POST-DISASTER POST-CONFLICT EMERGENCY SHELTERS: A HOLISTIC APPROACH

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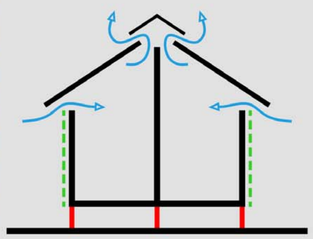
TRADITIONAL

SHELTER CONTEXT-DEPENDENT



Main features of the shelter design are retrieved from vernacular african architecture:

- Footprint layout;
- Separation between wooden load-bearing structure and external skin;
- Superstructure detached from ground level, to increase protection from wild animals and insects, and to enhance natural ventilation;
- Openings to facilitate flow of fresh air for increased cooling;
- Use of natural materials such as adobe and straws;
- External decorative patterns.

- What need did the project fill?
Context-dependent Sheltering solutions

- Why is it different/ special/ unique?
We account for cultural needs and traditional elements of self-construction to mitigate the social impact of living in shelters

- What challenges were faced and how were they overcome?
1. Providing shelters solutions for NGOs at affordable cost, whilst also accounting for social and environmental needs
2. Conciliating the (often contrasting) spheres of social and environmental sustainability and economic viability

- What did it achieve? What are the current and future benefits?
Accounting for the three spheres (social, environmental and economic) enables for a smoother transition, from temporary shelters to permanent housing

STRUCTURE

The structural design takes inspiration from traditional construction techniques, yet it can be easily assembled and used in different contexts and scenarios. It comprises of a series of timber members (beam & post) stabilised by steel cross ties.

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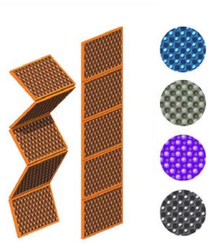

FOAM PANELS

The external envelope is made of waterproof foam panels; easy to pack and transport and available in several colors, to echoing with the african local tradition of mural painting.

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TEMPORARY SHELTER
(phase B)

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ADOBE

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THATCHED ROOF

Foam panels can be plastered with adobe during the transition phase from temporary shelter to permanent housing.

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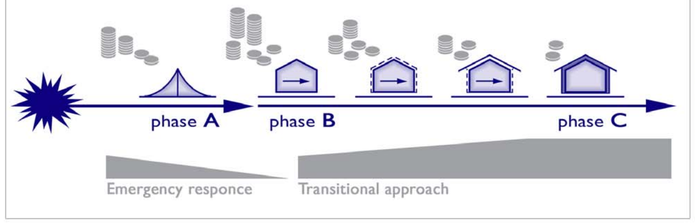
PERMANENT HOUSING
(phase C)

CUSTOMIZATION

Once permanent, houses can be customised with mural paintings, mats and rugs, in line with the local customs and traditions.

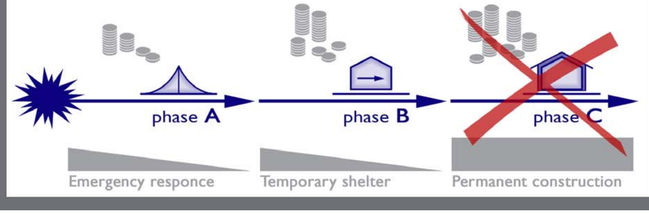
INCREMENTAL PROCESS



- Cost: 2500€
- Costruction: 4 pax in 24hr
- Life span: same as permanent housing
- Environmental sustainability
- Context-dependent
- Customisable
- Internal comfort
- Social suitability

WHAT EXISTS...

THREE-PHASE RECONSTRUCTION



BETTER SHELTER
IKEA
(phase B)

- Cost: 1000€ (excluded dismissal)
- Costruction: 4 pax in 4hr
- Life span: 3 years
- No environmental sustainability
- No context-dependent
- Not customisable
- Poor internal comfort
- No social suitability

T-SHELTER
AZRAQ CAMP, JORDAN
(phase B)

- Cost: 1250€ (excluded dismissal)
- Costruction: 4 pax in 16hr
- Life span: can be disassembled
- No environmental sustainability
- No context-dependent
- Not customisable
- Poor internal comfort
- No social suitability

Looking for color: T-Shelters in the Azraq camp, painted by young artists with the help of local refugees. A way of dignifying their day-to-day lives, to make the place feeling more like home than a temporary shelter.