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Locating Landmines and UXO: A Methodological Lesson from the Ethiopian Landmine Impact Survey

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Ethiopian Landmine Impact Survey

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July 5, 2002: MAG Opens Main Road from Luena, Mexico Province, Angola
Allowing Aid to Be Distributed to Thousands of Starving Families

TheLucusse Road between Luena andLucusse in Mexico province in eastern Angola has been the scene of heavy fighting for decades. There was fighting many years ago between Cuban and South African forces and over much of the last decade between the government and forces of the National Union for the Total Independence of Angola (UNITA). The road is littered with the wrecks of trucks and armored vehicles destroyed in anti-tank mine blasts and ambushes. It is said that over 6,000 soldiers died here trying to get convoys of supplies in and out of Luena. The road itself serves thousands of people living in its vicinity. Opening it up can dramatically change the socio-economic situation in the province.

On July 3, 2002, Mines Advisory Group (MAG) staff met with the Angolan Technical Unit for Coordination of Humanitarian Assistance (UTCHA). Lucusse will be used as a quartering area for 4,000 UNITA soldiers being disarmed and demobilised under the new peace agreement. While the Lucusse Road has been closed, thousands of families have not received aid of any sort. It is reported that 38 percent of the children in the area are severely malnourished. The World Food Program (WFP), the Angolan Ministry of Social Assistance and Reintegration (MINARS) and the United Nations all agreed that the major demining priority in the province was this road.

Due to the grave humanitarian situation, MAG undertook an emergency survey of the road immediately following the request from UTCHA to see how much the situation had changed since 1997/98. Previously, during this brief period of peace, MAG had surveyed and cleared 92 kilometers of the 148-kilometer route. After re-survey on July 3, 2002, it was clear that there had been no new vehicle wrecks since that time; however, using the route still requires extreme care. The survey team was able to travel to Lucusse where they met with the Police Commandant and UNITA officials who explained they were desperate for food and other emergency aid.

MAG teams returned July 4th to clear and destroy several items of UXO seen on the road. Areas where vehicles will have to travel off the edge of the road to get around mine craters or vehicle wrecks will also be checked for mines. MAG has already identified several suspect mined areas on the roadsides that will be marked. Passing areas are being targeted for special clearance efforts to minimize the risk in the immediate future. MAG has made it clear that all drivers intending to use the route must first attend a mine safety briefing conducted by MAG. Although it can be safe to use the road, there is a very good chance that any deviation from tracks of the previous vehicle may lead to a fatal mine accident. It is hoped that funding can be raised to enable complete clearance of the verges and other suspect areas along the route.

On July 6th, MAG escorted Médecins sans Frontières – Doctors Without Borders (MSF) to Lucusse so that medical assistance would be made available to the UNITA quartering areas. MAG has also facilitated the access of Dom Bosco, a respected Angolan non-governmental organization (NGO) to the quartering area. Dom Bosco has already begun registration and identification of needs. It is hoped that WFP deliveries will be authorized within the next week. These are all vital elements in the peace and confidence-building, demobilization and normalization process. MAG is proud that mine action can play its role and is grateful to all those parties in Angola and to its donors for enabling such progressive and positive outcomes.

For additional information, visit www.maggclearmines.org

Locating Landmines and UXO: A Methodological Lesson from the Ethiopian Landmine Impact Survey

One of the most important parts about implementing effective Landmine Impact Surveys is first identifying which communities have a landmine/UXO problem. The author describes how Expert Opinion Collection (EOC) is used in Ethiopia to overcome the obstacles survey teams face when gathering their information.

by Michael L. Fleisher, Ph.D., Deputy Team Leader/Operations Manager, Ethiopian Landmine Impact Survey

Introduction

In every country where a Landmine Impact Survey is being implemented, those charged with conducting it are faced with the challenge of compiling a reliable list of the communities that need surveying—before a community can be surveyed to assess the landmine/UXO impact, it must first be accurately identified as a community having a landmine/UXO problem. Owing to its vast size and its ongoing, highly vantaged conflict history, Ethiopia presents Landmine Impact Surveyors with particularly daunting difficulties. The Italian invasion of the 1980s Errita’s protracted, and ultimately successful, war for independence; the 1990s Ogaden war with Somalia; the Ethiopian People’s Revolutionary Democracy (ERPb’s) successful revolution to topple the Marxist Dergue regime; the recently concluded trench war with Eritrea; and the still simmering internal conflicts with the Oromo Liberation Front (OLF) and the Ogaden National Liberation Front (ONb)—all of these must be regarded as potential contributions to Ethiopia’s landmine/UXO legacy.

To make matters still more complicated, the country’s arid terrain and poor-to-nonexistent roads make travel in the rural areas problematic in the best of times and, in innumerable areas during the long rainy season, all but impossible. Even in subtilious weather, many Ethiopian communities are accessible only by foot or by mule. The task of determining where the landmines/UXO are, so as to be able to formulate a complete, reliable list of landmines/UXO affected communities for impact surveying, is not an easy one.

The technique developed for surmounting this problem, EOC, entails gathering information from all available sources—civilians, government administrators, military authorities, UN agencies, NGOs, and country scholars and so on—and using this information to compile a guerrier of the affected communities to be surveyed. However, because time and resources are inevitably limited, survey teams are pressed to devise methodologies that will enable them to separate the landmine/UXO-affected communities from the non-affected communities as quickly and as efficiently as possible. To accomplish this, they must first devise a strategy that will enable them to determine where the worst thorough, most reliable information regarding the locations of landmines/UXO may be obtained and how to acquire this intelligence as swiftly, systematically and cost-effectively as possible.

This article aims to facilitate this information-gathering process for all countries undergoing Landmine Impact Surveys by sharing some lessons learned by the Ethiopian Landmine Impact Survey (ELIS), which is currently being carried out by Norwegian Peoples Aid (NPA), under the auspices of the Survey Action Center (SAC), in Washington, D.C., and in close partnership with the Ethiopian Mine Action Office (EMAO) in Addis Ababa.
**Ethiopian Survey Efforts**

In Ethiopia, the survey's efforts are mainly focused on the five regions of the country's 11 that are regarded as being the most highly suspect for landmine/UXO contamination: Tigray, Amhara, Afar, Oromiya and the Ethiopian Somali National Regional State. However, because the ELIS's mandate is to cover the entire country, none of Ethiopia's other six regions may be neglected. Each of Ethiopia's regions is divided into zones; the zones, in turn, are divided into districts (woreda); the districts are divided into sub-districts (kebele); and the sub-districts are divided into sub-kebele (tabia, but satia in Tigray region), which are in turn made up of "communities" (sing. got, pl. gota). Although "community" is not an official administrative unit.

What is desirable in terms of both economy and efficiency, assuming it is accurate information regarding the presence or absence of landmines/UXO may be acquired. In the ideal world, we would hope to have all of the landmine/UXO data we needed at the national level without leaving the capital, but this ideal state of affairs does not exist in Ethiopia, nor has it existed in any of the other countries where Landmine Impact Surveys have been carried out. Experience has shown, in fact, that the highest, most inclusive administrative level at which generally reliable information may be found is the district.

In November/December 2001, an Advance Survey Mission (ASM) to Ethiopia, identified approximately 5,000 of the country's 26,000 kebeles as being highly affected by landmines/UXO. Four months later, the ELIS survey team set about the task of establishing the number of affected kebeles as precisely as possible by landmines/UXO. The ASM's report was used to establish the number of affected kebeles and the zones, in turn, are divided into districts (woreda), in turn, are divided into sub-districts (kebele), and the sub-districts are divided into sub-kebele (tabia, but satia in Tigray region), which are in turn made up of "communities" (sing. got, pl. gota), although "community" is not an official administrative unit.

**Requests and Responses**

After having consulted with officials at the regional level and after having selected one of Amhara region's 11 zones—North Wollo—for rapid assessment (RA), the ELIS staff visited eight of the zone's nine woredas for consultations with woreda administrators. In the course of this effort, the following request list for woreda administrators was developed and employed (Figure 1).

In response, the woreda administration provided the ELIS team with a kebele list.

**Figure 1**

REQUEST LIST FOR WOREDA ADMINISTRATORS (To Be Returned Outily)

Sir / Gentlemen, we would be very grateful if you could provide for us the following:

1. A list of all the kebeles in your woreda.
2. That the list of kebeles be marked to indicate, for each kebele, whether you and your fellow woreda officials consider it to be affected (A), possibly affected (PA), or not affected (NA) by landmines/UXO.
3. That you indicate, on the kebele list, the kebeles that are not accessible by car and, by what means is it possible to get there (i.e., whether by motorcycle, on foot, and/or by mule—and also the approximate length of time it will take to travel from each one to [insert town name], the woreda center).
4. That you provide a list of all the landmine/UXO accidents that have occurred in your woreda;
5. That you facilitate our meeting and talking with any landmine/UXO victims in your woreda, as well as any persons whether inside or outside your administration who might possess useful knowledge of the landmine/UXO situation here; and
6. That you provide us with a letter of permission and introduction to all of the kebeles in your woreda requesting their full cooperation in carrying out our work.

And that you provide us with a police guide to help us find our way to the various woredas. (This guide should not be dressed in a police uniform.)

We would also appreciate your opinion as to whether, in the future, with sufficient advance warning, and at our expense, it might be possible for you to bring informants from remote kebeles into [name town], the woreda center, to enable us to interview them here.

And I would like to provide you with my contact information in Addis Ababa to enable you to contact me in the event you have any additional information on the landmine/UXO situation in your woreda.

**Figure 2**

List of Kebeles for Wadla Woreda, North Wollo Zone, Amhara Region

<table>
<thead>
<tr>
<th>Condition</th>
<th>Access</th>
<th>Car</th>
<th>M'cycle</th>
<th>Foot</th>
<th>Mule</th>
<th>Hours (en Foot)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Affected</td>
<td>Possibly Affected</td>
<td>Not Affected</td>
<td>(A)</td>
<td>(PA)</td>
<td>(NA)</td>
<td>Cer</td>
</tr>
<tr>
<td>1</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>5</td>
<td></td>
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<tr>
<td>2</td>
<td>X</td>
<td>X</td>
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<td>X</td>
<td>5</td>
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<td>X</td>
<td>X</td>
<td>X</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

List of kebeles in Wadla woreda, North Wollo zone (Figure 2).

Annexed with such lists, the ELIS team conducted interviews with the residents of more than 50 kebeles, including those that woreda-level administrators had deemed to be landmine/UXO positive and those they had labeled as negative, in order to formulate as reliable an assessment as possible of the landmine/UXO threat in this area.

The RA strategy then employed was one of visiting and conducting a group interview at every kebele that had been labeled either as positive or suspect for landmines/UXO by its woreda administration—except in those few cases where the distance and/or landmine/UXO contamination make it impossible to make such interviews practical. In such cases, staff members were trained and dispatched to conduct an interview visit

**The Kebele Interview**

In this work, the following schedule of kebele interview questions was utilized:

1. Are there any landmines in this kebele?
2. Are there any UXOs in this kebele?
3. Have there ever been any landmine/UXO accidents in this kebele?
4. If yes, please tell us when and where they occurred, what the circumstances were; what kinds of landmines/UXO were involved; and whether any person(s) or animal(s) were killed or injured.
5. Are there any areas in your kebele where people are afraid to go because they...

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Kebele leader with photographsy in Kobo woreda

in this kebele?

Do you think that any of the kebeles that are adjacent to your own kebele might possibly be contaminated with landmines/UXO?

Results

The results of this mission strongly suggest that the landmine/UXO problem in the Amhara region is not nearly as pronounced as the original worst-case estimates had suggested. The team uncovered no evidence whatsoever of there being a landmine problem in this zone, and no evidence of a UXO problem apart from the presence of hand grenades, which have been responsible for the vast majority of the UXO incidents there.

The ELIS field staff has urged the adoption of a program of hand grenade awareness and clearance to deal with this problem. The ELIS assessment also produced valuable evidence that information collected at the woreda level is of satisfactory reliability and specificity to ensure the ELIS requirements of thoroughness and accuracy. Although administrators at the woreda level occasionally erred on the side of pronouncing a kebele in their area of administration to be definitely or possibly landmine/UXO-affected and it turned out not to be (i.e., this kebele turned out to be a false positive for the woreda administration), they never erred on the side of pronouncing a kebele to be free of landmine/UXO contamination and it turned out not to be (i.e., the kebele administrations produced no false negatives). This is an extraordinarily positive sign.

Further assessment work still needs to be done, however, to determine whether the results derived for North Wollo also hold true for Amhara region’s other 10 zones—and also to gauge the landmine/UXO threat in Ethiopia’s four remaining highly suspect regions as well as in the six other regions that are so far not suspect.

Conclusion

EOC is a worthwhile, eminently practical and extremely valuable technique, but like any research method, it is valuable only to the extent that it generates accurate, verifiable data. The experience of the ELIS team in North Wollo argues strongly for thorough verification/authorization of expert opinions obtained at the higher administrative tiers—in the ELIS case, the woreda—through sensitive but rigorous interviewing of ordinary citizens at the kebele/gar level, where people’s lives are at stake.

This assessment has had (and will continue to have) profound implications for the ELIS. Had the worst-case estimates of the ASM proven accurate, some 5,000 kebeles, and an estimated 10,000 grens within those kebeles, would have had to be surveyed, a task of such magnitude that it would have exceeded the capacity of the ELIS team to carry out a survey within existing time, money, and manpower constraints by a wide margin. Our hopes when we planned the North Wollo field assessment were the following:

1) Evidence would emerge suggesting that the magnitude of the landmine/UXO problem along the Addis-to- Tigray corridor might be far less than worst-case estimates had suggested.

2) The assessments of government officials, at least at the woreda level, would be sufficiently accurate and well-informed to obviate the necessity of carrying out RA survey work at the kebele and gar levels. We now feel that significant progress has been made toward achieving these goals.

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One Leg Dancing (Um Pé Que Dança)
Angola Embraces the Future

During a period of peace, demining efforts in Angola continue to require top priority in order to reopen the country to desperately needed aid programs. Unfortunately, funding by countries and non-governmental organizations (NGOs) in recent years has been low due to a sense of confusion and an unsuccessful history of previously under-funded projects.

by Joe Lokey and Ken O’Connell, MGI

Current State

Peace has broken out in Angola, and so it seems. The world has seen this before and its cautious optimism, is understandable. To the people of Angola, the promise of a brighter future is everywhere and the motivation to ensure a lasting peace has never been stronger. But the roads to prosperity are littered with deadly remnants of their civil past. Angola suffers due to the series of internal power struggles and civil wars that have inflicted a tremendous amount of destruction on this country since their independence from Portugal in 1975. Three attempts at peace (1975, 1991, 1994) have all collapsed for various reasons. The Angolan government and National Union for the Total Independence of Angola (UNITA) officials are building an incremental settlement that follows the 1994 Lusaka peace accords. The momentum for this latest effort began in earnest after the leader of the interna...