

The Implications of the Reverberating Effects of Explosive Weapons Use in Populated Areas for Implementing the Sustainable Development Goals

SDG Goal 2: Zero hunger

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This factsheet is an extract from a longer UNIDIR report on [Reverberating Effects of Explosive Weapons Use](#).

Target:

2.1: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations (...) to safe, nutritious and sufficient food all year round

The effects of explosive weapons reduce food availability and thereby drive up food prices. This affects poor and vulnerable people the most. Destruction of food production facilities reduces available food stocks. Damage to key transport infrastructure disrupts food importation and distribution. When markets are attacked, goods are lost and trade is interrupted. ERW can reduce the extent of cultivable land. Fear of the potential effects of explosive weapons affects commercial decisions and changes humanitarian practices.

A functioning food production-marketing-consumption chain is necessary for food security. Explosive weapons interrupt this chain at important points thereby reducing access to food and often causing substantial food price increases. To avoid hunger, people need to be able to produce food or they need markets to function (most people purchase some or all their food), and in cases of desperate need they require access to humanitarian relief.

No previous reports discussing the specific effects of explosive weapons on the food supply chain could be identified. This document draws on incident descriptions reported by the media to highlight the reverberating effects of explosive weapons on food supplies.

The effects of damage to food production, transport and distribution facilities

Explosive weapons damage affects production, transport and distribution infrastructure to a much larger extent than other conventional weapon types.

Air-delivered explosive weapons have damaged industrial **food production** sites. For example, in November 2015, a bakery was hit by air-delivered explosives in Saraqib¹ and a chicken farm in Raqqa, both in the Syrian Arab Republic.² If ERW are scattered over cultivable land, crop cultivation is reduced. For example, in the Lao People's Democratic Republic a third of all land is still contaminated with ERW from the war years (1964 to 1973), affecting farmers the most.³ Agricultural land can also be affected through the destruction of water supply, as happened for example in November 2015 in Deir ez Zor, Syrian Arab Republic, when air-delivered explosives destroyed a water pumping station responsible for providing water for 50,000 acres of land.⁴ Damage to specialized production facilities can have a severe impact. For example, according to the charity which ran the bakery in Saraqib, Syrian Arab Republic, the factory supplied bread to around 45,000 internally displaced people daily before it was bombed.

Air-delivered explosive weapons have caused damage to important **transport hubs**. Depending on the strategic importance of these hubs, this destruction can have a devastating impact on food security. For example, when the port of Hodeida, Yemen, was hit by air strikes in August 2015, cranes and warehouses were destroyed and the port was closed.⁵ Six weeks later, the Maritime Security Company, Mast, reported that one crane was working but that a fuel shortage made it likely that the port would be closed again.⁶ As Hodeida is Yemen's most

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important entry point for imports, handling over half of all unloaded dry bulk cargo,⁷ this damage had a devastating impact on food security in the country. The United Nations reported a 28 per cent rise in food prices across Yemen between August and September 2015.⁸

Damage to local markets can be caused by a much wider variety of explosive weapons. Some incidents have involved air-delivered weapons, such as the bombing of the livestock market in Fayyoush district, Lahj Province, Yemen, in July 2015.⁹ Markets have also been damaged by ground-delivered weaponry, as occurred in mid-2015 in Donetsk, Ukraine,¹⁰ or by IEDs and suicide bombings, such as the destruction of Yola market in Nigeria in November 2015.¹¹ Use of explosive weapons in the vicinity of markets tends to cause high numbers of casualties (45 dead, 50 injured in Fayyoush, Yemen, 32 dead, dozens injured in Yola, Nigeria). Such attacks also destroy food stocks and disrupt trade. However, these incidents rarely cause permanent closure of markets, which are of such importance to small-scale traders that many will continue to trade—despite the risks of repeat attacks.

The reverberating effects of explosive weapons on the food supply chain

A functioning food supply chain depends on rational choices made by numerous suppliers of foods and related services. The risk of damage and destruction causes many suppliers to divert food stocks to areas not affected by explosive weapons and transport providers to alter their practices. For example, when the conflict in Yemen escalated in March 2015, 25 per cent of Saudi transport companies reportedly declined to transport goods into Yemen citing security concerns for their assets and staff. Commercial food importers in Yemen reported difficulties in using open letters of credit from banks for shipments into the country, which reduced the amount of food they were able to import.¹² Many insurance companies do not provide coverage for goods exported into areas of explosive weapon use. As one representative explained: 'It is like the analogy that you can't insure your house when it is already on fire.'¹³ When aerial bombardment of Yemen began in March 2015, insurance companies focused on supporting the evacuation of assets instead of facilitating trade. These changes in commercial practices reduced the amount of accessible food.

Humanitarian agencies try to fill the gap left by market failures by providing food aid. However, they need to balance providing humanitarian aid with appropriate measures to protect their staff. The result is that their security risk assessments in the light of widespread aerial bombardments also tend to reduce their ability to deliver food. For example, humanitarian aid agencies relying on transport routes through north-western Syrian Arab Republic introduced precautionary security measures to lower the risk of their supply trucks being targeted when the number and frequency of air strikes in the area increased at the end of November 2015.¹⁴ The cumulative impact of these measures—such as not permitting travel in convoys and changing offloading practices—reduced the quantity of all food delivery by 80 per cent, according to one humanitarian actor (Mercy Corps).¹⁵

In summary, the reverberating effects of explosive weapons indirectly increase mortality when the destruction they cause disrupts trade in food. Many people are made more vulnerable to malnutrition and disease. Infrastructure reconstruction destroys livelihoods and adds to the post-conflict development bill. Destruction by explosive weapons leads to marginalization of affected areas in world trade in goods and services.

Endnotes

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² "French Jets Pound Raqqa as G20 Pledges New ISIL Fight", *Al Jazeera*, 16 November 2015.

³ "Leftover Unexploded Ordnance (UXO)", *Legacies of War*, 2 April 2016.

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⁵ "Saudi-Led Warplanes Hit Yemeni Port, Aid Group Sounds Alarm", *Reuters*, 18 August 2015; "Airstrikes of Arab Coalition Destroyed Hodeidah Port", *Maritime News*, 19 August 2015.

⁶ "Mast: Ports in Yemen Open, but Operation Difficult", *World Maritime News*, 8 October 2015.

⁷ *Hodeidah: Agro-Industrial Capital of Yemen: Local Economic Development Strategy*, p. 6.

⁸ Office for the Coordination of Humanitarian Affairs, *Yemen: Snapshot on Shipping and Food Imports*, 11 October 2015.

⁹ Kareem Shaheen, "Deadly Air Strike Hits Market in Yemen", *The Guardian*, 6 July 2015.

¹⁰ Maria Tsvetkova, "Ceasefire Brings Limited Respite for East Ukrainians", *Reuters*, 21 July 2015.

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¹² Fakhri Al-Arashi, "Businessmen Demand Advance Payment for Exports to Yemen", *National Yemen*, 22 February 2015.

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¹⁴ Christina Wille, "The Impact of Explosive Weapons on Humanitarian Access", *Aid in Danger [blog]*, December 2015.

¹⁵ Umar Farooq, "Russian Air Strikes in Syria Choking Humanitarian Aid", *Middle East Eye*, 21 December 2015.