



CRS Emergency Shelter Kit (ESK) Pilot Project

September 2025



Introduction to Emergency Shelter Kit (ESK)

- According to Shelter Cluster SC, the Emergency Shelter Kit contains the essential materials needed to build a 17 square meter emergency (temporary) shelter.
- The emergency kit (ESK) combines the Sealing Off Kits and the Framing kits to construct an emergency shelter. It should be accompanied by community-level or household-level toolkits.

CRS ESK Pilot Project

- CRS implemented a pilot project to construct 10 emergency shelters using the Emergency Shelter Kit (ESK), the emergency shelters were installed in 2 IDP camps in the southern areas of the Gaza Strip, Mawasi Khan Younis mainly.
- This pilot allowed CRS to properly test the construction techniques, ensure quality implementation, and to capture lessons learned from what we have experienced and to document the successes, challenges and inform better decision-making for future programming.

CRS ESK Pilot Project

➤ Implementation

- Contractor approach through tendering process
- Local procurement of ESK materials

➤ Item distributed:

- Toolkit/1HH
- CRS ESK IEC material







➤ Material Average Cost:










- local market ≈ **1600\$/Kit (Aug 2025)**
- International procurement ≈ **366\$/Kit**

➤ Manpower and duration

- Installing a shelter takes 7-8 hours
- One skilled worker with two unskilled workers

CRSESK Content

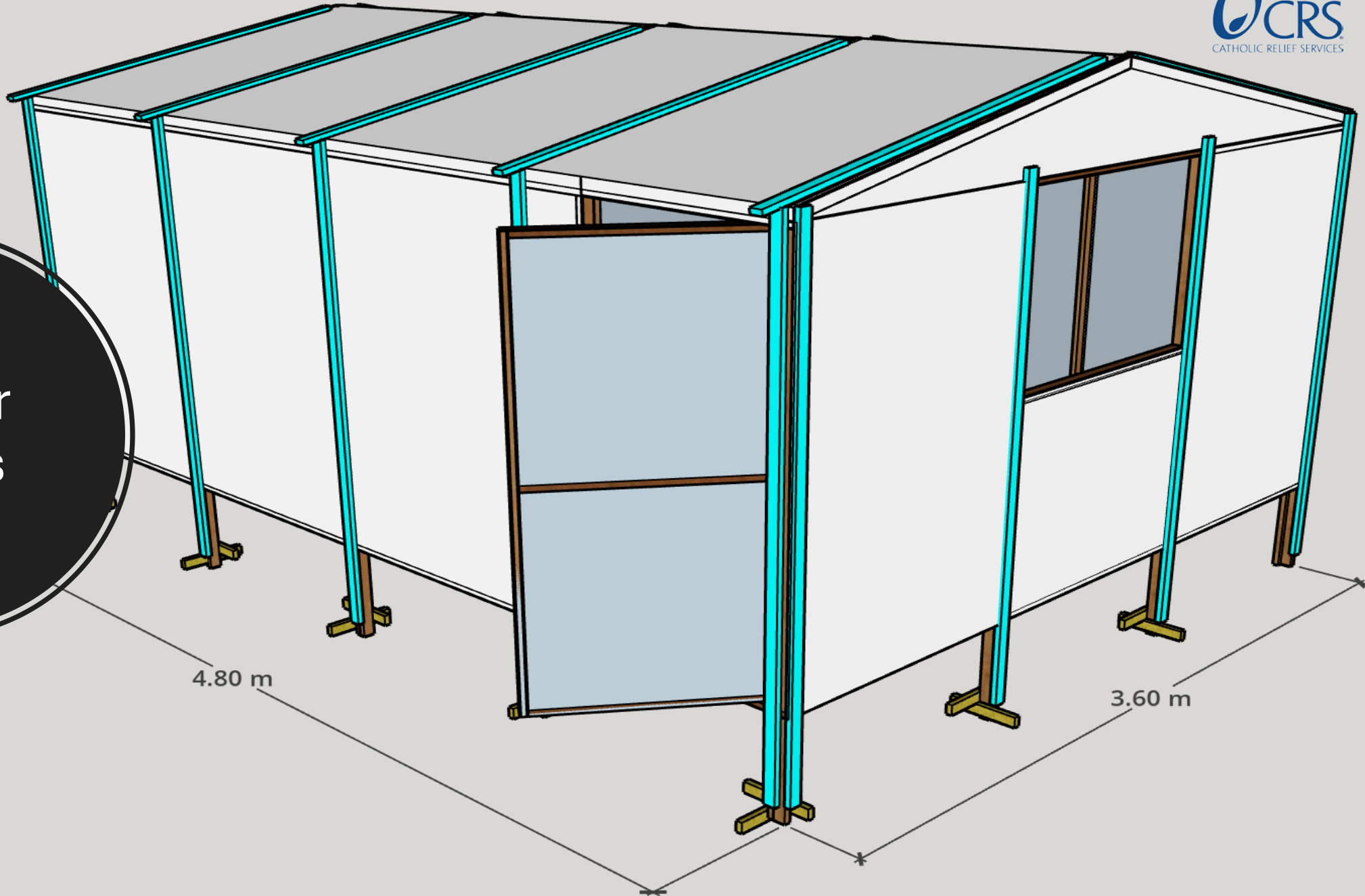
Item	Description	Unit	Quantity	Indicative Picture
Wooden Posts	Structural timber sections (5x 2.5cm x 2.4 m) square shaped high quality free of knots- minimum density: 370 KG/cubic meter - untreated. C16 or C24 graded timber.	Pcs	88	
Nails 50mm	Hot galvanised iron, for wood, 5cm (2") Used for structural joints and fixing cover-battens.	Kg	1.6	
3mm Rope	Polypropylene, diam. 3mm, minimum 3 strands, twisted	m	30	
6mm Rope	Polypropylene, diam. 6mm, minimum 3 strands, twisted	m	30	
Tarpaulin	Tarpaulin sheet - UNHCR/IFRC standard specs: standard size (4x6); Woven high-density polyethylene (HDPE) fabric laminated on both sides with low-density polyethylene (LDPE) coating White color	Pcs	3	
Plastic film	Plastic film 0.3mm thick, up to 50 sqm per shelter. Minimum width 4m	m2	50	

Scalpel (Box Cutter)	Please palletize separately An excellent cutting scalpel (Incco) with blades (Incco), suitable for light and medium work. Easy to use	Unit	1	
Duct Tape	Adhesive/duct tape of 25-meter length, water resistance – Extra Heavy Duty, 50mm -For taping plastic sheeting	Roll	2	
Claw hammer	Claw Hammer - Weight: 0.45 kg. Fiberglass/metal handle, unbreakable. Head in forged steel. Good quality.	Unit	1	
Shovel	Head with sharpened tip in forged steel which is tempered and hardened. Supplied with a handle. Total length: 100 to 110 cm.(good quality)	Unit	1	
Pliers	Combination pliers 150mm, 34mm jaw	Unit	1	
Handsaw	All-Purpose. Blade length of 500mm and an overall length of approx 640mm. 8 or 9 TPI (teeth per inch), hardpoint., teeth from tempered and hardened steel. Unbreakable handle. Saw blade (excellent quality)	Unit	1	
Tie wire	Galvanised, diam. 1.5 mm, roll	m	25	
Measuring tape	3m or 5m builders metal tape	Unit	1	
Needle	Stitching, curved, 127mm x 1.8mm, hole 1x7mm	Unit	2	
Bag	Heavy cotton canvas. Strong webbing handles and heavy-duty nylon zip for distribution of the items 50kg	Unit	1	

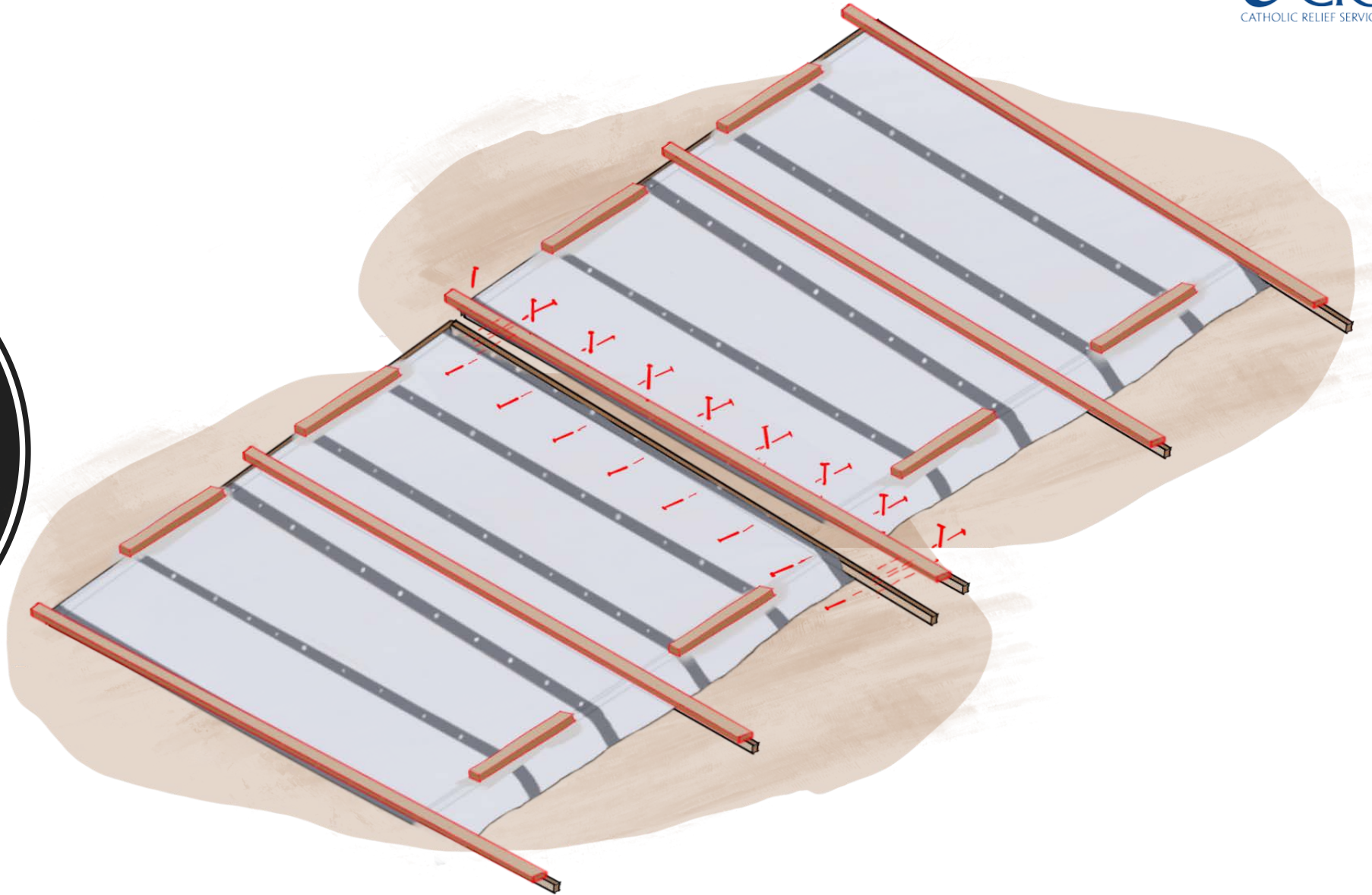
Assessment, Targeting and Selection

- Site prioritization guided by the Safety Audit tool
- Households were prioritized based on technical assessment and vulnerability criteria, focusing on:
 - Families with totally damaged homes
 - Living in open-air conditions or makeshift shelters
 - Have adequate space to construct the Emergency Shelter
- Priority was given to households headed by women, the elderly, or persons with disabilities, as well as large families.

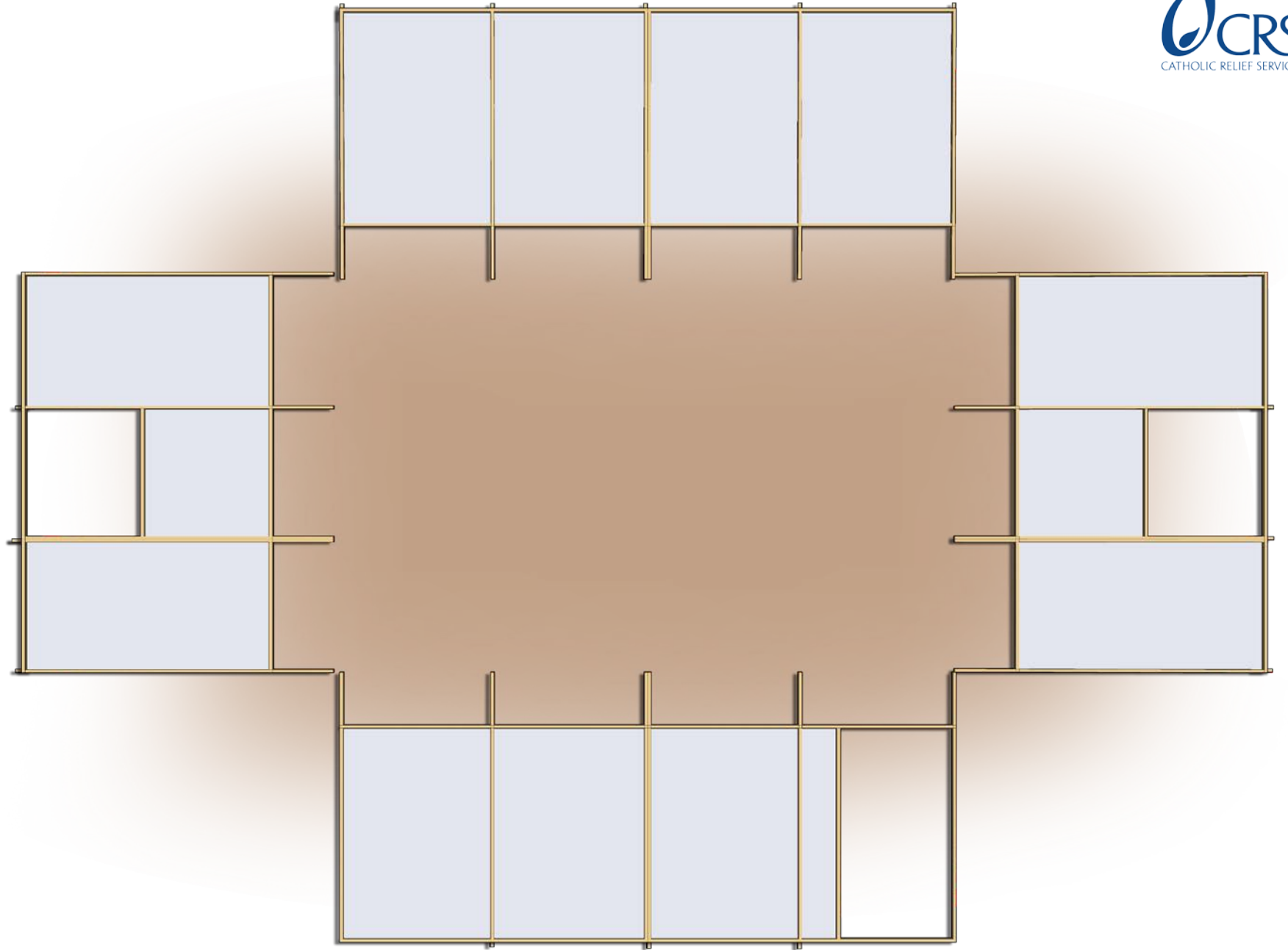
Shelter
details



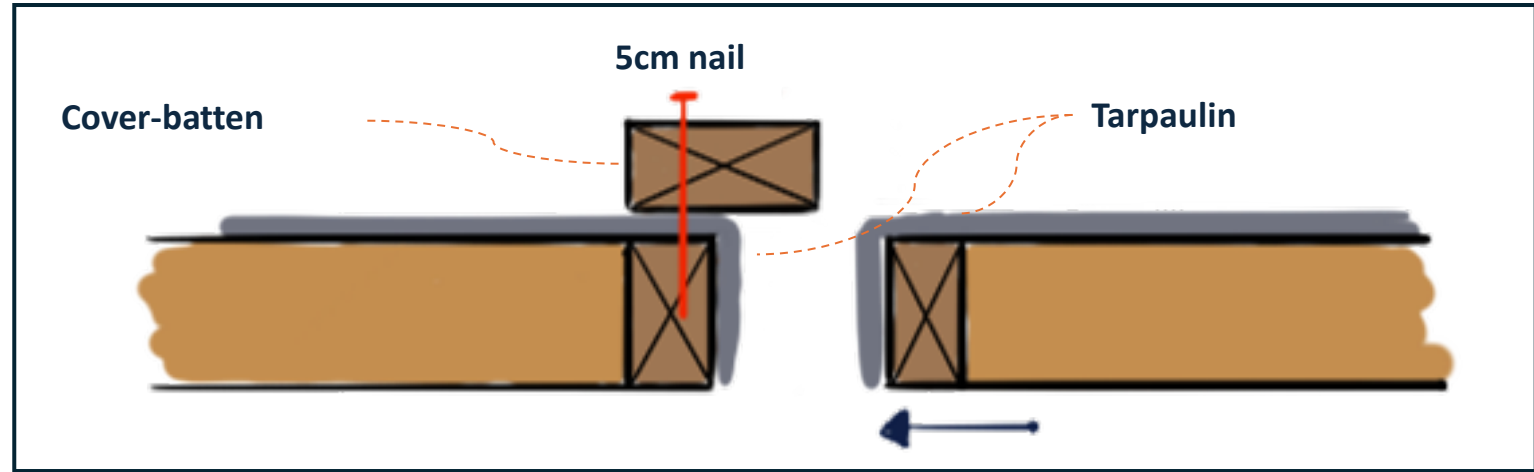
Panels



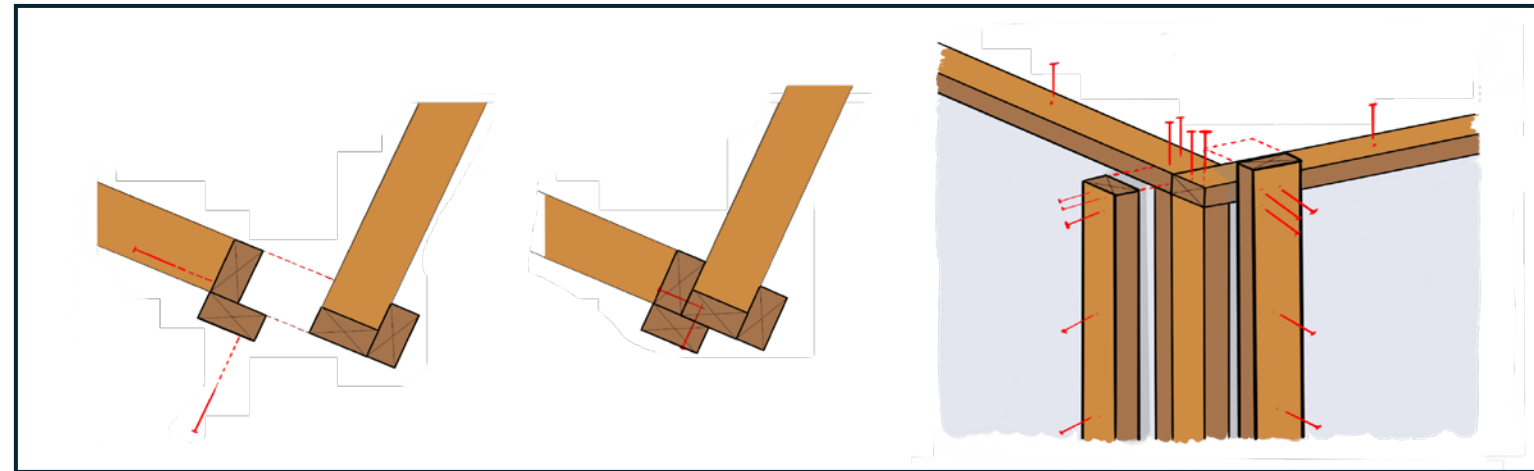
**Panels
layout**



Panel Connection



Corner Connection



Connections

Previous Sub-Standard Shelter



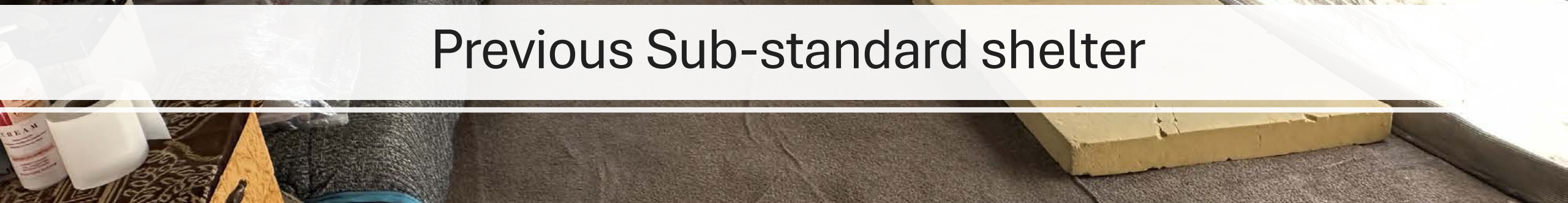
©2025, Mahmoud Abdelghafour, a father of 4 kids, photo taken by CRS staff

Current Shelter





Previous Sub-standard shelter





Current shelter

Reflection Session with Partner Team



Q1: What aspects of the design do you think need to be improved, please explain why?

- **Layout:** The design only considers sleeping space, needs to also consider WASH and other domestic functions.
- **Size of shelter:** The unified design size (17 sq.m.) doesn't consider different family size.
- **Flooring:** Raise it 20 cm from the ground for protection from water influx in winter season and the need an additional tarpaulin for flooring.
- **Need timber panels along the perimeter,** about 30-40 cm for backrest to sit.
- **Internal height :**Uplift the trusses by 30 cm to have a band of ventilation along the top perimeter and this will also help increase internal height.

Reflection Session with Partner Team

- Openings: Consider a canopy over windows and doors, to avoid water intrusion inside the shelter.
- Consider mesh to prevent entry of insects and for privacy.
- Add framing to window, hinges needed as well.
- Privacy: Consider adding one partition with tarps inside for privacy

Q2: What works well

- **Modular:** It is recommended to retain the modular panel design, as it provides structural soundness and stability while allowing for easy dismantling, transportation, and reinstallation.
- Modular design also has the advantage of being extended to expand size.
- A good starting point for an improved emergency shelter.

Reflection Session with Partner Team



- **Comparison between ESK and tent**

ESK	Humanitarian tent
Better internal height	Less internal height
Design allows flexibility and could be upgraded into a transitional shelter	Tent design is fixed and cannot be easily adapted to family needs or upgraded.
More stable and rigid	Less stable
Maintenance is easier (can change external cladding using the same framing)	More difficult maintenance
Fit more at the time of returning to original neighborhood	During the acute emergency phase, tents are easier to set-up and quicker.
Re-erecting can provide similar level of stability	It is not well erected and as stable the second time
Approvals and access remain a major concern	Easier COGAT approval

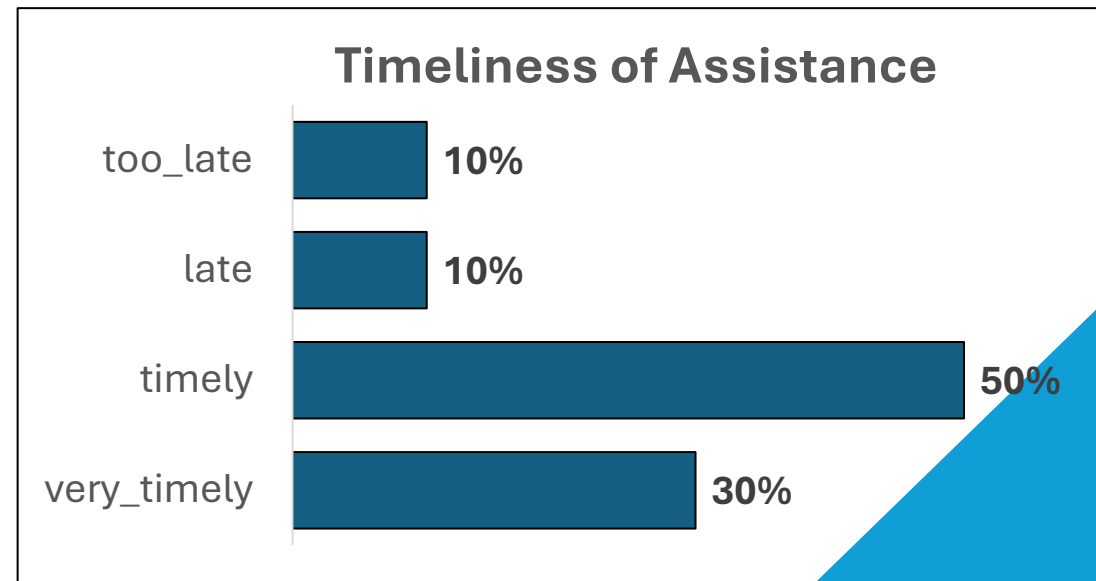
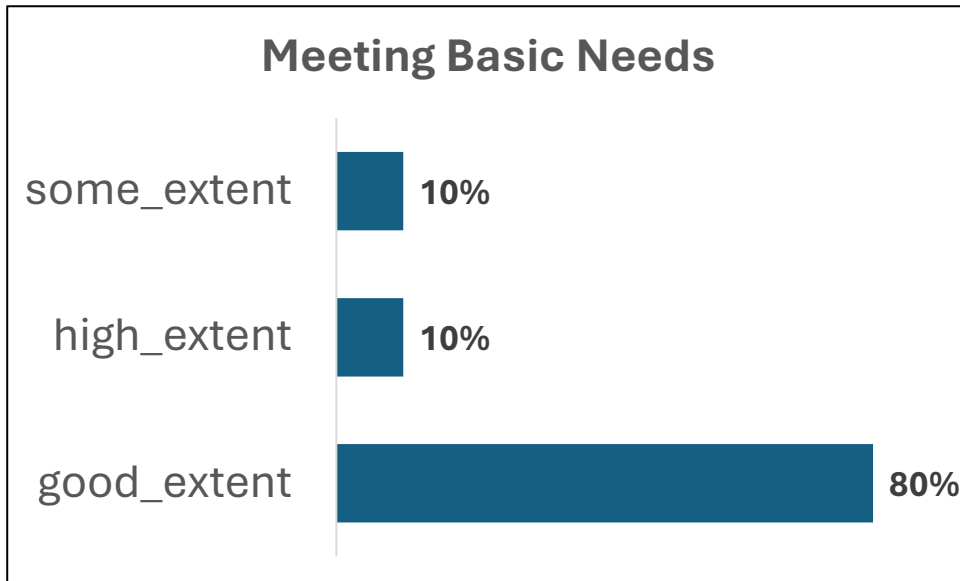
PDM Results

- Key findings

- ✓ 100% of households reported being either satisfied or neutral with the quality of shelter assistance received.
- ✓ 100% of households reported that they DID NOT have to pay or perform any actions to receive assistance.
- ✓ 100 % of respondents reported NOT selling or trading any of the contents of the parcels received, indicating that the items were valuable and useful to their households.
- ✓ 79% of respondents feel that humanitarian activities align with the protection of mainstreaming elements.

PDM Results

- Meeting Basic Needs





ESK installation process





















OCRS
CATHOLIC RELIEF SERVICES
خدمات الإغاثة الكاثوليكية

Two weeks after
ESK installation













CRS Emergency Shelter Kit (ESK) Pilot Project

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Thanks for watching

Questions ?

September 2025

Project Pilot