

## A.16 Kyrgyzstan - 2010 - Conflict

### Case study:

#### Country:

Kyrgyzstan

#### Disaster/conflict:

Civil disturbances

#### Disaster/ conflict date:

June 10<sup>th</sup>-11<sup>th</sup> 2010

#### No. of houses damaged:

2,000 compounds damaged  
1,690 completely destroyed

#### No. of people displaced:

300,000 people in Kyrgyzstan  
75,000 refugees in Uzbekistan

#### Project target population:

1,668 family shelters  
(13,400 people)

#### Shelter size:

28 m<sup>2</sup> covered living area  
(2 rooms of 14 m<sup>2</sup>) with an  
additional verandah of 16m<sup>2</sup>

#### Materials Cost per household:

Up to 5,100 USD per shelter  
(materials) depending on the  
level of damage

#### Project cost per household:

5,900 USD per shelter excluding  
operating costs.  
People building their own  
houses received 800 USD



#### Project timeline



#### Project description

Working through international partner organisations, the lead agency was able to build 1,668 seismically resistant winterised homes in time for winter. Homes were rebuilt using locally procured materials on the foundations of destroyed properties. Teams of engineers, foremen, community mobilisers were hired to ensure that all families received the material and technical expertise needed.

#### Strengths and weaknesses

- ✓ Shelters were designed with the beneficiaries. Families were allowed to make modifications.
- ✓ The homes were built using better material than previous dwellings.
- ✓ Homes were insulated and seismically resistant in line with national codes and international standards.
- ✓ People built their own shelters and were assisted in their work through contribution towards labour costs.
- ✓ Homes were built in existing compounds. This allowed the families to monitor the construction.
- ✓ The project was structured so that implementing organisations shared responsibilities.
- ✓ The implementing partners had good numbers of

- site engineers to oversee the work and provide advice.
- ✗ Materials were difficult to procure in volume. Transportation costs were high, flooding of quarries stopped sand production, timber was delayed at the border, and some suppliers withdrew from contracts.
- ✗ Small access roads, and lack of security on site meant materials could only be delivered in small volumes.
- ✗ Removal of debris was slowed by lack of heavy machinery and heavy traffic.
- ✗ Lack of proper documents prevented payment through the bank. Security made other means of payment challenging.
- By building their own houses, work was delayed and quality reduced, but the process acted as training.



“We were born here, we worked our entire life in Jalalabad, we built a house, invested all our savings and everything went in one day. We lost everything... This house gives me hope to see my grandchildren again”

Project beneficiary

A man stands in front of a destroyed building in the neighbourhood of Kizil Kishtak in Osh, Kyrgyzstan.  
Photo: Rodrigo Ordóñez

### Before the conflict

In Kyrgyzstan, families tend to live in compounds, containing an average of 2 families (15 persons). Households are defined as ‘one or more nuclear families related by blood or law who share the same compound. Most compounds contain 2-4 small houses.

The main type of house is a “Private One Storey”, and each compound has around 300m<sup>2</sup> of covered living space. The vast majority of homes have plastered walls and timber floors. Over 80% of the houses have a slate roof.

Nearly every house had access to water before the crisis through the municipal tap network. A minority has access to a private well. Some neighbourhoods had collective wells.

### After the conflict

The inter-ethnic violence of 10-11 June 2010 prompted a large scale displacement of mostly ethnic Uzbeks from within the Kyrgyz population. The displacement occurred rapidly within 3-4 days.

After the violence of June 2010, more than 1,500 families were without basic shelter or supplies in the south of Kyrgyzstan.

The damage led to large amounts of rubble and debris, including asbestos. Winter was approaching and temperatures would fall significantly below zero.

### Selection of beneficiaries

The project was for displaced families. The agreed selection criteria for beneficiaries was:

- Displaced people living outside (homeless) or in collective centres.
- People returning to (refugees and IDPs) their damaged homes.
- Displaced people (including separated family members) who were unable to return to their homes due to damage. In particular, where five or more displaced people are living with a host family.
- Very vulnerable individuals, and their displaced or returning family, including, but not necessarily limited to, single parented headed households and families supporting disabled or chronically sick people.
- Households who lost family members in the fighting.

### Emergency response

Tents and non-food items were initially distributed as an emergency measure.

A planning figure of 2,000 was used for damaged / destroyed shelters. This initial figure was arrived at through analysis of satellite imagery, and was based on two areas, Osh (1,500 households) and Jalalabad (500 households).

### Needs assessment

A house-to-house survey was conducted, assessing every recently damaged residential structure. Information on structural damage, as well as pre and post conflict data about the household was collected.

The survey started with a pilot phase on 3<sup>rd</sup> July 2010. The survey was completed for Osh city on 10<sup>th</sup> July. The Jalalabad component was carried out from 11–13<sup>th</sup> July 2010. Surveys included staff from different agencies.

Preliminary results gave an indication of the damage: 770 houses in Osh city, which is an estimated 38% of the expected overall total of houses that were damaged in Osh.

### Technical solutions:

The “emergency transitional shelter strategy” was developed by the Shelter Cluster participants with the Ministry of Emergencies and the State Directorate for Reconstruction. Technical issues such as selection of the building materials for the emergency transitional shelter was developed by the Shelter Cluster Technical Working Group which included representation of the government engineering team.

The actual design of, and support for, the emergency transitional shelter was based on the level of damage to the existing structures and the living space requirements of the house owners / users. The main building in the shelter assessment was assigned a damage categorization consisting of four levels, with corresponding entitlement to support:

- **Category 1)** minor damage. Up to 500 USD of materials.
- **Category 2)** moderate damage. Up to 1,500 USD of materials.
- **Category 3)** major damage. Up to 3,000 USD of materials.
- **Category 4)** Full reconstruction required. Up to 5,100 USD of materials.

75% of housing units assessed were fully destroyed (category 4).



The following prioritisation principles were applied:

- A minimum of two rooms of 14m<sup>2</sup> each per family. If there is more than one family per compound, support for additional rooms was provided.
- All damaged houses or compounds were provided with materials under a controlled monitoring regime, technical support and some support for labour. This was to ensure appropriate and warm living space for the family during the harsh winter. The estimated requirements were limited per level of damage.
- Families were engaged in the reconstruction / repair process. They had to provide labour through a self help programme. Family composition and capacity were taken into account.
- Priority was given to the most vulnerable households.
- All partially damaged houses were provided with support that ensures that their homes were repaired to the same standard and quality.

Shelters were designed on a case-by-case basis, taking into account the time frame, structural integrity of the existing foundation, availability of skilled communal labour (masons in particular for brick laying), bricks, and the amount of living space required for the household members. None-

theless, the basis of the project was modular, with two-room units providing 28 m<sup>2</sup> covered area.

This modular approach allowed for flexibility. In situations where a full structure could not be completed, the superstructure could be made of panels instead of brick and mortar. All other structural details remained the same for the sake of equity.

The majority of homes did not have indoor latrines prior to the conflict. Damage done to the outside sanitary facilities was not as extensive as to the main buildings. However, latrines were restored, as needed, to meet the toilet needs through the winter.

Given the scale of the challenges and the cost of the project, a third party neutral monitoring scheme was established to provide objective information with regular feedback on what was working, and what needed to be improved.

The State Directorate for Recon-

struction provided cash transfers to affected families, after which the affected families purchased supplies directly from government construction suppliers. All efforts were made ensure that all organisations worked to similar approaches and specifications.

### Logistics and materials

The government was committed to support the temporary / transitional housing scheme and offered tax exemptions for building materials, warehousing and transport.

Implementing agencies had to quickly source and purchase large amounts of construction material, including sand, cement, bricks and timber. Each day, 300,000 bricks had to be sourced, procured and delivered, as well as 800m<sup>3</sup> of sand, 600 cubic meters of gravel, 750m<sup>3</sup> of aggregate, and many more materials. In total, the programme used around 10 million bricks as well as 7,350 metric tons of cement.

Level of assessed damage**	Number of houses	Estimated cost (USD)	Total amount (USD)
Category 1	92	500	46,000
Category 2	94	1,500	141,000
Category 3	271	3,000	813,000
Category 4	1,419	5,100*	7,236,900
Unconfirmed category	6	unknown	Up to 30,600
Total	1,876		

\* Assuming that there are on average two families per compound

\*\* As per preliminary results of shelter assessment