



## **OBJECTIVES OF THE MISSION**

From Emergency assistance towards longer-term shelter strategy and self-reliance

## SECTOR

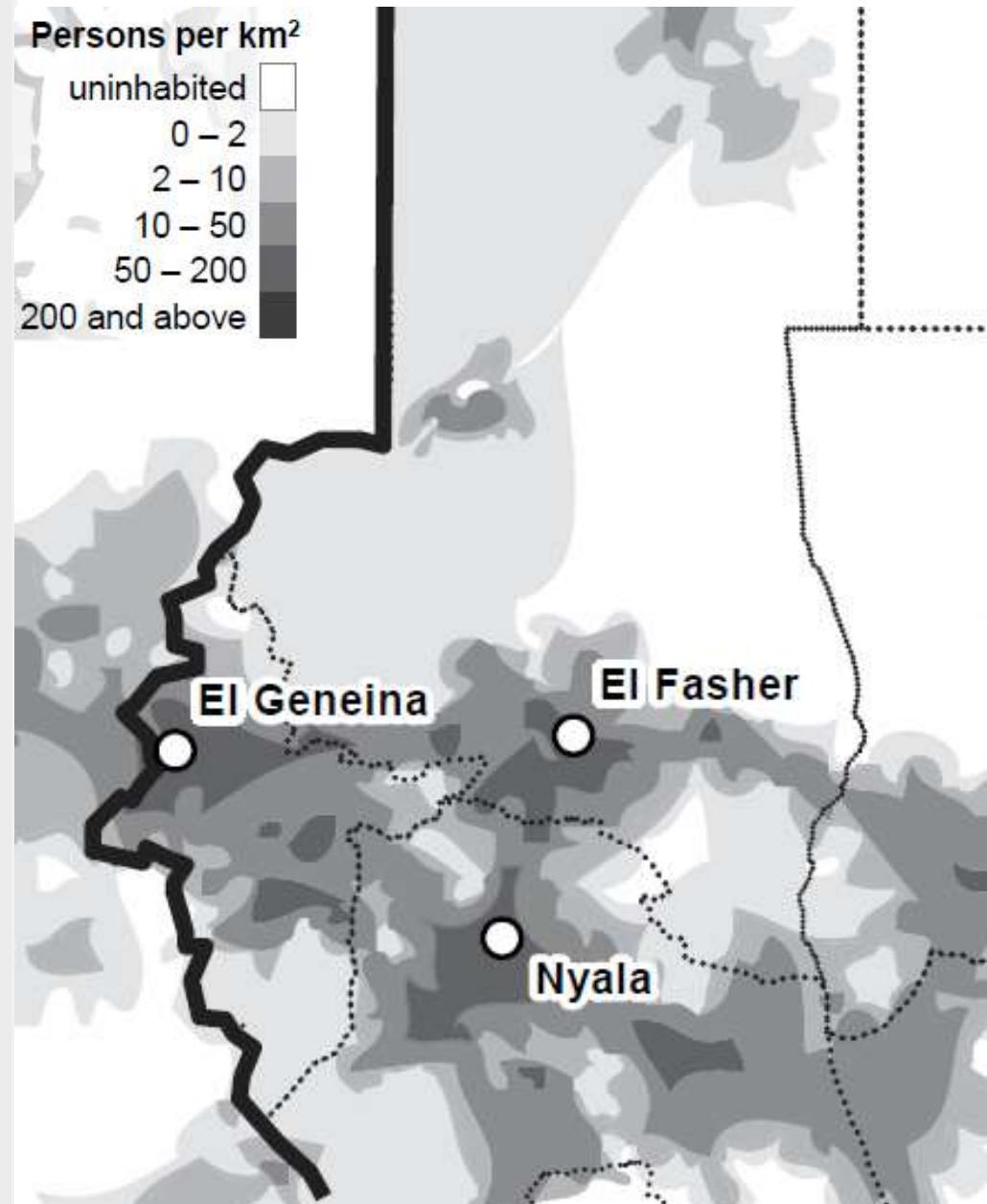
- Establish a Sector Coordination mechanism under UNHCR lead.
- Define a Sector Strategic Framework for future shelter activities in Darfur.

## UNHCR

- Provide technical guidelines for transitional shelter programming.

## CONTEXT

- 1.9 million IDP in Darfur (1.7 in Camps)
- 140'000 persons returned in 2011 (109'000 IDP + 30'000 Refugees)
- Estimated 100'000 new displaced by local conflicts
- Rapid urbanization (13% of population living in cities in 2003, 50% in 2011)



## **UN STRATEGIC BACKGROUND**

### Beyond Emergency Relief (Sept 2010)

- Environment
- **Livelihoods**
- Education and human capital
- Governance and capacity development

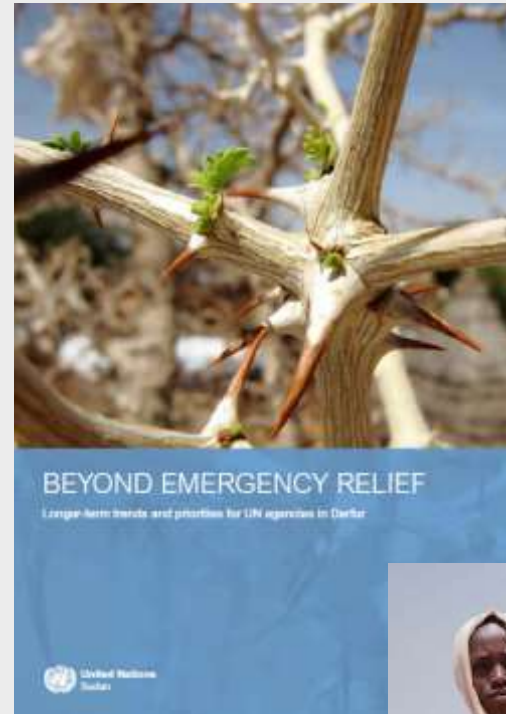
### SUDAN - UN and Partners Work Plan 2012

- Effective humanitarian response
- **Durable solutions.**
- Capacity building of national actors

### UNDAF 2009-2012 (2013-2016)

- Poverty Reduction and Sustainable Livelihoods
- **Basic Services**
- Governance and Rule of Law
- Social cohesion and Peace consolidation

### *Durable Solutions Strategy for Darfur (Draft-2012)*



## MAIN CHALLENGES

- **Security situation**
- **Land disputes**
- **Provision of basic services**
- Depletion of environmental resources (firewood, water)
- Food security (4.1 million people need food assistance in Darfur in 2012)
- Access and transport
- Limited livelihood opportunities



## IDP AND REFUGEES OPTIONS

### ▪ RETURN

Return to places of origin  
Mostly rural context

### ▪ LOCAL INTEGRATION

Permanent settlement in areas of refuge  
IDP Camps mostly in urban context

### ▪ RELOCATION

Relocation in new areas  
Service hubs/Model villages  
or city extensions

Right to opt for two simultaneous  
options (family split, seasonal return)



## **RETURN - VILLAGES OF ORIGIN**

### Situation

IDP and Refugees return to their villages of origin when security is granted and minimum services available

### Outlook

Provision of shelter and food is a strong pull factor for IDP to go back

### Typology

Informal plot size, mixed construction  
grass roof huts (Tukul or Goutias)

### Inhabitants

Often return is seasonal as long as security situation is not clear (family split)



## **INTEGRATION**

### **URBAN SPONTANEOUS SETTLEMENTS**

#### Situation

IDP informally settling in encroached land with limited control from local authorities

#### Outlook

Probably impossible to evacuate these settlements will remain permanent

#### Typology

Small plots (10x10 m – 100 m<sup>2</sup>)  
Solid construction (mud bricks)  
Structured and dense urban layout

#### Inhabitants

Mostly sedentary IDP  
Adapted to urban life





## **INTEGRATION NOMAD SPONTANEOUS SETTLEMENTS**

### Situation

IDP settling in land provided by the local authorities

### Outlook

Easy to dismantle these settlements will evolve parallel to the livelihood opportunities

### Typology

Small plots (no regular size)

Fragile construction

Natural materials (grass and bamboo)

### Inhabitants

Nomads



## **RELOCATION - URBAN EXTENSIONS**

### Concept

New neighborhoods are plotted by the local authorities around the cities

### Outlook

Urbanization trend is steady and is enhanced with IDP willing to remain in urban areas

### Typology

Planned city extensions with defined plot sizes and regulated construction

### Inhabitants

Any Sudanese willing to settle in a city can request a plot of land





## **BASIC SERVICES & UTILITIES**

### 1. Water and Sanitation

Key complementary factor for shelter projects  
Individual latrines = not sustainable in cities

### 2. Health & Education

Impossible to service all villages in Darfur  
(transport, service hubs)

### 3. Energy

Wood fuel as main energy  
Sensitive to replacement by “easy” fuel  
alternatives (gas, kerosene)

### 4. Refuse and Waste

Potential stress factor in urban context



## LIVELIHOODS

Essential factor for IDP and Refugees movements.

- IDP Camps in urban areas

### Small trade

donkey carts, brick production, fire wood and charcoal, hay collection

### Agriculture

travel to own land or land rental in the vicinity of camps (56% income from agriculture for IDP+ Host in 2011 in Darfur)

- Return villages

Rural activity (agriculture and livestock)



## WHAT AGENCIES DO

### UNHCR Shelter in Zam Zam – El-Fasher

Total cost: 1'700 USD / Unit

*1'200 USD if built by IDP contractors*

Interior area: 10 m<sup>2</sup> (3.7x2.7)

Burnt brick walls

Timber structure, grass and plastic roof



### UN-Habitat Shelters in Sakali – Nyala

Total cost 7'000 USD /Unit

(1 main room, 1 kitchen, latrine, fence)

Interior area: 11.6 m<sup>2</sup> (main room - 3.4x3.4)

SSB (stabilized soil bricks) and precast fiber cement roof, pillars and bamboo fence



## WHAT AGENCIES DO

### CRS (Tarbeiba & Nyoro)

20 m<sup>2</sup> space (4 x 5 m)

NGO provides 13 round steel poles  
26 sharghania (grass mats) and rope

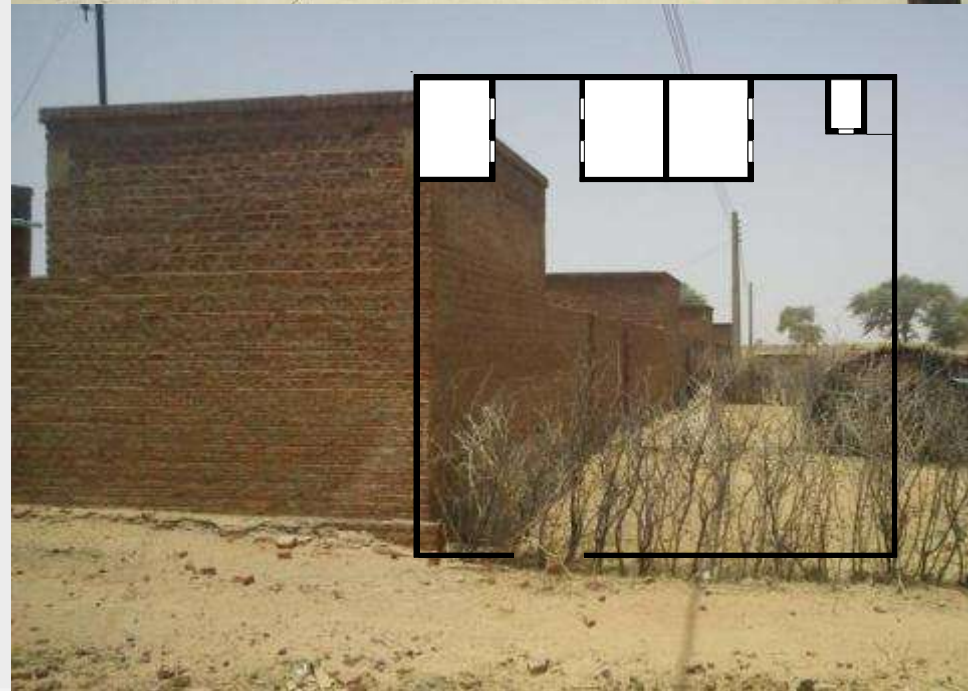
Total cost per unit: 350 USD (700 USD)  
Shelters built by community on 400 m<sup>2</sup> plots

### Model villages (Habla Kanary)

Two rooms (14 m<sup>2</sup>)  
Kitchen (12 m<sup>2</sup>) and Boundary wall

Burnt brick, insulated metal panel roof

Cost unknown (funded by Arab League)  
400 m<sup>2</sup> plot (20 x 20 m)



## WHAT IDP DO

### Mastera (El-Geneina)

Permanent settlement

Tukul or Goutias (3 x 3 m interior size)

Grass roof on timber structure

2'000 SDG (700 USD)

### Al-Salaam camp (Zalingei)

Nomads

Grass and plastic sheet(2.5 x 3 interior size )

Cost unknown (self built)





## WHAT IDP DO

### Sakali (Nyala)

Mud brick construction (3 x 3 interior size)

200 sq m plot (10 x 20 m)

Cost unknown (self built with plastic sheet on the roof)



### Zam zam (El-Fasher)

Mud brick (3 x 3 interior size), zinc sheet, metallic door

Cost 2'100 SDG for material +  
800 SDG labor (1'000 USD)



## **SHELTER CATEGORIES**

### ▪ EMERGENCY SHELTER (NFI)

IDP and Refugee continuously affected by natural disasters and conflict

### ▪ TRANSITIONAL SHELTER

IDP living temporarily in camps or spontaneous settlements

### ▪ PERMANENT/INCREMENTAL SHELTER

IDP and Refugee returning to their villages of origin or relocating in new settlements

Each category needs differentiated approach with local authorities in terms of land allocation and shelter design.



## **BENEFICIARY SELECTION CRITERIA**

### **From Individual to Community**

#### EMERGENCY (NFI)

Vulnerability (Elderly, Single Headed HH, Sick)  
Status (IDP, Refugees, Stateless)

#### EARLY RECOVERY (Transitional)

Needs (host comm., nomads, minorities)  
Gaps (livelihoods, poverty reduction, services)

#### DEVELOPMENT (Permanent)

Durability (materials, land, planning)  
Sustainability (self-sufficiency, social equity,  
environmental equilibrium, gov. lead)



## LAND TENURE AND OWNERSHIP

In Sudan statutory law does not grant land tenure to individuals.

Plotting (colonial rule):

- Class 1: 500 m<sup>2</sup> (multi-storey) 50 years rent
- Class 2: 400 m<sup>2</sup> (two-storey) 40 years rent
- Class 3: 300 m<sup>2</sup> (one-storey) 30 years rent
- Class 4: 200 m<sup>2</sup> (only in villages)

Return villages: customary rule,  
often land is occupied preventing return

Grazing right for nomads according to  
traditions along migration routes

NFI/Transitional Shelter: secondary issue

Permanent Shelter: major issue



## SECTOR COORDINATION

Existing Coordination  
(Emergency scheme, 9 sectors).

### ES/NFI Sector

Central Office in Khartoum (RoS)  
3 Field Offices (Fasher, Nyala, Geneina)

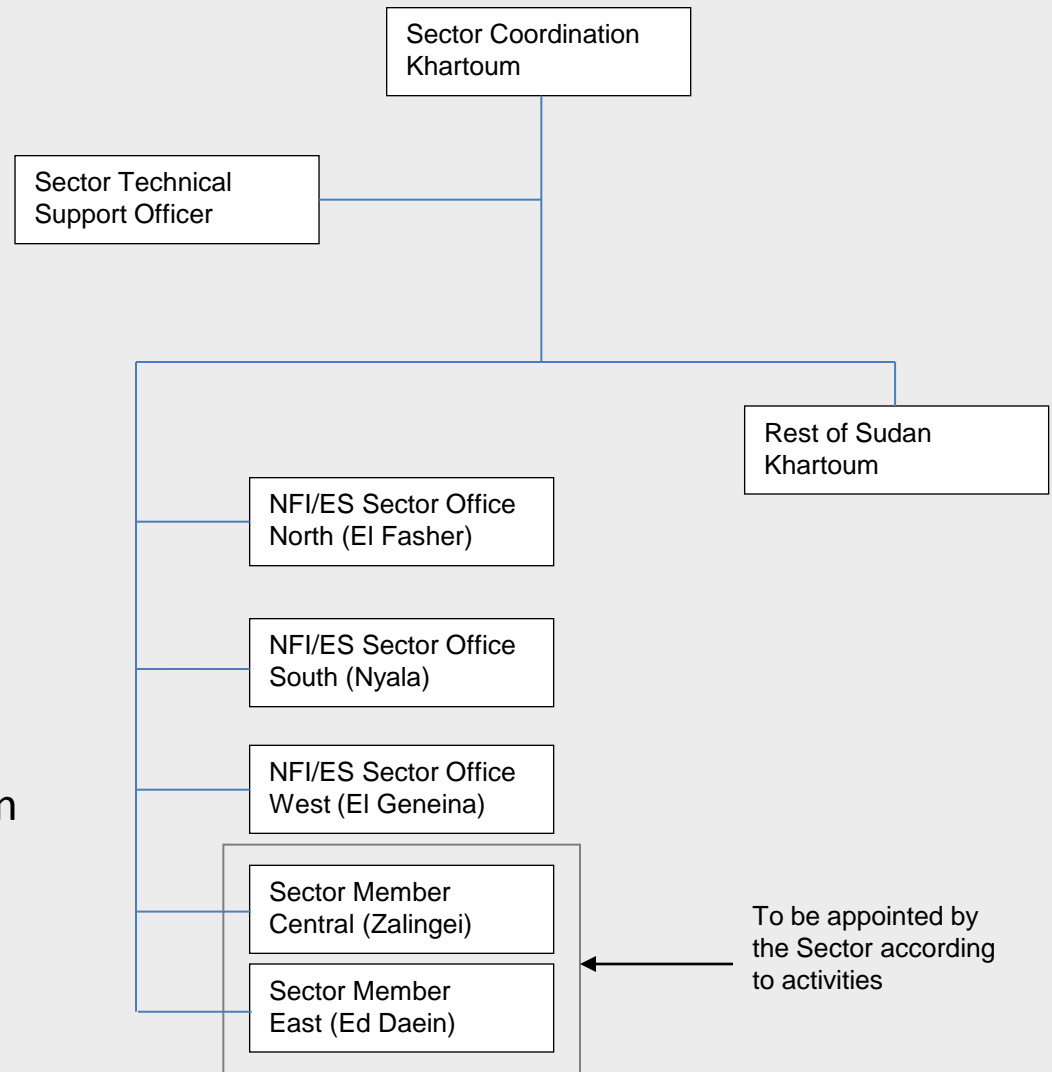
### **Objective during 2012**

Shelter Working Group in Khartoum

### Shelter Sector

Permanent Shelter Coordinator based in  
El-Fasher

Shelter integrated in NFI Field Offices  
and Coordination



## PROPOSED SHELTER TYPOLOGY

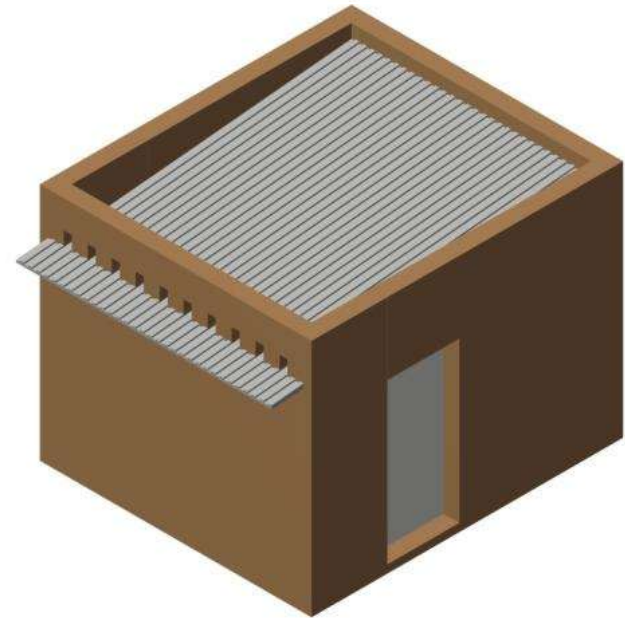
### Urban context

- Culture: full enclosure (privacy, dignity)
- Climate: heat (solid walls), wind and dust (limited openings), rain (zinc and plaster)
- Risks: fire (solid materials), floods (elevated inside floor)

Average covered space: 9 to 10 m<sup>2</sup>

The size of the units remain small to avoid the use of cement (expensive)

For extended families additional units are built (separation male/female)



## BASIC SHELTER TYPOLOGY

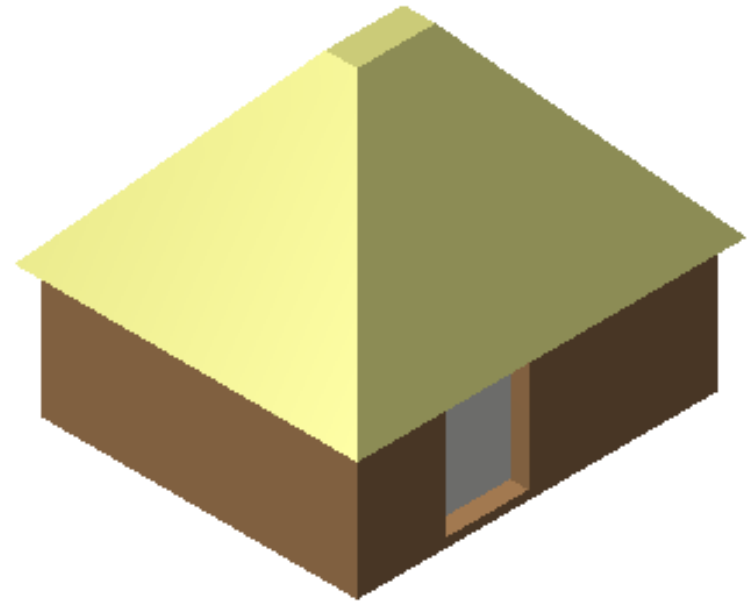
### Rural context

- Culture: full enclosure (privacy, dignity)
- Climate: heat (solid walls, hay roof), wind and dust (limited openings)
- Risks: subject to fire, degradation of the environment (Hay on timber structure)

Average covered space: 9 to 10 m<sup>2</sup>

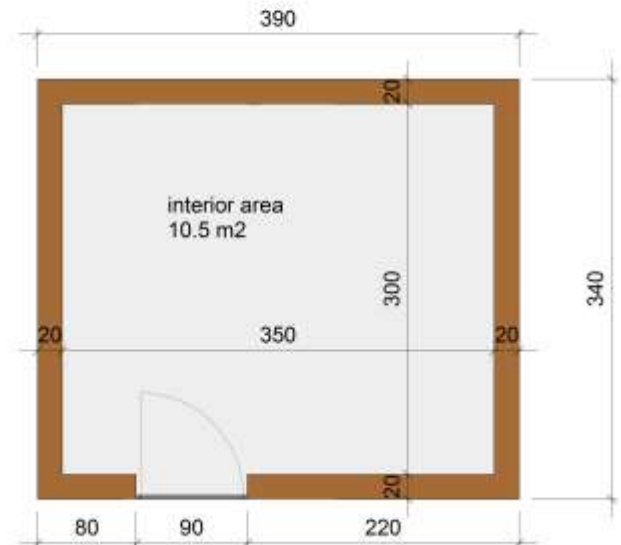
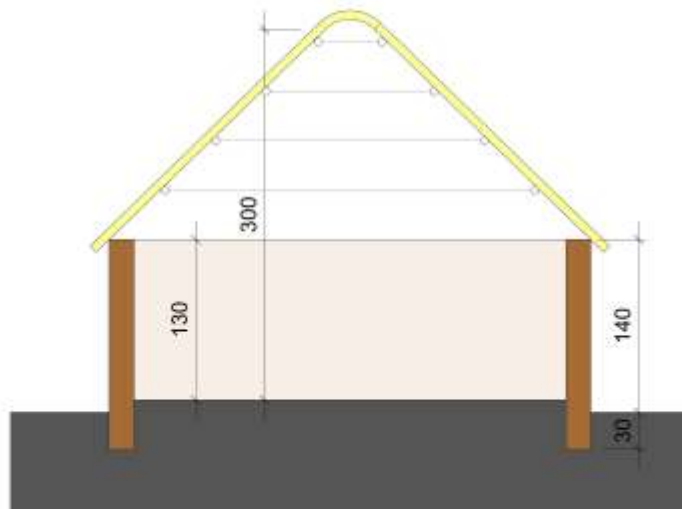
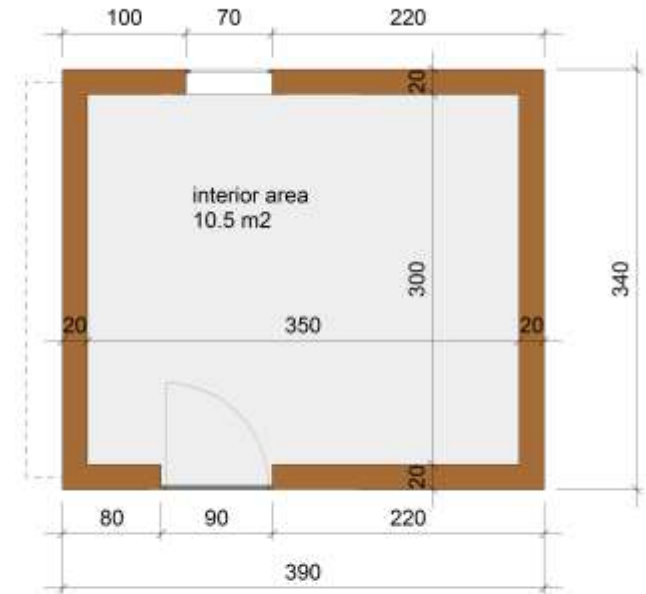
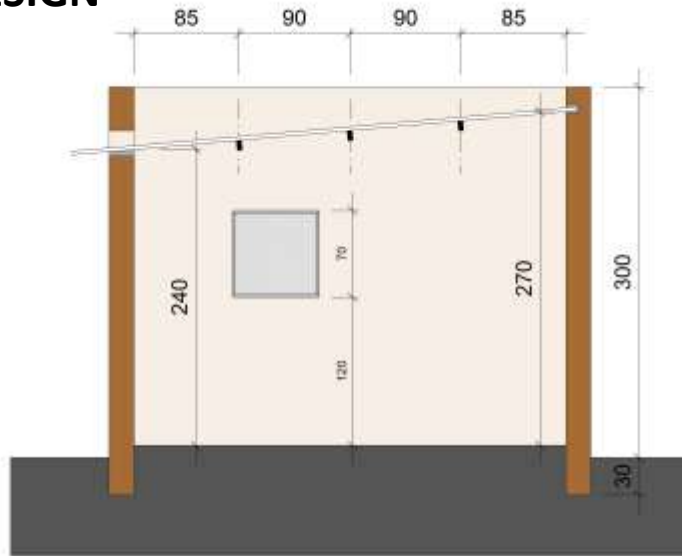
The size of the units remain small to avoid the necessity of too large timber structure

For extended families additional units are built (separation male/female)



Zam zam IDP camp – El-Fasher

### SHELTER DESIGN





## **MATERIALS**

### Transitional Shelter

- Walls  
Mud bricks (vulnerable to rain)
- Doors and windows  
Metallic, available in local markets
- Roofs  
Zinc sheets on steel structure (urban)  
Grass on timber structure (rural)

### Permanent Shelter

- SSB (Stabilized Soil Brick)
- Burned bricks (compensate with reforestation)



## EXTENSION / URBANISATION SCHEME

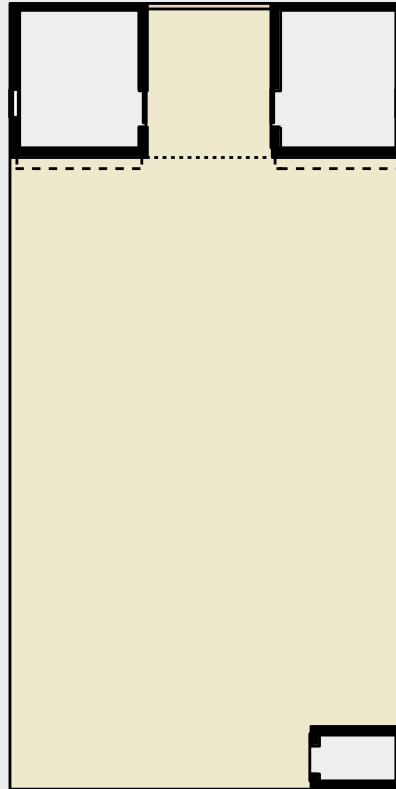
Core unit



Single unit

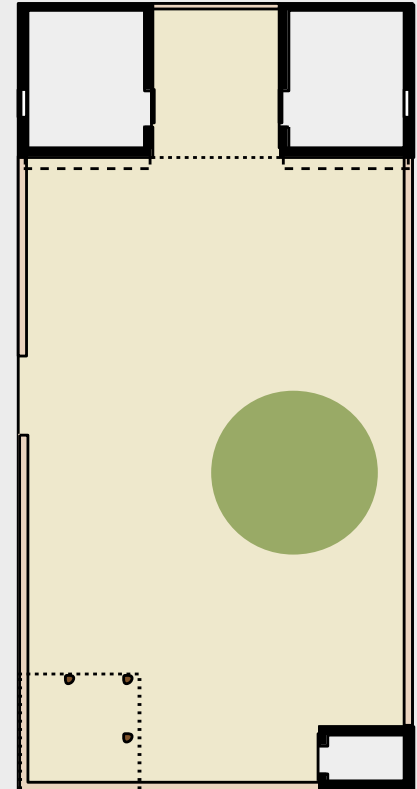
10x20 m plot (200 m<sup>2</sup>)

Extended unit

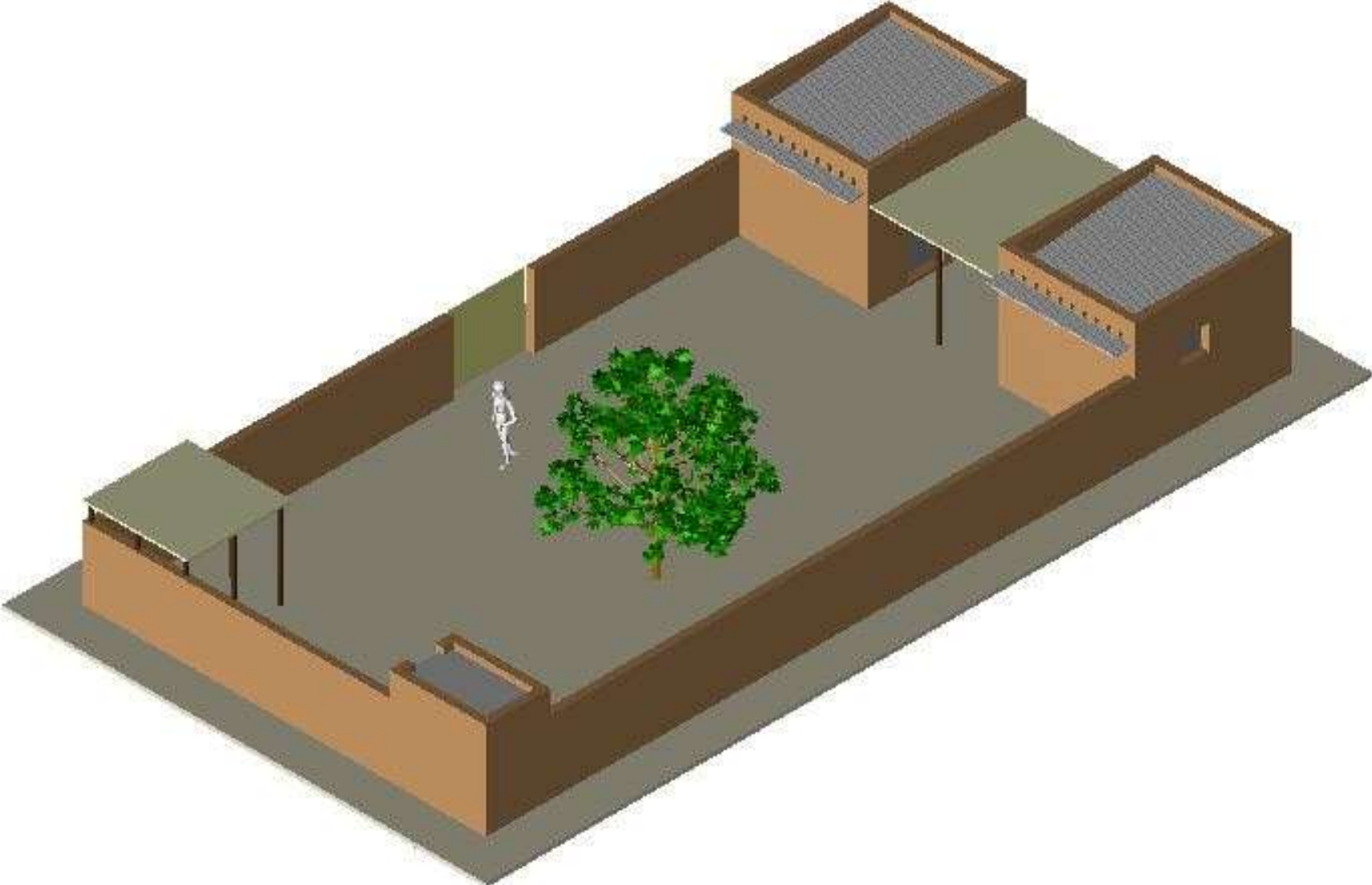


Two rooms  
(separation men and women)  
Latrine

Completed group



**COMPLETED GROUP**



## COST ESTIMATION

### Core shelter unit

Overall dimension	3.9	3.5	13.65	m2
Interior dimensions	3	3.5	10.5	m2
Interior height	2.6	2.4	2.5	m

exchange rate USD/SDG 2.88

Shelter kit	nbr	SDG/unit	SDG	USD
zinc sheet	5	100	500	173.61
door	1	300	300	104.17
window	1	150	150	52.08
beams	3	100	300	104.17
cement (bag)	5	80	400	138.89
tools			150	52.08
<b>Total material cost</b>			<b>1'800</b>	<b>625.00</b>

### Specifications

80 x 420 cm, 10 cm overlap  
 100 x 200 cm, steel frame and door  
 60 x 60 cm, steel frame & moskito net  
 8 x 4 cm, steel profile  
 external plaster  
 roof screws, shovel

### Community compensation

mud bricks	3'000	0.2	600	208.33
mortar & water			200	69.44
labor			1'000	347.22
<b>Total compensation</b>			<b>1800</b>	<b>625.00</b>

mud bricks, 17 x 26 x 8 cm  
 mud mortar

**Total cost per shelter 3'600 1'250.00**

## IMPLEMENTATION MODALITIES

### 1. Full self-help

Conditional cash grants in installments  
Project supervisors provide technical expertise

### 2. Partial self-help (shelter kit)

NGOs provide construction materials  
Beneficiaries build their shelter  
Project supervisors provide technical expertise

### 3. Contracted (for special cases)

Local contractor selected through tender  
process build the shelters  
Project supervisors monitor implementation



<b>RISKS</b>	<b>Field</b>	<b>Kind of risk</b>	<b>Level</b>
	<b><i>POLITIC</i></b>		
	<b>Security</b>	Local conflicts, war	High
	<b>Land</b>	Land dispute, no land allocation (GoS)	High
	<b>Government</b>	Resistance from authorities	Low
	<b><i>ECONOMY</i></b>		
	<b>Food</b>	Dependence on food distributions	Medium
	<b>Livelihood</b>	Limited income generating activities	Medium
	<b>Basic services</b>	Lack of basic services (health, education)	Medium
	<b><i>ENVIRONMENT</i></b>		
	<b>Wood</b>	Depletion of fire wood reserves	High
	<b>Water</b>	Decrease of water resources	Medium
	<b>Soil</b>	Soil careers for brick production (holes)	Medium
	<b><i>NATURAL DISASTERS</i></b>		
	<b>Fire</b>	Injuries, casualties, destruction of assets.	High
	<b>Drought</b>	Food security	High
	<b>Flood</b>	Destruction of assets	Medium

## **LESSONS LEARNED on shelter programmes**

- Promote self-help approach (reduce costs and enhance ownership)
- Use locally available materials and construction methods
- Select beneficiaries on a community based approach
- Support families constructing their shelter (cash/food compensation)
- Use environmentally friendly materials and techniques

## Other important concepts for transitional shelter

- Avoid rebuilding vulnerability
- Strengthen local capacities and create training programmes
- Consider from the outset land use, infrastructure and livelihood assets
- Provide reusable materials (construction of permanent shelter)
- Reflect cultural, social and economic norms of affected communities

## **ALTERNATIVE ENERGY PRODUCTION**

### Energy needs

Diesel, petrol	generators, mills, transport
Fire wood	cooking, brick production
Hay	animal traction

### Rules for renewable energy production

- Not a stand-alone technology
- Need change in behavior
- No priority for people struggling for survival

### What should work

- Solar cookers
- Fuel Efficient Stoves (FES)
- Solar panels (not realistic for individual use)
- Compost, biomass fuel





## QUESTIONS

