Iraq Mine Action Strategy (2010-2012)

Geneva International Centre for Humanitarian Demining

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INTRODUCTION

The first draft of a mine action strategy in Iraq was formulated in 2004 in line with the urgent requirement to structure and organize mine action in Iraq in order to support national development priorities in line with the National Development Strategy (NDS).

At the time of the development of this strategy it was not clear what the role of each of the involved Ministries, civil society organizations and the United Nations support program for mine action, which made it incapable of achieving its goals in a manner consistent with that stage.

And thus the current mine action strategy was formulated in accordance with the current components and features that defines the role and functions of the involved ministries with regards to the implementation of mine action activities.

It also included detailed steps of the main pillars of mine action and for the period (2010-2012) and completed by 20%.

That is developing a medium and long-term strategy in light of the results of the current strategy.

Environment

Geography

The country of Iraq consists mainly of desert and semi-desert areas with green areas along the Tigris and Euphrates rivers as well as the marshes in the south-east of the country.

The green lands are mainly used for irrigation farming of vegetables, wheat, and other crops. Whilst the desert areas are used for seasonal planting in some areas, the land is mainly used for grazing.
Main cities and bigger towns are well connected by roads but some of the deep rural areas are difficult to reach with very limited infrastructure. In these deep rural areas the communities are dependent mainly on agriculture as livelihood.

**Demography**

Iraq is home of an estimated 31.2 million people as of an April 2009 estimate. There are many of displaced people as a result of conflict and insecurity, some of them sought asylum in the neighboring countries. The majority of the Iraqi population are Arabs with the other major groups including Kurds, Assyrians, Iraqi Turkmen and others.

**Political environment**

The Government of Iraq has been substantially involved in reconciliation and securing the social peace after the change processes of the former regime, which left a political, social and sectarian conflict that contributed in reducing the interest in the subject of mine action in Iraq, the Iraqi government has made big efforts in recent years to reduce violence and stabilize the security and fight against terrorism.

The Government of Iraq still faces many development challenges such development processes, corruption and lack of transparency and accountability, weak institutional capacity of government to deliver services, and the weak capacity of the government sector to generate growth in the market economy.

**Security Situation**

There has been a marked but volatile improvement in the security environment during the last year. While incidents, including serious incidents, do still occur, the number of those incidents has dramatically reduced. This has created a more conducive environment to expanding mine action operations to areas not ventured in before. The improvement in the security environment will also allow UN mine action support on a wider front in the near future.

Despite the improvement in the security environment, security is still a factor that needs to be considered when planning mine action operations and determining work priorities.
Socio-Economic Environment

The economy of Iraq is still heavily reliant on oil exports but it is the intention of government to strengthen and expand other industries, especially agriculture. The economy still fosters a lack of proper legislation and regulations, especially towards investment promotion, inefficient banking system, lack of job opportunities, especially for youth and women, irregular employment outside the State sector, food insecurity and displacement.

The development of an Iraq private sector is challenged by an unattractive investment climate, lack of legislation, non-transparency, and corruption amongst other things.

As little was done to stimulate employment, the current unemployment rate exceeds 18%. Over 28% of the young labour force (15 to 29) is unemployed.

As a consequence of the drop in oil prices and the lack of other sources of budget revenue, the government is faced with major fiscal problems.

After decades of wars and conflict, poverty levels in Iraq have increased sharply. There has been a fall in all human development indicators relative to the 1980 baseline. Chronic unemployment lies at the root of the endemic poverty problem.

There are many reasons why reconstruction and development strategies need to mainstream gender. There is a need to reverse a trend of consistent deterioration in the living conditions of women.

Iraq is among the world’s most mine and explosive remnants of war contaminated countries impacting on the safety and livelihood of 1.6 million Iraqis. The contamination of mines and explosive remnants of war not only poses threats to individuals and communities but also impedes economic development by blocking access to areas that could be used for agricultural activities and exploration and development of new oil and gas fields.

Relief and Development Priorities

As a result of the impact of mines and explosive remnants of war on economic development, clearance of economically viable land will be considered as a priority.
To support poverty reduction, job creation and rural development, clearance of agricultural land and high impacted communities is also considered to be a priority.
MINE/ERW THREAT

Nature of the Contamination

The Iran-Iraq War of the 1980s and large-scale military actions of the 1991 Gulf War and widespread violence since 2003, have left Iraq littered with explosive remnants of war and mines.

While there is no reliable estimate available for their total number, the first report of the Government of Iraq submitted on 31 July 2008 to the Secretary-General of the United Nations under the Anti-Personnel Mine Ban Convention indicated that at least 20 million anti-tank and anti-personnel landmines are reported as being emplaced, mainly on the borders and around the oil fields in the south. This figure does, however, only include those laid by the Iraqi armed forces.

Landmines are only a part of Iraq’s total explosive remnants of war problems. Far larger are the dangers posed by the millions of cluster bombs used, as well as unexploded ordnance and abandoned munitions.

Extent of the Contamination

According to the Iraq Landmine Impact Survey (2004-2006) 1,622 communities nation-wide, including Kurdistan region, were found to be affected, with 3,673 separate areas suspected of being contaminated or hazardous. In total, it is believed that 1,730 square kilometers of land are contaminated, impacting the livelihoods and safety of more than 1.6 million Iraqis.

It should be noted, however, that the Landmine Impact Survey was conducted in only 13 out of a total of 18 governorates. Just as important is the fact that this was a community-based assessment, thus where there are no towns or villages near contaminated sites, these villages were not included.

Unknowns

The magnitude of the mine/ERW threat is not known. Apart from the partially completed Landmine Impact Survey (LIS), no exact data on the contamination exists. Further to the fact that the LIS was only completed in 13 of the 18 governorates, another fact is that large unpopulated areas were not surveyed. It should also be noted that currently the survey of the remaining governorates is ongoing.
IMPACT ASSESSMENT

Current Impact

The current impact of mines and can be summarized as follows:

- Affected communities – The LIS identified mine/ERW contamination in each of the 13 governorates surveyed. A total of 1,622 communities were found to be affected by mines/ERW. Excluding the border areas and some oilfields in the south, most of the remainder of the area is mainly plagued by UXO. The survey determined that, according to the indicators used to determine the rating, 70 communities were rated as high, 568 as medium, and 984 as low impacted.

- Risk-taking behaviour – The highest number of incidents happened during farming and herding activities. Tampering and collecting scrap metal was recorded as being relatively low. This may be because of the fact that these activities are considered to be illegal and thus not reported as such.

- Victim profiles and numbers – The survey found an estimated 18 new victims per 100,000 of the population in the affected communities. Victim rates were found to be unequally distributed across the regions. A total of 565 recent victims were recorded of which 38% was killed. About 44% of the victims were breadwinners, 99% were civilians, 89% males whilst 65% of the victims are from the productive age group of 15 to 44.

- Projected changes – The information available on return of refugees and construction projects under way is limited and further information should be obtained for the review of this strategy.

- Unknowns – The magnitude of the mine ERW is not known yet mainly due to the fact that the LIS was only conducted in 13 of the 18 governorates and, because the LIS is community based, it does not provide the full picture of the contamination.

- Is now complete the impact survey of the remaining five provinces will be completed so the overall perception about the size of the expected contamination of mines and UXO.
Development Constraints

The LIS collected extensive information on the types of livelihoods that the local populations are denied because of mines and ERW contamination. Overall, agricultural land, and in particular pasture land, is the most affected. In the south this accounts for more than 80% of the impact considering the fact that the people dependent on agriculture for their livelihood are normally the poor people in the deep rural areas where no alternative sources of income are available.

Mine/ERW contamination in the oil fields of the south is a huge problem as exploration and the further development of the oil industry is seriously hampered. Together with this, the building or rehabilitation of roads, rail lines, and electricity power lines are also seriously affected.

It is foreseen that as the tempo of reconstruction and development increases, the contamination will become more of an obstacle.

Development Priorities

From a development perspective, the priorities can be summarized as follows:

- Oil fields
- Agricultural land
- Power lines
- Roads and railway lines.
Existing Capacity

The existing capacity to deal with the mine and ERW problem is considered to be minute in relation to the magnitude of the problem. It was not possible during the planning to obtain the clearance and EOD capacity of the MoD and MoI. The existing mine/ERW clearance and EOD capacity is only made up of national and international organizations and NGOs mainly operational in Basra with no other coverage for the rest of the companies.

A disturbing aspect is that there is only one Mine Detection Dog Team available in all of Iraq excluding the Kurdistan Region. The DMA as such has no physical capacity for clearance, MRE, or MVA. The existing humanitarian and commercial capacity can be summarized as follows:

<table>
<thead>
<tr>
<th>SER</th>
<th>ORG</th>
<th>LOC</th>
<th>De.T</th>
<th>BA C</th>
<th>EOD</th>
<th>TECH S.</th>
<th>QC</th>
<th>M. De.T</th>
<th>MDDT.</th>
<th>MRE</th>
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<td>Alsafsafa Company</td>
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<td>10</td>
<td>MoI</td>
<td>All Gov.</td>
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<td>Iraq excl KRG</td>
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<td>4</td>
<td>1</td>
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</table>
Implementing Challenges

In order to mobilize donor support for mine action in Iraq, a proper functioning government institution and a realistic mine action strategy is required. The fact that this is not in place poses a major challenge to mine action.

Although the security situation in general has improved a lot over the past year making more areas accessible for mine action operations, it still poses a challenge to mine action as it might prevent attending to high priority problem areas that might be affected by the security situation.

The magnitude of the mine and ERW contamination is not known yet due to a partially completed landmine impact survey in 2006 which did not include the unpopulated areas of Iraq, especially in the south. This lack of complete recent information complicates the development of a realistic strategy to address the situation, especially in so far as the obligations under the Anti-Personnel Mine Ban Convention.

VISION

An Iraqi society free from the fear and impact of landmines and explosive remnants of war

MISSION

The promotion, planning and implementation of a safe, effective and efficient national mine action program for Iraq.

The basic components to achieve the strategic plan:

First: Develop and ratify an appropriate legislation for the Iraq mine action program

Second: Establish a higher committee for the development of public policies for mine action requirements for the three ministries.

Third: develop national standards for Iraqi mine action and carried out by the DMA

Forth: the international obligations are Platform for Action and a road map for the national plan.
Features of the Strategic Plan

First, there are approximately 453 mine-affected communities in 9 provinces (Central and South).

Secondly, there are 524 different suspected hazard areas.

Third, there are 941 km of contamination.

Forth, complete the impact survey work in the five remaining governorates this year.
Strategic objectives

First objective: Clearance operations

Development and implementation of operational and appropriately enough for Iraq, for the purpose of reducing the threats of landmines and ERW of war by 20% by 2012 to ensure;

1- Non-technical survey and technical survey of the land.
2- Demarcation and marking.
3- Battle Area Clearance (BAC), any other remnants of war (ERW).
4- Demining.
5- Quality control on all activities of the clearance

Second objective:

Mine Risk Education

Develop and implement a comprehensive national mine risk education program to raise awareness in order to reduce risks and adopt safe behavior among the population

Third objective:

Victim Assistance

Establish an integrated and capable programme for mine/UXO victims rehabilitation and reintegration in the society.

Fourth Objective

Information management of mine action

Develop an effective national information management system.
Key stakeholders: Roles and Responsibility

Introduction

This mine action strategy formulated after the development of guidelines relating to the functions and responsibilities of the three ministries concerned in the area of mine action in Iraq, in accordance with the Memorandum of Understanding between the Ministries of Defence and the ministry of Environment.

Ministry of Defence

The Ministry of Defence will be responsible for the following:

• Planning and Implementation of: Survey; Demarcation, and clearance of minefields inside the republic of Iraq. This includes the operations implemented by International and National companies in which the MoD will be part of their administrative boards through a liaison officer.

• All cleared mines and UXOs should fall under MoD ownership. It is not permitted for any other party to deal with this issue especially taking into consideration the obligations of Ottawa treaty which state that the destruction of ERW and ammunitions must be done according to IMAS.

• The import of explosives used in destruction is exclusively the responsibility of MoD.

• The import of equipment and instruments used by NGOs and commercial companies working in demining should be done in coordination with MoEnv, and MoD with an end user certificate signed by the Prime Minister (The General Commander of the Armed forces)

• The provision of protection to any civilian or military demining activity

• Obtaining detailed information about minefields and sharing the information with MoEnv and other relevant ministries

• Providing MoEnv with detailed reports about all demining activities that have been completed in the past as well as the operations to be carried out in the future.
Ministry of Interior

Ministry of the Interior will use its capacities to remove UXO and cluster bombs in the presence of its representative offices in all provinces. It will focus mainly on the emergency disposal tasks and other functions of disposal in the residential areas, civil facilities and remote areas. This will include,

1. The provision of emergency teams for the UXO and cluster bombs disposal in each province and when they are not involved in such tasks carry out the immediate disposal tasks.

2. All disposal operations implemented according to the national mine action standards.

3. Provide DMA with the information on the disposal operations to update the national database

4. Participate in updating the mine incidents data and mine risk education campaigns.

Ministry of Environment

As a ministry in charge of mine action, the Ministry of Environment will be responsible for planning and coordination of all mine action activities and development of policy and strategy in cooperation with the Ministry of Defence and Ministry of Interior. This will include,

1. Training and equipment of the DMA and related entities.

2. Develop a policy, national standards, and procedures for granting accreditation of the implementing bodies and guidelines for mine action beneficiaries.

3. Ensure the fulfillment of all governmental obligations with respect to international conventions, specifically the Anti-Personnel Mine Ban Convention.

4. Provide a system for quality management for all mine action activities

5. The adoption of a database of mine action in Iraq, using the information received from all involved bodies, other ministries and non-governmental organizations.
6. The development and implementation of mine risk education and victim assistance in cooperation with all stakeholders.
7. Ensure gender balance in all mine action plans and activities.
8. Planning and coordination with the following bodies to benefit from their clearance capacities:
   **First:** United Nations and Donors
   **Second:** All Iraqi Ministries
   **Third:** National NGOs and commercial demining companies
   **Fourth:** International NGOs and commercial demining companies.

9. MoEnv is not allowed to grant accreditation to NGOs and commercial companies before receiving a security approval from MoD, MoI, and Iraqi Intelligence, or other relevant security authorities.

10. MoEnv will coordinate with United Nations and International Organizations on the following:
   **First:** Training of military and civil staff to develop their capacities.
   **Second:** To obtain up to date equipment in coordination with MoD in addition to identifying the type and amount of the required equipment.

11. To provide MoD with detailed information about all demining activities that have been implemented in the past by non military organizations.

**Mutual Responsibilities between MoD and MoEnv.**

a. The Accreditation of national and international organizations should be done upon agreement between the two ministries.

b. Both Ministries will follow the following mechanism:
   **First:** All Iraqi ministries shall inform MoEnv about any of their projects that are affected by minefields.
   **Second:** MoEnv shall pass these projects and the info on the minefields to MoD to see whether MoD has the ability to clear them or not. If MoD cannot implement clearance for any reason, then MoEnv can make an announcement for tendering for international and national companies (the priority is to the national companies).
   **Third:** MoEnv shall use the accredited companies to perform Quality Assurance and Quality Control (QA/QC) to the areas cleaned by MoD according to international law.
   **Fourth:** MoD (Military Engineering Directorate) is responsible for the destruction of all mines removed by the Army or the international/national NGOs and companies (in this case these
NGOs/companies must cover the cost of the materials used in destruction.

c. Establish a joint committee between MoEnv, MoI, and MoD. Its base will be at the infrastructure centre at MoD, to follow all administrative; technical and security issues that deal with clearance of mines and UXOs.

Requirements of the operational capabilities

The information listed below reflects the operational capabilities that are considered as requirements to implement Iraq mine action strategy. These requirements can be provided through the Ministry of Defence, the Ministry of Interior, the Ministry of Environment, and the organizations and companies working with them. This information must be updated to match the obligations under the Article 5 of the Ottawa Treaty.

<table>
<thead>
<tr>
<th>Years</th>
<th>BAC TEAM</th>
<th>CLEAR TEAM</th>
<th>QA-QC TEAM</th>
<th>Tech. SVY.T</th>
<th>NonTech. SVY.T</th>
<th>DEMARC TEAM</th>
<th>MRE TEAM</th>
<th>VA STAFF</th>
<th>INFO STAFF</th>
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<td>20</td>
<td>15</td>
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</table>

Funding needs

- The figures mentioned in the table below are estimations based on the operational requirements in line with the information available from the results of the landmine impact survey.

- The funding needs should be distributed through the budgets of the Ministry of Environment, the Ministry of Defence and the Ministry of Interior in line with the responsibilities agreed upon in the Memorandum of Understanding:

<table>
<thead>
<tr>
<th>Years</th>
<th>Strac. Mang</th>
<th>BAC TEAM</th>
<th>QA-QC.T</th>
<th>CLEAR TEAM</th>
<th>Tech. SVY.T</th>
<th>NonTech. SVY.T</th>
<th>DEMARC TEAM</th>
<th>MRE TEAM</th>
<th>VA STAFF</th>
<th>INFO STAFF</th>
<th>Total Sum</th>
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<td></td>
<td>6.3</td>
<td>9</td>
<td>1.25</td>
<td>12.75</td>
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</table>
The First Strategic Goal

Demining Operations
Elements of the Demining Plan

- The plan covers the demining activities in the provinces of the south and south-center of Iraq (nine provinces) for the period (2010-2012) which are under the responsibility of the RMAC-S and RMAC-C (to be established in the future). These provinces include 90% of the reported contaminated areas. The Landmine Impact Survey is still ongoing in the five remaining provinces and to be completed by end of 2010. It is expected that this survey will report 10% of the total impact. Due to improvement in the security situation, it is planned to establish a regional mine action center in the North to manage mine action in these five provinces.

- The accumulative table represents the current strategy which will be implemented from 2010-2012, while the long-term strategy table shows the expected achievements until 2019 with the complete of the clearance operations for the contaminated areas recorded by LIS.

The Plan of the operations based on:

1- Divided according to three regional centers that manage mine action activities in the Iraqi governorates: the Regional Center in the South, based in Basra, the Regional Center in the Center, based in Hilla, and the Regional Center in the North, based in Mosul.
2- Identify priorities which are of the most contaminated areas and the most affected communities.
3- Needs assessment of the manpower represented by the teams required for the implementation.
4- Cost estimate needed for that implementation.
5- Needs assessment in (3) are found by using the equation below:

\[
\text{Number of teams} = \frac{\text{production (sqm)}}{(\text{number of working days per year} \times \text{team productivity per day})} 
\]

6- The cost estimate in (4) is made by using the following equation:

\[
\text{Annual labor cost} = \text{number of working teams} \times \text{average annual wage of the team} \times 1.20\%. \\
(20\% \text{ reflects the surplus value of the work of any commercial company profits, or organizer profits}).
\]

7- Use the average productivity of the manual demining team (200 m2 / day).
8- Use the average productivity of the non-technical survey team (15000 m²/day).
9- Use the average productivity of the technical survey team (1500 m²/day).
10- Use the average productivity of the demarcation team (5000 m²/day).
11- Use the ERW clearance team (7500 m²/day).
12- The cost of the manual demining team is ($324000 per year).
13- The cost of the Non-Technical Survey team is ($81000 per year)
14- The number of the demining team staff is (15 persons)
15- The number of the BAC team staff is (15 persons)
16- The number of the Non Technical Survey team staff is (4 persons)
17- The number of the Technical Survey team staff is (15 persons)
18- The cost of the Technical Survey team is (250%) of the manual demining team cost ($810000)
19- The cost of the demarcation team is ($81000)
20- The cost of the BAC team equals to the demining cost ($324000)
21- The Quality Control team number is 15% of the working teams
22- The cost of the Quality Control teams is 15% of the cost of the working teams.
23- The average working days per year (200 days)
24- The percentage of the dangerous areas to the contaminated areas is 50%.
   This percentage is the highest used internationally according to the NTS standards.
25- The percentage of the dangerous areas used in this strategy (5% for 2010 plan), (10% for 2011 plan) and (15% for 2012) cumulatively.
26- Use 20% of the total dangerous area for demining and demarcation. The
deming and demarcation activities are inversely proportionate starting from
2% to 20% as shown in the table.
27- Use 30% of the remaining dangerous area to conduct BAC in all years of the
strategy.
The Second Strategic Goal

Mine and UXO Risk Education

2010 – 2012

453 communities impacted by landmines and UXO with about 1.6 million citizens, 60% were from urban areas 30% of the villages and rural areas, and 10% of remote areas. The risk education will be conducted in 30% of the affected communities and 136 communities will be visited during the years of this strategy.
# IRAQ MINE ACTION STRATEGY: 2010 TO 2012

## The Second Strategic Goal  MRE to Mines / UXO for the years 2010 – 2012

<table>
<thead>
<tr>
<th>Objective</th>
<th>Activities</th>
<th>Responsible department</th>
<th>Indicators</th>
<th>Notes</th>
<th>Cost</th>
</tr>
</thead>
</table>
| Develop and implement a comprehensive national mine risk education program in cooperation with the all ministries and relevant partners to raise awareness in order to reduce risks and adopt safe behavior among the population | • MRE campaigns accompanying the demining teams in areas affected by mines and UXO as well as MRE campaigns for highly impacted communities  
• Cooperation with the Ministry of Education to conduct MRE campaigns for schools for all stages  
• Conduct MRE for 30% of the affected communities  
• Each team will conduct MRE in 40 communities per year  
• 120 communities visited by team during 3 years.                                                                                                                                                                                                                                                                                                                                                                                                  | MoEnv, MoE, Civil Society organizations | Verification of the success of the work of MRE campaigns through the questionnaire | • 5 visits to each affected community during the period of the strategy  
• The cost of the MRE team per year with logistics is $ 100000  
• 136 community visited with five visits each thus 680 visits by MRE teams. Each team can visit 40 communities then 17 teams needed at a cost of $100,000 for the team with 1.2 % add as organizer profit.                                                                                                                                                                                                                             | $100000 for 2010  
$100000 for 2011  
$100000 for 2012  
$ 300,000 cost of printing leaflets, bags and other materials distributed in schools and others in the 13 provinces                                                                                     |                                                                                                      |
| MRE teams capability development and training according to the standards and modern experiences to carry out MRE campaigns for the affected communities |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | MoEnv, International community | Improve the annual performance                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | $600,000                                                                                   |
| MRE media campaign to raise awareness about the impact of mines on development projects and infrastructure in the provinces, districts and sub- districts |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | MoEnv                        | national awareness of the dangers of mines, especially for government institutions close to the affected communities | Use different means of media audio, visual and print                                                                                                                                                                                                                                                                                                                                                                                                                                                | $ 600,000                                                                             |

**Total Cost:** $7800000
The Third Strategic Goal

Mine and UXO Victim Assistance
(2010 – 2012)
<table>
<thead>
<tr>
<th>Objective</th>
<th>Activities</th>
<th>Responsible department</th>
<th>Indicators</th>
<th>Notes</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish an integrated and capable programme for mine/UXO victims rehabilitation and reintegration in the society.</td>
<td>Sign memorandums of understanding with ministries deal with the disabled and mine victims affairs and develop mechanisms of joint coordination in the field of mine action. Conduct a comprehensive field survey in 15 provinces to register survivors, according to the project submitted to the mine action portfolio and to be implemented by the MoH and DMA after conducting joint training. Build a powerful database and updated with the data obtained from field surveys, hospitals (MoH) and police stations (MoI). Develop and disseminate a victim registration mechanism.</td>
<td>MoEnv, MoH MoLSA and MoHR MoEnv, MoH MoLSA and MoHR MoEnv, MoH, MoI,</td>
<td>MoU’s complete The survey started The mechanism developed and functioning</td>
<td>MoH, MoLSA and MoHR work together with the MoEnv in the field of victim assistance The project was submitted to the mine action portfolio (DMA Project For MA Portfolio 2010) with estimated cost of two million dollars. More details available. The recording of the accidents is at a police station prior to treatment in hospitals so a mechanism can be developed in cooperation with relevant Ministries to limit the registration of mine incidents in the future and consequently update the information.</td>
<td>$3000000 $1000000 added as transport allowances to the survivors Included in the above project</td>
</tr>
<tr>
<td>Service Description</td>
<td>Ministry Involvement</td>
<td>Joint Control Details</td>
<td>Amount</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------</td>
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<tr>
<td>Provide treatment to 20% of survivors and to provide them and train them on prosthesis</td>
<td>MoEnv, MoH</td>
<td>Joint control with the Ministry of Health on the work of the prosthetic centers from the international organizations</td>
<td>3000000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provide vocational rehabilitation to 10% of the survivors to reintegrate them into society and to provide appropriate employment opportunities</td>
<td>MoEnv, MoLSA</td>
<td>All ministries involved in the provision of employment and special specifications for the handicapped</td>
<td>2000000</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$ 9000000
The Fourth Strategic Goal

Information Management for Mine Action
2010 – 2012
The Fourth Strategic Goal: Information Management for the Mine Action for the years 2010 – 2012

<table>
<thead>
<tr>
<th>Goals</th>
<th>Activities</th>
<th>Responsible department</th>
<th>Indicators</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop an effective national information management system.</td>
<td>Develop a mechanism for the exchange of information and facilitate utilizing it by ministries, organizations and companies working in mine action</td>
<td>MoEnv</td>
<td>The stored information utilized and easily filled and updated</td>
<td>$ 200,000</td>
</tr>
<tr>
<td></td>
<td>Build a joint national mine action database for three ministries (MoEnv, MoD, MoI) with the support of international organizations</td>
<td>MoEnv, MoD, MoEnv</td>
<td>A national database contains all information on mine action and available to all ministries, organizations and companies</td>
<td>$ 800,000</td>
</tr>
<tr>
<td></td>
<td>Building a geographic information system (GIS) to mark the mines and UXO contaminated sites</td>
<td>Ministry of Environment</td>
<td>Effective and efficient GIS system</td>
<td>$ 250,000</td>
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<td>1250000$</td>
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</tbody>
</table>
Non-technical survey procedures that the strategy is based on. They include the release of lands marked by LIS according to the information obtained and the experience of the survey team.

(Figure 1) illustrates the area (SHA) generated during an impact survey or other claim of presence of hazard.

Figure (2) Example of a possible initial finding of a non-technical survey. The old SHA area outside the Confirmed Hazardous Area (CHA) has been cancelled. The CHA has been marked with a Reference Point (RP), Bench Mark (BM) and Turning Points (TP) for mapping purposes only, not physically on the ground.
Figure 3 - Example of a sub-divided CHA generated during a non-technical survey. The CHA has been sub-divided into sections based on differing evidence of hazards. For example, one section may have shown evidence of mines on the surface and so obviously requires clearance. A first hand informant may have provided information regarding a second and a third section stating that the areas are mined. The fourth and fifth sections have some information regarding the
presence of mines. The level and type of required technical survey may therefore vary between sections. This is the basic process that surveyors should undergo before declaring any area as a suspect hazardous area – failure to do so will inordinately inflate the estimate of actual hazardous area, which will lead to unnecessary remedial action and inefficient deployment of scarce clearance resources.
Sub-dividing the Confirmed Hazardous Areas (CHA) into smaller sections

Sometimes it may be difficult to find the balance between the requirement for non-technical and technical survey. The requirement for technical survey largely depends on the accuracy of the non-technical survey. Typically, one CHA may have sections within it that will more likely contain hazards than other sections. Some sections may in fact be hazard free but there is insufficient evidence to release these sections, and document this process, with sufficiently high confidence. By dividing CHA into smaller sections, any technical survey can be focused more appropriately. This helps to define the requirement for technical survey in each of the sections.

When the aim of the non-technical survey is to define the most appropriate requirement for technical survey, sub-division may be based on two main principles:

- varying degrees of evidence of the presence or absence of hazards;
- the suitability of technical survey assets in different parts of a CHA.

When sub-dividing a CHA based on evidence of hazards, the process of sub-division is part of the non-technical survey process. It should ideally be undertaken during the early stage of the survey, after an initial assessment of the field site and the hazard situation in the CHA.
Sources of information

- The Landmine Impact Survey of the south and south-center (9) provinces (2004 – 2006), VVAF. The survey was quite comprehensive. For example, the number of communities, according to the gazetteer, in the south and south-central provinces was 3301 communities, while total number of communities visited was 3189, covered 96.6%.

