accessed 14 September 2007.

⁶⁶ Khatam, A. (2006) "The Destruction of Bam and Its Reconstruction Following the Earthquake of December 2003", *Cities*, Vol. 3, No. 6, pp. 462-464.

⁶⁷ Meskinazarian, A. (u.d) *Analysing Social Resilience in Reconstruction of Post-earthquake Bam*, online paper, available at <http://www.ehs.unu.edu/file.php?id=297>, accessed 14 September 2007; Khazai B, Hausler, E. (2005) "Intermediate Shelters in Bam and Permanent Shelter Reconstruction in Villages Following the 2003 Bam, Iran, Earthquake", *Earthquake Spectra*, Vol. 21, No. S1, pp. S487-S511.

⁶⁸ Khatam, A. (2006), The Destruction of Bam and Its Reconstruction Following the Earthquake of December 2003, *Cities*, Vol. 3, No. 6, pp. 462-464.

⁶⁹ Meskinazarian, A (u.d) *Analysing Social Resilience in Reconstruction of Post-earthquake Bam*, online paper, available at <http://www.ehs.unu.edu/file.php?id=297>, accessed 14 September 2007; Khazai B, Hausler E (2005), "Intermediate Shelters in Bam and Permanent Shelter Reconstruction in Villages Following the 2003 Bam, Iran, Earthquake", *Earthquake Spectra*, Vol. 21, No. S1, pp. S487-S511.

buying and selling of land in Bam during the reconstruction phase.⁷⁰ It is not clear whether this prohibition led to an illegal market in land.

G. Hurricane Katrina: Louisiana 2005

1. Overview and Context

On 29 August 2005, Hurricane Katrina devastated parts of Mississippi, Alabama and Louisiana, and displaced as many as 800,000 people. Its storm surge overwhelmed the flood protection system for New Orleans, where 1500 people died and 80,000 of its houses and buildings were flooded. Prior to Hurricanes Katrina, approximately 51% of New Orleans was below sea levels. Over time, the risk of flooding had increased as the city slowly subsided, and extensive human-induced erosion along the Louisiana Coast removed natural barriers to the sea.⁷¹

Emergency Response

The Federal agencies with disaster-related jurisdiction included the Department of Homeland Security, the Federal Emergency Management Authority and the Department of Health and Human Services. These agencies are often accused of poor planning and preparedness for the risk of Hurricanes in the Mexican Gulf. After Hurricane Katrina, dedicated recovery authorities were established in the affected States. This case-study focuses on the Louisiana Recovery Authority.

Land Issues

Land Use Planning

Disagreements among federal, state and city planning authorities have greatly contributed to delays in reconstruction for New Orleans. The primary source of disagreement concerned reconstruction in low-lying neighbourhoods. Early plans recommended compulsory buy-outs of unviable neighbourhoods. After a political outcry, later plans have sought to mitigate future flooding risks through community consensus on safety standards, and financial incentives to refrain from rebuilding in unsafe areas.

Renters and Low-Income Groups

The primary land tenure issue in Louisiana involved housing options for renters and other low-income groups. Rental units made up 55% of all affected housing in New Orleans. Across all Katrina-affected areas, rental units made up 47 % of affected housing.⁷² Many displaced persons moved to other states. Large numbers took up residence in trailer units supplied by the Federal Emergency Management Authority (FEMA).⁷³ The vast majority

⁷⁰ Khazai B, Hausler E, (2005), "Intermediate Shelters in Bam and Permanent Shelter Reconstruction in Villages Following the 2003 Bam, Iran, Earthquake", *Earthquake Spectra*, Vol. 21, No. S1, pp. S487-S511.

⁷¹ See http://en.wikipedia.org/wiki/New_Orleans#Hurricanes_Katrina_and_Rita.

⁷² The Road Home Program, Overview of the Small Rental Property Program, <http://www.road2la.org/rental/overview.htm> (accessed 10 October 2007).

⁷³ Department of Homeland Security, Hurricane Katrina: What Government is Doing, <http://www.dhs.gov/xprepresp/programs> (accessed can October 2007).

of renters were unable to return to their pre-disaster locations for a variety of reasons, including:-

- greatly increased rents (up to 40% in New Orleans);
- landowner attempts to "gentrify" formerly low-income neighbourhoods;
- discriminatory land use regulations issued by local authorities (e.g. that new houses be rented to blood relatives only);
- discriminatory restrictions on housing assistance for persons with criminal records;
- restrictions on rebuilding in flood-prone areas (which were generally low-income neighbourhoods); and
- relatively small amounts of financial assistance to rebuild rental units, as compared to the amounts provided for homeowner reconstruction.⁷⁴

After the disaster, other low-income groups also lacked land and housing options due to the destruction of public housing and shelters for the homeless.

Land Responses

Land Use Planning

The first major land use and spatial plan for New Orleans was issued by the City's Bring New Orleans Back (BNOB) committee in March 2006. It recommended converting the lowest neighbourhoods into green space, through compulsory buyouts if returning residents could not prove the viability of their neighbourhood within four months of return. After a political outcry, the City administration established the New Orleans Neighbourhood Revitalisation Committee in April 2006. This committee prepared neighbourhood plans ("the Lambert Plans") that did not prohibit reconstruction in the lowest neighbourhoods. But the Lambert Plans ran into obstacles in securing state and federal approval, and in January 2007 the Louisiana Recovery authority issued the Unified New Orleans Plan (UNOP). The UNOP established community congresses to determine whether reconstruction standards, and financial incentives to sell land in unsafe areas, should apply at the neighbourhood level.

Renters and Low-Income Groups

The Road Home Program adopted by the Louisiana Recovery Authority included the following land tenure-related elements.

- *Homeowners* (US\$3.5 billion): Landowners whose houses were destroyed or suffered major damage as a result of Hurricane Katrina are eligible to receive up to \$150,000 in compensation. This money could be used to rebuild, or purchase another house in Louisiana. Alternatively, the landowner could keep the money, sell the property and move out of Louisiana altogether.

⁷⁴ See Eloisa Rodriguez-Dod and Olympia Duhart, Evaluating Katrina: A Snapshot of Renter's Rights Following Disasters, *Nova Law Review* (forthcoming).

- *Small-scale rental property owners* (US \$892.7 million): The Small Rental Property program provides financial incentives in the form of forgivable loans to property owners to help restore their damaged units and offer them at affordable rents. Participating property owners are required to accept limits on the rents they charge and the incomes of the tenants they select.
- *Homeless Support and Housing* (US \$25.9 million): This amount aims to repair 36 shelters that assisted nearly 1,800 homeless individuals prior to the disaster.
- *Rebuilding Public Housing* (US \$154 million): This amount aims to rebuild public housing, particularly in New Orleans, through a system of low-income housing tax credits.

To date, these programs have not been sufficient to allow return and re-housing of most displaced renters in Louisiana. Many remain in temporary trailers provided by the Federal Emergency Management Authority. There are now plans to recall all temporary trailers, largely as a result of local community complaints and allegations of emerging social problems in districts with large trailer populations.

H. Hurricane Mitch: Central America 1998

1. Context and overview

Hurricane Mitch killed around 11,000 people in Central America over the course of several days in October and November 1998. The storm destroyed tens of thousands of homes, and caused over USD\$5 billion worth of damage. Hurricane Mitch first made landfall in Honduras. It destroyed more than 33,000 houses and damaged a further 50,000, leaving as many as 1.5 million people homeless. Floods and mudslides are believed to have resulted in more than 6,500 deaths. They also caused widespread damage to land, leaving substantial areas of farm land with thick layers of sand, silt and rocks. Severe damage to food and cash crops and livestock left many people without livelihoods.⁷⁵

Land tenure has been a key cause of both conflict and poverty in Honduras. Half of the land in Honduras is privately owned, a quarter is community owned and rented to private farmers (*ejidales*), and the remainder is government owned. Land ownership is highly skewed, with 90% of prime farmland belonging to 10% of the population. In rural areas, more than 80 per cent of the population (2.1 million people) lives on sloping land; 80,000 farmers have plots that are half a hectare or smaller; and 250,000 families are landless. Uncertainty over tenure has contributed to deforestation, as have development strategies emphasizing export-led growth.⁷⁶ Poor land use planning and ineffective public

⁷⁵ Consultative Group for the Reconstruction and Transformation of Central America (2004) *Central America After Hurricane Mitch: The Challenge of Turning a Disaster Into An Opportunity – Honduras*, Inter-American Development Bank available at http://www.iadb.org/regions/re2/consultative_group/backgrounder2.htm, accessed 15 September 2007.

⁷⁶ See Segestam, L; Simonsson, L; Rubiano, J. and Morales, M (2006) *Cross-level institutional processes and vulnerability to natural hazards in Honduras*, Stockholm Environment Institute.

administration has led to poor quality land management.⁷⁷ Malfunctioning urban land and housing markets, largely a result of inadequate regulations, has led to a rapid increase in informal settlements in hazardous areas.⁷⁸ Some international assistance has been directed to land tenure reform - during the 1990s the Inter-American Development Bank (IADB), for example, linked disbursements to progress in the implementation of a detailed Tenure Action Plan.⁷⁹

Emergency response

Emergency management in Honduras is primarily the responsibility of COPECO (the Permanent Commission for Contingencies). COPECO is active at the national level, and CODERS (Regional Disaster Committees, composed of 11 brigades) operate as regional civil defence units which coordinate activities at a regional level. This system is further divided into CODEMS (municipal defence units) which are responsible for planning and analysis, and CODELS (local civil defence units) which are responsible for operational work in local communities. In the aftermath of Hurricane Mitch, the National Emergency Committee was created to oversee COPECO, due to COPEC's inability to manage a major national disaster.⁸⁰

International and regional agencies were also quick to respond to Hurricane Mitch. The agencies involved included the Economic Commission for Latin America and the Caribbean, various UN agencies, the Pan American Health Organisation and World Health Organisation, the World Bank, the International Monetary Fund and the Inter-American Development Bank. Legal and institutional changes to the emergency management system in Honduras have occurred in response to the lessons learnt from Hurricane Mitch.⁸¹

Land Issues

Land tenure and land management systems were influential factors in determining the vulnerability of individuals and communities to Hurricane Mitch. There was a clear link between land management practices – in particular slash and burn agriculture, and deforestation – and the extent of landslides and flooding.⁸² Furthermore, low-income settlements, particularly those in urban areas, tended to be located in inhospitable areas which were particularly vulnerable to flooding and landslides. By December 1998, 80,000 people were still living in emergency shelters, and another 150,000 people were estimated to be staying with family and friends. A large proportion of the displaced

⁷⁷ UNDP (2006) *Country Evaluation : Honduras*, United Nations Development Programme, New York, p.30

⁷⁸ Charvériat, C (2000) *Natural Disasters in Latin America and the Caribbean: An Overview of Risk*, Inter-American Development Bank.

⁷⁹ IADB (u.d) *Country Evaluation Program (CPE): Honduras*, Office of Evaluation and Oversight, OVE, Inter-American Development Bank, New York, Washington, pp. 30ff.

⁸⁰ See Segestam, L; Simonsson, L; Rubiano, J. and Morales, M (2006) *Cross-level institutional processes and vulnerability to natural hazards in Honduras*, Stockholm Environment Institute.

⁸¹ See Segestam, L; Simonsson, L; Rubiano, J. and Morales, M (2006) *Cross-level institutional processes and vulnerability to natural hazards in Honduras*, Stockholm Environment Institute.

⁸² UNDP (2006) *Country Evaluation : Honduras*, United Nations Development Programme, New York, p. 25; and Segestam, L; Simonsson, L; Rubiano, J. and Morales, M (2006) *Cross-level institutional processes and vulnerability to natural hazards in Honduras*, Stockholm Environment Institute, Stockholm

population opting to reside in temporary shelters were woman-headed households. Many households responded to their need for shelter by returning to high-risk areas and illegally occupying vacant land. In March 1999, protests and land invasions occurred in Tegucigalpa, the nation's capital, after the municipality announced its intent to build and move families from more than 100 shelters into 5 large shelters.⁸³

Land Responses

Honduras provides an example of links between reconstruction planning and development strategies relating to land. Many of the agencies at the forefront of disaster response and reconstruction efforts were agencies that had ongoing 'development' projects and had a long-standing presence in the country. UNDP was heavily involved in reconstruction efforts, and its country program for the period 1998-2000 included objectives to support the development of a legal and institutional framework to ensure, among other things, sustainable environmental management and consolidate land ownership rights.⁸⁴ USAID sequenced recovery assistance with longer-term development work, by ensuring that local currency proceeds from food aid were used to support land titling activities.⁸⁵ The Government of Honduras' Master Plan acknowledges the links between vulnerability and land management. It states that the Government's efforts to address poverty and human poverty would focus on a number of areas, including the lack of access to production factors such as land and credit. In the aftermath of Hurricane Mitch, the National Congress approved new measures to protect land ownership in rural areas.⁸⁶

In response to the need for large-scale housing reconstruction, the IADB provided a USD\$11.55 million loan to the Republic of Honduras for a Post Hurricane Housing Program ('the program'). The program's goals included providing displaced households with secure title on an orderly subdivision. The program documentation states that land purchased with the housing subsidy must be registered in the name of both spouses, or in the woman's name alone in the case of a woman-headed household.⁸⁷ It is unclear whether or not the program successfully incorporated women's needs, as a report compiled in the year after the hurricane concluded that in contrast to Nicaragua, women

⁸³ IADB (u.d) *Post Hurricane Housing Program – Executive Summary*, Inter-American Development Bank, available at <http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=454941>, accessed 10 September 2007..

⁸⁴ UNDP (2006) *Country Evaluation : Honduras*, United Nations Development Programme, New York, p. 41.

⁸⁵ Consultative Group for the Reconstruction and Transformation of Central America (2000) *Honduras - Assistance and Cooperation from the International Community*, Inter-American Development Bank, available at http://www.iadb.org/regions/re2/consultative_group/honduras_assist.htm, accessed 10 September 2007.

⁸⁶ Consultative Group for the Reconstruction and Transformation of Central America (2004) *Central America After Hurricane Mitch: The Challenge of Turning a Disaster Into An Opportunity – Honduras*, Inter-American Development Bank available at http://www.iadb.org/regions/re2/consultative_group/backgrounder2.htm, accessed 15 September 2007..

⁸⁷ IADB (u.d) *Post Hurricane Housing Program – Executive Summary*, Inter-American Development Bank, available at <http://idbdocs.iadb.org/wsdocs/getdocument.aspx?docnum=454941>, accessed 10 September 2007..

in Honduras were not favoured beneficiaries of residential land titles. The report concludes that reconstruction programs therefore missed an important opportunity to transform Honduran society.⁸⁸

I. Recommendations for Case-Studies

	<i>Country</i>	<i>Region</i>	<i>Type of Disaster</i>	<i>Year</i>
1	<i>Pakistan</i>	<i>South Asia</i>	<i>Earthquake</i>	<i>2005</i>
2	<i>Indonesia</i>	<i>Asia-Pacific</i>	<i>Tsunami</i>	<i>2004</i>
3	<i>Grenada</i>	<i>Central America</i>	<i>Hurricane Ivan</i>	<i>2004</i>
4	<i>Honduras</i>	<i>LAC</i>	<i>Hurricane Mitch</i>	<i>1998</i>
5	<i>Mozambique</i>	<i>Africa</i>	<i>Recurrent Floods</i>	<i>2000-1</i>
6	<i>Gujarat, India</i>	<i>South Asia</i>	<i>Earthquake</i>	<i>2001</i>
7	<i>New Orleans, USA</i>	<i>North America</i>	<i>Hurricane</i>	<i>2005</i>

These recommendations do not include the earthquake in Bam, Iran, because of relative difficulties in accessing literature and key local informants. The tsunami disaster in Sri Lanka has also been excluded because of its relative similarities to Aceh, and a desire to respond to global warming risks by including as many cases of flooding and Hurricanes as possible.

III. Key Findings and Lessons Learned

Key common conclusions from these case-studies include the following:-

- Poor quality land governance systems exacerbate the effects of a natural disaster.
- Assessing land issues during the early stages of an emergency facilitates early recovery and a sustainable transition to development. Yet land issues are rarely addressed adequately in initial damage and needs assessments; and are often addressed indirectly through programmes relating to housing, infrastructure, livelihoods, etc..
- Some degree of certainty of tenure is essential for recovery, particularly reconstruction of housing for displaced groups. Establishing (or re-establishing) tenure security can be complicated by a lack of land records, and overlaps among formal and informal systems of land governance.
- While national and local capacity may be overwhelmed by a disaster, national governments will take the lead in recovery programs. International actors must work with and through national agencies, including the reconstruction authority (if such an authority exists).

⁸⁸ Buvinic, M. et al (1999) *Hurricane Mitch: women’s needs and contributions*, Sustainable Development Department Technical papers series, Inter-American Development Bank.

- Access to land and housing for landless groups, including tenants and usufruct holders, is a bottleneck to sustainable recovery.
- Restoring the housing, land and property rights of displaced victims is complicated more by measures to mitigate future disaster risks, including relocation from unsafe areas, than secondary occupation of their land and housing.
- Women may be denied access and rights to land by inheritance mechanisms and land titling or documentation programs.
- Effective land use and spatial planning is essential to building back better, but institutional and community disagreement over post-disaster reconstruction in hazardous areas can significantly delay reconstruction.

This Part develops these conclusions into a broader "lessons learnt" framework. It begins with a brief overview of international literature and frameworks relating to resettlement, before turning to specific findings and lessons learnt from the case-studies and other research.

A. International Experience Addressing Land Issues after Natural Disasters

1. The literature on natural disasters

There is a great deal of literature on recovery from natural disaster. This literature has developed around the key analytical concepts of vulnerability and resilience. Vulnerability describes the state of readiness and resistance to the adverse effects of a disaster. Resilience describes the ability to recover from disaster, and to mitigate against future disasters. Because human activity is central to vulnerability and resilience, it is often said that there is no such thing as a "natural" disaster.

To date, the natural disaster literature has not extended its vulnerability and resilience analysis to issues of land tenure and governance. Yet it is clear that land issues contribute significantly to vulnerability to disaster, and resilience and recovery from disaster. While there are some case-study reports on land tenure and natural disasters, and increased awareness of the importance of land issues to disaster recovery, there is no detailed framework for analysing and addressing the full range of land issues after natural disasters.

There is considerable literature on post-disaster resettlement. This literature highlights the fact that, contrary to development-induced resettlement, resettlement after disaster is often reactive in nature and characterised by short lead times for planning and consultation. As a result, disaster-induced resettlement is "usually characterised by undesirable long-term socio-economic changes that affect the displaced population, such as poverty and malnutrition".⁸⁹ For example, an 11 year longitudinal study of the 1990

⁸⁹ Badri, S. Ali, Ali Asgary, A.R. Eftekhari, and Jason Levy (2006), *Post-disaster resettlement, development and change: a case study of the 1990 Manjil earthquake in Iran*, *Disasters* 30 (4), 451–468.

Manjil earthquake in Iran - which involved development of a new town for disaster-affected villagers - concluded that relocated families:

- lost access to natural resources, leading to adverse livelihoods effects;
- experienced weakening of social networks and reduced cooperation among the displaced population, due to increased competition for resources and employment;
- experienced increased poverty as productive farmers became unemployed (or the cane casual labourers); and
- exchanged multiple sources of livelihoods for single sources of income.⁹⁰

The report concludes that:

The resettlement policy in the study area may have been successful in reducing the earthquake disaster risk (by relocating villagers), yet the basic goals of sustainable development remain primarily unmet (permanent job creation, adequate income and improved quality of life).⁹¹

2. UN Disaster Recovery Frameworks

While national governments take the lead role in responding to natural disasters, their role is increasingly supplemented by international and transnational forms of assistance. This assistance includes humanitarian and development programs. It encompasses UN agencies, inter-governmental bodies, NGOs and national aid agencies. The range of institutions involved has led to increased awareness of the need for:

- better planning and coordination among all groups involved in post-disaster assistance;
- greater integration of short-term humanitarian responses and longer term strategies for sustainable recovery and development; and
- more capacity-building for national and international actors in post-disaster relief, recovery and development.

A number of UN agencies have responded to these coordination, integration and capacity-building needs. The International Labour Organisation (ILO) and the Food and Agriculture Organisation (FAO) have developed the Livelihoods Assessment and Response System for application after disasters. UNDP has incorporated disaster reduction and recovery into its development priorities, as part of the Millennium Development goals. UNDP has also prepared the Post-Disaster Needs Assessment methodology, and the Disaster Risk Index (DRI) Analysis Tool (which measures the vulnerability of countries to key natural hazards). UNDP is the lead agency for the Early Recovery Cluster, which links immediate responses to disasters to risk reduction and longer term development planning.

⁹⁰ Ibid at p. 464.

⁹¹ Ibid at p. 465.

UN-HABITAT has developed a strategic framework entitled "Sustainable Relief and Reconstruction" to respond to these needs for coordination, integration and capacity-building. Sustainable relief and reconstruction involves leveraging short-term humanitarian support to human settlements in crisis into longer-term strategies for development and disaster risk reduction. UN-HABITAT is working with other agencies to develop practical strategies and guidelines for sustainable relief and reconstruction after armed conflicts and natural disasters. In 2005, UN-HABITAT was designated the focal point for shelter/housing, land and property in the Protection and Early Recovery Humanitarian Clusters. UN-HABITAT also works closely with the Emergency Shelter Cluster to develop emergency shelter responses that include strategies for transition to sustainable housing.

3. The IASC Guidelines on Human Rights and Natural Disasters.

The UN places human rights at the heart of humanitarian assistance and sustainable development operations. This rights-based approach is reflected in the 2006 IASC Guidelines on Human Rights and Natural Disasters ("the IASC Guidelines"). The IASC guidelines distil UN and inter-governmental experiences relating to natural disasters. They highlight a number of land issues that were identified in the disaster case-studies discussed above, including displacement and enforced relocation, unsafe or involuntary return and the need to restore property to returnees.⁹² The IASC Guidelines note that these issues must be addressed at the outset, from a rights-based perspective, in order to ensure sustainable recovery and development.

Human rights are the legal underpinning of all humanitarian work pertaining to natural disasters. There is no other legal framework to guide such activities, especially in areas where there is no armed conflict. If humanitarian assistance is not based on a human rights framework, it risks having too narrow a focus, and cannot integrate all the basic needs of the victims into a holistic planning process.⁹³

The IASC Guidelines include a number of provisions relating to land. These provisions supplement basic principles relating to land in the UN Guiding Principles on Internal Displacement. In brief, the IASC Guidelines are based on the following rights to housing, land and property.

- Rights not to be discriminated against on the basis of property.⁹⁴

⁹² IASC Guidelines, page 8.

⁹³ IASC Guidelines, page 9.

⁹⁴ Arts. 2, 24, 26. See also *Principles on Housing and Property Restitution for Refugees and Displaced Persons*, United Nations, E/CN.4/Sub.2/2005/17 (2005) art 3.1; *Guiding Principles on Internal Displacement*, United Nations, E/CN.4/1998/53/Add.2 (1998) principles 1, 4, 22; *Comprehensive Human Rights Guidelines On Development-Based Displacement*, United Nations, E/CN.4/Sub.2/1997/7 (1997) art 14.

- Rights to adequate housing (which include security of tenure).⁹⁵
- Rights of return and restitution for displaced persons.⁹⁶

In relation to rights of return and restitution, the UN Guiding Principles on Internal Displacement state that:

Competent authorities have the duty and responsibility to assist returned and/or resettled internally displaced persons to recover, to the extent possible, their property and possessions which they left behind or were dispossessed of upon their displacement. When recovery of such property and possessions is not possible, competent authorities shall provide or assist these persons in obtaining appropriate compensation or another form of just reparation.

The Guiding Principles on Internal Displacement were unanimously approved by the UN General Assembly in 2005.

B. Specific Lessons Learnt from the Case-Studies and Other Research

I. Poor land governance and insecure tenure increase vulnerability to a disaster

In 2005, the International Institute on Sustainable Development (IISD) undertook a survey of land experts with experience in natural disaster contexts. The survey provides a snapshot of expert opinion and international awareness of land issues after natural disasters. Respondents to the IISD survey rated the importance of land to disaster vulnerability at 4.5 on a scale from 1 to 5. The indicators of land governance vulnerability include including poor urban management practices, inadequate planning and construction, environmental degradation, inadequate infrastructure and services in low-income areas, a high degree of non-compliance with spatial planning, and dysfunctional or corrupt government agencies.⁹⁷ As noted below (Section VI), the quality of a land governance system must be taken into account in formulating responses to land issues after a disaster.

⁹⁵ *Principles on Housing and Property Restitution for Refugees and Displaced Persons*, United Nations, E/CN.4/Sub.2/2005/17 (2005) art 8.1; *Comprehensive Human Rights Guidelines On Development-Based Displacement*, United Nations, E/CN.4/Sub.2/1997/7 (1997) art 18; *General Comment No. 7 on Forced Evictions*, United Nations (1997) para 9.

⁹⁶ *Principles on Housing and Property Restitution for Refugees and Displaced Persons*, United Nations, E/CN.4/Sub.2/2005/17 (2005) art 10.1; *Guiding Principles on Internal Displacement*, United Nations, E/CN.4/1998/53/Add.2 (1998) principle 28; *UNHCR Executive Committee Conclusion No. 18 (XXXI) 'Voluntary Repatriation'*, A/AC.96/588 (1980) paras (d), (f), (i); *UNHCR Executive Committee Conclusion No. 40 (XXXVI) 'Voluntary Repatriation'*, A/AC.96/673 (1985) paras (a), (b), (d), (h); *Comprehensive Human Rights Guidelines On Development-Based Displacement*, United Nations, E/CN.4/Sub.2/1997/7 (1997) art 25.

⁹⁷ See UN-HABITAT, *Sustainable Relief and Reconstruction: From Conceptual Framework into Operational Reality*, Synopsis for World Urban Forum I and II (copy on file with author).

It is clear that addressing issues of weak central and local government capacity and poor land governance is important to sustainable recovery and reconstruction. At the same time, the case-studies illustrate the timing challenges of addressing weak land governance, while also meeting pressures to provide housing for displaced groups. Most displaced victims - particularly those with insecure forms of tenure - wish to return to their land as soon as possible. They may be sceptical of government capacity and intentions. They may not want to wait for plans and mechanisms to "build back better", and improve the underlying quality of land governance. Equally, many housing providers need to show results for their donors, particularly in quantifiable terms of houses built and repaired. They also may not want to wait for measures to improve settlements and build resilience through better land governance. In the event, there is a risk of "breakout" return and reconstruction before systemic issues of weak land governance can be addressed.

The IISD report also concludes that land systems which fail to provide sufficient security of tenure, or access to land for all groups, will increase vulnerability to a natural disaster. This conclusion is supported by the following lessons that emerged from the disaster case-studies discussed above.

- Extralegal or informal settlements may not be included in risk reduction infrastructure or disaster risk assessments.
- Insufficient capacity and record-keeping in the land record systems will inhibit re-establishment of tenurial certainty after a disaster.
- Insufficient tenure security, or access to land, will increase vulnerability to dispossession and land grabbing in the event of displacement. Conversely, there may be unwillingness to leave land in the event of disaster because of a fear of dispossession and loss of land.
- Extralegal or informal landholders, including those subject to customary land systems, may face eligibility obstacles in applying for humanitarian assistance, including land-related assistance such as obtaining rights to substitute land or receiving the land documentation necessary for house reconstruction. These eligibility obstacles to assistance may also extend to secondary rights-holders such as tenants, particularly in cases where their rights have not been recorded in the formal cadastral system.
- Secondary rights-holders, women land rights-holders, extralegal or informal landholders - including those subject to customary land systems - may not be sufficiently identifiable from pre-disaster records to allow collection of information on their vulnerability to landlessness and homelessness after a disaster. They may also not be sufficiently identifiable from pre-disaster records to allow informed decisions, and sufficient participation and consultation, in relation to their land and housing options.

- Temporary living centres provide food and shelter. The greater the degree of landlessness and unequal land distribution prior to the disaster, the more likely that temporary living centres will become populated by victims of poverty who would not necessarily be victims of the disaster itself. Attempts to decommission temporary camps may be complicated by an influx of groups who are not eligible for post-disaster land and housing programmes.⁹⁸

2. There is a need for land programming in the first few weeks after a disaster.

Expert respondents to the IISD survey rated the importance of land to humanitarian relief after disasters at 3.1 on a scale from 1 to 5. While they did not consider that land programs should be adopted by emergency relief agencies, the IISD report does note a "strong feeling" among respondents that there was a "serious gap between humanitarian relief and long-term development". Land issues may not be the highest currency in the emergency relief and protection phase, except in relation to site selection for temporary shelters. Nevertheless, the disaster case-studies confirm the importance of early analysis, assessment and planning in relation to land issues. A failure to take land issues into account may delay the safe return, reintegration or resettlement of displaced persons. Any delays in providing sustainable solutions to displacement may:-

- expose vulnerable groups to human rights violations in temporary shelter locations, including the sexual exploitation of women and the economic expectation of children;
- lead to livelihood risks because victims who are unable to return cannot access their pre-disaster sources of livelihoods;
- lead to over-dependence on humanitarian assistance as residual caseloads of displaced victims face long-term periods in temporary shelters or housing; and
- inhibit access to appropriate social services, particularly for the disabled and elderly.

3. Sustainable recovery requires early assessment of the institutions that provide access to land and protect rights to land.

In many of the case-studies, the institutions involved in protecting housing, land and property rights were either lacking in capacity, dysfunctional or even discriminatory in their operation, prior to the disaster. In a few cases land-related institutions were themselves damaged or traumatised as a result of the disaster. As a general rule, the extent of systemic damage to land institutions does not appear to be as great in the case of

⁹⁸ For a general discussion see IISD, p. 2.

natural disasters as compared to armed conflicts. Most land institutions retain their basic functional capacity after a disaster. They will be subject to new demands, often overwhelming in nature, that may magnify any pre-disaster dysfunction or discrimination. They will also have new opportunities to extend their authority into new areas of operation. But they will not be so devastated as to require whole scale rebuilding of the land governance system itself.

In the case-studies, the primary gaps in the institutional protection of housing, land and property rights concerned:

- The general fact that the majority of the affected persons land rights (up to 70% in some cases) are “off-register”, that is, not included in the land register;
- Renters, secondary rights-holders and other groups without ownership of land;
- Extralegal, informal and traditional forms of settlements or tenure, particularly those residing in disaster-prone areas; and
- Widows, female-headed households and orphans.

All these groups were prone to discrimination in the pre-disaster land governance system. After the disaster, the institutions involved in their protection were often hesitant to adopt special measures that targeted their needs and vulnerable status. While at times this hesitancy derived from shortfalls in capacity, the primary reasons why vulnerable groups were not protected were those that applied prior to the disaster. That is, the disaster did not change inherently unequal, discriminatory and/or patriarchal forms of authority. Indeed, in many cases, the disruption created by the disaster created new opportunities for powerful groups to accumulate entitlements at the expense of vulnerable social groups.

A key lesson is that post-disaster assessments should identify institutions that protect vulnerable groups against the risks of dispossession. Where there is a tradition of strong non-governmental and civil society representation, such organisations can play a leadership role in terms of advocacy and providing immediate relief. The case-studies suggest that these local institutions can adapt quickly to the new institutional environment, and can often access transnational funding for their protection services. International actors that engage in direct programming to address discriminatory forms of land governance may become entangled in long-running socio--political contests over resource control and ownership. Assisting NGOs and other civil society organisations to engage in similar activities can help to protect international actors against allegations of partisanship and anti-government activity, while also taking advantage of the local knowledge and capacities of domestic institutions. At the same time, case studies such as Pakistan and Indonesia suggest that the United Nations can play a critical role in assisting policy formulation, and serving as a relatively neutral sounding board for decision-making on often highly political issues.

4. International actors will need to work with and through government agencies.

International actors do not have a high degree of autonomy in post-disaster circumstances. The case-studies demonstrate that governments will naturally wish to assume a leadership role in a post-disaster contexts. In all the case studies, international agencies had to work with and through national and local governments. Often, this collaborative task was made easier by the establishment of a reconstruction authority. A key lesson is that international actors may not have a high degree of *control* over land-related programming, though they may be able to exercise significant *influence*. Ultimately, however, several of the case studies demonstrate that Governments will naturally wish to assume a leadership role in a post-disaster context. The degree of influence U.N. agencies can exert on national policy making process seems to depend on the degree of trust established with Government (often through previous in-country work or through the effective delivery of humanitarian and reconstruction projects). Because programs may be formed and implemented by government agencies, international actors may tread a fine line between provision of practical assistance, and compliance with international human rights standards.

5. Security of tenure is essential for sustainable relief and recovery, particularly in circumstances of informality and/or lost land records.

In the context of natural disasters, tenure insecurity describes the situation when landholders or reconstruction actors are reluctant to invest because of uncertainty over ownership and other rights to land. Tenure insecurity can have a number of causes, including the existence of multiple and overlapping forms of land tenure (eg. statutory and customary/traditional), fears of state appropriation, uncertainty over legal status, inability to exclude encroachers and conflict with neighbours or other community members, or ambiguity over the land rights of women. The uncertainty can relate to land boundaries, rights or validity of use. In the case studies, tenure insecurity largely arose from:

- Poor land records and data prior to the disaster because of limited land record coverage;
- lost or damaged land records (including personal identity records);
- multiple forms of tenure in pre-disaster land systems; and
- government measures to restrict reconstruction in areas designated as unsafe.

The extent of tenure security, and the nature of its effects on recovery, varied considerably across the case-studies. At one end of the scale there are cases such as the 2004 Indonesian tsunami disaster, in which most land records were severely damaged or destroyed. In these cases, rapid measures are required to provide or restore documents in order to facilitate reconstruction. Without documentation, or an equivalent mechanism to ensure certainty, housing providers will not know whether they are building in the right place for the right person. At the other end of the scale, there are cases such as Hurricane

Katrina, in which land records were stored in such a way as to prevent loss and allow rapid retrieval.

Appropriate responses to the loss or damage of land records (including identity documents) also vary according to the disaster context. Comparative experience suggests that community-based measures to introduce tenure security are most adaptive to local needs, and most likely to produce quick responses for the purposes of reconstruction (but such measures have to be carefully assessed in terms of their linkages to the legal framework for land). Also, there may be cases where community-based measures will create conflict or abuse of power. In addition, an assessment must be made to determine whether government agencies are sufficiently capable of replacing records through provisional certificates, mass processing of claims, or reference to other records such as land tax payments and electricity bills. Moreover, even when community-based mechanisms are utilised, there will be a need for quality control and standard documentation to ensure useful results for reconstruction actors (particularly housing providers). These quality and standardisation requirements mean that government agencies, particularly local government officials, will be involved even when community-based measures respond to the problem of lost or damaged records.

In most cases, housing providers require some form of tenure documentation to ensure reconstruction in the right place for the right owner. Reconstruction without tenure documentation can create long-term risks of conflict and inappropriate siting of housing. In these circumstances, land rights documentation will need to be extended into previously undocumented areas. Even in areas where local systems service the tenorial needs of community members without the need for land documentation, the involvement of external actors such as housing providers can generate pressure for documentation programs to precede reconstruction. This pressure for tenure documentation programs to extend into previously undocumented areas will arise in the context of traditional rural areas, informal urban settlements and land governance systems where titling and certification does not cover all land parcels. There are a number of challenges facing any tenure documentation effort.

- Government agencies - particularly the line agency responsible for land administration - may be reluctant to adopt decentralised measures because of a lack of templates, and concerns over fragmentation of the land administration system.
- Domestic and international actors may advocate standard technical solutions to tenure insecurity, most commonly through programs of systematic titling and surveying. Where land institutions lack capacity, or only serve one segment of the population, titling and surveying will not protect the interests of *all* disaster victims and - above all - will be too slow to provide rapid forms of documentation for the purposes of housing reconstruction. In post-disaster context, titling and surveying solutions are difficult to implement because most developing countries do not have more than 30% of all land parcels covered by the land register. There is a clear need to identify land record approaches that are cheaper, easier to

deliver, consistent with the applicable legal framework, and adaptable to particular post-disaster contexts.

- The extension of land documentation into previously undocumented areas, particularly rural areas with customary land governance systems, can create potential for overlap in systems of state and customary law. Without an adequate regulatory and institutional framework, this overlapping form of legal pluralism can create long-term conflict and uncertainty. The potential for conflict and uncertainty will be increased where those implementing the documentation process are government officials lacking in local or family connections with the communities concerned.
- Community-based tenure documentation can create the potential for multiple documents, and inconsistency between local and national land administration systems. Without standard documentation, outputs at the local level may vary widely from place to place. Without integrative land administration measures, reconstruction actors may be unwilling to accept local documents, and local documents may not provide a solution to underlying problems of informality and lack of access to the formal land sector.
- As with all aspects of post-disaster land programming, the implementation of tenure security measures must be sufficiently rapid to facilitate recovery, and sufficiently sustainable to build long-term resilience into the land governance system. If tenure security measures are too slow, there will be "breakout" reconstruction by victims and housing providers in order to relieve the pressure to provide housing and show concrete results for donors. At the same time, tenure security measures require cross-institutional political support and a degree of institutional capacity. A key lesson is that template tenure security tools, which can be adapted to particular disaster circumstances, are important to meet the competing demands of speed and sustainability, and to convince local and national actors of the suitability of decentralised tenure documentation measures.

6. Managing residual caseloads: housing the landless is essential to decommissioning temporary living centres.

In most (perhaps all) of the case-studies, residual caseloads of displaced persons were not able to return to their pre-disaster places of residence. This residual category of displaced persons included:-

- Landowners whose land was submerged, destroyed, or otherwise uninhabitable.

- Renters or other secondary rights-holders, whether under statute or custom, who could not afford to pay rents,⁹⁹ or were otherwise refused access to their former land.
- Squatters on public or private land who could not return because access is denied, or because their house would not be rebuilt due to alleged illegality.
- Those who were without access to land or housing before the disaster.
- Groups who lost common property or other access and use rights to land necessary for their livelihoods.

For ease of discussion, these groups are described compendiously as the "landless". Key lessons learnt from the case-studies include the following.

- Temporary living centres cannot be decommissioned unless housing, or access to housing, is provided to the landless. Unless they are decommissioned, temporary living centres can become long-term settlements characterised by poor living conditions, unregulated development and inadequate access to infrastructure and services. It follows that early recovery responses to landlessness will reduce long-term challenges to sustainable relief and reconstruction.
- There may be a degree of government caution in dealing with the housing needs of the landless because providing them with land can create equivalent demands outside the disaster zone. Because international actors generally need to work with or through government agencies, the appropriate international response to government inaction may be assistance for advocacy or policy development measures relating to the landless.
- The scope and scale of any landlessness problem needs to be assessed soon after a disaster. Undue delays in identifying the landless may lead to delays in decommissioning temporary shelters. Undue delays may also lead to social conflict as landless groups agitate for housing, or engage in land invasions and construction of extralegal settlements.
- It can be very difficult to measure and value land that is submerged or destroyed as a result of a disaster. While resettlement should be based on principles of restorative justice, it may not be possible to identify precisely the value and extent of land that has been lost, destroyed or submerged. In this event, the simplest solution may be to offer standardised access to land and housing for all persons requiring resettlement.

After a disaster, there is no "one-size fits all" response to the land and housing needs of the landless. Possible responses include direct land grants by the State, purchase or grant of land by private actors, voucher or credit programs to assist direct purchase by the landless, the development of resettlement sites by private or state actors, or employment

⁹⁹ It is very common for rents to increase substantially after a natural disaster, both in newly rebuilt locations and areas adjoining the disaster zone.

and livelihoods assistance to build cash resources for the landless. Choosing the best response will turn on questions of political suitability and feasibility, the institutional capacity to deliver benefits, and - of course - the desires of the landless themselves.

7. Mitigation measures may create adverse resettlement effects.

Mitigation measures led to relocation of settlements, facilities and infrastructure in a number of the case-studies. These mitigation measures included movement away from faultlines, flood plains and geologically unstable areas, and/or the creation of buffer zones, green belts and restricted development areas. Resettlement can be an inevitable consequence of disaster, and an important measure to mitigate against future disasters. Nevertheless, the case-studies highlight a number of lessons learnt in relation to resettlement as a mitigating measure.

- Widows and female-headed households may be exposed to sexual and physical violence if they are relocated among male strangers.
- Groups with location-dependent livelihoods, and limited opportunities for off-land employment, will face disproportionate income risks if they are relocated from their pre-disaster lands. These income risks encompass disaster victims who rely on secondary sources of livelihoods, including access to common property resources.
- Heterogeneous groups from diverse locations that are resettled in one community may struggle to develop group cohesion and internal mechanisms of sustainable resource governance.
- The act of resettlement itself can lead to conflict and competition with host or adjacent communities, particularly where those communities lay claim to the resettlement sites.
- Assistance gaps may develop when governments, NGOs and international actors failed to coordinate effectively in providing full support to a resettled community, including in relation to public facilities such as schools, kindergartens and health clinics.
- Tensions can emerge in resettlement locations that are assisted by a number of NGOs and international donors, because of jealousy over the different levels of assistance received by community members.
- Staff at some NGOs and international donors may pay lip-service only to coordination imperatives because their self-interest is to spend as much money as possible, as quickly as possible. This is the criteria on which staff at some NGOs are evaluated.

8. Resettlement programming will be challenged by a lack of lead time for planning and consultation.

Resettlement often cannot be avoided in a disaster context. Unlike development-induced resettlement, resettlement after disaster is characterised by relatively short lead times for planning and consultation as a result of:

- the potential for protests, adverse publicity and land invasions should there be delays in providing housing solutions.
- pressures to decommission temporary living centres and provide rapid housing results;
- inherent difficulties in identifying, registering and verifying eligible beneficiaries; and

The government may also need to acquire land for resettlement, before it can consult with beneficiaries as to the location of that land, because the process of land acquisition itself takes considerable time to organise and implement.

Generally speaking, international standards on resettlement are aimed at cases of development-induced resettlement, where planning and consultation can take place prior to displacement.¹⁰⁰ They establish consultation and participation rights for persons requiring resettlement. They require that resettled groups agree to the location of the new settlement. While the leading resettlement standards acknowledge the potential need for adaptation in disaster cases, the challenges of timing and consultation after disasters - and the political sensitivity of resettlement programs - may cause some international agencies to avoid resettlement assistance altogether.

A key lesson from the case-studies is that some level of international assistance is better than none in minimising the potential for adverse resettlement outcomes. A related lesson is that early measures are required to ensure sustainable relief and recovery outcomes for groups requiring resettlement. These early measures will include identifying and assessing victims requiring resettlement, and assisting civil society organisations able to support consultation and participation mechanisms.

9. Restitution of housing, land and property rights in a disaster context tends to occur without an *ex ante* need for formal adjudication of competing claims.

Generally speaking, the disaster's impact in each of the case-studies was relatively localised - at least by comparison with cases of armed conflict. Other than the case of

¹⁰⁰ See, for example, World Bank (2004) *Involuntary Resettlement Source Book*, World Bank; ADB (1995) *Involuntary Resettlement*, Asian Development Bank; OECD (1992) *Guidelines for Aid Agencies on Involuntary Displacement and Resettlement in Development Projects*, OECD.

Hurricane Katrina, victims tend to be displaced to areas surrounding the disaster impact zone, and generally did not move to places further afield. Because the act of displacement was sudden and one-off in nature, there was little opportunity for victims (or non-victims) to occupy land and housing belonging to someone else. The greater risk of land grabbing arose from disproportionately large restricted reconstruction zones (e.g. buffer zones), or (less often) the preferencing of commercial claims over insecure occupation rights.

No case-study involved the establishment of a dedicated land claims commission to adjudicate claims for restitution. In most cases, return and restitution occurred well before a specialist commission could have been established. While adjudication mechanisms will be important, their focus is less likely to be on pre-return eviction of secondary occupiers than post-return resolution of inheritance and boundary disputes. A key lesson is that early recovery efforts may need to prioritise tenure security for those who have already returned, over *ex ante* adjudication of restitution claims.

10. Adjudicating restitutionary claims through the courts may not assist displaced victims with insecure forms of tenure.

The potential obstacles to restitution are greater in the case of extralegal and informal tenures. Commercial groups, often associated with government officials, may take advantage of displacement and dislocation and weak land governance to appropriate land formerly occupied by victims with insecure tenurial rights. The grounds for appropriation will include claims of invalidity, lack of documentation or otherwise illegal forms of tenure. Alternatively, government officials may prevent return to informal or extralegal settlements, on the basis that return will resurrect undesirable slum conditions. In either case, a key lesson is that the courts may not assist restitutionary claims where the basis of the claim includes elements of illegality. In these circumstances, the appropriate response by international actors may not involve capacity-building for existing restitutionary institutions, but support for alternative dispute-resolution mechanisms (including community-based techniques), and advocacy and policy measures, including the development of flexible hierarchies of legal evidence. Such an approach would have to weigh the short-term consequences and long-term impacts of not working through national institutions. A further response, aimed at the restitutionary risks of future disasters, would be to integrate longer term tenure reform and regularisation programs with short-term programs of shelter provision for victims from informal settlements.

11. Women and children face disproportionate obstacles to restoration of housing, land and property rights.

Some case-study evaluations concluded that women, particularly widows, disproportionately lost rights or access to land after disaster-induced displacement. The evidence is less extensive in relation to orphans, although it is likely that they to face

disproportionate risks of lost rights for access to land. In both cases - women and children - the initial vulnerability flows from issues of social standing, lack of "voice" and obstacles to accessing institutions of justice. This vulnerability is compounded in cases of disaster by the fact of displacement, the deaths of husbands or parents, and system changes that create space for land grabbing by social elites (including adult male relatives). Similar vulnerability and dispossession risks have been identified in cases of armed conflicts.

Land is a source of shelter, livelihoods and social status. Vulnerable groups who lose rights or access to land will face long-term challenges to sustainable recovery. National and local institutions may lack the capacity or willingness to assist vulnerable groups because of the pre-disaster status, voice and access issues that created vulnerability in the first place. A key lesson from the case-studies is that international actors need to plan for vulnerability and dispossession risks - particularly those faced by women and children - early in the relief and reconstruction process. This planning needs to take into account the possibility of lack of capacity or willingness on the part of government institutions. Again, therefore, the appropriate international response may be to focus on programs of policy development, information awareness and institutional monitoring.

IV. Recommendations

A. Address the Needs of Informal, Extralegal and Customary Settlements in order to Reduce Vulnerability to Future Disasters.

Post-disaster land programming must take into account the underlying issues that enhanced vulnerability to the disaster. These vulnerability issues are often deep-seated, and can only be met by long-term programming. It is essential that short-term reconstruction efforts include planning for long-term land programs to reduce vulnerability and build resilience. From a land perspective, programs should include measures to:

- Incorporate informal, extralegal and customary tenure systems into disaster planning and risk reduction infrastructure
- Enhance tenure security and (if appropriate) land documentation for informal, extralegal and customary settlements through appropriately decentralised land administration measures, and interim measures such as certificates of occupation;
- Include informal and extralegal settlements in programs to protect land and property left behind during displacement;
- Include informal and extralegal settlements, customary land rights-holders, and undocumented secondary rights-holders, in land-related recovery programming

such as obtaining rights to substitute land or receiving the land documentation necessary for house reconstruction;

- Collect information soon after a disaster on the socio-economic needs of those most vulnerable to landlessness and homelessness after a disaster, including secondary rights-holders, widows and extralegal, customary or informal landholders;¹⁰¹
- Include secondary rights-holders and extralegal, customary or informal landholders and women in consultation and participation mechanisms relating to land and housing options;
- Apply participatory micro-planning techniques to informal, extralegal and customary settlements, particularly so as to improve long-term sustainability and mitigate against the risk of future disasters;
- Integrate micro-planning for informal, extralegal and customary settlements into macro plans for land use and the supply of infrastructure, services and public facilities;
- Develop capacity and awareness among government institutions relating to the tenurial, land use planning and infrastructure/services/facilities needs of informal, extralegal or customary settlements;
- Undertake an audit of public/state lands to inventory available land to accommodate displaced persons;

B. Undertake Early (and Ongoing) Institutional Assessment

A human rights-based approach to disaster recovery requires early (and ongoing) institutional assessment, particularly so as to identify gaps in the institutional protection of victims' rights. Where there are protection gaps, UN agencies should advocate and/or establish programmes to ensure comprehensive protection of the human rights of all victims. The key rights relating to land include rights to housing, security of tenure, non-discrimination and restitution of housing, land and property after displacement. The institutions involved in protecting housing, land and property rights include local, municipal and/or village governments, the Courts, the Parliament, the line agency responsible for land administration and/or housing, the police and traditional or religious forms of authority. After a disaster, these institutions will be subject to new demands and sets of incentives. Some may have degraded capacity. Others may have opportunities to extend their authority to new areas of jurisdiction. Analysing the institutional and/or

¹⁰¹ Often this requires embedding land-related issues in broader physical damage, livelihoods or social protection assessments.

governance protection framework for disaster victims should take into account these new forms of institutional interaction.

Participatory methods are required to collect information about protection gaps for vulnerable groups in relation to housing, land and property rights. These methods must include the views of those most at risk, including women, children, indigenous groups, the disabled, the landless and holders of secondary rights to land. These groups should be interviewed and assessed separately, using local institutions that are best able to access and collect useful information. The key themes elaborated through informal individual and group discussions will include rights and access to land, the emergence of conflicts and obstacles to institutional redress. These key themes should then be the foundation for focus group discussions, and comprehensive quantitative assessments.

C. Support Rapid and Ongoing Measures for Tenure Security and Tenure Reform

Generally speaking, the options for establishing (or re-establishing) tenurial certainty after natural disasters include:-

- Reliance on existing records and land administration institutions.
- Reliance on traditional forms of authority in areas characterised by customary systems of land governance.
- Reliance on community leadership and management structures in extra-legal urban areas;
- Administrative measures to replace lost documents, either on application or through systematic programs.
- Community-based mechanisms to issue new (or interim) forms of documentation, including in previously undocumented areas.
- Legal adjudication of competing claims to land.
- The allocation of building rights by the authorities.

In determining which option is most appropriate to a post-disaster circumstance, national and international actors should take into account the following.

- The extent and accuracy of land documentation prior to the disaster, and the extent to which land administration institutions served the interests of all actual and prospective land users.
- The coverage of the formal system (often less than 30% of the population) and options for the rest of the population not covered by the formal system.
- The nature and extent of any localised land management systems (including customary arrangements), and the degree to which this localised system is (1) sufficiently recognized and regulated, and (2) transparent and accountable.

- The extent of loss or damage both to existing land records and to the land administration system itself.
- The degree of institutional willingness and capacity to engage in community-based tenure security measures, and the extent to which community-based mechanisms may already be underway (with or without official involvement).

D. Provide Land and Housing to the Landless and Holders of Secondary Rights to Land

All victims of a disaster have a right to sustainable recovery and reconstruction. Special measures are required to protect victims that are particularly vulnerable to homelessness. In all the case-studies, the landless and holders of secondary rights to land (especially renters) were disproportionately represented in residual caseloads of victims without housing. International agencies have a particular duty to assist vulnerable groups, particularly where national governments are reluctant to provide land and housing for fear of opening the floodgates to claims outside the disaster zone.

Special measures to protect the landless and secondary rights-holders from homelessness will require the following measures during the relief and early recovery period:

- Rapid assessment of the pre-tenurial situation from existing sources and contact persons.
- Rapid identification and recording of those who are without access to land.
- Rapid socio-economic survey of those without access to land.

The questions to be answered through these mechanisms will include:

Who are the landless and secondary holders of rights to land? How many were victims of the disaster? What are their socio-economic needs, including their sources of livelihoods? What are their legal rights (if any) to return to their pre-disaster places of residence? What obstacles exist to enforcing these legal rights to return? What consultation and participatory mechanisms are already in place for the landless and secondary land rights-holders? What organisations are best suited to engage in or assist consultation and participation involving these groups? What tenure options are available within the legal system?

E. Advocate Resettlement as a Last Resort Response to Requirements for Disaster Risk Mitigation

International resettlement standards stipulate that resettlement should be a last resort to problems of displacement. Reconstruction should be allowed to proceed in areas

vulnerable to future disasters if mitigation measures short of resettlement will suffice to reduce disaster vulnerability to an acceptable level. Examples of mitigation alternatives to resettlement include levee banks and flood diversion mechanisms, buffer zones and tsunami escape mechanisms, mangrove development, earthquake proof housing, protected areas for water catchments and landslide prone areas, and restrictions on building in water catchments and areas necessary for stability.

Minimising reconstruction in unsafe areas should not be based on outright prohibitions, which will cause controversy and popular protests, but on community consensus and the use of safety standards and financial or infrastructure incentives.

F. Protect the Housing, Land and Property Rights of Women and Children

International law prohibits discrimination on the basis of property. The principle of non-discrimination incorporates special measures to protect groups that are most at risk of discrimination. Women and children, in particular, face disproportionate risks of losing rights and access to land after natural disasters. They may also face disproportionate obstacles to enforcing restitutionary rights through local or national institutions. Early in the recovery process, international actors should plan for the restitution and dispossession risks based by women and children. This planning should incorporate lessons from armed conflicts and natural disasters. In brief, it will require:

- Early collection of age and sex-disaggregated data, particularly so as to identify the numbers of widows and orphans affected.
- Rapid assessment of the nature and extent of restitutionary risks faced by women and children, including questions of law, access to justice, and the nature of local authority systems.
- Development of programs that reflect collected data and risk assessments, with a particular focus on policy development, information awareness and institutional monitoring.

V. Potential Tools for Addressing Issues after Natural Disasters.

A. An Initial List of Potential Tools

A land tool is a practical method to implement policies, principles and analytical findings in the field. The following list of potential tools either relate to natural disasters generally, or to the specific case-studies discussed in this report. Not all applicable tools could be collected in the time available for preparation of this report.

1. Disasters and land rights

IASC *Guidelines on Human Rights and Natural Disasters*

http://www.brookings.edu/fp/projects/idp/2006_naturaldisasters.htm

<http://www.law.berkeley.edu/clinics/ihr/c/pdf/IASCOperationalGuidelinesfinal.pdf>

Representative of the Secretary General, *Manual and Guidelines on Human Rights and Natural Disasters*.

Guiding Principles on Internal Displacement, United Nations, E/CN.4/1998/53/Add.2 (1998)

2. Resettlement

World Bank (2004) *Involuntary Resettlement Source Book*, World Bank.

Asian Development Bank (1995) *Involuntary Resettlement Handbook*, ADB

OECD (1992) *Guidelines for Aid Agencies on Involuntary Displacement and Resettlement in Development Projects*, OECD.

3. Post-Disaster Needs Assessment

UNDP, *Post-Disaster Needs Assessment Tool Kit and Methodology* (draft).

Mika Törhönen and M.A. Kularathne (2005) *Land Tenure/Administration Needs Assessment in the Tsunami Damaged Areas in Sri Lanka*, Food and Agriculture Organisation Final Report, 31 March 2005.

4. Vulnerability Reduction and Disaster Preparedness

UN-HABITAT (u.d) *Slum Upgrading and Vulnerability Reduction in Flood-prone Cities/Towns in Mozambique*, available at:

<http://www.unHABITAT.org/content.asp?cid=677&catid=220&typeid=13&subMenuId=0>

UN-HABITAT (u.d) *Land and Water Management for Disaster Preparedness and Vulnerability Reduction in the Lower Limpopo Basin*, available at:

<http://www.unHABITAT.org/content.asp?cid=4599&catid=271&typeid=13&subMenuId=0>;

UN-HABITAT (u.d) *Sustainable Land Use Planning for Integrated Land and Water Management for Disaster Preparedness and Vulnerability Reduction in the Lower Limpopo Basin*, available at:

<http://www.unHABITAT.org/content.asp?cid=676&catid=220&typeid=13&subMenuId=0>,

5. Tenure Security

UN-HABITAT (u.d) *Security of Tenure and Policy Preparation*, available at: <http://www.unHABITAT.org/content.asp?cid=675&catid=220&typeid=13&subMenuId=0>,

National Land Agency (Indonesia), BPN Decree No. 114-II.2005 *On the Land Registration Manual in Post Tsunami Areas* (community-driven adjudication of land rights and boundaries after tsunami disaster).

B. Identifying Gaps in Land Tools

Space and time constraints prevent a detailed examination of gaps in tools for land programming after natural disasters. The following list of necessary tools relate to the key issues of vulnerability reduction and tenure security.

1. Vulnerability Reduction

In order to implement vulnerability reduction measures in the field, there is a need to identify or develop successful land programming tools relating to:

- Rapid identification and verification of all categories of victims.
- Methods of micro-planning that are sufficiently participatory, but also quick enough to be completed prior to commencement of reconstruction.
- Coordination among all housing providers - governmental and non-governmental - in relation to micro-planning, particularly again so as to complete the plan prior to reconstruction.
- Reconstruction programs that build back better and safer in settlements characterised by informal, extralegal or customary forms of tenure.
- Integration of micro- plans for communities with macro land use plans from the government.
- Capacity-building programs for government agencies involved in macro land use planning, particularly so as to incorporate sufficient incentives for all actors to comply with the plan.

- Measures to create a culture of mitigation and prevention among housing providers, particularly so as to reduce pressure from donors for quick (and potentially unsafe) housing results.
- Improvements to the quality of land administration in extralegal or informal settlements, particularly so as to enhance the resilience of record-keeping and documentation in the event of a disaster.
- Upgrading of tenure rights and security in extralegal or informal settlements that are vulnerable to disasters.

2. Tenure Security

There is a need to develop land tools relating to tenure security measures after natural disasters. These tools should include:

- Standardised documentation to allow consistent and useful results where community-based mechanisms are adopted.
- Legal and institutional measures to integrate local tenure documentation with national systems land administration.
- Mechanisms to prevent tenure documentation programs creating dispossession risks for women and children.
- Donor funding agreements that incorporate requirements (mandatory or discretionary as appropriate) to engage in practice tenure security measures.
- Mechanisms to recognize and record group-based interests in land (community land trusts, incorporated land groups etc).
- Incremental improvements to tenure security for groups who cannot afford access to formal legal titles.
- Simplified and improved land administration mechanisms to improve access to record-keeping and information systems for people in informal settlements.

VI. Analytical Framework

This section provides an analytical framework to assist preparation of the detailed case-study reports recommended in Part II above. It also represents an initial attempt at developing a common framework to analyse land issues after all types of disasters, and

across all land system contexts. This common analytical framework will be developed further in the final IASC guidelines on addressing land issues after natural disasters.

The preparation of the case study reports should combine four broad approaches: (a) a pro-poor land perspective; (b) vulnerability and resilience analysis; (c) an institutional and land governance focus; (d) and a discussion of key issues that commonly occur in the aftermath of a natural disaster. These four approaches are briefly outlined below.

A. Broad Approaches to Land and Disaster Case-Studies

1. Pro-poor land perspective

A pro-poor land perspective seeks to promote security of tenure for the poor and equitable access to land and related resources. Among the important characteristics of a pro-poor land perspective are the following:

- *Promoting a range of tenure options:* For the purpose of delivering security of tenure to the majority, land rights cannot be restricted solely to registered rights, and especially not to individual property rights. Rather there are a range of tenure options, from use and access rights to conditional or full rights of ownership or disposal. Such an approach recognizes legal pluralism and the role of traditional institutions.
- *Particular emphasis on a gendered approach:* The gender dimension is of critical importance to a pro-poor approach. No citizen should be deprived of property on the basis of gender, marital status or age or any other reason created by history, policy, tradition or custom.
- *Building on the grassroots.* Supporting the initiatives of poor communities, whether urban or rural, is critical to a pro-poor land perspective. The ability to integrate grassroots initiatives and community-based initiatives within a broader land governance system requires building understanding between poor communities and land professionals.
- *A recognized need to develop new land tools.* A tool is a practical method to achieve a defined objective in a particular context. Tools can come in many forms, including administrative procedures, land information systems, guidelines, and manuals. Many of the existing tools for land administration and land management are not pro-poor because they require a level of education, wealth, influence and technical capacity that is beyond the reach of poor individuals. In many developing countries, the result is often a two-tiered system of land administration and management that places poor people outside the statutory legal regime. This makes them particularly vulnerable in terms of livelihoods, corruption, natural disaster and the like.

For the purposes of the case-studies, therefore, a pro-poor approach requires that the case studies examine how poor and vulnerable groups, particularly women, are affected by the natural disaster. Laws, policies, programmes and tools should be critiqued from the

perspective of how they impact or enable poor people to recover from the natural disaster. A pro-poor perspective also builds on a key lesson from the case-studies discussed in this report, namely that durable solutions to disaster and displacement require special measures to ensure a access to land (and therefore shelter) for vulnerable groups.

2. An Institutional and Governance Focus

As an inter-governmental organisation, the United Nations is particularly concerned with institutions and governance. An important departure point for the study is to describe the set of statutory land institutions responsible for managing the access to, control over and transfer of land and related natural resources. This is also sometimes described as the "land system". Statutory land institutions include: land policies, land laws and regulations, land administration systems (including land information systems).¹⁰² In this context, "statutory" simply refers to those aspects of a land system that derive from legislative authority and instruments.

Statutory institutions represent only part of the institutional context for land. Hence there is a need for a broader perspective on land governance generally. Such an approach brings in land stakeholders that do not necessarily derive their authority from legislative instruments. Table 1 provides a broad checklist of the actors involved in land governance.

FAO and UN-HABITAT define land governance as “the process by which decisions are made about access to and use of land, the manner in which those decisions are implemented and the way that conflicting interests in land are reconciled” (FAO and UN-HABITAT 2007 forthcoming). The definition builds on a multi-stakeholder perspective and highlights not only the importance of decision-making process, but also the impact of those decisions. In some cases, land policies may be appropriate but are never implemented, or are implemented in a way that privileges one group over another. Moreover, conflicts over land are inevitable because land is a scarce resource that attracts the interest of many different stakeholders. How those conflicts are resolved is a significant indicator of the quality of land governance in a country. The importance of power relations and politics is a vital component of a land governance approach, and reinforces, therefore, the pro-poor approach. For FAO and UN-HABITAT, good land governance is characterized by the following principles: equity, effectiveness, accountability, transparency, civic engagement, rule of law, security, subsidiarity, and sustainability (see FAO-UN-HABITAT 2007 forthcoming).

The implications of an institutional and land governance approach for the preparation of the case study reports can be summarized as follows:

- *Impact of natural disasters on statutory institutions:* The case study reports should examine what happens to statutory institutions under the stress of a natural disaster. It is therefore important to understand (i) the state of, and relationships between, the institutions prior to the disaster; (ii) the responses of these institutions and new

¹⁰² See Dale, Peter F. and John D. McLaughlin *Land Information Management*, Clarendon Press, Oxford 1988.

relationships that emerge in the aftermath of the disaster; and (iii) how the lessons-learned from the natural disaster are incorporated into institutional reform for improved disaster preparedness.

- *Broader focus on the impact on other institutions and stakeholders:* The full land governance picture prior to the natural disaster must be described, using Table 1 as an indicative check-list of stakeholders. Their relative sources of influence and power, as well as their relationships amongst each other and to the formal institutions should be described. How these other stakeholders and institutions respond to the disaster and their relative resilience should also be discussed. Whether these institutions or stakeholders are integrated in the statutory land regime should also be highlighted.
- *Post-disaster interventions can be assessed based in part on their fulfillment of the principles of good land governance.* Do the laws, policies and programmes promote good land governance?

3. Vulnerability and Resilience

Vulnerability describes the state of readiness and resistance to the adverse effects of a disaster. Resilience describes the ability to recover from a disaster, and to mitigate against future disasters. To date, the natural disaster literature has not extended its vulnerability and resilience analysis to issues of land tenure and natural disasters. The guidelines for addressing land issues following natural disasters, therefore, are intended to help fill this important knowledge gap.

Concepts of vulnerability and resilience should be woven into the analysis of each case-study report. The case-studies and materials in this scoping paper suggest that vulnerability in a land governance system not only encompasses dysfunctional, discriminatory or incapable land governance institutions before a disaster, but includes failures to:

- Build back better and mitigate the risks of future disasters through effective spatial and land use planning.
- Engage in sufficient consultation and participation with all stakeholders, including those discriminated against by pre-and post-disaster land governance institutions.
- Coordinate efforts across different levels of government, among the different institutions of civil society, and with international reconstruction actors.
- Implement land policies and programmes due to institutional competition and struggles for control over resources.
- Protect the land rights of vulnerable groups after a disaster, including renters, squatters, widows and orphans.

To some extent, resilience in a land governance system describes the opposite situation to vulnerability. Essentially it describes a land governance system that not only recovers but improves after a disaster, including in relation to mitigation against future disasters. More generally the disaster literature defines resilience to include: "the amount of change that a system can undergo while still maintaining the same controls on structure and function; (2) the system's ability to self-organise; (3) and the degree to which the system is capable of learning and adaptation."¹⁰³ Each case-study report should consider these aspects of resilience, including in particular:

- The extent to which different land institutions responded quickly and effectively after the disaster.
- The extent to which different land institutions displayed a capacity to adapt to unfolding post-disaster events.
- The response of individuals and communities to land policies and programmes designed to meet their needs.

4. Key Issues

Finally, experience with natural disasters has indicated that there are common land-related issues that arise following a natural disaster. A preliminary framework for post-disaster land issues is outlined below. One of the emerging observations regarding key issues is that there is a need to manage expectations regarding what can be achieved in terms of systemic changes in a post-disaster context. As Augustinus and Barry have concluded when applying a soft-systems analysis to post-conflict situations,¹⁰⁴ "many land management problems in a rapidly changing situation should be viewed as conditions to be alleviated rather than as problems to be fixed." While many stakeholders see disasters as an opportunity to, for example, permanently secure land rights, reform the land administration system, or decentralize responsibilities, such attempts can prove overly ambitious.

TABLE 1: INDICATIVE LIST OF LAND STAKEHOLDERS

Public Sector	Private Sector	Civil Society
<ul style="list-style-type: none"> • Politicians • Military (where appropriate) • Disaster Management institutions (existing and specially created) • Line Ministries: Land, 	<ul style="list-style-type: none"> • Land developers (formal/informal) • Estate agents (formal/informal) • Lawyers, notaries • Surveyors, Planners, engineers, other professional 	<ul style="list-style-type: none"> • Non-governmental organisations • Community-based organisations • Civil society organisations • Universities, research institutes, technical institutes

¹⁰³ Cumming, G. S., Barnes, G., Perz, S., Schmink, M., Sieving, K. E., Southworth, J., Binford, M., Holt, R. D., Stickler, C. and Van Holt, T. (2006), *An Exploratory Framework for the Empirical Measurement of Resilience*, *Ecosystems* 8: 975–987.

¹⁰⁴ Augustinus, C.; Barry, M.B. (2006) *Land management strategy formulation in post-conflict societies* 38 (302), pp. 668-681.

<p>Housing, Justice, Forestry, Agriculture, Planning, etc.</p> <ul style="list-style-type: none"> • Local Government: state/provincial, district/ward, village, municipal departments related to land and land management • Professionals: land professionals, city managers, planners, regional planners, engineers, architects, natural resource managers, finance, 	<p>groups/societies</p> <ul style="list-style-type: none"> • Construction industry • Bankers, savings organisations, micro-finance, money-lenders, • Chamber of Commerce • Media • Small holders/ farmer groups 	<ul style="list-style-type: none"> • Religious and faith-based orgs • Media organisations
Traditional Authorities	Households/Individuals	Intl Development Partners
<ul style="list-style-type: none"> • Traditional Chiefs, elders, councils • Informal settlement leaders • Conflict resolution mechanisms • Influential persons (religious, etc) 	<ul style="list-style-type: none"> • Women and men across socio-economic, ethnic, religious and other groupings • Specific beneficiaries of land related programmes • Specific people affected by land management decisions (eg. Expropriation, evictions, etc.) • Land owners and leaseholders • People on intermediate forms of tenure (certificates, group title, etc) • Landlords and tenants • Squatters • Sharecroppers • Refugees and internally displaced people 	<ul style="list-style-type: none"> • World Bank • UN Agencies • Bilateral agencies • Private Foundations • International NGOs/ Charities

B. Post Disaster Land Issues – Draft Outline for the Case-Study Reports

This section provides a common case study structure to facilitate comparison between the case-study reports. Each case-study report will be approximately 50 pages (not including cover, table of contents, bibliography, annexes, etc.) organized into 5 sections as follows:

1. Introduction: the Disaster and the Response (2-3 pages)
2. The Land Context (6-8 pages)
3. Critical Land Issues after the Disaster (24-28 pages)
4. Lessons-Learned and Recommendations (5-7 pages)
5. Tools (8-10)

These sections are described in more detail below. While the overall 5-section structure will be used by all authors, the issues discussed in each section will vary from case-study to case-study. The issues proposed under each section heading, therefore, should be seen

as an indicative “checklist” of issues to consider. Only those issues relevant for the case study should be discussed. Finally, specific guidance regarding supporting material is included in the relevant section.

1. Introduction: the Disaster and the Response

The purpose of this section is to provide a broad overview of the disaster, its impacts and the response. It should be a factual and chronological narrative that identifies the significant milestones in the international response. Issues to be considered include:

(i) The Disaster and its Impacts (1 page)

- Date and type of disaster, indicating any magnitude data where relevant
- Impact of the disaster: (i) human impact: deaths, injuries, internal displacement; (ii) physical damage and cost estimates for reconstruction taken from damage and needs assessments): destroyed and damaged housing, infrastructure, services, lost/unsafe land, etc; (iii) economic and livelihoods impacts (iv) impact on Government (lost lives, damaged buildings, etc.), including at local levels.
- Physical affected area: total affected area; geographic concentration of the disaster (eg. epicenter location), predominantly urban or rural; any other relevant detail (for example, in Indonesia and Pakistan, the disaster struck in areas with a history of conflict and both occurred in physically remote areas).
- The disaster section should be accompanied by a map illustrating where the disaster occurred and, if possible, some of the names of the major affected states/provinces/cities and villages discussed in the paper. These maps should be readily available on the web (eg. <http://www.reliefweb.org>)

(ii) The Response (2 pages)

- The narrative should include a fact-based chronology of the response, including key milestones such as: needs assessment, official end of the emergency phase, establishment of reconstruction authority, date key land-related policies were produced (eg. housing, resettlement, planning, guardians, renters/squatters polices, etc.); implementation milestones over time (eg. number of houses reconstructed in year 1, year 2).
- The narrative should include factual information on key stakeholders and how leadership in the response changed over time (eg. in Indonesia, the planning authority initially took the lead; and then a reconstruction authority was established; UNHCR took the lead in emergency shelter and UN-HABITAT led on permanent shelter):
 - Which specific organizations played critical roles and at what stage of the response: government (specific line ministries/military/local government/other?); UN system; Donors (World Bank, regional banks, bilateral agencies); International NGOs; national NGOs; national professional, academic, or other organizations
 - Consideration should also be given to different roles: (i) needs assessment – emergency and reconstruction; (ii) advocacy; (iii) policy support – eg.

- specific organizations as well as ad hoc working groups, for example; (iv) coordination; (v) implementing land-related projects - what kinds, where, at what scale; (vi) monitoring and evaluation.
- Finally, this section should include some political analysis of the context and how it evolved over time: who competed with whom, over what and with what result?
 - Authors should take into account: competition between government agencies; competition between the international assistance community and the government; competition within the international assistance community (WB/UN; UN/NGOs; international vs. national NGOs).

2. Land and Country Context

Having reviewed the broad disaster and reconstruction context, this section provides an overview of the context related to land. This section should provide relevant background regarding the pre-disaster situation related to land. Authors may need to provide some relevant historical, political or other information to enable readers to understand the underlying factors contributing to the post-disaster land issues. Some suggestions regarding country contextual information and regarding the specific land context are included below. Again, these are issues to consider, but only include where relevant. This section does not have to be structured in two parts (country context, land context).

(i) *Country Context*

Information that may be relevant to include:

- History: relevant historical information (eg. colonial history in relation to land); history of conflict over land in the affected area?
- Government system: federal, unitary, etc; levels of Government and degree of decentralization/autonomy; identify any long-running political issues/conflict between the central government and the affected area. Identify specific institutions responsible for disaster management at national and local levels
- Economy: major sources of revenue; GDP and relative incomes of people living in affected area; sources of livelihoods for people in affected area
- Social: literacy rates – national and vs. affected area, social structures in the affected area: who are the rich/powerful, who are the poor/vulnerable, who are the socially excluded in the affected area; gender roles
- Environment and Natural Resources: water, land, forests, etc.

(ii) *Land Context*

This section should provide an overview of the tenure, policy, legal and institutional framework for land in the country, with an emphasis on the pre-disaster situation. It should address both statutory and customary/traditional institutions. The statutory system should also be critically appraised, comparing how the system is designed to operate against how it operated in practice prior to the disaster. Issues to consider:

- Land Tenure

- Context of land tenure (constitution, religion a/o customary system(s))
- Tenure types (formal, customary, informal) – rural vs urban if appropriate
- regional differences, pluralism
- Land administration system
 - national vs local responsibilities
 - land registry and cadastre/mapping (are they together or not)
 - other land records (e.g. for state land, forest, mining, land tax)
 - land use (planning) responsibilities, interrelation with land rights system (sub-division)
 - spatial planning responsibilities, relation to land use and land rights
 - key procedures (first registration, inheritance, sale, mortgaging, subdivision)
- Institutional framework
 - Min. of Lands (or other(s))
 - cadastre/surveyor general's office
 - land registry (in or outside of court)
 - coordination between cadastre and land registration
 - decentralized offices, part of local or national government, national coord
 - private practitioners (licensed surveyors a/o planners, conveyancers/notaries)
 - local land use / planning offices, national plan office, coordination
 - informal (local) land record keeping a/o planning structures
 - customary (local) land record keeping structures
 - dispute resolution mechanisms (customary leaders, courts)
- legal framework
 - laws and (government) regulations related to (first) registration, land use and planning
 - lower regulations (minister, agency, decentralized government.)
 - contradictions within (formal) legal framework
 - customary a/o religious (legal) traditions
 - informal habitual behavior, internal rules
 - contradictions and/or complications between formal, customary and informal
 - legal pluralism and forum shopping
- policy framework
 - land (management) policy, policies or lack thereof
 - land administration policy
 - projects for upgrading a/o titling (or plans for it)
- reality check
 - awareness of formal land administration in society (per segment)
 - impact of formal land administration (% titled, mapped, ..)
 - level of up-to-dateness of land records

- level of informal transactions (in formal land)
- actual processes for key procedures (eg. role of intermediaries, facilitation fees)
- status and developments in land market (incl. informal)
- impact of land records (coverage, up-to-dateness, quality, reliability)

3. Critical Land Issues after the Disaster

In this section, the critical land issues are to be analyzed in depth. A list of common land-related issues is included as an Annex to this guidance note. Authors should review both the headings and the bullets of the Annex against their own experience and discuss those issues that are most relevant to their case. In the case of Indonesia, for example, the preliminary list of key issues included 6 issues: security of tenure and land rights; access to land for housing and infrastructure; resettlement; planning; land governance; and inheritance.

- Each key issue should include the following information:
 - Brief Explanation of the Issue: what is the issue, what information/knowledge became available to put it on the agenda, when did it emerge, who raised it, was it relevant throughout the affected area or only in selected areas – where?
 - Analysis of the issue: why does the issue exist, including underlying socio-economic drivers, governance issues, land administration issues, legal issues, etc;
 - Policy options considered: is there evidence that other options were considered; how was the choice made?
 - Policy implemented: describe the policy, referring to formal policy statements, implementation guidelines, training materials, etc.; describe also any monitoring systems that were used or evaluations conducted.
 - Lessons-learned: reasons for failure or critical factors for success; how could the policy or its implementation be improved
 - Recommendations: under what conditions is the policy response appropriate/inappropriate;
- This section should also include some boxes to illustrate the issue:
 - Mini-case studies presenting the specific experiences of villages, urban neighbourhoods, and/or individuals (for example, dealing with inheritance);
 - Potential good practices or not-so-good practices in implementation – where things went right; where things did not go well
 - Potential tools – reference to specific tools used to facilitate implementation

4. Lessons Learned and Recommendations

The lessons learned section should derive from the case-study itself. The recommendations section, however, should be oriented towards advising Governments,

the international community, NGOs and others on how to respond to land issues. Consideration should be given to, inter alia:

- Recommendations regarding different stages of response on land issues: needs assessment, stabilization measures, policy making, implementation, monitoring and evaluation;
- Recommendations for specific stakeholders: eg. Government; development banks; bilateral agencies; UN Agencies; international NGOs, national NGOs, etc.;
- Recommendations regarding sequencing and timing of different interventions in the critical issues areas, etc.

5. Tools

This section should identify and describe any land-related tools used in the case study that may be of use for future disasters. The section should also identify any specific gaps (tools that, had they been available, would have been of benefit).

According to the Global Land Tool Network (GLTN), a tool is “a practical method for achieving a defined objective in a particular context.” A land tool can be “an administrative procedure, a method to organize people, or a way to make a decision on land issues.” For more info, please see the Frequently Asked Questions document available at <http://www.gltm.net>

In some cases, the tool will be widely used, such as for example, community land mapping and community-driven adjudication in Indonesia. One or more manuals will exist in country and electronic and hard copies of the ‘best’ ones should be collected. In other cases, the tool has been developed for the specific emergency context but could be usefully generalized to facilitate adaptation in other contexts.

A common format will be developed to document tools, including information regarding:

- Name of the tool
- Organisation that developed the tool, including contact person in the field and at HQ
- Organisation that applied the tool in the specific post-disaster context
- Description of the tool: purpose, how it was used/adapted to the context
- Lessons-learned: successes and short-comings
- Recommendations: pre-requisites for application; considerations when adapting
- Attach a copy of the tool (electronically and hard-copy).

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Annexure 1: List of Persons Contacted

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