

## A.13 Lebanon – 2012 – Syria conflict

### Case study

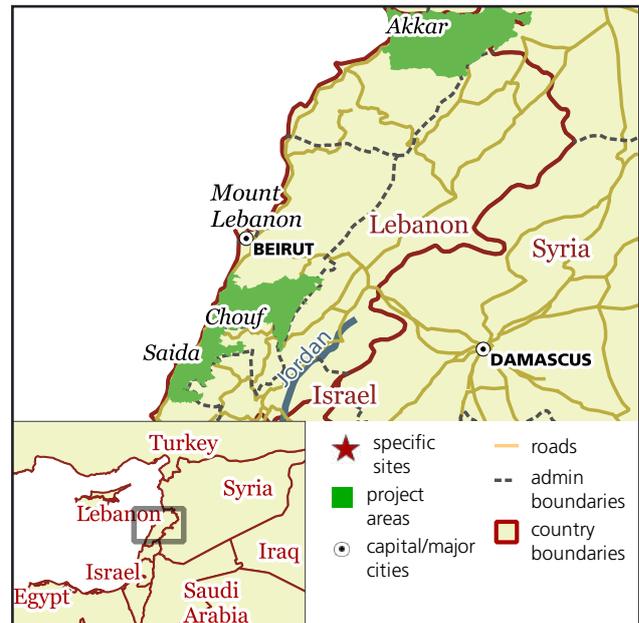
**Keywords:** Construction materials; Tools; Emergency shelter.

- Emergency:** Syria crisis, refugees in Lebanon.
- Date:** Conflict begins: March 2011 (ongoing). December 2012: over 100,000 Syrian refugees in Lebanon.
- People affected:** Total: over 3.1 million refugees. Lebanon: over 1.1 million (Oct. 2014)
- Project location:** Saida and Chouf districts (Mt Lebanon Governorate) and Akkar district (North Governorate).
- Beneficiaries:** 38,000.
- Outputs:** 4,000 Sealing-off Kits (SOK) for unfinished buildings (SOK1) and self-made shelters/tents (SOK2).
- Occupancy rate:** 100%
- Shelter size:** Self-made shelters (tents) ranged from 15m<sup>2</sup> to 20m<sup>2</sup>. Unfinished buildings (either single shelters or rooms in buildings) ranged from 25m<sup>2</sup> to 35m<sup>2</sup>.
- Cost:** Materials: SOK1: US\$ 245. SOK2: US\$ 345. Transport costs per kit: US\$ 15. Project costs per kit: US\$ 100.

### Project description:

After carrying out minor rehabilitation activities in 2012, the organisation decided to respond to a huge increase in shelter needs, by developing a Sealing-off Kit (SOK) for distribution.

The kits enabled beneficiaries to make rapid, emergency improvements to their shelters, such as adding missing doors and windows, whilst waiting for more substantial assistance. The organisation distributed up to 500 kits (for 3,000 people) per week.



### Emergency timeline:

**[a]** March 2011, Syria conflict begins. **[b]** 100,000 refugees. **[c]** 500,000 refugees. **[d]** 1 million refugees.

### Project timeline (number of months):

- [1]** October 2012: Design of SOK1.  
**[2-3]** Distribution of 500 SOK1.  
**[5]** Share design and methodology of kit with other humanitarian organisations.  
**[7]** Design of SOK2.  
**[8]** Distribution by other organisations begins. Distributions are on-going.



### Strengths

- ✓ Large number of shelters can be upgraded in a short period of time. The majority of beneficiaries reported using the kit in full within 72 hours of distribution.
- ✓ Beneficiaries can choose how to use the materials to best improve their shelters, with a high satisfaction rate amongst beneficiaries.
- ✓ The unit cost is relatively low (around US\$ 50 per person). Unlike projects that use contractors to install kits, there are no labour costs. Unlike some voucher-based projects, there are cost benefits due to the economies of sale of centralised purchasing.
- ✓ Contingency stock allows organisations to scale-up response quickly.
- ✓ The SOK's composition is flexible, made up of the most commonly required materials, and can be easily modified to adapt to changing needs.

### Weaknesses

- ✗ The SOK has to be delivered at the shelter but sometimes larger trucks were unable to access remote areas. The organisation modified the transport fleet accordingly or, in a few cases, had to use centralised distributions.
- ✗ The availability of large quantities of materials wasn't always guaranteed, and to avoid delays the organisation had to plan procurement well before distributions.
- ✗ The SOK could only support emergency or temporary repairs.

### Observations

- The project requires very good logistics for transportation, storage and distribution (each SOK weighs around 170kg).



Some families used the materials to build partitions in their shelter.  
Photo: Edouard Elias/PU-AMI

## Situation before the crisis

Syrian refugees in Lebanon have a mix of backgrounds. Some come from urban areas with experience of living in good quality accommodation, others from rural areas or from areas with poor-quality housing.

## Situation after the crisis began

Most Syrian refugees in Lebanon rent rooms or shelters, with rents increasing dramatically since the Syrian crisis began. A shortage of affordable housing in Lebanon before the conflict has been exacerbated by the arrival of hundreds of thousands of refugees, and people are prepared to take any shelter available, even if it is sub-standard.

## Shelter strategy

The national shelter strategy of the Shelter Sector Working Group is to provide an adequate shelter (according to *Sphere* standards) to the most vulnerable Syrian refugees in Lebanon, while avoiding using camps as a solution. Activities are divided into three main groups:

- Providing a SOK in order to repair the most urgent shelter needs (missing windows, doors, walls).
- Minor rehabilitation in small shelter units or collective shelter, including sanitation facilities.

- Cash-for-rent assistance.

## Project implementation

By selecting a methodology where kits were distributed to beneficiaries in order for them to make their own repairs, it was possible to meet the most urgent needs very quickly in comparison to the organisation running its own repair project. Speed of response was a priority as the winter had already arrived before the first distribution.

A needs assessment showed that many shelters lacked doors, windows and partitions for toilets. To meet these needs, a SOK for unfinished buildings was designed, using materials to be found in local markets that beneficiaries were familiar with.

The organisation's long experience in the area enabled it to make rapid decisions regarding the contents of the SOK, and it then approached suppliers who could provide the items packaged and ready to be distributed.

Two suppliers delivered the kits, one providing timber and the other providing plastic sheet and fixings, to the organisation's warehouse in preparation for distribution by the project teams.

A distribution plan was made once a group of between 20 and 80 beneficiary families had been identified for support.

The SOKs were loaded on to small trucks and delivered to the beneficiaries' shelters by staff of the

organisation. The beneficiaries then signed for receipt of the materials.

The project undertook post-distribution monitoring, which involved interviewing households, and focussing upon the use of the kit rather than the quality of construction. This information was then fed back into revisions of the contents of the SOK.

Before the start of the project, the main risk identified was that beneficiaries would either sell the kits or make poor-quality repairs. However, following an evaluation of 100 households following the distribution of the first 500 kits, the results were much better than expected. More than 90% of beneficiaries reported significant improvement of living conditions due to provision of the kit, and the majority of beneficiaries had used all the items for repair or upgrading of their shelters.

In terms of speed of implementation, around three quarters of the beneficiaries participating in one evaluation reported that they had used the entire contents of the kit within three days of receiving it.

## Beneficiary selection

Beneficiaries were selected following house-to-house assessments made by project teams made up of around six people.

The criteria to receive a SOK, developed by the organisation and based on *Sphere* standards, were that the shelter was *without* one or more of the following:

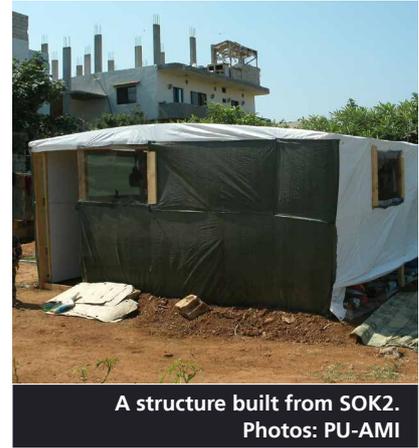
- external doors and windows,
- internal walls,
- partition between the toilet and living area,
- partition in collective rooms, occupied by two or more families.

## Coordination

The organisation presented the SOK project to the Shelter Sector Working Group in Lebanon in February 2013 (five months after the project started). Following this,



A distribution of Sealing-off Kits.  
Photo: Edouard Elias/PU-AMI



A structure built from SOK2.  
Photos: PU-AMI

several other humanitarian organisations have implemented similar distributions of SOKs.

### Technical solutions

As the SOK does not contain any building material facilitating permanent construction, there were no problems gaining approval from local authorities regarding its distribution.

The kit was designed to be as flexible as possible, allowing beneficiaries to use the materials in a way that would best improve their shelters. The kit contained 22 different items. Plastic sheets, tarpaulin and plywood could be used for multiple purposes such as improving walls, ceilings or door panels, or for sealing windows and holes, while timber could be used for walls, doors, and window frames.

The SOK1 is designed for a small shelter unit such as an unfinished house, garage or shop. It included items such as foam filler, which is very useful for blocking small holes or gaps between the roof and walls and is much cheaper and easier to use than mortar.

The SOK2 is designed for self-made shelters built by the beneficiaries, and contains more timber and plastic sheeting, in order to reinforce the structure.

### Materials

All the kit items were well known to beneficiaries as construction materials, and have been available locally in both Lebanon and Syria.

Requests to suppliers were made several weeks before distributions, to

prevent bottlenecks or shortages in the local market.

### Use and adaptations

Some beneficiaries built entirely new extensions to their shelters with the kits.

Wooden and plastic partitions were used for separating sanitation facilities or providing privacy, with plywood, tarpaulin or plastic sheets sometimes employed as false ceilings. Internal and external doors were built from different wood components.

Plastic sheeting was often used to seal windows, but was also used for walling or for protecting brick walls from the weather during construction.

Left-over sections from timber and plywood were used for building furniture – everything from shelves and cupboards to bed frames.

Post-distribution monitoring surveys showed that around 13% of the beneficiaries sold some of the SOK contents, overwhelmingly in order to pay rent. Around 6% of households swapped and shared items in order to meet their specific needs.

### Wider project impacts

The SOK design was approved by a large number of aid agencies and donors. It has been distributed by several organisations since winter 2012.

### Simplified kit contents

Item	SOK1 (qty)	SOK2 (qty)
Transparent Sheet 20m x 2m / Plastic Film	1	1
Plastic Sheet (heavy duty Tarpaulin) 4m x 6m	1	1
Plastic Sheet (medium quality Tarpaulin) 4m x 6m	2	3
Nails for wood	1.5kg	2.5kg
Nails for concrete	3 boxes	-
Wood screws (box) and washers (1kg)	1	1
Aluminium wire mesh	4 m <sup>2</sup>	4 m <sup>2</sup>
Expanding foam filler	1kg	
Galvanised hinges and connectors	42 pcs	8 hinges
Padlock and latch	1	-
Adhesive tape	3 rolls	-
Toolkit: hammer, screw driver, saw, cutter	1	-
Plywood sheets 244cm x 122cm	5 x 4mm, 1 x 18mm	15 x 4mm
Wood various thicknesses and 3-4 metre lengths	15 pcs	33 pcs
Rope (6mm thick)	-	2kg