This document has been drafted by the Shelter Recovery Working group, in close collaboration with UN Habitat, currently leading the shelter recovery response in view of the recent flooding in Lesotho. It highlights the immediate needs under the shelter sector derived from the recent PDNA exercise undertaken as well as the rapid assessment report compiled in January 2011. It is envisaged that this document will assist agencies to direct resources and funding appropriately and strategically in order to effectively contribute to the efforts of the flood recovery response within the shelter sector.

Summary of recommendations for all stakeholders.

- Ensure sufficient funds are made available to support an in depth structural hazard assessment and that informs on construction techniques used and in so doing sets minimal technical standards against traditional shelter designs. And that incorporates a vulnerabilities assessment which ensures that needs of those affected are understood and beneficiary selection process is transparent.
- Promote a flexible approach to the reconstruction and recovery process that contributes to safer long term building solutions that compliment local knowledge. (In addition preserves historical knowledge of rural housing architecture and promotes sustainable rural development).
- Advocate for a common communications plan and messages to inform the public about risks and shelter maintenance (outreach materials to promote low cost repair and maintenance techniques).
- Encourage monitoring and evaluation of the recovery process and documentation thereof.
- Incorporate Disaster Risk Reduction activities within the “Build Back Safer “approach being taken.

Background

During the summer of late December 2010 and February 2011, the Kingdom of Lesotho experienced an unexpected amount of rainfall. According to the Lesotho Metrological Services the rainfall was categorized as above normal, and the accumulative recordings showed that it was the highest amount of rain experienced by the country since 1939.

As a result of this unusual climatic phenomenon, widespread flooding was experienced across several districts, with approximately 2000 to 2500 of households affected and 26 reported deaths across six districts. Around 1000 households are in need of immediate support. A rapid assessment of the extent of the damage reflected that about 252 houses completely destroyed, 100 with walls damaged, 162 with roof damage and 505 houses that have flood damage.

The areas that reported the most extensive damage was that of Berea, Leribe and Botha Buthe. In particular those households located in the mountain highlands were also particularly affected. To date a total of 300 persons have been issued with immediate support through distribution of emergency items, such as tents, tarpaulins, shelter kits, clothing, blankets and NFI goods by various aid agencies. NFI distribution carried out by various agencies and distributions are currently ongoing.
Challenges

There are a number of factors which need to be considered in the design of an effective and appropriate shelter strategy, and especially one that includes a focus on risk reduction.

Pre existing socio economic factors

Of particular relevance is the fact that there exists a significant gap in the market for housing. A country where a vast majority of the population lives below the poverty line, a house can be particularly important in that many income generation activities tend to be home based or home reliant. It is also one of the key assets that can contribute to the process of raising families out of poverty.

The major demand for housing originates from those individuals employed by the informal (rural) sector. A large proportion of the housing supply in Lesotho originates exclusively through the public/private sector institutions focused on targeting the middle to high income sector. The current legislative systems provide little incentive to support the demand from the lower income households.

The limited availability of affordable housing solutions as a result of variety pre-existing development constraints forces many into utilizing alternative solutions made available to them through the informal sector to meet their housing needs. This includes settling in areas that would normally be used for agricultural purposes and constructing housing structures that subjects them to living in sub-standard conditions, that exposes them to vulnerabilities in the event of natural disasters.

Access

Majority of the affected population are located in the highlands and villages spread in the mountainous areas. The flooding has cut off access to many so it may be very difficult to reach those affected. With limited resources (see below) this may mean that the focus ends up on the easier to reach (urban) areas rather than on the (rural) areas with most needs.

Limited or lack of Funding

There are currently three major shelter actors (Habitat for Humanity, World Vision and the Lesotho RedCross) in country however the needs and the area of coverage out whey’s that within their existing funding and resource capacities.

Total damages are estimated with Lesotho Maloti 22 million, comprising of 11.7 million for fully destroyed houses, Lesotho Maloti 5 million for the damaged walls and Lesotho Maloti 2.9 million for damaged roofs, and 2.6 million for damaged cause to household foundations through water seepage through floors and walls. (Please refer to PDNA assessment report for more account of the detailed damage/loss cost estimations).

At this present time partners have, combined only sufficient funding to support reconstruction of 15 (Maloti 350000) households. There is a need for a swift injection of funds to support the immediate emergency response efforts.
Lesotho Floods 2011
Shelter Recovery Response

**Host Families / Winter Season**
Winters in Lesotho is generally harder with a large amount of household income spent on making sure that they are protected against the severe weather conditions? With many households damaged by the floods, and the winter season closing in many households will now be faced with new vulnerabilities during this year’s winter. Approximately 20% of households whom have been affected by the flooding have taken up residence with neighbors or relatives and as a result in an increased economic and social burden on existing community structures.

**Recommendations for immediate recovery and response.**

In the development of a strategy, a number of assessments need to be conducted. A PDNA has already been undertaken and this focuses primarily on an assessment of physical damage. In addition to this, it would be useful to undertake a more detailed a structural hazard assessment and vulnerability assessment.

**Structural Hazard Assessment & Vulnerabilities Assessment**

There is a need for a detailed assessment of renewed vulnerabilities of those individuals affected by the floods, which should help determine transparent criteria for beneficiary selections. This assessment, undertaken by a shelter sector partner(s) would help focus immediate support to those most vulnerable taking into consideration the immediate needs of those impacted by the floods.

Many of the housing found in the rural areas are constructed using traditional building methods handed down from many generations. The main construction material used for the construction of walls (mud bricks and stick mud, (sand) stone and concrete bricks). More than 40% of the houses partly damaged or fully destroyed houses were constructed using sandstone or mud bricks. Whilst these building techniques survived generations, the recent ruthless weather conditions have weakened the house ability to provide sufficient protection against the elements.

A detailed structural hazard assessment of the households that have been severely affected needs to be undertaken. The assessment through a community participatory approach should incorporate an analysis of building techniques so as to preserve traditional architectural methodologies. Whilst at the same time advise and recommend cost effective construction techniques that would strengthen and reinforce existing structures. As well as contribute to the development of a local rural building code.

**Monitoring and Evaluation**

In order that partners are able to better measure adapt and manage the need in relation to the circumstances on the ground, so that the recovery process reflects that of the initial response plan. There needs to be strong evaluation mechanisms in place to monitoring the short and long term efforts of the response.

**DRR & Community Advocacy**

The majority of the affected communities are made up of those living within the informal housing settlements. They are also generally lower income groups and as a result face a variety of constraints using alternative solutions in meeting their shelter needs. This includes utilizing cheap local resources
Lesotho Floods 2011
Shelter Recovery Response

(mud bricks, concrete blocks and sandstone) in the construction of sub-standard housing structures and settling in areas that are vulnerable to disasters such as rock falls, landslides and flooding.

The ever present affects of climate change within the region, shows the need for ongoing mitigation against potential disasters. Targeting specifically the rural communities, and encouraging settlement in safer habitual environment that pose minimal risk to individuals.

There is a need to map out the existing settlement patterns of the population. To educate inform and sensitize communities of the risks of, building utilising sub-standard materials and settlement in areas that are prone to disaster. Through promotion of community based disaster preparedness advocacy and planning.

COMPARATIVE RISK ANALYSIS

The following areas of concern have been identified that would need to be taken into consideration whilst coordinating response effort;

- Flash Floods
- Electric Storms Thunder & Lightening
- Winter Season preparedness
- Land Slides
- Associated Risks in the event of a Heavy Wind.

In an effort to manage the ever present risk of disaster there is a need to conduct a complete risk analysis of the above areas of concern with regard to disaster management and contingency planning.

Flash Floods / Landslides
The variation in the topography and geography are key factors that distinguish the various ecological zones in Lesotho, namely the lowlands, the foothills, the highlands and the Sengu River Valley.

The most fertile areas of Lesotho can be located in the foothills. Its fertility means that it is associated with large agricultural productivity. However, the arable land is vulnerable due to severe soil erosion and it is estimated that around 40million tons of soil per year is lost through soil erosion.

Village settlements are scattered across the lowlands and highlands as a result of uncontrolled settlement planning and inefficient land allocation systems means that communities located in these areas are vulnerable to risk of landslides and flash flooding and potential rock falls.

Electric Storms, severe thunder & lightening

Given that Lesotho is located approximately 1600mtrs above sea level it is subject to unusual shifts in weather patterns. Thunder storms are one of those unusual phenomenons that pose a risk to communities located in the highlands, whose households are made with thatch roofs that are in danger to lighting strikes and fires without any lighting rods. Communities need to be made aware of the risks associated with respect to severe thunderstorms.
Incoming winter season poses new threats of vulnerability to those whose houses have been damaged/destroyed by the flooding.

Winters in Lesotho are generally dry and cold, and are characterized by systems with the resulting clear skies, dry air and warm to moderate temperatures during the day, with sudden cold temperatures just after sunset. In some areas rainfall is experienced is mainly in the form of snow and is common phenomenon over the highlands, and sometimes over the lowlands.

Heavy snowfalls often occur either at the beginning or the end of the winter season. With many of those impacted by the floods having to deal with the loss of existing shelters. It is important to identify contingency stocks of emergency kits and packs in place in the event of severe winter conditions being experienced.

Who are we?

The Shelter Recovery working group is a coordination cell of the Lesotho floods emergency recovery response teams. They include the DMA, UN Habitat Lesotho Red Cross, and Habitat for Humanity and World Vision respectively. Should you require further information on the ongoing response efforts, we recommend that you visit our website at https://sites.google.com/site/lesothoshelter2011/

Should wish to share/donate any information that would contribute to the response efforts please do not hesitate to contact us at lesothoshelter2011@gmail.com