



KOBANI A city of rubble and unexploded devices

In April 2015, Handicap International assessed the damage caused by the fighting in the city of Kobani and the surrounding villages. The team found an appalling illustration of the devastating consequences of the intensive use of explosive weapons¹ in populated areas by all parties in Syria²: civilians killed and injured, homes and infrastructure destroyed, and populations in danger when trying to settle back and rebuilding their lives.

Hardly ever before have Handicap International teams encountered such a density and diversity of explosive remnants of war contamination³.

KEY FACTS

- The level of weapons contamination in city center is extremely high: an average of 10 pieces of munitions per square meter.
- **700 coalition air strikes** destroyed most of the buildings in the 11 Islamic Stateoccupied neighbourhoods, including the city centre and the eastern and southern parts of the city.
- A wide variety of industrial and home-made munitions were used by parties:
 - 250-kg to one-tonne aerial bombs
 - Around 40 booby-trapped cars blown-up in the city centre, some containing several tonnes of explosives
- 20 suicide bomb attacks occurred in the eastern neighbourhoods.
- An array of **booby traps**⁴, placed all over Kobani and the surrounding villages and farms, are causing numerous accidents. Some devices have exploded, while many others still wait to be tripped.

On January 25, 2015, the city of Kobani was officially taken by Kurdish forces after four months of fierce combat of Kurdish combatants and other armed groups against fighters of the Islamic State. The ground fighting, as well as U.S.-led coalition air strikes, were extremely violent, destroying almost 80% of the city and forcing 90% of Kobani's residents to flee to Turkey.



^{1.} Explosive weapons entail mortars, missiles, rockets, artillery shells and aircraft bombs and other weapons which under the Convention on Certain Conventional Weapons and other instruments are referred to as 'explosive ordnance', as well as improvised explosive devices. Different technical features dictate their precision and explosive effect, but these weapons generally create a blast-and-fragmentation zone.

^{2.} See Handicap International report, "The Use of Explosive Weapons in Syria: A Time Bomb in the Making", May 2015.

^{3.} Explosive remnants of war entail unexploded ordnance and abandoned explosive ordnance (Convention on Conventional Weapons, Protocol V, Article 2).

^{4.} An explosive or non-explosive device, or other material, deliberately placed to cause casualties when an apparently harmless object is disturbed or a normally safe act is performed (IMAS).

Kobani is a city located in Syria's Aleppo governorate, which is one of the areas most contaminated by explosive remnants of war. The city covers 7 km², and counted 60,000 inhabitants before the fighting. Across the entire governorate, explosive remnants of war threaten an estimated 1.1 million people.



CLASSIFICATION OF CONTAMINATION IN KOBANI

The explosives contamination observed in Kobani and the villages in the immediate vicinity can be classified as follows:

1. INDUSTRIALLY-PRODUCED MUNITIONS

The industrially-produced munitions observed in and around Kobani can be classified into the following major families: aerial bombs, cartridges (small calibre), cluster munitions, grenades, missiles (MANPADS), mortars, rockets, and shells.

Examination of explosive remnants of war and the packaging spotted during site visits indicated that these weapons were produced mainly in: Russia, the former Yugoslavia, Belgium, the United States, Turkey, and other NATO countries (for the air-to-ground munitions). Weapons that did not explode on impact remain dangerous, and may explode at any moment. Professional deminers are needed to neutralize these munitions.



2. HOMEMADE MUNITIONS

Used by several parties, homemade munitions can be found in large quantities in most of Kobani's neighbourhoods. The homemade munitions observed in the field can be classified as grenades, mines, mortars, and rockets. In most cases, these munitions functioned only partially or not at all. The failure to function was due to their unsophisticated firing systems and the low quality explosives with which they were made. They are, nevertheless, still dangerous. The explosives they contain can remain highly flammable and unstable for a long time, putting the civilian population in direct risk because of the lack of awareness about the danger these projectiles pose.



3. BOOBY TRAPS

The booby traps studied during the evaluation mission were all anti-personnel by nature, in that they had either a steel casing that would naturally create shrapnel on exploding, or additional fragmentation. The explosive charges discovered in Kobani amounted to tens or even hundreds of kilos. Most of the time, these are homemade explosive materials, or mixtures of high explosives recovered by disassembling industrially produced munitions.

Booby traps found in Kobani were designed to stay active for a long time. They were found among the rubble of homes—attached to furniture, doors, and windows—in vehicles like cars or tractors, hidden in olive groves, water supply systems, cultivable areas, and beyond. They prevent the safe return of inhabitants and create an atmosphere of terror by preventing any movement or normal, everyday life activities.

4. BOOBY-TRAPPED CORPSES

Among terrible tactics used in the Kobani battle, booby-trapped decapitated human bodies were left in the rubble. Filled with 20-kg explosive charges and more than 500 steel ball bearings as improvised fragmentation bombs, the corpses are rigged to explode at the slightest touch. Previous attempts to recover such bodies ended in tragic accidents. Since then, the bodies have remained where they are, and continue to decompose while awaiting intervention by deminers trained in booby trap clearance.



OVERVIEW OF CONTAMINATION IN KOBANI CITY AND SURROUNDING VILLAGES

The information below on the density of explosives contamination should be taken with caution, because it refers only to dangerous devices that were visible on the surface. Based on the degree of destruction in some of the city's neighbourhoods, and the residents' daily discoveries of additional devices, contamination density estimates will likely be revised upward as the rubble is cleared.

Location	Contamination density⁵ (visible on the surface)	Type of contamination
Kobani city centre	Very high (10 pieces of munitions/m²)	Unexploded ordnance (UXO) ⁶ Abandoned explosive ordnance ⁷ Booby-trapped houses Booby-trapped vehicles Partially-destroyed T-72 tanks Home-made armoured vehicles Booby-trapped corpses
Northern Kobani neighbourhoods	High to medium (5 to 1 pieces of munitions/m²)	
Southern Kobani neighbourhoods	High (5 pieces of munitions/m²)	
Western Kobani neighbourhoods	Low (0.2 piece of munitions/m²)	Unexploded Ordnance (UXO)
Villages around Kobani	Medium to low (1 to 0.2 piece of munitions/m²)	Unexploded Ordnance (UXO) Abandoned Explosive Ordnance Booby-trapped houses Booby-trapped vehicles Anti-personnel and anti-vehicle mines

^{5.} As of April 2015.

^{6.} Explosive ordnance that has been primed, fused, armed or otherwise prepared for use or used. It may have been fired, dropped, launched or projected yet remains unexploded either through malfunction or design or for any other reason (IMAS).

^{7.} Explosive ordnance that has not been used during an armed conflict, that has been left behind or dumped by a party to an armed conflict, and which is no longer under control of the party that left it behind or dumped it. Abandoned explosive ordnance may or may not have been primed, fused, armed or otherwise prepared for use (IMAS).

Building destruction and contamination

An estimated **3,247 buildings have been damaged**, of which:

- 1,206 were completely destroyed
- 1,169 sustained serious damage and will have to be demolished
- 872 were moderately damaged and can be rebuilt (although they may be contaminated with unexploded ordnance and booby traps, which means that reconstruction will be impossible until clearance operations finish).

As a result of heavy fighting, many unexploded ordnance and abandoned explosive ordnance remain in the rubble of buildings that collapsed completely or are in danger of collapsing at any time. In addition, a large number of booby traps and suspicious corpses are still strewn around the neighbourhoods that experienced the fiercest fighting.

The ever-present danger in these sectors requires that the public be denied access to them immediately, and that emergency clearance starts as soon as possible.

Other sectors in the eastern part of the city suffered less damage and could potentially be rebuilt. Those areas have been identified and should be considered high priority for emergency rubble and booby trap clearance, so that reconstruction and the relocation of homeless families can begin.

Residents and returnees at high risk

The level of contamination by explosive remnants of war and booby traps of all kinds poses a very significant risk of accidents for residents and for refugees or displaced persons returning to settle in Kobani Canton.

Due to the lack of risk education programmes and the fact that booby traps have been concealed in the windows, doors, furniture, food, and everyday objects left in homes, but also in close proximity to access roads, and in vehicles, people face the greatest risks. The potential for loss of lives and injuries is enormous.

The population does not perceive the threat posed by the deadly weapons in their midst as they search through the rubble to find personal belongings or items that are necessary to their survival. In the hardest-hit neighbourhoods—including Al-Amin Al-Murabba and the Suq Hala, the former fruit and vegetable market, and the northern part of the city—residents continue to pull unexploded devices from the rubble and place them in the street for deminers to collect, despite the prohibition by the municipal team. While this is dangerous for the residents, it is even more dangerous for returnees, who have not been made aware of the risks as they attempt to return to their homes and rebuild them.

The situation in the villages around Kobani is also complex and tragic. The majority of families living in these regions are farmers, whose principal livelihood is agriculture and livestock. Though the villages suffered less intense fighting than Kobani, farms and access roads are dangerously contaminated by the booby traps and homemade mines left by fighters.

- On average, five to seven incidents occurred each week before the Handicap International team visit.
- Booby-traps and home-made mines have caused more than 40 deaths and many more injuries in the surrounding villages.



RECOMMENDATIONS

It is paramount for the international community to take immediate measures to protect people from the consequences of explosive weapons. This need is most pressing in Syria, but this issue should also be addressed at the global level.

States should:

- Strongly condemn the use of explosive weapons in populated areas and in particular the use of banned weapons such as cluster munitions and landmines in Syria;
- Support the development of an international commitment to end the use of explosive weapons with wide-area effects in populated areas;
- Share their national policies and practices related to the use of explosive weapons in populated areas according to the UN Secretary General recommendations.

All parties to the conflict should:

- Publicly commit to stop using explosive weapons in populated areas;
- Grant access to weapons clearance and risk education organisations;
- Ensure the protection of people living in areas under their control.

The humanitarian community should:

In terms of risk education:

- Support local risk education capacity building, and create a community of volunteers who will provide risk education and safe behaviour training to affected communities;
- Support the immediate launch of risk awareness

- programs, which can be systematically rolled-out in all affected areas in and around Kobani, with a particular focus on high-risk groups such as children;
- Support immediate risk awareness programs for persons who fled the conflict and are willing to return in Kobani, targeting, in particular, people living in refugee camps in Turkey and other neighbouring countries;
- Integrate risk education training at all schools in Syria offering formal and informal education, as well at schools for refugees in Turkey and other neighbouring countries to ensure that students learn safe behaviours around weapons.

In terms of emergency clearance:

- Immediately support and implement emergency rubble and booby trap clearance activities, so that home rehabilitation can begin, and homeless families can be relocated;
- Implement training programs and provide support to local partners to address basic clearance needs and rubble removal issues in areas of return and/or displacement in both rural and urban areas.

In term of victim assistance:

 Implement victim assistance programs, including rehabilitation in Kobani for the short- and longterm, and provide further support to hospitals and health facilities responding to the needs of the injured.

In term of funding:

• Ensure adequate funding to respond to the most urgent and long-term needs in terms of risk education, clearance and victim assistance.

 $\hbox{All pictures:} \circledcirc \hbox{Philippe Houliat / Handicap International}$

