



## EVALUATION OF UN MINE ACTION TEAM IN NEPAL

### EXECUTIVE SUMMARY

### INTRODUCTION

#### ***Background***

The ten year insurgency which ended in November 2006 left Nepal heavily contaminated by mines and unexploded ordnance. Minefields had been laid at 53 locations by the Nepal Army (NA) to protect military installations, police posts and infrastructure such as communications sites. Of greater impact was the large number of improvised explosive devices (IEDs) used by the Maoist Army, and to a lesser extent by the NA and armed police. As a result, Nepal's relatively small population of 28 million ranks among the world's most affected by explosive remnants of war (ERW).

When the insurgency ended both sides agreed to rid the country of the threat from landmines and ERW. Indeed, the Comprehensive Peace Agreement (CPA) of 21 November 2006 requires the NA and the Communist Party of Nepal (Maoist), CPN (M), to assist in the clearance of minefields, and the destruction of stockpiles of ammunition and caches of IEDs.

In December 2006, a mine action unit was formed as part of the UN Mission in Nepal (UNMIN) to provide technical assistance to the national mine action authorities and implementing organisations; and in April 2007 a commercial demining organisation was awarded a UN contract to destroy IEDs, and to train the NA to conduct humanitarian demining to international standards.

In late 2007 a UN interagency assessment was conducted with the aim of clarifying the UN's support to mine action in Nepal. One of the outcomes of the assessment was an expansion of the role of the UN in developing Nepal's national mine action capacity.

Over the past 30 months much has been achieved in advancing national mine action in Nepal. It is timely to review the role of the UN Mine Action Team (UNMAT), and to make recommendations on the Way Ahead.

#### ***Evaluation aim***

The aim of the study was to assess the effectiveness of the support provided by UNMAT in addressing the mine action needs of Nepal, and to compare the current UNMAT capacity development approach with the former approach taken by the UN contractor, ArmorGroup International.

#### ***Approach and methodology***

The evaluation was conducted in three phases:

Phase 1: Phase 1 of the evaluation involved the collection and initial analysis of information, and a review of reports and previous assessments by the United Nations and others.

Phase 2: Phase 2 involved meetings and interviews in Nepal with UN staff, international and national NGOs and the NA. On Wednesday 20 May, key UNMIN staff and senior NA officers were briefed on the provisional findings and recommendations of the evaluation.

The evaluation coincided with the delivery by Cranfield University of a mine action management course for mid-ranking officers of the NA. The course provided a unique opportunity to assess the current level of knowledge and skills of the NA's mine action managers, and to determine the NA's potential to manage mine action in Nepal effectively, efficiently and safely without the ongoing assistance of UN technical advisers.

Phase 3: Phase 3 involved a briefing of UNMAS and UNOPS staff by conference call on 17 June 2009.

### ***Key terms and definitions***

Individuals and formed units who fought for the CPN(M) are known as the Maoist Army. The CPN(M) merged in January 2009 with a smaller communist party and was renamed as the Unified Communist Party of Nepal (Maoists). For the sake of this report the Unified Communist Party of Nepal (Maoists) is referred to as the CPN(M).

The Army of Nepal was known as the Royal Nepal Army prior to 2006. For the purposes of this report it is referred to as the Nepal Army (NA) throughout.

### ***Sources of information***

A number of sources of information were used by the evaluation team. Sources included the texts of the CPA and Agreement on the Monitoring of the Arms and Armies (AMMAA), Landmine Monitor reports, International Crisis Group Asia Report 126, Economist Intelligence Unit country report and country forecast, ArmorGroup mission reports, UNMAT Concept of Operations Version 6, and NAMACC/UNMAT Capacity Development Plan Version 1.3.

Information was gathered by the Cranfield University evaluation team through meetings and semi-structured interviews of 12 national and international staff. The feedback was candid and consistent, and has provided a sound basis for the subsequent analysis, leading to the findings and recommendations given in this report.

The evaluation used classic research methods for reviewing and assessing the information for accuracy and relevance. Wherever possible the team characterised the information collected into substantiated data and opinion.

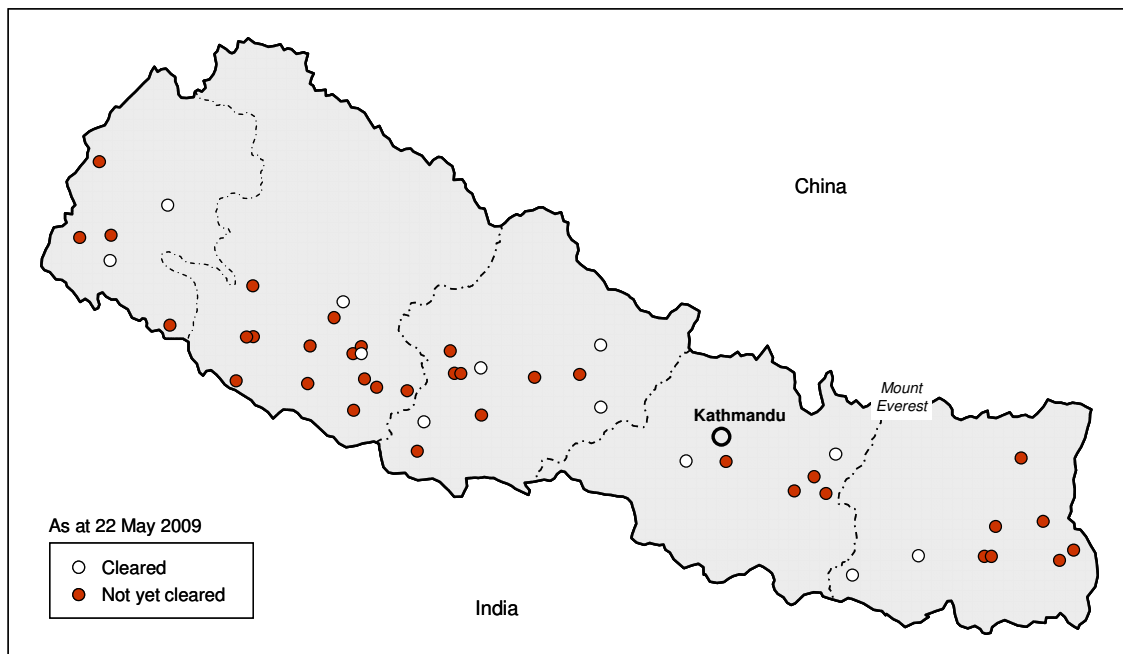
## **THE POST-CONFLICT LEGACY OF LANDMINES AND ERW**

A formal socio-economic impact assessment of landmines and ERW in Nepal has not been conducted. Indeed, due to the tempo in which the NA's antipersonnel minefields are being cleared and stockpiles of ERW are being destroyed it may not be necessary to conduct a comprehensive countrywide impact assessment.

The use of landmines and ERW has resulted in four residual problems: (1) the need to clear the NA's antipersonnel minefields and defensive positions; (2) the need to destroy the stockpiles of IEDs held at the seven cantonment camps and associated satellite sites; (3) the need to reduce, and over time to remove, the risk from IEDs and other ERW abandoned by the Maoist Army and NA; and (4) the need to provide ongoing psychosocial support and medical care to the survivors of accidents from mines, IEDs and other ERW.

### **(1) NA's minefields and defensive positions**

Antipersonnel minefields were laid by the NA at 53 locations to protect military installations, police posts and infrastructure such as communications sites. As at 22 May 2009, the NA had cleared 12 minefields; two minefields were being cleared, and the NA has approved a further 11 for clearance over the next 12 months. The locations of the 53 minefields are shown below in Map 1. [Afternote: as at 26 June, 18 minefields had been cleared.]



Map 1, Location of antipersonnel minefields laid by the NA

The Nepal Police reportedly deployed command detonated devices at 47 defensive positions, some of which have been cleared by the NA. No evidence has been provided by the NA, Armed Police Force or Nepal Police showing when and how these locations have been cleared. The clearance is unlikely to have been carried out to International Mine Action Standards (IMAS) and so far there has been no confirmation by any external body that all locations have been cleared, and are now safe. The failure to completely clear these command detonated devices represents just as great a threat as the failure to completely clear the NA's antipersonnel minefields.

The clearance of the NA's minefields is progressing well. The NA has two trained and accredited demining platoons each comprising two sections. A third platoon has been trained and is ready to deploy on operations subject to the agreement of the Director Engineer Services. The average clearance rate is 12.4 sqm per deminer per day, which exceeds international clearance norms for difficult terrain. Based on this rate of clearance it is expected that all 53 minefields will be cleared by the NA to international standards by early 2011. The outline clearance plan for the period May 2009 to February 2011 is shown in Table 1.

### **(2) Stockpiles of IEDs**

The CPA and AMMAA require the Maoist Army to collect and store IEDs, conventional munitions and associated explosive stores at designated areas a safe distance from the seven main cantonment camps.

In 2007, ArmorGroup surveyed the storage facilities. Many of the facilities were badly sited and poorly ventilated. Much of the explosives inspected had been affected by the high

temperatures generated under plastic tarpaulins, items were breaking down and the crystallisation of explosives was evident. ArmorGroup repackaged, repositioned and stored explosive natures together, and training was provided to the Maoist Army on ammunition storage and management.

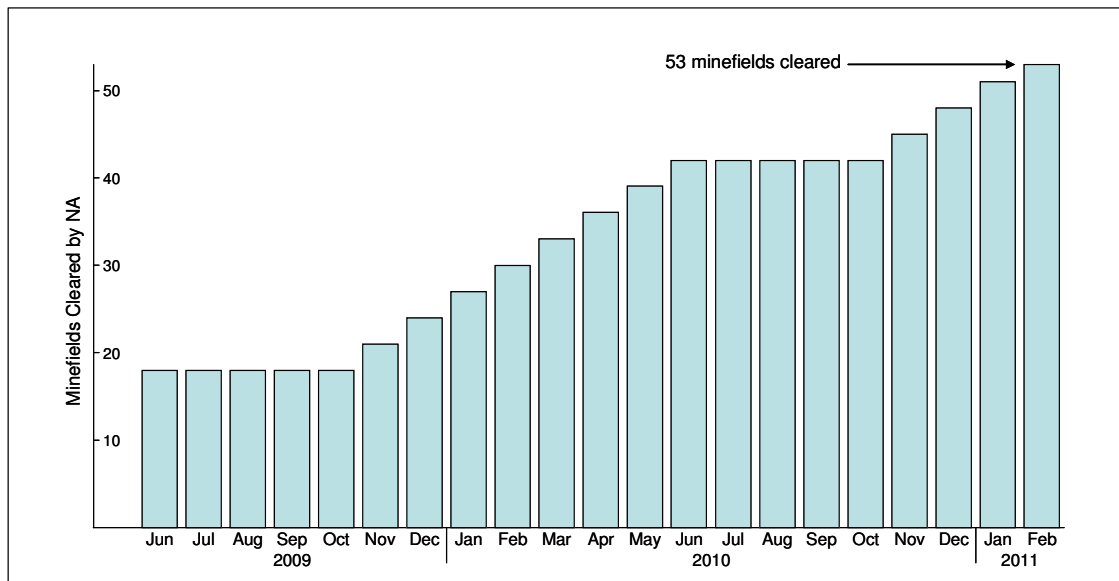


Table 1, Clearance of the NA's antipersonnel minefields

All items were tagged with non-removable serial numbers. The ammunition was prioritised for destruction based on its condition. Socket bombs, bucket bombs and pressure cooker bombs displaying signs of deterioration were categorised as Priority 1 and earmarked for destruction at the earliest opportunity. Items in a safer condition (the majority of conventional military ordnance such as mortar bombs and grenades) were categorised as Priority 2, to be made safe once all Priority 1 items had been destroyed.

From July 2008 to May 2009 no IEDs, conventional munitions or associated explosives were destroyed. Recently, following the arrival of an EOD technical advisor at UNMAT, the stockpiles have been re-surveyed. The evaluation team noted that the condition of the IEDs, conventional munitions and associated explosives has worsened, and the guarding of the sites is inadequate. Indeed recent surveys by the UNMAT EOD technical adviser suggest that items have been removed from some sites. A sense of urgency by UNMAT to complete the IED destruction programme was noted by the evaluation team. UNMIN has confirmed the need for urgency, not least as the complete destruction of stockpiled IEDs, conventional munitions and associated explosives forms an important part of the AMMAA, and its success will contribute to enhancing the rule of law in Nepal.

UNMAT reported to the evaluation team that 34,907 items remain to be destroyed as at 22 May 2009. This represents 39% of the original stockpile. UNMAT plans to destroy all remaining items by mid September 2009. *[Afternote: the UNMAT EOD technical adviser destroyed some items in early June, but he was then instructed to halt all further destruction by Maoist commanders.]*

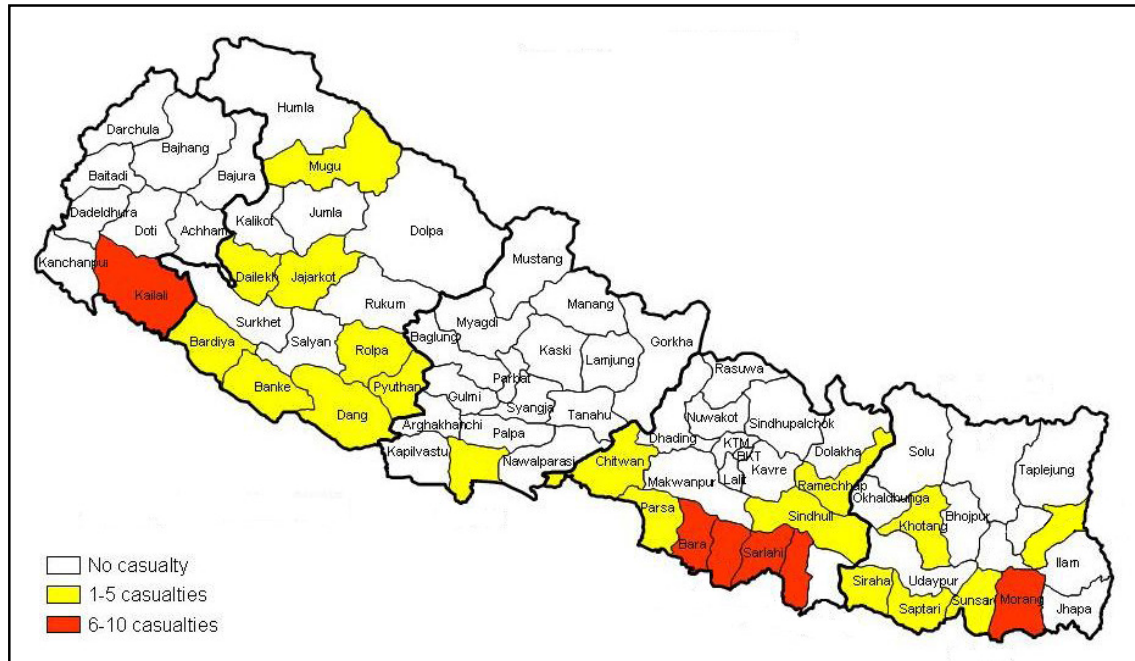
### **(3) Abandoned IEDs and other ERW**

During the conflict, the Maoist Army had limited access to commercially manufactured arms, and instead resorted to the manufacture and use of IEDs and booby-traps. As stated above, the most common device was the 'socket bomb' made from plumbing joints filled with locally available explosives. Bombs were also made from steel pipes, buckets and pressure

cookers as well as other ordinary containers. The fuzing mechanisms were often unreliable, unstable and affected by environmental conditions.

The NA's use of mortars and other projectiles has resulted in typical post-conflict UXO 'battlefield' contamination causing civilians to be killed and injured.

There has been no comprehensive landmine impact assessment to gauge the socio-economic damage caused by abandoned IEDs and other ERW. However, victim surveillance data provided by the Informal Sector Service Centre (INSEC), a Nepali NGO, suggest that the remaining threat is distributed mainly across the Tarai region, the lowland belt of flat alluvial land stretching along the Nepal-India border; see Map 2.



Map 2, Casualties from abandoned IEDs and other ERW, January – December 2008

#### (4) Victims of mines, IEDs and other ERW

The National Campaign to Ban Landmines (NCBL) was the first organisation to collect data on victims from mines, IEDs and ERW. NCBL's data collection was based on reports from the national media and from human rights organisations. The accuracy of the data was not confirmed and as such the victim information collected in the early years of the insurgency is considered by UNMAT and others to be unreliable.

In January 2006, INSEC established a victim surveillance system across the country using district representatives to verify incidents by interviewing survivors, families and witnesses. Data is collected using standardised forms with clear definitions, differentiation by device types and detonation mechanisms, personal and socio-economic information, and the incident locations and circumstances. INSEC data is considered much more reliable than that collected by the NCBL during the conflict, and has become the *de facto* source of casualty data for mine action in Nepal.

The evaluation team was impressed with the INSEC mine victim surveillance system. The methods used to collect and verify the data are based on best public health practice and the system is similar in scope, accuracy and rigour to the Cambodian Mine Victim Information System methodology - which is considered to be a benchmark of quality in mine action victim surveillance. The information provided by INSEC is used by UNMAT to assist its strategic and operational planning.

There is a steady and continuous reduction in the number of incidents and casualties in Nepal from an increased awareness of the threat from ERW. Some of this awareness is the result of formal mine risk education (MRE) programmes, while some is the result of an osmosis of knowledge passed informally from family to family across the country. The data collected by INSEC from January 2006 to May 2009 suggests that most accidents: affect children, particularly the 10-14 age group (58%); affect males (67%); occur at home (38%); occur away from NA and police bases, and the Maoist cantonments (98%); are caused by IEDs (94%); and are caused by dangerous behaviour such as tampering (89%).

It is important to note that 98% of the accidents over the past three years have occurred away from the clearance activities conducted or overseen by UNMAT. There is therefore little immediate benefit in terms of reduced casualties from the clearance of antipersonnel mines from the NA and police bases and the destruction of stockpiles of IEDs at the Maoist cantonment sites. Indeed, most of the accidents come from single, unmarked and unrecorded IEDs left by the Maoist Army units alongside roads and tracks, in woodland and jungle, and on the edge of villages with the intention of killing or maiming members of the NA, police and armed police during the insurgency. As the locations of such weapons are unknown it will never be practical to clear them systematically. Emphasis must be placed on effective and sustained MRE with a rapid EOD response capability provided by the NA, supported by local police.

## **KEY FINDINGS**

There is an absence of national accountability and governance of mine action in Nepal. In June 2007 the Government established a national mine action authority (NMAA) consisting of an inter-ministerial steering committee and an implementing technical committee, but the NMAA does not exist in practice, and there have been no meetings of the national steering or technical committees.

The work of national and international mine action organisations operating in Nepal is coordinated informally through a Joint Mine Action Working Group. Working group members include the Ministry of Peace and Reconstruction, the NA and police, UN agencies, the Nepal Red Cross Society, the NCBL, various national and international NGOs, and the ICRC as an observer.

Despite the absence of national accountability and governance of mine action in Nepal, these current informal arrangements seem to work. The NA is clearing its antipersonnel minefields effectively, efficiently and safely, all the remaining IEDs and related items held at the Maoist cantonments will soon be cleared, INSEC has established an excellent victim surveillance system, and there is a comprehensive MRE programme operating across the country.

UNMAT's concept of operations places great emphasis on supporting and enabling the NA to operate in the future without international technical advice and other forms of external support. UNMAT technical advisers work strictly in accordance with this principle and do not make decisions on behalf of the NA. This mentoring is coordinated through a Capacity Development Plan produced jointly by UNMAT and the NA, and reports are prepared every three months to confirm that the objectives and targets are being achieved.

At an operational level the NA's mine action management and demining platoons are performing well. The evaluation team is satisfied with the progress being made by UNMAT in supporting the NA's goals with regard to operational management, task prioritising and quality management.

Considerable progress has been made in strengthening the middle management of the NA's mine action capability. The NA has developed a cadre of capable middle managers and site

supervisors, but there is a natural turnover of staff as officers are promoted and/or posted and/or are deployed on UN missions as observers, and replacement officers arrive requiring training. UNMAT and the NAMACC will need to put in place a long term plan to ensure that the NA retain sufficient trained and capable managers who are able to maintain the current levels of competency and unit effectiveness.

It is almost impossible to compare the productivity and cost efficiency of the current regime with that of ArmorGroup. ArmorGroup met its contractual obligations by destroying all Priority 1 items held at the Maoist cantonment sites, by developing the technical mine clearance capabilities of the NA, and of assisting the NA clear the first tranche of antipersonnel minefields. UNMAT is building on the stable base provided by ArmorGroup, with greater emphasis on the development of a sustainable management capability. The two systems and approaches complement one another.

A summary of strengths and weaknesses, and the external opportunities and threats to the current arrangements for mine action in Nepal is at Annex A.

## **RECOMMENDATIONS**

The evaluation team was impressed with the approach and performance of UNMAT. But there is a need to ensure that standards do not drop through complacency. In particular it is recommended that:

- (1) UNMAT should continue to be funded through to December 2011, to ensure the clearance of all the NA's minefields and hazardous areas containing command-detonated explosive devices;
- (2) UNMAT should provide external quality assurance and post-clearance quality control to the NA for the clearance of all hazardous areas containing command-detonated explosive devices;
- (3) UNMAT should encourage the Director of Engineer Services to allow a further two demining platoons to be deployed;
- (4) UNMAT should encourage and assist the NAMACC to make more effective use of IMSMA and in particular to record fully the actions taken to clear all hazardous areas containing command-detonated explosive devices; and
- (5) UNMAT should prepare a multi-year plan for mine action in Nepal. This plan should be agreed with the Joint Mine Action Working Group and should reflect the needs of clearance, MRE, victim assistance and the development of a sustainable national mine action capacity.

**SUMMARY OF UNMAT'S STRENGTHS, WEAKNESSES,  
OPPORTUNITIES AND THREATS**

<p><b>STRENGTHS</b></p> <ul style="list-style-type: none"> <li>• The Joint Mine Action Working Group provides effective coordination of mine action activities in Nepal.</li> <li>• The arrangement between the UNMAT and UNICEF MRE Adviser works well.</li> <li>• There is a strong and effective working relationship between UNMAT and the NA officers in the NAMACC.</li> <li>• The UNMAT staff are committed to developing the management and technical capabilities of the NAMACC.</li> <li>• The UNMAT Programme Manager is well respected by senior staff of UNMIN and the Office of the UN Resident Coordinator.</li> <li>• The two deployed NA demining teams are operating effectively, efficiently and safely and should have cleared all 53 minefields by no later than December 2011.</li> </ul>	<p><b>OPPORTUNITIES</b></p> <ul style="list-style-type: none"> <li>• The developing management and technical mine action capability and proven performance of the NAMACC will give the NA an accredited demining capability which can be deployed in the future on UN DPKO missions.</li> <li>• The successful clearance of the NA's 53 minefields and the destruction of the IEDs from the cantonment sites will be a demonstration of success of the CPA and AMMAA.</li> <li>• Mine action be used as a confidence-building measure between the Maoist Army and the NA.</li> </ul>
<p><b>WEAKNESSES</b></p> <ul style="list-style-type: none"> <li>• The Director of Engineer Services has been reluctant to allow the NAMACC to deploy the third and fourth NA demining teams. (Note: the evaluation team was assured by the Director of Engineer Services that permission would shortly be given to deploy two additional teams.)</li> <li>• There is little visibility by UNMAT staff on the work being conducted by the NA to clear command-detonated explosive devices.</li> <li>• IMSMA is not being used effectively.</li> <li>• There is an absence of effective national accountability and governance.</li> <li>• There is no national mine action strategy or multi-year plan.</li> </ul>	<p><b>THREATS / CHALLENGES</b></p> <ul style="list-style-type: none"> <li>• Security conditions could prevent the clearance of all the NA's 53 minefields and/or the destruction of the remaining IEDs and other related items from the Maoist cantonment sites.</li> <li>• The Maoist Army could deny UNMAT access to destroy the remaining IEDs and other related items.</li> <li>• Political differences between the Government of Nepal and the NA could prevent the NAMACC from continuing to clear the NA's 53 minefields.</li> <li>• Senior officers in the NA could withdraw support for the NAMACC.</li> <li>• The UN and international donors may no longer provide sufficient funds to complete the task.</li> </ul>