



Photo 6 On-the-job training of local artisans is an important aspect of the project

Local artisans have been identified and have received on the job training. A key aspect of the intervention is to build local capacity so that the villages remain with skilled artisans trained in sound construction for flood prone areas long after the project has closed. The project has produced an easy to use illustrated manual which will be used not just in Chikhwawa but in other flood prone areas in the country.



Photo 7 The safe haven complete with toilets and kitchen.

Safe haven will be a rescue point in times of disasters and a distribution centre for relief items. In normal times, it can be used for community activities such as school, mobile clinic, women homecraft centre etc. The safe haven will reduce disruption to learning during disasters as existing schools may not be used as rescue points and relief distribution centres.



Photo 8 These children now learning under a tree may learn in the safe haven during normal times.



Photo 9 Village Headwoman Jana stands in front of a completed demonstration house in her village.

" Our floors and walls are always wet during the rainy season because of rising and running water. We now know how we can overcome these problems. I will encourage my subjects to build their houses following the building techniques we are learning" - Village Headwoman Jana of TA Makhwira, Chikhwawa.

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LIVING WITH FLOODS

For most communities living in areas that normally experience low to moderate level flooding, relocation is generally not an option. Such communities need to be supported to 'live with floods'.

UN-HABITAT is supporting a disaster risk reduction intervention in the area of T/A Makhwira in Chikhwawa District.

Objective:

To reduce vulnerability to floods for communities living in low lands prone to low and moderate level flooding by reinforcing local capacities through innovative small-scale mitigation interventions for floods to support the alternative strategy of Living with Floods rather than relocation.

Accomplishments:

1. Demonstration houses, improved toilets and safe haven (rescue centre) constructed in villages of Traditional Authority Makhwira in Chikhwawa District.

2. Improved awareness, dissemination and advocacy activities undertaken at community, district and national levels.
3. Local capacity in safe house construction improved through on the job training of community artisans and a construction manual.

Implementing partners: Department of Disaster Management Affairs, Ministry of Lands and Housing, Chikhwawa District Council, Habitat for Humanity Malawi.

The problems.....



Photo 1 Rising and flowing water causing dampness and weakening foundations



Photo 2 In extreme cases the stability of the house is compromised

Many houses lack proper foundations and easily collapse during floods. Low or no foundations let in flood water into the house.

Lack of damp-proof course allows dampness to rise through the walls causing unhealthy living conditions inside the house and weakening the foundations.

Poor roofing is a major problem in the area resulting in leakages.

The demonstrations lay strong emphasis on sound foundation construction and how to construct a roof that overcomes leaking.

The intervention is not so much about materials or how to design houses (important though they are), but **how to build them.**

The solutions.....



Photo 3 One of community awareness meetings

Community awareness is an essential part of the intervention. Apart from community awareness meetings, villagers were also invited to construction sites at key stages of construction to explain why certain things are being done the way they are being done.



Photo 4 Good foundation construction is the basis of a sound house

Raised foundation prevents running water in normal floods from inundating the inside of the house. Damp proof (plastic sheeting which in the area is normally used on the roof to prevent roof leakage) is encouraged to be used in the foundation to prevent rising damp so that the inside of the house is dry always. Sound roofing techniques even using grass thatch will address the leaking problem.



Photo 5 The raised foundation, ring beam and heaped roof are important aspects of sound house construction

Apart from floods and roof leakages, other important considerations are strong winds and earth tremors. Heaped roofs perform better in strong winds than pitched roofs because the winds blow over them rather than through them. The ring beam holds the house together during earth tremors.