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## OVERVIEW

**At least 21 States and four areas of Africa, the Middle East, Asia, and Europe are affected by cluster munitions or have been in the last five decades. In some countries, cluster munitions were used extensively, such as in Laos where the weapons were dropped over a period of nine years (1964 to 1973), creating a widespread lethal hazard for the population (GICHD, February 2007). In other contexts, their use has been more limited but the impact has also been severe. In Kosovo, for instance, the conflict lasted only 11 weeks, but it is estimated that between 230,000 and 290,000 submunitions were dropped (Landmine Action/ICRC) and that approximately 30,000 remained unexploded on the ground when the fighting ended (ICRC, 2001).**

*Submunitions can land far from the intended target. Darwish Abd el-Aal looks at an unexploded cluster munition hanging from a tree in an orchard.*

AP/Mohammed Zaatari

# CLUSTER MUNITION CONTAMINATION

## WHERE ARE CLUSTER MUNITIONS? WHAT IS THEIR LEGACY?

### WHICH STATES AND AREAS ARE MOST AFFECTED BY CLUSTER MUNITIONS?

Identifying the degree to which States are affected by cluster munitions can be difficult, as data on cluster munition contamination is sometimes mixed in with data on contamination by other types of unexploded ordnance (UXO). However, we do know that where cluster munitions have been used extensively, they have accounted for a large part of the explosive remnants of war problem and have had a severe impact on civilians and communities.

**Laos** became contaminated by cluster munitions between 1964 and 1973 as a result of the wars in the region. Handicap International's National Survey on the Impact of UXO in Laos found that the most common type of UXO contamination involved unexploded submunitions and that 1,553 villages were contaminated by these weapons (Handicap International, 1997). The Lao National Unexploded Ordnance Programme estimates that approximately 270 million submunitions were released from cluster bombs (UXO



Lao) and estimated that with a failure rate of 10% to 30%, between 9 million and 27 million unexploded submunitions remained on the ground at the end of the conflict (ICRC Expert Meeting on ERW, 2000). As of March 2007, Handicap International had recorded 4,837 people killed or injured by cluster munitions (Handicap International, 2007) – and victim data is still incomplete. About 200 new victims of explosive remnants of war, including submunitions, are still recorded in Laos each year. In addition, a significant number of incidents probably go unrecorded (GICHD). Laos is thus a prime example of the potentially long lasting effects of cluster munition use.

The case of **Kosovo** demonstrates that cluster munitions can leave behind severe problems that take years to address, even when they are used in short-lived conflicts. During the 11 week war in 1999, between 230,000 and 290,000 cluster submunitions were dropped in the territory (Landmine Action, 2007/ICRC, 2001) and it is estimated that approximately 30,000 failed to explode (ICRC, 2001). This created a serious hazard to civilians who, despite the warnings, entered cluster-strike areas such as fields, forests and vineyards because they had to in order to earn a living (ICRC, 2001). A Landmine Action study revealed that at

least 54% of the contaminated area was agricultural land (Landmine Action, 2007). In 2007, the Kosovo Protection Corps Coordination reported that 61 hazard areas remained, mainly in the west of the territory (Handicap International, 2007).

The latest recorded use of cluster munitions was in southern **Lebanon** in July and August 2006. Although there is no data available on the total number of submunitions used, an initial estimate in November 2006 by the UN Mine Action Co-ordination Centre in South Lebanon (UNMACC SL) indicated that up to a million submunitions remained unexploded after the fighting ended.

Areas contaminated by these weapons included agricultural land and water and power infrastructure. The UN Food and Agriculture Organization (UN FAO) estimated that in large areas of southern Lebanon at least 25% of the cultivated area was contaminated by unexploded cluster submunitions (UN FAO, 2006). Overall, agriculture constitutes nearly 70% of the total household income in southern Lebanon and half of the working population earns its living entirely from this activity (UN FAO, 2006). Unexploded submunitions have also hindered reconstruction efforts, e.g. by disrupting repairs to power lines (Landmine Action, 2006).

By December 2007, 217 civilians had been killed or injured by unexploded ordnance, almost all by submunitions (UNMACC SL, December 2007). A significant proportion of these incidents occurred when people returned to their homes following the fighting, or just after their return (Landmine Action, 2006).

By September 2007, the UNMACC SL estimated that 40% of the contaminated area had been cleared of all surface threat. However, only 21% had been fully cleared (i.e. to a depth of 20 cm). In October 2007, it reported that 131,115 unexploded submunitions had been cleared so far.

Cluster munitions were also used extensively in **Afghanistan** in the conflicts of the 1980s and 1990s and, most recently, in 2001–2002. However, many contaminated areas in Afghanistan are not mapped, and submunition contamination is often not differentiated from that due to other explosive remnants of war (Handicap International, 2007). By February 2007, 222 out of 269 known sites had been cleared of recent contamination (Handicap International, 2007).

## WHAT CHALLENGES ARISE IN AREAS AFFECTED BY CLUSTER MUNITIONS?

Like anti-personnel mines and other explosive remnants of war, unexploded cluster submunitions have severe effects, which go well beyond individual casualties. As highlighted above, the contamination from these weapons often blocks access to basic necessities such as food, water and fuel, and to schools, markets, health care and other essential services.

Because submunitions have such a high failure rate and are scattered in such large numbers, even a single cluster munition strike in or near an agricultural area, for example, can pose a significant long-term socioeconomic and physical threat to the population.

In **Iraq**, according to the United Nations Assistance Mission for Iraq (UNAMI), agriculture provides employment to 37% of the population (UNAMI, December 2006). Reports by the Iraq Landmine Impact Survey (ILIS) in 2006 revealed that in some areas of southern Iraq, 100% of agricultural land and 95% of pasture land was inaccessible due to ERW, including submunitions (Handicap International, 2007).

When agricultural areas are contaminated or water sources become inaccessible – and as it often takes time to clear the affected areas – people may take conscious risks in order to access their fields, fuel

*Areas contaminated by cluster munitions create a serious hazard to civilians and have long-term consequences for war-affected communities.*

John Rodsted



sources or clean water. In **Vietnam**, 61.1% of all cluster submunition deaths and injuries between 1975 and 2007 occurred while the victims were farming, herding or digging, and 53.1% of incidents occurred on agricultural or grazing land (Handicap International, 2007).

Unexploded submunitions can also represent valuable but extremely dangerous sources of income. For example, nomads in **Afghanistan** have fallen victim to submunitions as they collect the weapons as scrap metal to supplement their income (Handicap International, 2007). In **Cambodia**, scrap metal collection and trade is a common activity (Handicap International, 2004). When scrap metal prices rose after 2002, so did the number of accidents resulting from deliberately handling ERW to extract metal (Cambodian Red Cross). In a survey by Handicap International, 32% of the

children interviewed relied solely on scrap metal for their income (Handicap International, 2004).

Submunitions are highly explosive and may be extremely unstable. Clearance teams therefore have to exercise extra care when encountering and destroying them. This also makes the process more expensive and time-consuming. The same characteristics make it likely that when a person accidentally detonates a submunition, others in the immediate vicinity will also be killed or maimed.

*A Mines Advisory Group (MAG) team clears unexploded cluster submunitions. This is a highly dangerous, time-consuming and expensive task.*

Sean Sutton/Panos Pictures



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