

C.13 Nicaragua - 1972 - Earthquake

Case study:

Planned camp

Case study credit: CUNY Center
See Shelter Projects 2008 for more

Disaster:

7.5 magnitude earthquake
Managua, Nicaragua

Disaster date:

23 December 1972

Project type:

Shelters in community-
grouped camp in Coyotepe,
Masaya

Houses damaged:

50,000 destroyed, 24,000
damaged

Project target population:

180 then 360 families
in tents; afterwards 310
families in polyurethane
igloos

Occupancy rate:

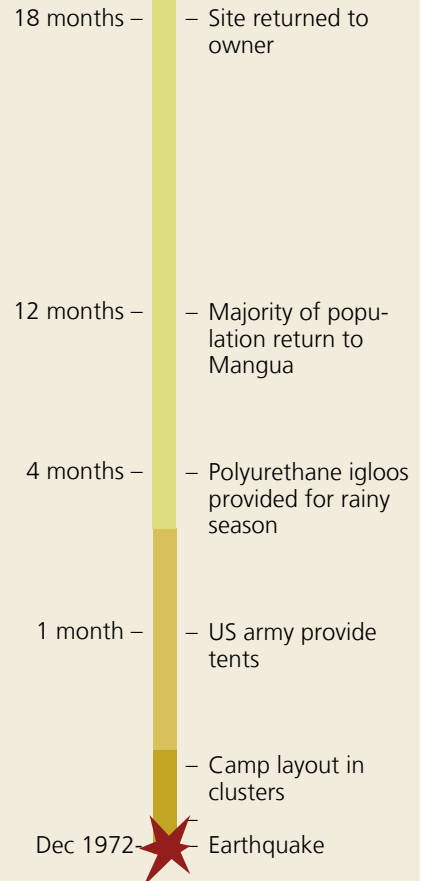
60% of tents, 45% of
replacement igloos occupied
on handover

Shelter size

Tent: approximately 12m²
Igloo: approximately 20m²



Project timeline



Summary

Working Working with displaced families, the NGO created a camp layout in Masaya which for the first time grouped families into group clusters, and supported community networks. All other camps previously were laid out along strict military lines. This new formation resulted in a camp with a much higher occupancy rate than any other camp built in response to the disaster, and at much lower costs.

The camp was laid out using square 'clusters' of 16 shelters, with a central space for administrative buildings and social or recreation areas. The clusters were placed so that the camp could be expanded after the initial construction phase. This would allow the camp to have capacity for up to 3,500 people (700 shelters). The layout was designed to accommodate either community or individual cooking and washing facilities. The latrines were placed outside of all of the shelter clusters along the side of the camp.

The design also took into account the possibility that the camp would exist for the longer-term, or would be upgraded into a permanent settlement. Space was provided for the installation of standard drainage, and semi-permanent water and sewage facilities.



Planned camp for earthquake affectees
Photo: Ian Davis