

United Nations Mine Action Team

Gaza Office



**THE
UNITED
NATIONS
MINE ACTION**

Unexploded Ordnance & Gaza: Operation Cast Lead

Unexploded Ordnance (UXO) from Operation Cast Lead poses a direct threat to the physical security of communities, internally displaced persons and UN and humanitarian actors living and working in Gaza. The existence of UXO also hinders the already-difficult tasks of reconstructing homes and essential infrastructure, and re-developing the means for livelihoods. Thus, under the

coordination of the United Nations Mine Action Service (UNMAS) the United Nations Mine Action Team – Gaza Office (UNMAT-GO) was established to provide a rapid response towards neutralising the threat of UXO: coordinating Explosive Ordnance Disposal (EOD) teams, providing UXO safety training for humanitarian workers and raising awareness amongst the local population.



An unexploded 2000lb bomb on the second storey of a damaged building in Rafah, Gaza Strip

The Threat

While anti-tank mines were used to demolish buildings, there is no evidence that landmines were laid by either side. The key threat is from UXO, largely Mark 80 series General Purpose High Explosive (HE) aircraft bombs ranging from 500-2000lbs, Guided Bomb Units, 120mm tank rounds HE, 120 and

155mm Artillery shells containing HE and White Phosphorous (WP), various calibre mortar rounds (60mm - 120mm WP, Illumination & HE), various ordnance delivered from Apache Helicopters, 76mm Naval ordnance, as well as a range of Infantry weapons small arms ammunition and 40mm HE grenades. Local authorities possess a limited EOD capacity and

conducted some surface clearance of UXO during, and in the days immediately following the conflict. While it has proven difficult to gather precise data on accidents involving UXO since the bombardment ended, the Gaza Ministry of Health has reported that 7 civilians (including 6 children) have been killed and a further 26 injured in 8 incidents since 23 January.

UNITED NATIONS MINE ACTION TEAM— OBJECTIVES

1. Providing freedom from fear: minimizing the threat of death or injury caused by UXO to those living and working in Gaza; and,
2. Enhancing freedom from want: supporting rubble removal, reconstruction and rehabilitation of housing, infrastructure, agricultural land and livelihoods in line with the Palestinian National Authority Early Recovery & Reconstruction Plan 2009-2010 (2nd March 2009) and UN Security Council Resolution 1860 (2009).

UNMAT WOULD LIKE TO THANK THE FOLLOWING DONORS FOR SUPPORT TO MINE ACTION IN GAZA

- *United Kingdom Department for International Development*
- *European Commission*
- *United Nations Office for the Coordination of Humanitarian Affairs*
- *Government of the Kingdom of the Netherlands*
- *The Swedish International Development Agency*

The most significant remaining UXO threat now lies within the ruins of collapsed and damaged buildings. UNMAT's work over the coming months will focus on support to rubble removal – the safe clearance of UXO being crucial for these projects' success. UNMAT input into the assessment and planning for such projects will be fundamental for the safe and effective rebuilding of Gaza.

4,036 housing units were completely destroyed in the bombardment, with a further 11,514 partially damaged. While a number are known to have been razed me-

MINE ACTION & RUBBLE REMOVAL

chanically, a large proportion were struck with 500 – 2000 lbs aircraft bombs, as well as other naval, air and ground delivered ordnance containing both high

explosives and white phosphorous. There is thus a high probability that significant quantities of UXO remain in



A home which has been classed as "highly likely" to contain UXO

the rubble. UNMAT will provide risk assessment, EOD and awareness training services to ensure that the estimated 9,000 Palestinians involved in this complicated task are able to do so with the minimum possible threat of injury or death from UXO.

The threat in the rubble

Risk assessments have only recently begun (in late April 2009). Of the 215 buildings assessed so far, 49% were classed as having a high or medium risk of UXO contamination thus requiring EOD follow-up. If this trend continues, it can be estimated that more than 7,000 buildings in Gaza are likely and

1,500 are very likely to contain unstable UXO. Detonation of just one large item of ordnance during rubble removal could cause death or injury to large numbers of Palestinian laborers working on the site, and to surrounding communities. Heavy-lifting machinery (which is already in short supply in Gaza) and

surrounding infrastructure would likely be damaged. Experience from rubble removal projects in other countries has shown that any accidents or incidents involving UXO set the overall process back and thus delay reconstruction and recovery.

Damage to livelihoods

Significant damage was inflicted upon other livelihoods sectors: for example, the United Nations Food and Agriculture Organization (FAO) estimates that 12,000 hectares of agricultural land was damaged during the bombardment, while irrigation trenches and equipment were targeted extensively. UNMAT will lay the foundations for rehabilitation of these lands and facilities by providing assessments and remov-

ing ordnance. UNMAT will also remove and destroy other explosive remnants of war as requested and permitted by the de facto authorities, UN agencies and NGOs. In addition, close to 100 "impact holes" have been located, which are believed to contain ordnance which failed to explode and is now buried sub-surface; UNMAT will work to remove and destroy these items. A 24/7 call-out service will also be provided in the case of emergencies.



Extensive damage was caused to agricultural infrastructure during the bombardment



What is UXO?

UXO by definition has been prepared for use, and fired, dropped, launched or projected, but remains unexploded. It is often sensitive to movement and may explode when touched or otherwise disturbed. UNMAT-GO will work to remove and destroy these items of UXO as requested and permitted by the de facto authorities, UN agencies and NGOs, so that they do not continue to pose a threat to the civilian population in Gaza.



One of several collections of UXO known to exist in the Gaza Strip

Mine Action: Who does it?

The United Nations Mine Action Service (UNMAS): The unique political and security situation in Gaza requires a well-coordinated approach between international humanitarian organizations operating in the area, and local authorities. UNMAS – under the Department of Peacekeeping Operations’ Office of Rule of Law and Security Institutions – was designated the UN mine action focal point in 1997. UNMAS

mobilized into Gaza on 23 January 2009 to conduct a technical assessment mission, and to establish a mine action project in response to Operation Cast Lead, and offices have since been opened in Gaza and Jerusalem. A Programme Manager, Security Officer, Support Specialist and Programme Officer now coordinate the operations of implementing partner EOD, community liaison and awareness-raising teams, and provide

technical advice to UN agencies and NGOs. The Swedish Civil Contingencies Agency (MSB) provides an in-kind operations officer and medical coordinator.

CHALLENGES

UNMAT is waiting for the IDF to approve an isolated site which can be used as an area for demolition of ordnance. This is the key remaining challenge to mine action work in Gaza

Mines Advisory Group



An EOD technician from Mines Advisory Group extinguishes a burning White Phosphorus sponge

British-based NGO Mines Advisory Group (MAG) has been the key implementing partner for UNMAT. MAG deployed two of its directors to Gaza in mid January to coordinate and plan with representatives of UNMAS. This was followed by the deployment of MAG’s technical personnel to Gaza from the 23rd January. MAG immediately commenced assessment of schools, health facilities and responded to reports of UXO

(Unexploded Ordnance) contamination. 5 EOD teams have removed and rendered safe UXO across the Gaza Strip and conducted assessments in support of the operations of humanitarian and development organizations. UXO safety briefings for UN agencies and NGOs, promoting safe behavior for those working in Gaza. Medical support to MAG is provided by the Canadian-based organization GlobalMedic.

UXO located:

UNMAT has identified 197 items of unexploded ordnance (56 containing white phosphorous and 141 containing high explosives)

- 120mm HEAT x 4
- 120mm WP x 4
- 40mm HEDP x 1
- 60mm Mortar Illum x 1
- 81mm Mortar Illum x 2
- 155mm HE x 96
- 155mm WP x 52
- 30mm HE x 4
- 20mm HE x 1
- Mk82 500lb Bomb x 18
- Mk84 2000lb Bomb x 6
- M117 750lb Bomb x 7
- 76mm WP (Naval) x 1

To sustain life-saving mine action operations in support of rubble removal and reconstruction, UNMAT is seeking to secure \$4.96million for 18 months between 1 August 2009 and 31 January 2011.

United Nations Mine Action Team Gaza Office

Mr. Kerei Ruru
Programme Manager
Gaza Office: Floor 2, Hanadi Tower
Jerusalem Office: 8, Nur Ed Din St, Wadi Joz

Phone: +972598785912
Phone: +972543447853
E-mail: kerei@unops.org



United Nations Mine Action Team
Gaza Office

ACHIEVEMENTS

UNMAT's achievements as of 15 May 2009 include:

- the opening of all arterial roads in the Gaza strip permitting much-needed access for humanitarian relief
- the survey and clearance of all known contaminated schools in Gaza (38 UNICEF-supported government schools and 4 UNRWA schools)
- clearance of all UN facilities
- survey and clearance of a number of high-priority buildings and areas, including hospitals, clinics, market places and warehousing for organisations including the United Nations Development Programme, United Nations Relief Works Agency, Disaster Waste Reduction, Norwegian Refugee Council (NRC) and Community Housing Foundation Inc



UNMAT has now cleared all known UXO from all schools in the Gaza Strip

These achievements are particularly significant in the context of the complex operating environment, with access for staff, goods and equipment extremely limited, and security concerns hampering many operations. Crucially, a majority of this work has been undertaken in support of and at the request of UN agencies and NGOs in Gaza, enabling them to resume operations and plan for future work

Still to be achieved:

Assessments :

- 285 homes and 15 government buildings for UNDP (before 15 June 09)
- 301 buildings in IDP "camps" for UNRWA
- A further 2 assessments of sites containing 39 homes for CHF
- Various other small-scale rubble-removal assessments for NGOs

Training:

It is expected that up to 9000 rubble removal workers and supervisors/team leaders will receive "rubble removal & UXO safety" trainings.

EOD support:

Of 198 buildings assessed to date:

- 10% have been classified as "high-risk". An EOD team will thus assist the site supervisor to devise clearance plans, and be present on the site during some or all of the rubble removal process.
- 39% are medium risk. An EOD team will be on-site or available at 60mins notice.
- EOD teams will remain on stand-by to respond to reports of UXO discovered in the rubble of

destroyed/damaged buildings.

- Assessment and clearance of agricultural lands (12,000 Hectares destroyed, extensive bombing of equipment and irrigation systems
- Approximately 300 tunnel houses requiring checking for UXO
- EOD support to other livelihoods and reconstruction projects as requested
- Investigation of close to 100 impact holes suspected to contain UXO (including excavation)



**THE
UNITED
NATIONS
MINE ACTION**