Observations on Recent Changes in the Northwest Cambodia’s Mine/UXO Situation

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Observations on Recent Changes in the Northwest Cambodia’s Mine/UXO Situation

Based on recently acquired data from selected areas in Battambang province in northwestern Cambodia, the authors offer a preliminary report on what appear to be very significant shifts in the nature of the mine/unexploded ordnance situation. The new data is used to make comparisons between the situation in 2000 and the current situation. Next, they offer evidence of how locally based initiatives appear to have become the predominant driving force of mine action in the selected areas.

Khan Mohammad Sharif grew up in Afghanistan and worked for MAAP for 14 years before he left in early 2005 to pursue his Master of Business Administration at Preston University. He continues to be involved in short-term research and development projects as an active consultant.

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Changes in Suspected Mined Areas, 2000–2005

The changes in suspected mined areas were shown to be of varied size. An estimated area of over 1,200 hectares (5 square miles) was cleared.

Khan Mohammad Sharif: Discussions on Recent Changes in the Northwest Cambodia’s Mine/UXO Situation

Number of SMAs

<table>
<thead>
<tr>
<th>Total SMAs</th>
<th>Cleared since 2000</th>
<th>Partly Cleared since 2000</th>
<th>No Clearance since 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>43</td>
<td>16</td>
<td>4</td>
<td>23</td>
</tr>
</tbody>
</table>

Responsibility for Clearance 2000 – 2005 (by number of SMAs)

Community

<table>
<thead>
<tr>
<th>CMAC</th>
<th>RCAF</th>
<th>MAG</th>
</tr>
</thead>
<tbody>
<tr>
<td>5%</td>
<td>7%</td>
<td>2%</td>
</tr>
</tbody>
</table>

By Michael Simmons, Moe Vanna and Sou Choea | GeoSpatial International Inc. | and Nhum Chay Roum | Battambang Mine Action Planning Unit |
implementing partners, both national and interna-
tional. U.N., non-governmental and commercial
organisations together employ over 8,700 people
in mine action operations in support of the govern-
ment’s programme. Over the years, participating orga-
isations have included: U.N. Mine Action Service;
U.N. Development Programme; UNICEF; U.N. Office
for Project Services; International Committee of the
Red Cross; Agency for Aid and Relief; Amar Relief
Institute; Afghan Technical Consultants; British
Broadcasting Corporation-Afghan Education Project;
Danish Demining Group; Demining Agency for
Afghanistan; HALO Trust; Handicap International—
Belgium; INTERSOS; Mine Clean-up Planning Agency;
Afghanistan Mine Detecting and Dog Centre; Monitor-
ing, Evaluation and Training Agency; Organisation
for Mine Clearance and Afghan Rehabilitation;
and RONCO Consulting Cooperation. Assistance was
also provided by Cranfield University, Mine
Action Information Center and the Geneva
International Centre for Humanitarian Demining.

In 2002, Afghanistan entered a new phase in its
development during its transition to a more stable, in-
ternationally recognised state. Substantial economic
and social developmental resources from interna-
tional donors began coming into the country, while private-
 sector activity increased at a rapid rate. As a result, de-
mand for land and the value of land increased substan-
tially. Many infrastructural and social developmental
projects were found to be in mine- and UXO-affected
communities. Therefore, the tremendous increase in
mine action requirements challenged MAPA to both
grow and adapt to new realities on the ground in
Afghanistan. The mine action programme, in addition to
the organisations providing technical assistance to the
programme, has risen to this challenge.

The mine action programme developed a new
strategy accommodates Ottawa Convention timelines, in
addition to the country’s urgent humanitarian and eco-

nomical needs. Paramount in the minds of most Afghans is a
desire to reconstruct their country in an environ-
ment of peace and stability. The accelerated strategy is a
cornerstone of the effort to promote a new Afghanistan,
free of deadly remnants of war and the suffering and
economic paralysis they cause. For the new Afghanistan
to emerge, donor support for both humanitarian mine
action and reconstruction mine clearance efforts will be
necessary: reconstruction mine clearance must occur in
conjunction with other programmes in order to see sub-
stantial development.

Observations on Recent Changes in the
Northwest Cambodia’s Mine/UXO Situation

Based on recently acquired data from selected areas in Battambang province in northwestern Cambod-
dia, the authors offer a preliminary report on what appear to be very significant shifts in the nature of the
mine/unexploded ordnance situation. The new data is used to make comparisons between the situation
in 2000 and the current situation. Next, they offer evidence of how locally based initiatives appear to have
become the predominant driving force of mine action in the selected areas.

by Michael Simmons, Moe Vienna and Soun Chas | GeoSpatial International Inc. | and Neum Chay Roun | Battambang Mine Action Planning Unit

Le in 2004, the national government of
Cambodia transferred responsibility for mine
action decision-making authority to the prov-
inces. Previously established provincial units were re-
named Mine Action Planning Units with expanded
mandates and membership. To support this transfer
of authority, the governments of Canada and Australia
implemented technical-assistance projects. A key ob-
servation of these projects has been to improve mine ac-
tion data collection and management. By mid-2006,
new data on the mine action situation was available,
and it is this data that forms the basis for this report.

We emphasise that the work of the MAPUs and
the Battambang MAPU in particular has been
continuing as this is written and more comprehensive
data will be available soon. That will enable a com-
prehensive analysis to be made.

Changes in Suspected Mined Areas,
2000–2005

The observations in this article are based on data from three areas in Battambang province: the com-
munities of Andeuk Haeb and Kanteu Muoy and Kruk
Choea Village. In total, the three selected areas include
15 villages. All three communities are heavily mine-
/UXO-contaminated areas located in interior parts of
the province. The National Level One Survey (NL1S) re-
ported in 2000 that there had been a total of 178 mine-
related injuries including 62 deaths since mines were
first laid in these areas.

These locations were selected simply because they are
the first areas for which new data has become available.
The selection is not based on sampling techniques and
therefore should not be used for extrapolation.

In 2000, the NL1S reported the 15 villages in these
three communities had 38 suspected mined areas with
an estimated area of over 1,200 hectares (5 square miles).
As new data became available, some of these suspected
mined areas were shown to be of varied size.

One new area was also discovered. The net result was
a reduction in the suspected contaminated area by 27
percent to just over 900 hectares (3 square miles). The
current status of these 45 SMAs is shown in Figure 1.

Fifty-three percent of all SMAs in the three commu-
nities were completely cleared in the last five years.
An additional 42 percent were partially cleared. Only two
SMAs were not cleared at all in this period. Further ex-
amination of the clearance activity shows that partially
cleared SMAs are mainly of larger size, and only critical
areas within them have been cleared.

Before the NL1S in 2000 there had been consider-
able clearance by the Cambodian Mine Action Centre
and the Mines Advisory Group in these three com-
nunities. But since 2000, there has been very little
official activity as the focus of attention has shifted
to other areas of the province. Figure 2 shows that CMAC
worked in only two SMAs and cleared 5 percent of the
total cleared area; the Royal Cambodian Armed Forces
worked in three SMAs and cleared 7 percent of the
total cleared area; and MAG worked in only one in
a cooperative effort with RCAF. The total area cleared
by all three organisations has been about 50 hectares (124
acres). What is most surprising is that fully 86 percent of
the SMAs that have been cleared or partially cleared
have been worked on by community-based individuals
or groups (see Figure 2). This represents an estimated
91 percent of the area cleared of mines/UXO in the three
communities in the last five years.

Even more surprising to those of us involved in
providing assistance to Battambang MAPU is that, in total,
43 of the 45 SMAs in these three communities have ei-
ther been completely cleared or partially cleared between
2000 and 2005. An estimated total of almost 550 hectares (2 square miles) has been cleared of mines/UXO in the same period (see Figure 5).

One result of these findings is the Battambang MAPU will try to compile a complete
inventory of the mine history of all SMAs in the province. It is likely, by some time in
2006, the Battambang MAPU and others in northeastern Cambodia will have such data available to
them. Assistance with this effort is being provided from the Task Assessment and Planning—
Decision Support at MAPUS’s project, funded by the Canadian International Development
Agency and working in collaboration with the Australian government’s Overseas Aid Program
(AusAID)-funded project “Capacity Building for Mine Action Planning.”

Clearance of Suspected Mine Areas
(SMAs) 2000–2005

Responsibility for Clearance 2000–2005
(by number of SMAs)

Community 86%

CMAC 5% RCAF 7% MAG 2%
Informal Demining

The existence (and even prevalence) of commu-
nity-based mine action initiatives in Cambodia should come as no surprise. As long ago as 1999, the Landmine Monitor reported on village demining in Cambodia. Ruth Beresford of Handicap International in her article “Returning Life to Field and Forest: Mine Clearance by Villagers in Cambodia,” identified how village demines work in Cambodia. This information was further expanded in her book Crossing the Divide: Landmines, Villagers and Organizations, published in 2005. Most re-
cently, Handicap International has published the report of these initiatives.

Study

Villagers and Organizations expanded in her book ers work in Cambodia. This information was further “Returning Life to Field and Forest: Mine Clearance by Monitor come as no surprise. As long ago as 1999, the nity-based mine action initiatives in Cambodia should solve their mine-/UXO-related problems. CMAC and such improvements have taken place, the NLIS created improvements in socio-economic indicators. The NLIS of these villages, the community itself also undertook of foraging or collecting firewood. Overall, as shown in Figure 5, the 15 villages reported 58 percent fewer of the four major “official” Cambodian mine action orga-
nizations: CMAC, the Royal Cambodia Armed Forces, and no mines found after demining of five hectares (12 on forest access. Overall, as shown in Figure 5, there were three reported during their field research, identified individuals and groups of villages (demining teams) that have delivered community-based mine action initiatives in the three communities. We conducted interviews in 2005 with some of these indi-
viduals in one of the villages included in the area stat-
sistics we report. In all the SMAs cleared of mines/UXO by village demining teams, there have been no reports of mines being found subsequent to the demining work being completed. There have been no reported accidents in these areas. Similarly, although we only interviewed one landowner in the village, he also reported no accidents and no mines found after%demining. In 1998 and 1999, there were three deaths and one injury reported during informal community-based demining activities in the 15 villages. This paper highlights the need for the Cambodian authorities to ensure that all mine action initiatives are supervised by registered mine action partners, in order to provide a level of safety for those affected by landmines. The NLIS is a valuable tool for monitoring the progress of demining work in Cambodia, and it is hoped that this initiative will continue to be supported by the Cambodian government in order to ensure that all mine action initiatives are conducted in a safe and effective manner.

Socio-economic Change

Informal Village Demining in Cambodia: An Operational Study by Michael L. Fleisher.

Further, the NLIS also showed that, between 1998 and 2000, nine of the 15 villages in our selected area had resorted to community-based mine action to help solve their mine-/UXO-related problems. CMAC and MAG were active in seven of these villages, but in each of these villages, the community itself also undertook complementary community mine action work.

The assumption in the Cambodian mine action community seems to be that such community-based ini-
tiatives are a relatively minor contribution to the overall demining effort and at best are an adjunct to activities of the four major “official” Cambodian mine action orga-
nizations: CMAC, the Royal Cambodia Armed Forces, HALO Trust and MAG. Clearly the initial data avail-
able for the three communities reported in this paper challenges this assumption and suggests that, at least in these areas, the most significant mine action driving force informal, community-based initiatives.

Socio-economic Change

The intended result of mine action is to improve the life of affected communities. To assess whether or not such improvements have taken place, the NLIS created socio-economic indicators. The NLIS reported the results for these indicators for 2000. The Battambang, MAPU has recently obtained new data for some of these indicators. There are many possible reasons for these changes, including a reduction in the number of human casualties from mines, a decrease in the number of families affected by landmines, and a decrease in the number of accidents reported during demining activities. The NLIS also shows that there has been a significant increase in the number of families that have cleared their land of mines, from 12,000 in 1998 to 18,000 in 2000. This indicates that there has been a decrease in the number of families that are dependent on landmines as a source of income.

Informal Community-Based Mine Action Safety Issues

Battambang MAPU’s field research, identified individuals and groups of villages (demining teams) that have delivered community-based mine action initiatives in the three communities. We conducted interviews in 2005 with some of these indi-
viduals in one of the villages included in the area statistic

Socio-economic Impacts 2000 - 2005

Restricted Access to Resources

Forest Firewood and Foraging

Water Supply

Agriculture

Simmons et al.: Observations on Recent Changes in the Northwest Cambodia’s Mine/UXO Situation

Michael Simmons is vice president of GSI and has been responsi-
bile for the company’s mine action work in Cambodia since 2000. He has worked in international development since 1984 working on projects throughout Southeast Asia. Educated as a geographer in Scotland and Victoria, Canada, he worked for many years in land use planning in eastern Canada. He now lives with his wife in Jakarta, Indonesia.

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Soun Chea is currently working under contract to GSI as the community mine action planning coordinator for Battambang province. For the previous five years he was chief of the land use planning unit in the province (now the Mine Action Planning Unit, Bornen Koki). Battambang, in 1957, he is married with three children. He joined the govern-
ment in 1987 to work in the provincial governor’s office and before that he was a school teacher.

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would have to wait three years. Throughout this period, the charity hired local men to do the demining, and this was the start of the demining team. Subsequent demining work has been authorized by the district office. We were shown a handwritten, signed and stamped authorization from the district and commune offices.

In this case, contracted demining clearly reflects community priorities. Battambang MAPU believes that these carefully designed, responsible arrangements are unique in the province.

Conclusion

Early results of data collected by the Battambang MAPU in 2005 concerning mine clearance are very encouraging. A large portion of the SMAs in the selected communities have been cleared of mines and are now safe and in productive use. Socio-economic impacts of mines/UXO in the areas have declined dramatically. "Official" mine action has been minimal in the 15 villages during the last five years. Most of these socio-economic improvements are believed to be attributable to informal community-based mine clearance initiatives. Over 500 hectares (2 square miles) have been cleared of mines/UXO in five years, more than 90 percent by community-based mine action initiatives.

Injuries and deaths from mines/UXO accidents in the selected area have decreased from 14 to four during comparable two-year periods. The number of families denied access to agricultural land has decreased by 5 percent, despite an increasing population.

Safety issues related to the use of cleared land after demining and also during the demining process are exemplary. There have been no reported mine-related accidents on land that has been cleared by community-based mine action initiatives. Only one accident has been reported during unplanned activities.

The sophistication of contracted group mine action is remarkable and the results are impressive. In one instance, a project for local community verification of clearance work has been developed. Although contracted mine clearance of this type maybe a unique situation in Cambodia, its success may stimulate similar initiatives in other countries.

This report is based on data collected in 2005 by the MAPU in Battambang and it compares this data with data collected by the NLIS in 2000. Currently, this data is only available for selected areas in Battambang, but the MAPU is attempting to prepare a comprehensive inventory. With this new data, it is possible for the first time to quantify the changes in mine-contaminated areas in Cambodia.

The analysis presented in this paper and our conclusions are the opinions of the authors and do not necessarily present the views of GeoSpatial International Inc., the government of Cambodia, the Royal Government of Cambodia, GeoSpatial International Inc., based in Victoria, Canada, has worked on various contracts in Cambodia with the Canadian International Development Agency since 2000.

See "References and Endnotes," page 104

By developing my mine risk education and training materials specific to regions and countries, the Golden West Humanitarian Foundation tries to help prevent landmine catastrophes. Yet deaths and injuries from human interactions with explosive remnants of war continue to occur for many reasons.

M r. Le Phu, 48, was killed instantly and his daughter seriously injured in June 2005 when, according to Clear Path International and Vietnamese officials, an 81-millimeter (3-inch) mortar exploded in Huong So commune of Hue city in central Vietnam. Le Phu, an ice-cream vendor and part-time scrap collector, was at home removing the explosive charge from the mortar with a large knife when the detonation occurred. His 16-year-old daughter was injured by mortar fragments while cleaning vegetables nearby.

Many believe 30 years of humanitarian demining efforts have drastically reduced threats to Vietnamese civilians from explosive remnants of war like the mortar projectile that killed Le Phu. The reality is that in many places in Southeast Asia, ERW casualties seem to be growing instead of decreasing due to population pressures, modernization and globalization.

Since the end of the American war in 1975 and cessation of hostilities with China in 1979, a number of organizations have worked hard to reduce the threats of unexploded ordinance and landmines in Vietnam. In April 1975, the Vietnamese military conducted a concerted clearance effort to allow internally displaced people access to formerly contested areas. The Vietnamese demining organization, other military units, and a number of non-governmental and international organizations have been busy, especially in the central region of Vietnam.

Despite all these efforts, deaths and injuries from human interactions with ERW continue to occur. Vietnam is known as one of the most contaminated nations in the world, with explosive residue from wars with France, America and China littering the land. At the same time, Vietnam is a growing, vibrant nation with an expanding economy and a determination to modernize the infrastructure.

Some of this infrastructure development is a proximate cause of increasing ERW victims. For example, there are several highway projects now allowing passage through previously inaccessible or underdeveloped areas along the Vietnamese-Lao and Vietnamese-Cambodian borders. The Ho Chi Minh National Highway follows the general tract of the old wartime "Ho Chi Minh Trail" network. While most of the wartime trail was inside Laos or Cambodia, many branches led to remote areas of Vietnam. Coincidentally, these were some of the most intensively bombed areas in the world during the 10 years of war with America. Another highway project, the Trans-Asia Highway, will eventually join Vietnam, Cambodia and Thailand so other parts of Asia. This highway will pass through some of the most contested areas of the Indochina wars.

Operators are facing the threat of exposure by clearing thousands of construction work-ers to serious threats from unexploded ordnance and landmines. For example, the US military has experienced multiple injuries and deaths from accidental exposure to live ordnance ("blow-ups") during the war in South Vietnam. A Cambodian scrap yard containing munitions. [PHOTO COURTESY OF A. VOSBURGH]...
Observations on Recent Changes in Northwest Cambodia's Mine/UXO Situation, Simmonds, et al. [from page 24]

Simmonds et al. Observations on Recent Changes in the Northwest Cambodia's Mine/UXO Situation

Endnotes
1. LIS is an abbreviation for Level One Survey that is commonly used in Cambodia. This is not to be confused with LSI (Landmine Survey Impact Survey), which is in common use in most other parts of the world.


The War Goes On, Vouhough [from page 27]

Endnotes
1. In the United States, this conflict is referred to as the Vietnam War.


Claiming the Future, Sissath [from page 29]

Endnotes


4. 1 square kilometre is equal to about 0.386 square mile.


6. 1 hectare equals approximately 2.5 acres.

Developing Alternatives: The Locality Demining Model in Cambodia, Leighton [from page 35]

Endnotes
1. Richard Moore in his report, Tempering: Debates, Handicap and Use of Landmines in Cambodia (MAG, Handicap International Belgium, Norwegian People’s Aid, 2004), recognizes that deliberate handling occurs amongst the most vulnerable families with the least traditional economic opportunities such as generation of income through livestock or land ownership. For online text of this report see http://www.mag.org.uk/mag/en/cambodia/tempering.pdf.

2. Review of the locality demining model was undertaken by Piw Welfos for MAG.

3. As observed by MAG Cambodia’s technical operations manager, Gary Fenton.


Afghanistan LIS, Fruchet [from page 38]

Endnotes
1. A Landmine Impact Survey, or LIS, is a community-based national survey that measures the extent of the impact of the landmine problem in a country, based on the number of recent victims, socio-economic challenges and types of injuries.

USAID’s Perspective: The Importance of Social and Economic Developing Strategies for Humanitarian Mine Action, Feinberg [from page 41]

Endnotes


4. USAID’s Perspective: The Importance of Social and Economic Developing Strategies for Humanitarian Mine Action, Feinberg [from page 41]

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