CMVIS EXTERNAL EVALUATION REPORT

Elke Hottentot

March 2006

ACKNOWLEDGEMENTS

The success of any evaluation depends on the willingness of people to share their knowledge and experiences. The CMVIS staff have been superbly helpful, cooperative and done more than their share to ensure that I was given every possible bit of understanding of the CMVIS project.

My special thanks go to Mr. Lim, who as the project manager of the project answered the bulk of my questions, Mr. Loo and Mr. Sovanna, who took me on their trails to the provinces, and Handicap International Technical Advisors, Mr. Vannarin and Mr. Vuthy, whose insights into the project were invaluable. The CMVIS Data Gathers never tired of sharing their experience, whether this was in the field or in the PP office. This evaluation would not have reached to the same depths if it wasn't for my assistant/interpreter/translator Ranine. Mr. Christian Provoost, who left his post at the end of January, set me off on the right track with his introduction to the project. The kind feedback from Mr. Bruno Leclerq, HI-B Country Director and various other staff at HI-B filled in the remaining gaps.

The insights of many other people were solicited during this interview, including those of a variety of mine action agencies, the Cambodian Mine Action Authority and NGOs. Specifically, I want to thank Andy Kervell for sharing his wealth of understanding on how the CMVIS project could best meet the needs of the Mine Action Planning Units.

Lastly, my thanks go the all the mine/UXO casualties we visited and whose welcoming smiles always made me feel at home. It is my sincere hope that this evaluation will strengthen CMVIS' ability to provide them with support, as well as CMVIS' ability to even better meet the needs of its end-users so that ultimately, they are better able to prevent mine/UXO incidents from happening in the future.

Elke Hottentot
March 22nd, 2006

CONTENT

List of Acronyms

AVI	Australian Volunteers International
CBMRR	Community-based Mine Risk Reduction
CBURR	Community-based UXO Risk Reduction
CMAA	Cambodia Mine Action and Victim Assistance Authority
CMAC	Cambodia Mine Action Centre
CMVIS	Cambodia Mine Victim Information System
CRC	Cambodian Red Cross
DAC	Disability Action Council
DGs	Data gathers
GICHD	Geneva International Centre for Humanitarian Mine Action
HI-B	Handicap International Belgium
HMA	Humanitarian Mine Action Agencies
IMAS	International Mine Action Standards
ISPA TA	Injury Surveillance Project Advisor/Technical Advisor
JMAS	Japanese Mine Action Service
JSC	Jesuit Services Cambodia
MAG	Mines Advisory Group
NPA	Norwegian People's Aid
OEB	Operations des Enfant de Battambang
PM	Program Manager
PMAC	Provincial Mine Action Committee
PRC	Provincial Rehabilitation Centers
TA	Technical Advisor
TMO TA	Training and Monitoring Officer/Technical Advisor
UXO	Unexploded ordnance

Executive Summary

CMVIS is a leading mine/UXO casualty collection system in the world. Its work has been reported on in studies of the Mine Action Information Centre at James Madison University and those conducted by the Geneva International Centre for Humanitarian Demining (GICHD). A simple web search for CMVIS gives 38 hits. The data is used for a wide variety of purposes, provides information to a broad end-user group and it is well respected by humanitarian mine action agencies (HMA) and victim assistance (VA) agencies, Cambodian Mine Action and Victim Assistance Authority (CMAA), Mine Action Planning Units[1] (MAPUs), donors and embassies in Cambodia. All consider CMVIS to be the most reliable source of mine/UXO casualty data in the country.

The data is obtained through an elaborate chain of operations that begins with an expansive volunteer network at the community level and ends with the dissemination of the data to the end-users. Data collection practices are thorough, but could benefit from more organized cross-checking practices with external sources. There are no such sources with which to check whether the data CMVIS collects is *accurate*, but there are a number of sources that CMVIS does not use that could inform whether the data is *complete*. These include other projects such as the Community-based Mine/UXO Risk Reduction (CBMRR) project, the Mine Action Planning Units (MAPUs) and the Provincial Rehabilitation Centers (PRC). Based on current operations, the data CMVIS collects is mostly accurate, although the reliability and consistency of the incident[2] location is an area in need of much improvement. As MAPU and CMAA currently are the main end-users of incident location data, suggestions for improvement received much input from these two end-users.

The conduct of this evaluation brings the project to a cross-roads; either it continues as it has with the consequence that, with some relatively minor improvements, it is as good as it is going to get, OR it sets a clear direction for the future that would allow it to evolve and better fit with the changing character of mine action in Cambodia. The latter depends largely on the setting of a clear strategic direction by Handicap International Belgium (HI-B), its partner, the Cambodian Red Cross (CRC) and CMVIS.

HI-B and the CRC have been partners in supporting the project for the past ten years, but not yet formulated a clear strategic direction for their role in the project. This partnership is formally endorsed on an annual basis by way of signing a Memorandum of Understanding, but otherwise has not been strengthened by means of building relationships of mutual trust and capacity building. The CRC, for its part, appears keen to have the project under its umbrella, yet has done very little to indicate its interest in increasing its involvement in the project. And HI-B, for its part, has changed its views on its role in the project. Whereas it planned handing over the project to the CRC in 2001[3], this did not occur. And although the deliverables for this evaluation included the provision of a road map leading to a partial or complete withdraw of HI-B technical

[1] MAPU gather data on behalf of, and report to, PMAC, who ultimately approve the provincial Mine clearance annual work plan based on the information provided by MAPU. PMAC is the provincial government body in charge of the mine clearance planning process.
[2] This report will use the term 'incident' to describe the event in which a landmine/UXO explodes unexpectedly.
[3] UNICEF External Evaluation of Supported Mine Action Projects, July 2000.

assistance, this changed during the course of the evaluation to HI-B's current stance which is one of being undecided about what role it will play in the project in the longer term.

The lack of clear direction for the future of the project acts as a significant barrier to the project's evolution. Whereas the recommendations outlined in the first and third section of this report can be implemented immediately, the relevancy of all those listed in the second and some of those in the fourth section depends largely on the future direction of the project.

Two options for CMVIS' future appear to be on the horizon. One option that is discussed outside the mine action community is for CMVIS to become part of a wider injury surveillance system. The other option is talked about inside the mine action community, which is for CMVIS to stay operationally as it is but with closer links to the CMAA. The latter is only seen as an option *if* the CMAA shows it is capable of the leadership role it is mandated with. Both options can exist side by side; CMVIS can become part of a wider injury surveillance system[4] by collecting data on a wide range of injures, and at the same work more directly with the CMAA.

The forging of a closer relationship between CMVIS and CMAA appears particularly suitable with the anticipated implementation by CMAA of IMSMA4. IMSMA4 would not replace the CMVIS data base[5], but act as portal by which CMVIS data can be shared more readily. The availability of all mine action related information in one data base would significantly aid management of mine action information. A closer relationship with the authority would also facilitate their joint conduct of a meta-analysis of the data embedded in the data base. For this purpose, it may be beneficial to establish a Mine Action Data Analysis Committee that is comprised of CMAA, CMVIS and representatives of the various mine action operators such as the Cambodian Mine Action Centre (CMAC), HALO, Mines Advisory Group (MAG).

In sum, from a strategic point of view, CMVIS has more than one option. Before pursuing any one of these and possible other options, it would be most beneficial for both partners *and* CMVIS to decide on a strategic direction for the project in the future, conduct the necessary research, design a strategic plan, outline activities and monitor for the results of these activities.

Direction for the day to day operations of the project is blurred due to incongruence between the log frame and field activities *and* the primary outputs and overall goal stated in formal proposals and reports. This concerns particularly the role of CMVIS as an advocate. If CMVIS, as stated, is to contribute to the overall goal of reducing mine/UXO casualties and to the cessation of mine/UXO impact on affected communities, it will need to take on an advocacy role. Yet, this will likely compromise its neutrality as an independent, transparent source, as one without a conflict of interest.

[4] This evaluation did not assess the feasibility of CMVIS becoming part of a wider injury surveillance system and will therefore not comment on this option.

[5] IMSMA4 was designed in response to lengthy field tests of the previous system. IMSMA4 is more intuitive in design and acts as a shell that is customizable. Fields can be added and key information can be imported. For CMVIS, IMSMA4 can act as a portal with import – export functionality. Importing CMVIS data on key information fields would allow for sharing CMVIS data more broadly and readily. End-users would still approach CMVIS for additional information not contained by IMSMA4.

CMVIS and HI-B therefore need to decide *if* and to what degree and in which areas it wants to play an advocacy role. If CMVIS decides it does not want to be an advocate for mine action, it needs to revise the primary outputs and overall goal it describes in its proposals and reports, as it would be unrealistic for CMVIS to achieve described results without taking on an advocacy role. If CMVIS decides it does want to play the role of advocate, it needs to revise its log frame to include results indicators that are then used by management and monitoring staff to direct the project. This would enable to project's activities to gain significant momentum and ultimately, achieve greater results, yet at the same time, would compromise its much valued independence.

Whereas the role of CMVIS as an advocate for mine action is seen as potentially controversial, its role as advocate for mine victims is not. One of the project's main activities is the provision of victim assistance (VA) and the role of advocate fits quite well within this role. Advocacy for mine victims would include the forging of linkages with VA and other NGOs that provide support to victims; ensuring services are made available by following up; speaking on behalf of the victim if needed; and, to analyze the casualty data to better understand for example which types of disability do, and which ones generally don't, receive services. Because the conduct of advocacy for mine/UXO casualties is not seen as a compromise to its neutrality, CMVIS can immediately begin to strengthen its victim assistance role by being an advocate for victims.

Lastly, CMVIS' main end-users (mine action agencies, CMAA and MAPUs) are generally pleased with the work of CVMVIS. The project's response time to special requests is improving, but end-users that make the same special request on a regular basis repeatedly need to prompt project staff to provide them with the information. End-user would be better served if CMVIS designed an automated system to store and be reminded these regular special requests.
CMVIS could also better meet the needs of its end users if it solicited their feedback about ways in which to improve the system and if it collected more accurate incident location information.
To increase the uptake of the information CMVIS collects and to facilitate greater interpretation, CMVIS is recommended to promote the use of OLAP-Cubes[6] to HMA end-users. This would not only decrease the workload of the former but better serve the information needs of the latter.

In closing, CMVIS has stood up to the test of time and for ten years has been providing reliable high quality casualty data that is much valued by a diverse group of end-users. With some renewed strategic direction from HI-B, CRC and CMVIS, clarification of its mandate and a stronger relationship with the Cambodian partner, whether this be CRC, CMAA or another institution, CMVIS will be even better able to meet the needs of its end-users and to provide much-needed assistance to mine/UXO casualties.

[6] OLAP-Cubes: Online Analytical Processing: Excel system that allows users to manipulate data in a number of categories in whatever configuration they choose.

PART A – Evaluation Framework

1. INTRODUCTION

This document presents a draft evaluation framework and methodology for the external evaluation of the Cambodian Mine-UXO Victim Information System (CMVIS). This evaluation was planned by Handicap International Belgium (HI-B) and is to take place from January 16th 2006 through until March 23rd 2006. The purpose of writing this document is two-fold: 1) to verify the evaluator fully understands the Terms of Reference (TOR), and 2) to enable all parties involved, i.e., HI-B, Cambodian Red Cross (CRC), and CMVIS to provide input into the way in which this evaluation is conducted. It therefore aims to act as a discussion piece, upon which the final framework for this evaluation will be based.

As part of the evaluation framework, the project is briefly described, as well as the environment within which the project currently operates. This environment simultaneously forms the external context of the evaluation. The justification for the evaluation is given, as are the purpose and objectives of the evaluation. Next, each objective is discussed separately by posing one key question that aims to capture the objective as well as a series of sub-questions that indicate the various ways in which this key question can be pursued. The content of this evaluation will depend on which of these sub-questions are selected. Although the questions aim to be complete, it is likely that some questions that need to be asked are not yet listed. New questions can be added in the process of finalizing the framework. The questions listed aim to invite critical feedback from the various parties. This feedback will then be incorporated and the final evaluation framework established. One this has been done, a plan of action for the evaluation will be drafted and the evaluation conducted.

This document also provides a brief overview of the conceptual framework guiding the evaluation; and briefly describes evaluation methods and expected outputs as stated the TOR (11/10/05). Feedback related to any aspect of this evaluation will be integrated into the framework, which ultimately will inform the content and type of recommendations of this evaluation.

2. BRIEF PROJECT DESCRIPTION

CMVIS maintains a national data-gathering network and system for the storage and dissemination of information related to mine/UXO casualties in Cambodia. CMVIS is a partnership of Handicap International Belgium (HI-B) and the CRC. The Ministries of Foreign Affairs of Finland, the Belgian Cooperation, DFID and UNICEF further financially support CMVIS.

Whereas Mines Advisory Group (MAG) first established CMVIS in 1994, it has been under the full responsibility of CRC and HIB since September of 1995. Since its inception, CMVIS has aimed to contribute to the protection of mine and UXO affected communities, the prevention of mine and UXO incidents[7] and the provision of support to mine-UXO casualties.

[7] This report will use the term 'incident' to describe the event in which a landmine/UXO explodes unexpectedly.

The specific objectives of CMVIS are:

- To maintain and coordinate a sustainable information-gathering and referral network of mine/UXO casualties in Cambodia
- To analyze and disseminate mine/UXO casualty information nationally and internationally
- To support the capacity and development of the Cambodian Red Cross in undertaking the activity independently from HI-B

The primary outputs of the project are:

- The provision of assistance to the planning cycles of all programs concerned with mine action and mine victim assistance
- The provision of advocacy for mine-affected communities and mine victims as well as support to survivors of mine/UXO incidents through the dissemination of information on the location and condition of survivors to victim assistance agencies.

The overall goal of CMVIS is to support a reduction in mine/UXO casualties in Cambodia and, ultimately, the cessation of mine/UXO related impact on most affected communities.

3. PROJECT SETTING

Cambodia is a country of approximately 13.5 million people (population projection for 2004, Ministry of Planning, p.8 CMVIS annual report 2004). Administratively, the country is divided in 24 provinces and municipalities, which each are divided in districts, which are made up of communes. A number of villages together form one commune.

Cambodia endured decades of conflict during the 20th century, which left the landscape scattered with mines and UXO. Landmines and anti-tank mines are particularly present in the North West of the country, whereas UXO are more predominant in the South East. People working the land and foraging the forests for food were, for many years, the primary victims. Up until 2002, more casualties took place a result of mine incidents. Since 2003, however, a greater number of casualties occurred due to incident with UXO. This shift can be explained by the increase in price of scrap metal, which has led to people searching for, collecting and intentionally dismantling of UXO for their metal content. The following table provides a quick overview of the change in the occurrence of casualties caused by mine *versus* UXO since the year 2000.

Year	Mine in %	**UXO in %**	**# Incidents**	**# Casualty**
2000	53	47		832
2001	52	47		828
2002	44	56		841
2003	47	53	541	772
2004	38	62	540	898
2005	41	59	542	865

Whereas one mine incident generally leads to one casualty, one UXO incident can lead to many casualties. This is reflected in the significantly higher number of casualties in 2004 than in 2003, whilst the number of incidents is actually lower than in 2003.

Cambodia counts many governmental and non-governmental humanitarian mine action (HMA) agencies, as well as a large number of organizations that provide mine/UXO victim assistance. Overall coordination of mine action in Cambodia is the responsibility of the Cambodian Mine Action Authority (CMAA). Provincial planning of demining agencies is the task of each province's Provincial Mine Action Committee (PMAC). The provincial Mine Action Planning Units (MAPUs) gather data on behalf of the PMAC.

The overall environment in which HMA takes place in Cambodia and the context within which CMVIS works is not only one that is technical in nature, but very much social, geographic and political as well. Social in that is people from the lowest socio-economic groupings that are most affected; geographical in that certain areas are more affected than others, and political as those areas (K5) most affected by mines border on Thailand, thereby turning the mine issue into an issue of border security as well.

CMVIS plays an important role in HMA in Cambodia, as it collects and disseminates mine/UXO casualty data, which is essential if those resources available are to be used effectively, whether through better targeting or monitoring of the various components of HMA. In addition, the project aims to support mine victims by acting as a liaison between the victims and those agencies that can support through the provision of equipment, other resources and training, to name only a few.

4. RATIONALE FOR EVALUATION

To maximize CMVIS's contribution to its stated objective and overall goal, the project has received external input through a number of evaluations.

In 2000, UNICEF supported an evaluation that focused on an analysis of stated objectives of the project and the system of data gathering employed. In 2003, HIB conducted an evaluation of the database system, and in 2004 an end-user satisfaction study was conducted.

At this time, when CMVIS has been in operation for ten years, and the number of casualties increased in 2004 and 2005 as compared to the average of proceeding years, HIB commissioned an evaluation to assess the project for its consistency and effectiveness. The forthcoming recommendations aim to increase the efficiency of the project's deployment and daily management.

5. PURPOSE and OBJECTIVES OF THE EVALUATION

The overall purpose of the evaluation as per the TO (11/10/05) is to: "…assess how much the project is currently responding to the overall challenge to collect comprehensive and detailed information on mine and UXO victims that can be reliably used by end users"

The objectives of the evaluation as stated in the TOR(11/10/05) can be found on the next page:

- To assess the humanitarian impact of the project on mine action practitioners' work in terms of strategy formulation and priority deployment... This includes demining agencies, HMA NGOs, CMAA, PMAC, MAPU, CBMRR...

- To assess the CMVIS deployment scheme and its expected responsiveness towards beneficiaries; propose a revised scheme of intervention if required making the best use of CRC volunteer network

- To analyze the consistency of the chain of operations from staff/volunteer deployment to final reporting and dissemination

- To assess the CRC management capacity with the objective to ultimately work independently from HI-B Technical Assistance; analyze existing internal management tools, set conditions and draft plan for the transfer of responsibilities

- To develop a benchmark outlining the minimum technical, managerial requirements and best political ownership/support to export the model.

6. EVALUATION OBJECTIVES and RELATED QUESTIONS

In order of Hi-B priority, the objectives of the evaluation (TOR 11/10/05) and the key, as well as possible sub-questions raised by each objective can be found below.

6.1 To analyze the consistency of the chain of operations from staff/volunteer deployment to final reporting and dissemination

- Key question:
  What, if any, steps can be taken to improve the consistency, i.e. reliability, of data collected, processed, reported and disseminated by CMVIS?

- Sub-questions:
  1. How reliable is the data collected by the Data Gathers (DG) on the same victims when compared to the data obtained by the Field Supervisor?
  2. What, if any, criteria for follow-up of mine victims have been developed to ensure that data collected about the status of the injury is still reliable three months after initial visit of DG?
  3. What, if any, monitoring processes are in place to ensure CMVIS data is reliable?"
  4. What are the possible stages in the data collection process where errors can occur and what measures are in place to correct these?
  5. Given the relatively low number of UXO incidents in the East of Cambodia, what sources of information are available to CMVIS to ensure all casualties are recorded?
  6. To what extent is CMVIS data complete when cross-referenced with data from, for example, Prosthetic Rehabilitation Centers (PRC), Community-based Mine Risk Reduction (CBMRR) project, Community-based UXO Risk Reduction (CBURR)

project, Mine Action Planning Unit (MAPU), Jesuit Services Cambodia (JSC), CARE Cambodia, Disability Action Council (DAC), and local authorities?

6.2 To assess the CMVIS management capacity with the objective to ultimately work independently from HI-B Technical Assistance (TA)[8]; analyze existing internal management tools, set conditions and draft plan for the transfer of responsibilities

It should be noted that this objective was modified six weeks into the evaluation process. Whereas the TOR originally asked for a road map leading to a partial or complete withdraw of Technical Assistance including timeframe and thus implied that a hand-over of the project from HI-B to CRC was pending, this changed with the departure of, and subsequent change in project support from, the Mine and Injury Prevention Coordinator to HI-B Country Director.

Following the departure of the former at the end of January 2006, the latter adjusted HI-B's vision. This led to a change in the TOR six weeks into the evaluation, from one that was exploring initial feasibility of CRC taking over the project and CMVIS capacity to manage the project without HI-B support to one that focused solely on assessing the ability of CMVIS staff to work without external support from HI-B.

The original TOR asked for an investigation of CRC HQ's future intent to manage the CMVIS project independently from HI-B in the long term. As this was already explored prior to the change in the TOR, this will still be reported on in Part B of the evaluation.

The following key questions and corresponding sub-questions will be answered by the evaluation.

- Key questions:

- What is CMVIS staff's current internal non-technical (knowledge/skills, i.e. management tools) and technical (knowledge/skills related to data base, monitoring and training) capacity to manage the CMVIS project without HI-B TAs?
- What are the minimal conditions that need to be in place for the CRC CMVIS staff to competently run the CMVIS project independent from HI-B TA?
- What time frame is required for these conditions to be met and for responsibilities to be transferred?

- Sub-questions:
  1. What is CMVIS staff internal technical and non-technical capacity?
  2. What tasks are currently conducted by the two TAs?
  3. For which of the tasks that are currently conducted by the TAs does CMVIS already have the capacity, time and resources in-house?
  4. How capable would CMVIS be today to manage the project independently from HIB?

[8] The two HI-B Technical Advisors work in the role of Injury Surveillance Project Advisor and Training and Monitoring Officer. In this report, they will either be referred to as TAs when discussed in duo, or as TA-ISPA and TA-TMO when specific mention is made of their specific role in the project.

5. What is minimally required in terms of technical and non-technical capacity for CMVIS to be independent from HI-B?
6. In keeping with the third objective of CMVIS to support the capacity and development of the Cambodian Red Cross, what steps has HI-B already taken to support the CRC to independently manage the project?
7. What other steps need to be taken by HI-B to strengthen CMVIS staff management (non-technical) and technical capacity (i.e. database, monitoring and training), as well as resources *if* CRC CMVIS staff is to manage the project as independently as possible?

6.3 To assess the CMVIS deployment scheme and it's expected responsiveness towards beneficiaries (i.e. mine/UXO victims and their families); propose a revised scheme of intervention if required making the best use of CRC volunteer network

- Key questions:

- To what degree is CMVIS current deployment scheme of field staff and volunteers responsive to the needs of beneficiaries?
- What deployment scheme of CMVIS field staff and volunteers would best serve the needs of beneficiaries?

- Sub-questions:

1. Does the distribution (i.e. deployment scheme) of Data Gathers (DGs) and volunteers reflect reporting needs in terms of the number and location of casualties?
2. What are the activities of Data Gathers (DGs) and volunteers and which of these respond to the needs of beneficiaries?
3. With which victim assistance agencies have CMVIS staff and volunteers established partnerships?
4. When comparing which victim assistance agencies were contacted by DGs (as stated in their monthly reports) with those agencies known to be active in the same district, are there any victim assistance organizations with which CMVIS has not yet built a relationship?
5. What feedback does CMVIS staff have regarding the CMVIS deployment scheme and expected responsiveness towards beneficiaries?
6. Given current capacity (knowledge, attitudes and behavior) of, and resources (time, money, equipment such as mobile telephone and motor bike) available to, field staff and volunteers, what results related to victim advocacy and support could realistically be expected?
7. What areas of CMVIS field staff and volunteers capacity need to be strengthened in order to maximize CMVIS assistance to beneficiaries?
8. What, if any, is CMVIS' current strategy for following up on CMVIS generated requests for explosive ordnance disposal (EOD), mine clearance, mine marking and mine risk education (MRE)?
9. What, if any, monitoring systems (i.e. criteria for follow up, quantitative *and* qualitative approach to indicator development) are in place to ensure CMVIS reaches the intended output of providing advocacy for and support to mine-affected

communities and mine victims?" (In other words: To what extent are the results of CMVIS activities related to mine/UXO victim support measured and used to modify CMVIS response to beneficiaries or used to initiate new activities?)

6.4 To assess the humanitarian impact of the project on mine action practitioners' work in terms of strategy formulation and priority deployment... This includes demining agencies, HMA NGOs, CMAA, PMAC, MAPU, CBMRR …

- Key question:
  "To what degree does CMVIS currently meet the information needs of end users as it relates to their ability to formulate strategy and decide on priority deployment?"

- Sub-questions:
  1. What are the opinions of end users about the reliability of CMVIS data?
  2. How important is the exact location of the mine incident to end-users? (Data Gathers are often not able to get the exact location of the mine incident due to safety issues)
  3. In the opinion of end users, what are current strengths, weaknesses of the information provided by CMVIS and how do they think better cooperation can be achieved?
  4. How are areas for improvement prioritized by the various agencies?
  5. Has CMVIS maximized its possible humanitarian impact on mine action practitioners' work given its current activities?
  6. Could CMVIS conduct other activities that would increase its humanitarian impact on mine action practitioners' work? (For example, could CMVIS provide a meta-analysis of the data similar to the Cambodia Road Traffic Accident and Victim Information System (RTAVIS), thereby acting as monitoring tool for HMA in Cambodia while also making it more accountable to CMVIS' overall goal of contributing to a reduction in the number of mine/UXO casualties?)

The following objective was part of the original TOR. Upon review of the evaluation framework, it was decided that objective 6.1 – 6.4 take priority. Due to time constraints it was decided to eliminate this last objective from the TOR. For the sake of being complete, it is included in this evaluation framework.

6.5 To develop a benchmark outlining the minimum technical, managerial requirements and best political ownership/support to export the model

- Key question:
- What are the minimum technical and managerial requirements and what would be the best possible political/support situation *if* a data base similar to CMVIS were to be developed in other mine/UXO affected countries?

- Sub-questions:
- What are the current technical and managerial conditions that allow CMVIS to function?

- In the opinion of staff at CMVIS, CRC, HMA, HIB and possibly other NGOs; what are the minimum technical and managerial requirements if CMVIS were to be successful in other mine/UXO-affected countries?
- In the opinion of staff at CMVIS, CRC, HMA, HIB and possibly other NGOs; what is the best political ownership/support situation if a data base similar to CMVIS were to be successful in other mine/UXO-affected countries?
- Does IMSMA provide any valuable information regarding benchmark development for mine/UXO victim data base development?
- What, if any, best practices are known for establishing a data collection system like CMVIS?

7. CONCEPTUAL FRAMEWORK and METHODOLOGY

This conceptual framework guiding this evaluation will be results-oriented, rather than activity oriented. This means that the evaluation will focus on how CMVIS is achieving results as related to stated objective of the project, rather than focus on the activities of the project alone. As may be evident from the questions posed above, this evaluation will analyze the project's accountability to results, rather than to activities.

Activities are seen as a means to an end by the evaluator, therefore it is important to assess whether the right activities are conducted given the stated objectives, and if so whether these activities are reaching the intended result. Alternatively, it is important to investigate if the project is engaged in activities that lead to results that are not captured by one of the objectives. If so, it may be necessary to adjust the project's stated objectives. Results (changes that are achieved as a result of the project) will be considered along the continuum of time, i.e., at the shorter-term output level, but also at the intermediate (outcome) and long-term (impact) level. In other words, which quantitative and qualitative results, and when, can be expected along the time continuum given the resource inputs of the project?

The following methods will be used to gather the understanding necessary to evaluate the project:
- Document review and cross-referencing of data, both internally as externally
- Qualitative evaluation tools such as formal and semi-formal and formal interviews, knowledge/attitude and practice survey, job shadowing, and field visits
- Participatory tools will be used where possible

8. EXPECTED OUTPUTS

As per the TOR (11/10/05), the following outputs are expected:

- The delivery of a draft evaluation report with the main findings, analyses and practical recommendations prepared for review by HI-B and CRC.
- A final evaluation report presenting the methodologies, the findings, and the recommendations of the evaluator. This will include an analysis of progress made since previous evaluation studies

(UNICEF Sept 2002 and HI-B June 2004). This will also contain illustrations of the project activities. The report should contain an executive summary outlining the main findings and recommendations, which can later be translated into Khmer and distributed to the major stakeholders in the field.

PART B – Evaluation Results

This document reports on the results of the evaluation in four different sections, each one of which presents the findings and recommendations in response to one objective. Before presenting findings and recommendations, each section is introduced by describing the current situation of the project in relation to the specific objective.

1. Current Situation, Main Findings and Recommendations

1.1 CONSISTENCY OF CHAIN OF OPERATIONS

Evaluation Objective
To analyze the consistency of the chain of operations from staff/volunteer deployment to final reporting and dissemination

Key question:
What, if any, steps can be taken to improve the consistency, i.e. reliability, of data collected, processed, reported and disseminated by CMVIS?

1.1.1 Current Situation

The CMVIS chain of operations is well-thought out and operates effectively. This chain is formed by fifteen full time and three part time data gathers (DGs), who are hired from amongst CRC staff and selected for their knowledge of, and connections in, a specific geographic area. They report to the provincial CRC Director on a weekly basis and have been employed by the project since 1999. For casualty reporting in those areas with fewer incidents, CMVIS relies on six main volunteers and approximately 500 Cambodian Red Cross (CRC) volunteers throughout all of the 24 provinces/municipalities of Cambodia. The project also relies on another 345 CMVIS volunteers. In addition, DGs may have what is called 'friend volunteers' in areas where CRC and CMVIS volunteers are scarce. Together, they are the eyes and ears of the CMVIS project. The CRC and CMVIS volunteers do not complete the CMVIS casualty information form (see Appendix A), but report new casualties to one of the DGs or main volunteers. Main volunteers receive USD$5 for each mine/UXO casualty reported, as well as a small annual fee to compensate for any expenses related to their duties.

Each DG and main volunteer is responsible for reporting each and every mine/UXO casualty in the defined geographical area for which they are responsible. The deployment of the DGs and main volunteers is reviewed once a year and was last changed in July of 2005. Whereas the project currently operates with 15 full time staff, it operated with 18 full time staff prior to July 2005. Three full time staff were withdraws, one each from Siem Reap, Pursat and Battambang province.

According to the 2005-2006 CMVIS proposal to the Government of Finland[9], the deployment scheme (see Appendix B for a map of Cambodia and location of DGs and main volunteers). is decided upon by "the degree of mine/UXO contamination at a commune, district and provincial level, as reported by MAG, CMAC and Geospatial International. Additionally, the results of HI-B/CRC national survey of mine victims has enabled the division of Cambodia into operationally high and low incident villages, districts, communes and provinces, according to the number of casualties recorded by the survey. Finally, an analysis of the history of conflict in Cambodia, and areas known to have experienced large amounts of conflict, will influence the choice of sites." The distance to be traveled by DG and main volunteer, as well as ease of access to the area are also points of consideration.

When DGs and main volunteers receive news of a mine/UXO incident, they travel to meet the victim and/or their family. On average, the number of days between the incident and the time the DGs collect their casualty information is six days[10]. A wide variety of sources inform DGs about new casualties. These include CRC and CMVIS volunteers, Commune and Village Chiefs, police, mine action operators, to staff at the provincial CRC offices and health centers (for a list of persons/agencies with whom each DG had contact in 2005, see Appendix C).

By the time the news of a new casualty reaches the DGs, it has often been passed from person to person, not infrequently via radio communication if the casualty is seriously injured, or via a written note if the injury is not considered serious. Below are some examples of various people in the chain of information sources that leads to the DGs and main volunteers being informed of a new casualty.

DG BTM – Mann Sa Im – Data of incident January 12th 2006
Time to report: 15 days

Local people → *police in village* → *Commune police* → *District office* → *DG*

DG Kampong Speu – Sous Bun Soeurn – Data of incident January 17th 2006
Time to report: 2 days

Director of school → *Police* → *DG*

DG Pursat – TYim Kimsean - Data of incident January 2nd 2006
Time to report: 2 days

Soldier in the group of victims → *Commune police* → *Contact by radio communication to head quarters of border police* → *Provincial police* → *DG*

Though DGs have recently begun to work with a monthly work plan that outlines the villages to be checked for new casualties and follow up meetings with 'old' casualties, the plan is flexible

[9] CMVIS project proposal 2005-2006 (p. 14) – submitted by HI-B for the consideration of the Government of Finland.
[10] Information obtained from DGs during their monthly visits to DMO

and allows for an immediate response to new incidents. DGs and main volunteers aim to interview the actual victim. If this is not possible, either because the person has died or is too injured, the person closest to the victim will be interviewed. Global Positioning System (GPS)[11] coordinates of the site of the incident are taken. If it is not safe to enter the area, GPS coordinates of the point closest to the incident site, estimated distance to the site of the accident and compass reading are noted. If the casualty occurred in a new village that has yet to be assigned a village code by the Department of Geography (DoG), the DG will take the nearest village code and alert the Phnom Penh Data Management Office (DMO) with a yellow post-it note on the casualty report form. This is done consistently by all DGs. A non-designated staff in the DMO will go to the DoG to obtain the new code.

All forms completed by DGs will be brought to the DMO and submitted to the field supervisors once a month by thirteen of the eighteen DGs, or sent to PP by taxi by the main volunteer. The phone number of the taxi driver is passed by the main volunteer to the DMO office, which will pay the fare upon receipt of the form. The field supervisors will check each form for missing data and complete where possible. If more information is required, the DGs will be asked to obtain it. DGs will generally visit each casualty more than once; although each does so as his/her own discretion as no clear guidelines for when to do so currently exist.

Next, data on the 210 fields contained in the casualty report form is entered into the ACCESS data base by the two field supervisors. Once the data has been inputted into ACCESS, the data base is be queried for ad-hoc reports, as well as for the monthly and annual reports (for a flow chart of data collection operations, see Appendix D), which are produced using Microsoft Excel and Arc View GIS software. The monthly and annual reports are sent to end-users in electronic and paper format. The total number of end-users currently is 886 and comprises a diverse group, ranging from humanitarian mine action agencies, victim assistance agencies, to embassies and donors.

As CMVIS is a central data base for mine/UXO casualty and incident data, accuracy of this data is paramount if the information it yields is to be reliable. To ensure accuracy, CMVIS aspires to use a consistent data collection, reporting and dissemination process. To ensure consistency, CMVIS is in the process of completing a Standard Operating Procedure (SOP) manual. The SOP aims to guide the planning, implementation and management of the CMVIS project. It is anticipated that the implementation of the SOP will enhance consistency of the process and, as a result, increase accuracy of the data. The CMVIS SOP will be available in both Khmer and English.

To ensure reliability of the data collected, DGs cross reference their data on an ad-hoc basis with that of the Community-based Mine Risk Reduction project (CMAC) and occasionally with that of the MAPUs, ICRC, Veterans International (VI) and Provincial Rehabilitation Centre (PRC) and the Capacity Building of People with Disabilities in the Community (CABDIC) project. Staff also checks written media for any incidents that may have gone unnoticed, although, like cross checking data with various agencies, this has not been done in a systematic manner. CMVIS is

[11] CMVIS has been using GPS coordinates since 2000, at which time they had ten in use. Since 2003, all DGs (18 in total) have been equipped with GPS. Main volunteers and CRC volunteers do not have GPS.

currently in the process of formalizing information exchange with MAPU, PRC, ICRC, and VI, which may lead to more systematic cross-checking practices.

To ensure reliability of the data published in the annual report, one mechanism is in place. Field supervisors and the Training and Monitoring Officer (TMO)/TA conduct a high number of spot (i.e. double) checks of casualties during the first three months of the year. Criteria for deciding which reports to spot check are as followed:

- Seriously injured
- Activity at time of accident handling mine/UXO, burning (not with mine/UXO) and/or military activity
- Casualty did not attend mine awareness training
- No incident location GPS information

It should be noted that the above information is not readily available. Most of the staff did not know these criteria exist and it took several times with several people to get a better understanding *how* field supervisor decide on which form to spot check, and which not. Having joined two field trips for the purpose of spot checking, it is clear that staff takes the task of double check information seriously and explore every possible nook and cranny for mine/UXO casualties that may have gone unnoticed by DGs and main volunteers. Examples of questions asked in relation to this are: 'any scrap metal traders in this area?', or 'do you know any people that fish with explosives?' Informants interviewed ranged from villagers, to village chief, health centre director to police and volunteers.

Up until now, clear direction for casualty follow up by the DGs has been lacking. If DGs do return to casualties sometimes after their visit, they may find the situation has changed. This frequently occurs, as victims may have lost more of a limb due to complications, or received victim assistance services some time after they were first injured. Any changes to the data collected originally will be reported by the DGs to the DMO on their next visit to the CMVIS office in PP.

The data contained in the CMVIS data base is backed up according to a rigorous schedule. This ensures that the total of 60.000 entries is secure. Once a year, CMVIS staff queries the ACCESS data base for duplicate reports. If duplicates are found, they will be investigated and removed if found to report twice on one and the same incident.

1.1.2 Main Findings

Evidence of consistency of the chain of CMVIS operations would be the delivery of reliable, accurate, useful data. Errors can happen at the following stages in this process:

- Data collection: are all casualties being reported and is the information collected accurate and reliable?
- Submission of data: are all reports collected being submitted?
- Data entry: is the data entered correctly?
- Data analysis: is the data analyzed and reported correctly?
- Data dissemination: are the reports being disseminated to the right end-users?

- Data use: is the information disseminated considered valuable by end users?
Various checks were made to verify the reliability of the data collected, entered and analyzed, and disseminated. Whether CMVIS delivers useful data is reported on in section 1.4.

Before proceeding to present the findings, it should be noted that the DGs, field supervisors and TMO TA could not be more diligent in their field work. The challenges inherent in ensuring data is correct are not easy to appreciate. People tend to relocate and *vice versa,* 'old' mine/UXO victims move into the area and access to remote areas, both of which present as big challenges to the spot checking process. During two field trips, the evaluator never ceased to be amazed at the due diligence with which staff follows up with casualties, even if this meant driving to three different locations. Equally, staff goes to great lengths to get accurate GPS location information on UXO. Up to two times, we walked for kilometers to visit and record the accurate location of an UXO.

1.1.2.1 Collection of data

- Review CMVIS field staff deployment scheme

CMVIS currently only considers predominantly historical data in deciding where to deploy staff (see section 1.1.1). Appendix E outlines coverage area of each DG, the district and number of commune and villages for which they are responsible, as well as the number of mine/UXO casualties for 2005. As discussed in section 1.1.1, the deployment was last changed in June 2005 when the project reduced its staff in Siem Reap, Pursat and Battambang. The reasons for this were stabilization in the number of casualties and improved road access. This reduction is fitting giving casualty data for those three provinces. Given 2005 casualty data, coverage area and access issues, the DGs seem to be properly deployed.

- Capacity of CRC and CMVIS volunteers

Contact between DG and CRC and CMVIS volunteers is regular in that they provide information about the occurrence of incidents to the DGs. A number of the DGs[12] commented that more training of volunteers is needed to ensure that the cooperation between volunteers and the DG is optimal. A review of CMVIS volunteer training (see Appendix F) reveals that all volunteers attended training once in the past five years, with 33 receiving training in 2005. The 33 volunteers were trained in Pursat and Siem Reap, where three DGs were formally deployed.

- Cross-reference data with CBMRR and MAPUs

CBMRR and the MAPUs were asked to provide casualty data for the purpose of cross-referencing data collected by the DGs. Neither sources claim that the data they collect is accurate and reliable. On cross-referencing, it was found that there was no discrepancy between the data collected by CMVIS and that collected by CBMRR during the two months of September and October of 2005, although the latter's data was presented in disorderly manner. Whereas the CBMRR raw data *can* (with some minor changes in the way it is collected and presented) be used as a guide to ensure that CMVIS data collection is complete (rather than accurate), the MAPU raw data cannot serve this purpose. An explanation of why follows below.

[12] Information obtained from DGs during conduct of knowledge – attitude and practice (KAP) survey (see part B section 1.3.1)

MAPU Australian Volunteers International Technical Advisors (AVI TA) conducted a comparison of accident numbers for large Level One Survey polygons which did have CMVIS incident locations recorded within them. The results were fairly inconclusive, in other words, there was a poor correlation between the two. According to MAPU/AVI[13], "…this could be due to a number of reasons:

- [CMVIS] accident locations are inaccurate so do not fall within suspect area or investigated minefield (this could be due also to mistakes in interpreting the raw data with compass & distance etc)
- [CMVIS] accidents recorded at village not accident location, and so actual location are not recorded within polygon
- Village informants do not really know accurate location or dates of accidents in relation to the area under investigation, and so provide MAPU with poor accident number information
- MAPU have not recorded the accident numbers in the form (I have checked and this is rare) or not entered into database (true of some of the latter mine field IDs which are added after investigations to the work plan)
- We are only comparing two years of data, which may provide a part of the picture in terms of clearance priority"

The poor correlation is likely due to a combination of the first three points. "It therefore highlights the weakness in relying on local village informant's memory for accident information, and also the importance of the need for accurate location information by CMVIS to be able to make this useful comparison for planning prioritization purposes. This low 'hit rate' of CMVIS accident locations against planned clearance reduces the confidence in CMVIS data, and its use in the planning process. But to only rely on village informant information is proven here to be equally potentially flawed. Possibly CMVIS data can therefore only provide a guide or indicator to approximate areas of problems, and should not be used at this large scale village level."

As the above analysis shows, the raw MAPU – CMVIS data comparison does thus not provide insight as to whether the CMVIS data is complete. This does not mean there is no value in cross-referencing data between MAPU and CMVIS; it simply means in needs to be done in another way than presented above. Please see section 1.1.3.1 for recommendations related to this point.

- Comparison of data in casualty report from DG with that of field supervisor on spot check

A comparison was made between data collected on a number of categories in the casualty report by DGs on 2005 casualties and those collected by field supervisors on their spot check field trips during the first four months of 2005 (see table 1 below). The categories compared were selected as priority areas of information by MAPUs, HALO, MAG, JMAS and UNICEF.

For the year 2005, the total number of casualties was 865, of which a total of 139 have been spot checked to date. This represents 16% of total casualty reports. This number constitutes a reliable sample size which allows for generalizing the findings of this comparison to all the data collected during 2005. The following table outlines reliability rating, expressed in % of those data fields in the casualty report form.

[13] Email communication Andy Kervell, March 13 2006 (please note use of the term 'accident' refers to same as the term 'incident used in this report)

Reliability Rating of Data in Casualty Report 2004		
Category of Data		**Reliability Rating (%)**
1	Name village, commune, district, province of site of accident	98.6%
2	Phum code	100%
3	Current Address	88.9%
4	Type of device	81.9%
5	Accident exact X & Y coordinate	81.9%
6	Date of accident	100%
7	Age of victim	97.2%
8	Gender of victim	100%
9	Occupation of victim	97.2%
10	Accident area description	84.7%
11	Site marked as dangerous	93.1%
12	Previous mine clearance	97.2%
13	How often did victim go to the area	91.7%
14	Did the victim know there was a mine/UXO at the site of accident?	81.9%
15	If they knew there was a mine/UXO, why did they go there?	79.2%
16	Victim attend mine awareness	86.1%
17	Was the child victim attending school?	95.8%
18	Has the victim received any disability services	63.9%
19	Victim killed or injured?	100%
20	If victim died, how long after accident?	100%
21	Where did the casualty die?	100%
22	Type of injury	65.3%
23	Activity during accident	88.9%
24	Other killed or injured	100%
25	Animals killed or injured	100%

The two categories that show the lowest rating are ‘victim received disability services’ (63.9%) and ‘type of injury’ (65.3%). This confirms the fact that the status of these two categories frequently changes after some time has passed; a below knee amputation may become an above knee one, and a casualty who at first did not receive any services will have received them some time after the initial injury. The average reliability of the data contained in these 25 categories is 90.9%

- Criteria for follow-up visits of casualties by DGs and for field visit by Field Supervisor and TMO TA

The low reliability rate of the categories ‘victim received disability services’ and ‘type of injury’ confirms the need for setting criteria for follow-up by DGs of particularly those most seriously injured if the CMVIS data on particularly these two categories is to be reliable.

Criteria for determining which casualties should be visited more than once do currently not exist and are decided upon by each individual DG and main volunteer. It appears that criteria for spot checking do exist, but each Field Supervisor applies his own set and the program manager himself is not even aware they exist. It will be important to clarify these criteria in the SOP and to develop them for DG follow up of casualties as well. These should also be included in the SOP.

1.1.2.2 Submission of data

- Tracking casualties from media to casualty report

During the time of the external evaluation, three incidents with a total of eight casualties reported in the newspaper were tracked to assess if they were entered in the data base. The first two incidents happened on January 31st and February 1st (*The* Cambodian Daily, February 2nd 2006). It is unclear from the article which one of the incidents happened on the 31st and which one on the 1st. The article read as followed:

> *One teenager was killed and two others critically injured in two land mine blasts in Battambang province on Sunday and Monday, officials said. Seng Bros, 18, died instantly and a relative, Nhor Chum, 17, was critically injured when a mine detonated as they cleared farmland in Kamrieng district's Trang commune. The land had been used for sesame and corn farming for years without incident, said deputy district police chief Nol Sok. In Sampouv Loun district, Phat Vuthy, 19, a high school student, was digging behind his house in Tasda commune when he accidentally triggered a frog mine, which ejected and blew his left leg off above the knee, Sampov Loun deputy district police chief Keang Vuthy said* (p. 12).

The third incident occurred on the weekend of January 28th 2006 (*The* Cambodian Daily, February 3rd 2006). The article reads as followed:

> *Five members of a family were injured in Svay Rieng province over the weekend when a B-40 shell exploded, officials said Thursday. Three brothers and their nephew found the shell in Prey Chlak commune while swimming in a pond on Saturday, then took it home to their mother who did not recognize what it was, said Prak Cham, provincial police chief. After that they cleaned it and started playing around, rolling it, he said. The five injured area all being treated at the provincial hospital, said hospital nurse In Sarin, adding that it has been possible to remove the shrapnel from some of the victims, while others have wounds too deep to do so* (p. 16).

Casualty reports were submitted for all eight of these casualties. This exercise was only a random check and therefore does not provide insight into the overall quality of submission of data. The outcome, however, can be considered a positive indicator of complete data submission.

1.1.2.3 Entry of data

- Random sample comparison

A random sample of ten casualty data collection forms were checked against the data entered into the system. With the exception of one data field, the data entered into the computer from these ten forms was the same as that on the forms. This bodes positively for the accurate transcription of data in the form to the data base.

1.1.2.4 Analysis of data

- Review of monthly and annual reports

A number of monthly and annual reports were reviewed and two errors were noticed in the 2004 Annual report: 1) the overview of country data per province on page 5 adds up to 86.8% rather than 100%. Staff apparently calculates this table manually and acknowledged the miscalculation, and 2) numbering in the casualty report form on page 9 of the same annual report is not consistent with that of provincial data reports. For example, whereas the category on 'Where did the accident take place' is numbered 6.1 in the casualty report form, yet the data on this category is numbered 3 on the provincial data pages. When brought to the attention of staff, they acknowledged the numbering in the provincial data pages was off.

The ACCESS data base automatically calculates the various categories of information provided in the monthly CMVIS report. Analysis as such is not done by staff, but rather the information is provided by the data base system upon standardized monthly query. Tables in both the annual and monthly reports, however, often add up to either a bit less or more than 100%. The Program Manager explained that this is due to the fact that percentages on the individual items in a table are rounded up or down.

Although CMVIS states in its general objectives that it analyzes the data, its 'analytical' work is limited to descriptions of the statistics. Further analysis would require interpreting the data, capacity for which is lacking amongst current staff.

1.1.2.5 Dissemination of data

- System for maintaining updated end-user list

CMVIS distributes monthly and annual reports by email, hand and postal delivery. The only method for keeping the email list up to date is the deletion of those email addresses that are rejected three times. There is no system in place that confirms that electronic end-users actually want to continue to receive the information. As for those reports that are hand delivered, confirmation of the desire for continued information is received upon delivery. There is no system in place for reports to confirm that reports mailed out are either received or still desired.

In addition and perhaps, more importantly, the project currently lacks a means by which to ensure that all agencies and organizations that could use the data are actually receiving it. CMVIS is recommended to hold a meeting with senior level management of CRC and HI-B to review the current end-user list and determine whether other agencies/organization/authorities, etc. not yet included on the end-user list should be informed of CMVIS services. It is advised to conduct such a review on an annual basis.

- Level of end-user satisfaction

For information on this item, please check section 1.4.

1.1.3 Recommendations

Based on the main findings of the evaluation, the following recommendations are made with regards to improving the CMVIS chain of operations.

1.1.3.1 Collection of data

- Consider indicators other than casualty data in deploying and directing field staff

CMVIS currently deploys field staff based on historical casualty data and knowledge of areas with large amounts of armed conflict, i.e. retro-actively. This could be misleading as deploying few staff in lower casualties areas may actually lead to casualties going unreported. However, based on the findings of this evaluation, CMVIS staff is thorough in their work to report all casualties through DGs high level of commitment to the project, a diverse network of informants and extensive travel.

CMVIS may, however, also want to consider those factors that contribute to an increase in the number of casualties in a given area, such as the speed and type of development (new roads are known to draw in new people) in a given area. This would enable CMVIS to decide upon deployment not only reactively, but pro-actively as well. Speed and type of development will particularly influence those people most vulnerable. Predisposition to mine/UXO incidents is directly related to people's vulnerability and thus the more vulnerable a person, the more s/he is at risk of being involved in a mine/UXO incident. Vulnerability to mine/UXO risk is directly related to poverty. Indices of poverty are numerous. Within the Cambodian mine/UXO risk context, two stand out, namely population movement and access to resources. Infrastructure development projects and mine clearance for development have in the past led to an increase in casualties. Casualties follow development, or said differently, development precedes casualties. One example is that shared by Ian Thomas[14], CMAA technical advisor. One of the mine operators apparently finished clearing west of Pailin city towards the border through Steung Kach and Bar Yakha communes in early 2005. This reportedly resulted in eleven casualties as people used the new road to settle (and cut) previously inaccessible forest. CMVIS is recommended to stay abreast of such development projects by requesting provincial development plans where available. This would enable them to stay alert to the eventuality of an increase in casualties in specific areas. If unable to consider such criteria when deciding where to deploy DGs and volunteers, CMVIS staff at the DMO office could inform DGs of any planned development that is expected to lead to an increase in casualties.

- Organize annual refresher course for all CRC and CMVIS volunteers

CMVIS relies on having a reliable volunteer network. Without this, CMVIS would not be the well-respected source of casualty information it is today. As mentioned by the UNICEF External Evaluation in 2000[15], "volunteers and communication networks are not established without organization, communication and some degree of incentive or motivation." In order to be sure that volunteers are engaged and reporting casualties, it is recommended to provide a refresher course once per year. This would not only ensure volunteers are engaged, but perhaps more

[14] Interview CMAA TA – February 8th 2006

[15] UNICEF External Evaluation of Supported Mine Action Projects June/July 2000, p. 43

importantly, show volunteers appreciation for their work. The role of appreciation for volunteers should not be underestimated.

This training would be best designed and delivered by the DGs with support from the field supervisor and TMO TA. In those areas where there DGs are not employed, this training should be delivered by the field supervisors and/or TMO TA. Extra funding will have to be made available.

- Diversify and structure sources for cross-checking data

CMVIS can only ascertain that its data is complete by cross-referencing the number of casualties reported with those known to other sources. Such sources are currently limited to the CBMRR project which works in the five most mine/UXO affected provinces, and hospital and VA agencies in some of the provinces. Cross-referencing is done in an unstructured and ad hoc way. The reliability of the CMVIS data would be much enhanced if more sources were accessed in a more systematic way. The Mine Awareness Officer in charge of the CBMRR project at CMAC HQ receives monthly reports from the field that report on the number and name of casualties in CBMRR villages, which currently totals 130 in five provinces in the NW of the country. Although this data is not presented in organized form, CMVIS is recommended to meet with CBMRR management to request this and to formalize sharing data on a monthly basis.

The MAPUs, which currently work in five provinces as well, do not collect as detailed information as the CBMRR project, but their field staff has knowledge of casualties that could help DGs to ensure they have reported on all casualties.

From conversations with the MAPU/AVI, MAPU would encourage closer cooperation with CMVIS. CMVIS is advised to meet with MAPU leadership and AVI to explain what type of information it requires and, if both parties agree, an agreement formalized. AVI suggested MAPU staff would need some training from the DGs to understand what sort of questions they should ask and to decide how often they should meet. Better incident data would not only benefit the work of CMVIS, but also that of the MAPUs.

A source that has until now remained untapped is the SEILA socio-economic inventory. Although SEILA currently does not collect any casualty data, it does gather information on a wide number of categories. SEILA could be invited to add one category on the presence and number of mine/UXO casualties. Another potential source may be the CENSUS, which in the recent past included a question as to whether there are any mine/UXO casualties in the household. Unfortunately, the CENSUS did not ask how many casualties there were. Requesting the CENSUS to also collect information on the number of casualties would make the CENSUS data into a valuable source for CMVIS. A last source is the CMAC/Japanese Mine Action Service (JMAS) Community-based UXO Risk Reduction (CBURR) project. CMAC's EOD coordinator[16] advised that although the project is currently not collecting any UXO casualty information, it is keen to enter into partnership with CMVIS. Some training of CBURR staff would be required according to the EOD Coordinator. Other sources for cross-referencing are MAG's village assessment data, which it would gladly share with CMVIS[17]., the PRCs and

[16] Interview CMAC EOD Coordinator, March 3rd, 2006.
[17] Interview MAG Country Program Manager, March 7th 2006.

CABDIC. The latter two are already being consulted for the purpose of cross checking, although this has yet to be done on a regular basis.

Systematizing and formalizing cross checking of data would equally provide both CMVIS *and* the partner agency with valuable information about all incidents and casualties in their district.

- Conduct annual analysis of all spot-checked forms

CMVIS could gain valuable knowledge about the overall reliability of data by comparing data gathered by field supervisors against that collected by the DGs on an annual basis. The comparison done as part of this evaluation could act as a baseline against which future annual analysis and results could be measured.

- Design standardized criteria for casualty follow up by DG and for spot checks by field supervisor and TMO TA

The reliability of CMVIS data would be strengthened if criteria were designed that would determine which casualties DG should meet with more than once, and which casualty report forms should be spot checked. Naturally, one would suggest these criteria to lead to those casualties that were severely injured to be followed up by DG or spot checked by field supervisor and TMO for any changes in their status.

1.1.3.2 Analysis of data

- Conduct more thorough editing of monthly and annual reports

Simple errors can easily be avoided with more thorough editing. CMVIS is recommended to ensure all tables, pie charts, diagrams and bar graphs add up to exactly 100% as this would increase end-user confidence in the data.

1.1.3.3 Dissemination of data

- System for maintaining updated end-user list

The current system for ensuring that end-users either receive the information *and* want to continue to receive it is in place for those end-users who receive the information through hand-delivery, but is missing for those distributed by postal delivery.

CMVIS system of deleting email addresses that are rejected may work, but still does not ensure that end-users reached by email actually want to continue to receive the information. This challenge is inherent in one-way communication through email and is one that is faced not by CMVIS alone, but indeed by many organizations who provide information on a regular basis to a large distribution list. In order to ensure that those end-users that are reached either by email desire the continued flow of information, CMVIS is advised to sent out a query email once per year, requesting end-users who wish to continue to receive the information to confirm this by sending a return email. This is time consuming for CMVIS and one may query the cost-benefit of this. However, without knowing the number of people that actually use the CMVIS information, CMVIS will be hard-pressed to convince donors of its ongoing relevance. The same could be done for those end-users that receive CMVIS reports through the regular mailing system, but in

the form of a written letter and a request for mailing back a slip in pre-posted envelopes that indicates their ongoing interest.

As mentioned in the findings section, CMVIS currently does not have a means by which it checks whether there are any agencies/organizations/authorities etc that *could* benefit from the data but are not included on the end-user list. CMVIS is recommended to hold a meeting with senior level management of CRC and HI-B to review the current end-user list and determine whether the list is complete. If not, those potential end-users not yet included should be informed of CMVIS' services and queried for their interest in taking advantage of such. CMVIS is advised to conduct such a review on an annual basis.

- Common and consistent core of data fields

The terms 'incident' and 'accident' are used interchangeably by the CMVIS project to describe the event in which a landmine/UXO explodes unexpectedly. The annual report and casualty report form use the term 'accident', whereas the monthly report uses 'incident'[18]. This can lead to misinterpretation of the data. This inconsistency is common not only to CMVIS but across the mine action community, including those involved the collection of casualty data. The new *International Mine Action Standards (IMAS[19])* attempt to clarify the use of these terms, but even IMSMA has not fully adopted the use of the terms according to the standards.

"IMSMA[20] distinguishes between incident and accident by having two different sets of forms for collecting information: one for use when there is an "accident" during a demining-related operation and the other for use when a landmine or UXO explodes unexpectedly at times other than during a demining-related activity." CMVIS is recommended to select one and to use it consistently.

Summary of Recommendations

Data Collection

1. Consider indicators other than casualty data in deploying and directing field staff
2. Organize annual refresher course for all CRC and CMVIS volunteers
3. Diversify and structure sources for cross-checking data
4. Conduct annual analysis of all spot-checked forms
5. Design standardized criteria for casualty follow up by DG and for spot checks by field supervisor and TMO

Data Analysis

6. Conduct more thorough editing of monthly and annual reports

Data Dissemination

7. Develop a system that assists with maintaining updated end-user list
8. Develop common and consistent core of data fields

[18] This report will consistently use the term 'incident' to describe the event of mine/UXO explosion

[19] International Mine Action Standards 04.10 - Second Edition (2003). Glossary of mine action terms, definitions and abbreviations.

[20] Wessel, T., Fiederlein, S., & Ferguson, F. (2001). James Madison University – Mine Action Information System: Managing landmine casualty data: Designing and developing data structures and models to track and manage landmine casualty data

1.2 CMVIS CAPACITY

Evaluation Objective
To assess the CMVIS management capacity with the objective to ultimately work independently from HI-B Technical Assistance (TA); analyze existing internal management tools, set conditions and draft plan for the transfer of responsibilities.

Key questions:

- What is CMVIS staff's current internal non-technical (knowledge/skills, i.e. management tools) and technical (knowledge/skills related to data base, monitoring and training) capacity to manage the CMVIS project without HI-B TA?
- What are the minimal conditions that need to be in place for the CMVIS staff to competently run the CMVIS project independent from HI-B TA?
- What time frame is required for these conditions to be met and for responsibilities to be transferred?

As discussed in Part A, this section also explores CRC HQ's intent for managing the CMVIS project independently from HI-B in the future.

1.2.1 Current Situation

CMVIS has been managed by the CRC in partnership with HI-B and been operated since September 1995. CRC HQ's responsibility for the CMVIS project is management of human resources (hiring of staff, provision of staff benefit and salary), logistics, donor reports and the proper distribution of funds allocated to CMVIS that are provided by HI-B. Since September of last year, CMVIS also receives funds directly from UNICEF for the purpose of a one year pilot project that provides emergency house repairs in the two provinces of Preah Vihear and Otdar Meanchey.

Since 1995, HI-B has been providing financial, technical and management support to the project; financial in terms of proposal writing, budgeting, report writing, auditing, donor relations etc.; technical and management in the form of two full-time technical advisors who provide assistance with the data base, management, monitoring and training aspects of the project. Until recently, HI-B's Mine and Injury Prevention Coordinator provided support on a wide variety of project-related aspects. The HI-B Coordinator recently left his post and a new person is to be hired into the position of Program Coordinator shortly, who will continue to provide support to the project.

HI-B has been lending support to the project in the form of two technical advisors: one an injury surveillance project advisor (ISPA) since 1998, and one training and monitoring officer (TMO) TA since 2001. Whereas the previous ISPA TA reportedly concerned himself mostly with the data base aspect of the project, the current ISPA TA has widened his role to also include management (logic framework, organizing of weekly meetings, etc.) and partnership support. The ISPA TA has been with the project for year and half. The current TMO TA has been with the project since September 2005. His role has also expanded when compared with that of the previous TMO TA. The latter focused only on the quality of the data gathering aspect of DGs'

work, whereas the current TMO TA is also monitoring other areas of their work, such as victim assistance and proposing tools by which to plan their work, such as a monthly work plan. The TMO TA travels to the districts approximately one to two weeks out of each month to assess the various activities of the DGs and main volunteers.

The CMVIS project is currently carried by a total of 22 CRC full-time and three part-time CRC staff, seven main volunteers and a network of more than 800 volunteers. Of the total of 25 staff, five work in the Data Management Office (DMO) in PP: one program manager who has worked with the project since its inception in 1996, two field supervisors and an operator, all three of whom have been with the project for ten years, two drivers and one cleaner (see Appendix G) for an organizational chart). The remaining 18 staff work as Data Gathers (DGs) in the provinces; 15 of whom full-time and three half-time.

In the past four months, the project has also been supported full-time by Ms. Ngim, who volunteers her time and assists with a wide variety of data management related tasks. Her contribution is significant. Up until March 2005, the project counted two data base operators; now only one[21], and until September 2005, the CMVIS team also included one data base supervisor. Since, this position has been vacant and the CRC has been in the process of hiring for this position.

The current location of the CMVIS office is a space rented by CRC and funded by HI-B[22] and UNICEF in a building across the street from the CRC office on road 180 in PP. During the period of this evaluation, this location frequently suffered from power cuts[23]. Power outages during office hours during these three months occurred for a total of 46 hours, thereby reducing office productivity by more than 12.5% during the two months of the evaluation. Whereas the CRC HQ office uses generators during times of outage, the CMVIS office was unable to use power off this grid for fears of crashing the aged generators. Discussion between the CRC and CMVIS were underway during the evaluation, which did not lead to CRC resolving the issue. Towards the end of the evaluation, HI-B provided funds for the project to purchase a generator.

1.2.2 Main Findings

CMVIS is currently jointly managed and supported by HI-B and CRC. In the future, it is assumed CMVIS will continue to work under the umbrella of an organization; however, it is unclear at this pointing time as to whether this will continue to be the CRC or another agency. During the field trip to Mondol Kiri, the local CRC Director was asked if he would still lend the support of his volunteers to the project if it were to be moved to another organization. He confirmed that this would not make a difference and that he would gladly continue the partnership with CMVIS.

[21] According to the program manager, this operator worked on the Road Traffic Accident System, which operated from the CMVIS office up until the middle of 2005. With RTVIS moving to the HI-B office, this position was no longer needed and thus a replacement was not hired.
[22] CRC apparently offered the CMVIS project space in its warehouse in Obek K'am some years ago, but HI-B reportedly disinclined based on the fact that the warehouse had yet to be renovated and was too far away.
[23] Power cuts are a frequent occurrence throughout the city as a result of the government's work to increase the capacity of the grid.

During this evaluation, the CMVIS project was assessed for its current technical and non-technical capacity to manage the project without the support of HI-B. It was not within the scope of this evaluation to analyze CMVIS capacity to manage its financial matters independently from HI-B. This will be evaluated in the future through an external audit. In essence then, this evaluation will only draw part of the picture necessary to decide whether CMVIS can be managed independently from HI-B.

The question whether CMVIS can be managed independently from HI-B can only be fully answered if CMVIS technical and non-technical capacity and that of the other supporting agency, the CRC, is properly understood. This evaluation did not assess CRC HQ capacity to manage CMVIS without HI-B's support, but did explore CRC HQ intent for to independently managing the project in the future.

1.2.2.1 CRC HQ intent for future involvement with CMVIS

For over ten years, HI-B and CRC have been partners in supporting the CMVIS project. Yet, according to HI-B, despite their efforts to invite greater input of CRC HQ into the management of CMVIS, the latter's involvement has remained low over the years.

A recent staff change at CRC saw the appointment of a new acting Director of Planning. Since cooperation with the previous Director had been challenging, this change was welcome. A meeting was held between HI-B Mine and Injury Prevention Coordinator, the CMVIS program manager, HI-B TAs and the evaluator on January 30th 2006 to explore CRC's intent in terms of managing the CMVIS project independently from HI-B in the future. Mr. Provoost first introduced this as the purpose of meeting, after which the acting Director of Planning. shared his views for CMVIS 'self-management' under CRC. He discussed notions of sustainability and ownership and mentioned the need for an exit strategy if CRC is to take over CMVIS management from HI-B, as well as the need for a capacity review on the part of CRC management. Before taking any action, the acting Director of Planning commented he first wanted to discuss this with the Secretary General of the CRC.

Next, the acting Director of Planning left for Japan and contact was made with the second Deputy Secretary General of the CRC. He was not aware of the previous meeting with the acting Director of Planning, but equally expressed interest in managing CMVIS independently from HI-B. A follow-up meeting between the second Deputy Secretary General and HI-B Country Director was scheduled for February 10th 2006. This meeting was joined the CRC Director of Finance. Again, CRC confirmed its interest in taking over the CMVIS project, although expressed doubts over its ability to raise the funds necessary to run the project entirely without HI-B support in terms of fundraising. HI-B TA raised concern over CRC's lengthy hiring process of a new data base supervisor as well as CRC's inability to provide the CMVIS office with power during times of outage. CRC's responded that it is currently not able to either speed up hiring practices or provide power to the CMVIS office. A last example is that the CMVIS webpage is on that of the CRC. This means that CMIVS is dependent on the CRC for posting the monthly report on time and for receiving information about the number of hits the site receives. Neither is happening on a timely basis and each requires the TA to prompt the CRC multiple times. In all, the CRC has yet to show that it is keen to take over the CMVIS project.

CMVIS staff opinion about being managed fully by the CRC varies from general disinterest in the topic, to one that sees no problems to one that is very keen to continue to have the CMVIS project managed by the CRC. The latter opinion belongs to the CMVIS program manager. To him, it is acceptable that the CRC is unable to provide power and is delayed in hiring a data base manager. He trusts that CRC will resolve both issues as soon as it is capable.

1.2.2.2 CRC HQ and HI-B relations

Having reviewed CRC's intent for its involvement in the project, this section will take a look at the degree to which HI-B and CRC have worked together to strengthen their cooperation for the ultimate purpose of increasing the capacity of the CRC to independently manage the CMVIS project.

HI-B and CRC have now been working together with the CMVIS project for a total of ten years. For the past three years, the HI-B Mine and Injury Prevention Coordinator reportedly worked hard to establish a strong relationship with the CRC Director of Planning yet found little receptiveness on the part of the latter to become actively engaged with the project. Beyond this, it appears that little more has been done in terms of relationship building by the two agencies, which represents the first ingredient of any capacity building undertaking. Whereas one would expect regular meetings between the various HI-B departments and their counterparts in the CRC, this apparently has not taken place in the past few years. Even though HI-B and CRC HQ, for example, have some shared responsibilities for the financial management of the project, HI-B and CRC financial staff has not yet worked together or even met regularly. This perhaps explains the reason why cooperation between HI-B and CRC in terms of the CMVIS project remains low today.

As a partner agency with a long term vision for the independence of any local project it supports, one would anticipate HI-B to have planned clear activities with clearly formulated results that would guide the process of strengthening CRC HQ capacity to manage the project. Thus far though, Hi-B does not have a logic framework for its role in supporting the CMVIS project, which in part explains the lack of clear HI-B activities and the absence of monitoring of results and progress that would indicate the CRC's capacity to manage the project independently is being strengthened. It is in this area that HI-B's role requires more attention.

1.2.2.3 HI-B support to CMVIS with developing and using a logic framework

In response to donor request, the CMVIS project has been using a logic framework sine 1998. This frame was mostly, if not completely, developed by HI-B Mine and Injury Prevention Coordinator and the HI-B ISPA TA.

Reviewing CMVIS' log frame and project activities, three issues come to the fore. The first being incongruence in the log frame at a number of levels. The second issue is that it only measures changes achieved by the project in the shorter term. And the third one is that staff work plans are not aligned in any way with the project log frame. All three of these issues stand in the way of the

project being properly monitored and, as a consequence, in the way of the project being managed to achieve intended results. These issues are elaborated on below.

1) Incongruence in the log frame is evident at three levels. First, in that the third objective in the log frame belongs in an HI-B log frame and not in that of CMVIS. It reads: *'to support the capacity and development of the Cambodian Red Cross in undertaking the activity independently from HI-B'*. A related objective does fit in the CMVIS log frame, but should read differently and put CMVIS at the centre of the action.

Second, incongruence between CMVIS' stated activities, objectives, primary outputs and overall goal of *'supporting a reduction in mine/UXO casualties in Cambodia and, ultimately, the cessation of mine/UXO related impact on most affected communities'*. Given stated project activities, it is unrealistic that CMVIS will achieve the overall stated goal. As activities generally flow from objectives, a leap of logic between objectives – activities and goals is evident.

Third, one of the two stated primary outputs of the project is not reflected in any of the three project objectives in the log frame, and the frame (and thus the project) lacks activities and indicators that could lead to its achievement. This output reads as follows: *'the provision of advocacy for mine-affected communities and mine/UXO victims and support to mine/UXO casualties'*. Yet, at the same time, some minimal related activities are conducted in the field by the DGs.

All three of the above point to leaps of logic in the logic frame, which can only confuse matters more for project staff who are already grappling with the concepts conveyed by the framework.

2) Project results, ideally, are measured at various points in time, i.e. outputs measure the immediate result achieved by activities, outcomes measure the intermediate result achieved from a number of outputs, and impact measures those changes that are achieved over the longer term as a result of all project activities and their outputs and outcomes combined. Whereas change at the level of outcomes should realize the various project objectives, change at the impact level should match the vision portrayed by the overall goal of a project. Even though the CMVIS log frame lists a number of outputs, the indicators of these outputs measure change interchangeably at the output and outcome level. *Which* is *which*, is not clear.

3) The log frame could be better used as a pro-active management tool by CMVIS. This would significantly strengthen CMVIS management capacity. Staff's work plans, performance evaluations[24] and monitoring systems could be more aligned with the log frame. The frame is reviewed once a year with staff during the annual retreat. This review is limited to an assessment of the degree to which (expressed in %) each activity has been achieved, rather than the degree to which results of these activities have been achieved. The assumption that the achievement of an activity automatically leads to the result outlined in the log frame is, purely that; an assumption. Assuming that doing one thing (i.e. an activity) will automatically lead to another thing (i.e. result) is evident of a leap of logic. Without logically assessing whether the expected result of an

[24] Current performance review templates used by CRC and HI-B are designed in a results-oriented fashion and therefore lend themselves well to being used in accordance with a results-oriented log frame.

activity has been achieved, it is of no use to solely assess to what degree a*ny* activity has been achieved.

A last and related point is the project current development of Standard Operating Procedures (SOP). These will provide guidance to the project and act as a complementary tool to the log frame. Whereas the SOPs will assist with the HOW of the project, the log frame provides guidance in terms of the WHAT. In other words, the SOP will show the step by step actions of the project, and the log frame provides the reason as to why those steps are relevant.

1.2.2.4 CMVIS management capacity

It should be noted that for a project that should run in relatively straight forward manner, it was difficult to get consistent information about the operations of the project from one staff to the other. To arrive at a clear consistent picture of some aspect of the project, often more than two staff would have been consulted.

For the day to day operations of the project, CMVIS is managed by one program manager who reportedly uses the following management tools:

- Log frame work to assist with planning and management:
- Job descriptions/terms of reference
- Work plans (DG monthly plan and DMO and HI-B TA work plans)
- Activity reports (DGs, CMVIS staff activity and field visit report)
- Additional feedback from DG monthly visits and quarterly meetings
- CMVIS staff weekly team meeting
- Annual strategic retreat
- Staff performance review
- External inputs from HMAs and NGOs

A description of these tools follows below.

As mentioned in the previous section, CMVIS could be better at using the log frame as a ‘living document’, but rather as one that receives attention once per year as a way to report back to donors on its activities. Project proposals to various donors outline a helpful list of performance indicators, yet information for these indicators is not being systematically tracked and used to modify project activities or initiate new ones. As described in great detail in section 1.2.2.3, CMVIS management capacity could be strengthened greatly if the logic framework were to be designed *and* applied in a logical fashion.

The job descriptions of the CMVIS staff seem mostly up-to-date, although the role of the data operator reflects more that of a financial/administrative assistant. The use of monthly work plans by the DGs has recently been instigated by the TMO TA. For DMO staff, work plans are not made on an individual basis, but one is written for all DMO staff for a period covering four or five months. Rather than DMO staff compiling these plans, the ISPA TA receives a list of activities from each staff member and enters them into one document. HI-B TAs work plans are also made and reflect the activities of both TAs.

Meetings with field staff present as management opportunities. Three types of meetings with DGs take place:

- DG monthly visits have been observed and serve the general purpose of DMO staff maintaining regular contact with the field.
- DG quarterly meetings for the purpose of: 1) DGs report on their activities/share experiences, 2) discuss their work plans, 3) establish best practices, and 4) report on any difficulties they may be experiencing and receive training there where necessary
- A large seminar is held once a year and attended by all CMVIS staff and partner agencies. The purpose of the 2005 seminar, for example, was (1) to strengthen the activities of data gatherers and main volunteers, (2) to strengthen the cooperation and communication with other projects, and (3) to provide a training skill on Mine/UXO Risk Education to data gatherers and the main volunteers (4) seminar evaluation.

DMO staff meets weekly for an hour and annually for a few days. The CMVIS weekly DMO meetings though are not held regularly. The program manager's reason for this is that all staff is hardly ever in the office at the same time. The annual strategic retreat was not attended by the evaluator, but from the report focused on the discussing the degree to which each activity in the log frame work was achieved.

The remaining management tools in use by the program manager are staff performance reviews and feedback from end-users. Staff performance reviews for 2005 have yet to be done, reason being that the program manager is awaiting the release of the reviews by CRC. External inputs from HMAs and NGOs are received on an ad-hoc basis.

The general observation is that even though CMVIS engages a useful number of management tools, they are used in an unsystematic fashion and in isolation from one another, thereby missing the opportunity to act as an essential feedback loop that allows for learning and the subsequent systematic implementation of programmatic changes and follow up on the impact such changes. Please see section 1.2.3 for ways in which to make CMVIS management more systematic.

In addition, the program manager's ability to manage the project appears to be challenged by the fact that his management decisions are influenced by a number of, as he puts it, 'bosses'. These currently are the HI-B Country Director, the Directors of Planning and HR staff at CRC HQ, and UNICEF's Assistant Project Officer of Accident, Injury and Disability Projects. Compounding the challenge is the change in HI-B staff in charge of CMVIS resulting in different view on the anticipated future of the project.

Some examples of how the management capacity of the CMVIS program manager and ISPA TA is challenged by receiving direction from the three different corners mentioned above follows:

- Uncertainty about which agency is to support CMVIS in the future limits staff's ability to move forward on securing funding opportunities from new donors. In the course of his work, the CMIVS program manager has met with agencies that have expressed interest in financially supporting the project and asked to submit a proposal. He reportedly not pursued these opportunities as it is yet undetermined who will support the project in the long term.

- The CRC-HI-B MOU being signed at the end of January 2006 reportedly led to CRC's hesitation to post the data base supervisor position as it was unsure whether funds would be secured to pay for this position, leaving the project, which depends on the proper functioning of a data base, without a data base supervisor for more than five months

- The delay in reviewing CMVIS staff performance due to the fact that CRC has yet to distribute the 2005 annual performance review forms. This hampers the program manager's ability to re-direct staff on an annual basis and limits his ability to manage staff.

- Revision of the DG deployment scheme that would have seen withdrawal from some paid staff from certain areas last year was discouraged by UNICEF as it intends for the DGs to take on data collection on casualties other than mine/UXO as part of a wider injury surveillance system

In sum, and put metaphorically, there appear to be too many cooks in the kitchen that are meddling with the soup.

1.2.2.5 CMVIS current staff capacity to operate without HI-B TAs

The proper functioning of the CMVIS project requires skills in a wide variety of areas. Appendix H) contains a table that was drafted by the CMVIS program manager and TAs that outlines these various technical and non-technical tasks and provides percentage points to indicate to which degree these tasks are now performed by CMVIS, HI-B, or CRC HQ staff. If HI-B decides to phase out of the CMVIS project, it could use this table as a baseline against which future progress in regards to increasing CMVIS capacity and decreasing HI-B involvement is measured.

A detailed assessment was made of the degree to which CMVIS staff could manage the various tasks of the two TAs given time, capacity and resources. This was done by asking each TA to indicate which of his tasks could be performed by CMVIS staff, given time, capacity and resources. Independently from the TAs reviewing their tasks, the same question was posed to the program manager. It was interesting to find out that many of the tasks the TAs considered could *not* be carried out by CMVIS staff, the program manager felt it could. Two key observations can be made from this, each one of which gives rise to a question.

<u>First Observation</u>
Hi-B TAs appear to be working in operational roles, rather than in an advisory and capacity building ones as one would expect from technical advisors.

This gives rise to the question whether the project would simply have enough manpower to complete all tasks currently done by the TAs? This in turn demands a review of the number of staff in the CMVIS DMO office as well as their apparent ability in the past few months to complete all their tasks even though power outages reduced their time by 46 hours in the past two months and they have had to operate without a data base supervisor for more than five months. One may expect that this has caused a delay in response to ad-hoc requests, but this does not appear to be the case. In fact, the response time is increasingly becoming shorter, indicating that

staff is coping quite well despite the staff and power shortage. As ARC-View capacity of current staff including TAs is limited, one may also expect that the 2005 annual report, to be published in June 2006, may suffer in quality. Unfortunately, timing will not allow this evaluation to comment on this as it will be completed by the end of March 2006.

A review of current man power reveals that, in addition to operating without the data base supervisor, the one operator on the project seems mostly occupied with administrative work, and supporting the program manager with various tasks, particularly where these concern supervision of the drivers and cleaner, as well as financial matters with CRC. In fact, when asking the name of her position, she was described as the project's assistant to the program manager and the cashier. This has led to the bulk, if not all, of data entry and analysis being done by the field supervisors (in addition to their other tasks) and the one volunteer.

Moreover, CMVIS has employed a cleaner for years. The DMO office is small and may require cleaning for 30 minutes a day. Beyond cleaning, which is done poorly, the cleaner's task is to prepare tea, run documents over to the CRC office, which is across the street, check newspapers for any mine/UXO incidents and aid with mailing out monthly and annual reports. Together, the cleaner's tasks require at most one hour a day. Perhaps not surprisingly, the program manager encouraged her for sometime to become involved in data entry, but she was not interested in taking on other tasks. As a result, she spends a significant amount of time being unproductive. CMVIS also employs two full-time drivers, the need for which is clear during the first four months of the year when both field supervisors and TMO TA spend significant amount of time in the provinces. It is questionable though if they are needed during the remainder of the year.

It has to be said though that in the past two months, CMVIS has been asked to share its data base development expertise with two different agencies, namely Jesuit Relief Services (JSC) and the Association for Aid and Relief, Japan. Although sharing its mine/UXO casualty data base system with other mine/UXO affected countries is part of its mandate, helping agencies developing other systems is not.

Reflecting on the above, one would think that, given appropriate training, CMVIS staff would have time to take over the various tasks now performed by the TAs. This leads the discussion to areas for capacity building.

Second Observation

Given the HI-B currently supports the project in a number of areas, CMVIS staff will require training if the project is to operate successfully without the support of the TAs. This raises the question: 'what steps has HI-B already taken to support CMVIS to independently manage the project?' An inventory of previous capacity building efforts reveals that staff capacity has been strengthened in a number of areas, but not all. The following table outlines past capacity building interventions.

Training Received	Who
Proposal writing	Program Manager
Monitoring and Evaluation	Field Supervisor
Project Management X 2	Program Manager
Microsoft Certified Professional	Program Manager
Accounting Theory	Data Base Operator
Quick Book	Data Base Operator
Financial Management	CRC Director of Program Department
Microsoft Access	Cleaner

* CMVIS program manager missed fundraising workshop he had committed to last year due to the fact that the CRC organized a seminar/workshop he had to attend which took place on the same date

1.2.2.6 HI-B capacity

The ability of the HI-B TAs to strengthen the CMVIS project is hampered for a number of reasons that are described below. The first reason being that both TAs appear to be working in operational, rather than advisory roles. This is true more so for the TMO TA than for the ISPA TA, but applies to both. At the time of the evaluation, their work was instrumental in the CMVIS project carrying out its various activities. This creates a challenge for both TAs, as instead of standing on the sidelines provides support and advice; they have become players equal to the CRC staff. Although the relationship between the TAs and the program manager is good, this seems on the one hand to have blurred the TAs objectivity and, as a result, their ability to provide direction to the project as they should in their role of TAs. On the other hand, the close partnership between the program manager and the TAs may have decreased the program manager's receptiveness to make changes based on the advice of the TAs. The above is evident from the fact that both TAs report to the program manager as if he were to be their supervisor, rather than work with him as equals. Although this is more so the case for the TMO TA, it applies to both.

A second *and* related reason is that their involvement in the direct operations of the project limits their capacity building potential. Whereas the TOR for the ISPA TA outlines some operational tasks, it also includes some capacity building activities; this is not the case for the TOR of the TMO TA. The TOR of the latter predominantly describes operational tasks and does not even once mention the transfer of monitoring capacity to the project staff. This is contrary to what one would expect, as the focus of the TMO TA should be the building of staff capacity.

Considering that technical advisors are generally lent to a project to strengthen one aspect or another and that *only* for a definite period of time, *and* considering that HI-B has provided two full-time TAs to the project for more than seven years, one is left questioning what HI-B's long-term vision is for its involvement in the project. From the project's experience, one gathers that HI-B will continue to provide TA support. If support is ongoing, it is likely to be less focused on capacity building and more on operations. This indeed seems to have been the primary focus of the various TAs that have worked with the project.

A third reason that may explain why HI-B TAs ability to strengthen the CMVIS project is hampered is a lack of congruency between the general objective in the ISPA TA TOR and described duties. The general objective states that the ISPA TA will:
- Develop the analysis capacity of CMVIS staff
- Promote the use of national data base as planning and monitoring tool
- Ensuring the VA assistance role of CMVIS
- Build institutional capacity of the CRC in terms of data base administration and overall project management.

Corresponding duties, however, are only given for the fourth item, and none for the first three. The TOR for the TMO TA is, in this regard, congruent.

A fourth and last reason as to why HI-B's capacity building efforts may have had limited effect to date is the capacity of the TAs themselves in the areas of results-oriented frameworks as well as advocacy. This evaluation took the opportunity to increase TAs knowledge in these two areas. This resulted in understanding the value of a log frame in managing for results, rather than activities, and in the notion of advocacy no longer being simply understood as encouraging or referring victims, but rather as speaking on behalf of someone in order to improve the situation of this person. This fact that the notion of advocacy was not properly understood is not odd, given that the terms 'advocacy' and 'referral' are both translated as one and the same word in Khmer, with the meaning 'referral'.

The one skill area that remains in need of strengthening with the assistance of some outside support is the interpretation of data for the purpose of advocacy for mine/UXO casualties. Although donor proposals list the activity of analyzing trends in incidents and the provision of a baseline for monitoring the impact of VA and mine action programs, this is currently not done. This is likely due to the project's limited data analysis/interpretation ability. An example of how data analysis could be used to monitor of VA services and to provide advocacy for casualties follows: a query of the CMVIS data of which type of casualty (amputee, blind, burns, etc.) receives victim assistance services will reveal which type of disability is most likely to receive victim assistance services. Such a query could point CMVIS to raise the awareness of victim assistance agencies of this fact. As it is CMVIS' task to analyze the data, use it to monitor and support its role as an advocate for mine/UXO casualties and then promote an as wide as possible application of the data, it is in this area the project could benefit from some outside support.

As for the work of the TMO TA specifically, the following: the current monitoring system used by the TMO TA is could be more strongly linked to the CMVIS project log frame. As a result of questions asked during the evaluation, the TMO TA recently realized the importance of indicators and is in the process of developing these. This will aid the systematic collection of data. The TMO TA clearly understands the importance and concept of monitoring for results. During the course of the evaluation, changes have already been made to the monitoring process. It is anticipated that this will also change the focus of field trips, from ones that are limited to joining the field supervisors on their visits to victims and authorities for the purpose of data collection alone, to ones that focus on monitoring the results of all CMVIS activities. These should include the various VA activities of the DGs, including the liaison with VA agencies and possibly other agencies that are in a position to provide assistance to victims. The findings of each visit is reported in a field trip report that provides detailed descriptions of the visit that

currently takes approximately eight hours to complete. Discussion with the TMO TA provided input into how to reduce the length of these reports by limiting the reporting to findings and recommendations. Changes to the TMO TA reporting have already been made.

The pending completion of the SOP will aid to further strengthen the monitoring process by providing step by step information about the various activities to be pursued during field trips. The monitoring framework will function to inform the purpose of these activities. In sum, the log frame, monitoring framework and SOP should all be designed in such a way as to complement one another.

1.2.3 Recommendations

1.2.3.1 HI-B to formulate strategic plan for CMVIS and to increase cooperation with partner agency

For the successful management of CMVIS by CRC CMVIS staff, it will be of utmost importance that HI-B, CRC and CMVIS formulate a vision for the project, set a clear strategic direction for the project and outline the chain of command. This chain needs to not only be communicated with CRC and UNICEF, but also outline who is ultimately in charge. Based on this, clear expectations of the decision-making role of the CMVIS program manager need to be formulated.

Regardless of whom HI-B considers to be CMVIS' partner organization in the future, HI-B would be wise to adopt an exit strategy. This exit strategy would of course detail to whom the project would be handed over, include HI-B support for the partner agency's review of its current capacity to successfully manage the project and outlining HI-B activities intended to strengthen the partners' capacity in response to this review. This strategy would also include what results HI-B expects of these capacity building activities and indicators of these results by which HI-B could track that the partner agency's capacity is increasing. Adopting such an exit strategy would ensure the gradual transfer of responsibilities, but only *if* and *when* evidence of the partner agency's capacity exists. This plan would also include activities such as for example HI-B's building of relationships with the HR and financial departments of the partner agency.

If the CRC, or any other partner for that matter, is to fully manage CMVIS, it would be responsible for obtaining funds as well. One way to do this is for the partner to pursue new funding avenues. HI-B may propose to its current donors the possibility of funding the CMVIS project directly through the partner. This may require HI-B's support in building a relationship of trust between the partner and current donors. In essence, this would be one of HI-B's objectives to be achieved prior to the transfer of responsibility for CMVIS from HI-B to CRC. In other words, this part of capacity building will be the responsibility of HI-B and be stipulated as part of its exit strategy.

1.2.3.2 Review and revise CMVIS logic framework

A short, half day training in results oriented planning, was given to CMVIS staff on February 20th. The purpose of this workshop was to explain the difference between planning and managing activities and planning and managing for results.

CMVIS staff, together with a results-oriented logic framework consultant, is recommended to review and revise its logic framework. The current frame needs to be updated in the following areas:

- Revise the logic framework by deleting the third objective and replace it with an objective that puts CMVIS in an active role, i.e.: *'CMVIS to explore ways in which it can ultimately manage the project without management, technical and financial support from HI-B'*
- Ensure congruency between CMVIS' stated activities, objectives, primary outputs and overall goal. Current activities will not lead to CMVIS overall goal of *'supporting a reduction in mine/UXO casualties in Cambodia and, ultimately, the cessation of mine/UXO related impact on most affected communities'*. For CMVIS to realize this goal, it will have to add advocacy, whether this it be to the government, mine action operators or victim assistance and community development organizations, as a major activity set. Given that this may compromise the project's much respected neutrality (see section 1.3.2), it may choose not to do this. If so, it should revise its overall goal and make it more realistic
- Conceptualize the changes the project wants to achieve over time and determine which activities will lead to immediate changes (outputs), which group of results combined will lead to changes in the medium term (outcomes) and how all of the work of the project will contribute to achieving CMVIS overall long term vision, i.e. goal (impact)
- Create results indicators and decide on what information needs to be collected to inform these indicators, who will collect that information and when

With donor approval, a framework as attached in Appendix I is proposed. The content of this framework is shown as an example of one way in which it can be completed by CMVIS staff. The SOP that currently being designed will need to be aligned with the various activities outlined in the log frame. Together, the two should be used as management tools, with the log frame providing the reason for under taking certain activities and the SOP outlining the steps involved in these activities.

1.2.3.3 Strengthen CMVIS management tools

CMVIS currently uses the log frame as a reporting tool for donors that is reviewed once a year and then pinned to the wall, rather than as an active management tool. As mentioned earlier, for a project that should be run in a relatively straight forward manner, it lacks the rigor one would expect to support it. The absence of standard operating procedures to date underscores this point. The value of such a management tool has thus far simply not been recognized.

CMVIS management capacity would gain significant strength if it were to base operations on its updated log framework; one that is reviewed, and if needed, adjusted on a quarterly basis. Rather

than reviewing the activities outlined in the log frame during the annual retreat, staff could report on the results that were achieved and on how these contribute to reaching CMVIS' overall goal.

Whereas the ISPA TA currently compiles staff activities for the quarterly CMVIS work plan, each DMO staff should create their own. Once CMVIS has reviewed and revised its logic framework, each staff member should create their own annual log frame, clearly detailing the overall purpose of their role in the project, activities, results and indicators. Staff could then align their quarterly work plans to this log frame. This would allow them to become deeply familiar with linking their various activities to results, and then to monitor for these. If CMVIS is to truly use the log frame as a management tool it would be wise to parallel its training, monitoring and reporting activities to the project's log frame. This will enhance its ability to plan and modify activities based on whether anticipated results are delivered or not and ultimately, ensure it reaches the greatest impact possible.

DMO and HI-B staff is strongly recommended to hold weekly meetings, even though not all staff are in attendance. This would allow for follow up on previously discussed items that required action. Meeting minutes would allow absent staff to be informed, thereby enabling them to contribute to next week's meeting. Regular meetings, perhaps on a bi-monthly if not monthly basis are also recommended for HI-B, CRC and CMVIS leadership.

Staff performance reviews need to be done either at the end of each year. Instead of using the CRC performance review form, it is advised for the program manager to discuss with CRC the need for developing its own template, one that focuses on the main activities of each staff and the concrete results achieved as a result of these activities.

CMVIS management capacity will also be enhanced if recommendations for HI-B outlined in section 1.2.3.1 were to be followed up.

1.2.3.4 Consider reducing number of CMVIS staff at DMO

Reviewing the entire DMO staff situation, the project has now been functioning without a data base supervisor for more than five months. The project seems to have managed without this staff positions, calling into questions if they are needed. Funds for these positions should still be available, and perhaps with donor approval, can be used to towards other activities that are now not being pursued for reasons of cash shortage (i.e. volunteer training, printing CMVIS brochure, repair of vehicle, purchasing a generator…, to name only a few).

CMVIS is advised to review the performance of the full time cleaner and two full-time drivers. Based on this performance review, it should be decided if performance is satisfactory as well as if the project requires the full-time support of these three staff.

1.2.3.5 Train CMVIS staff in selected topics

Dependent on the decision to either continue HI-B TA support to the project, or to slowly withdraw, the CMVIS project would benefit greatly if all staff, field and DMO alike, were trained in planning and monitoring activities in response to the degree to which anticipated results were achieved.

Further areas of training for DMO staff are:

- Arc View Mapping
- English Written and Spoken Language Skills
- Data Analysis[25] and related Advocacy
- Partnership building

It will be important for CMVIS and HI-B to incorporate training activities into their log frames; to define expected results in terms of CMVIS' increased capacity to run the project without TAs and to monitor for these results.

1.2.3.6 Strengthen role of HI-B TAs

Again, dependent on HI-B, CRC and CMVIS' decision regarding the future of the project, the following recommendation will, or will not be relevant. *If* HI-B plans to eventually phase out its support for the CMVIS project, it would be wise to ensure that TAs work mostly in a capacity building role, rather than in an operational one[26].

In addition, it would be most beneficial for each of the TAs and the program manager to review the roles and responsibilities of each TA. From the comparative task assessment described in section 1.2.2.5, this would allow for more clearly identified roles for the TAs and for many of their tasks to be transferred to CMVIS staff. This would free the TAs up and allow them to focus on building the capacity of CMVIS staff in those areas where their capacity is still lacking.

Further, the project would benefit if the knowledge of both TAs was strengthened in the creation and application of results-oriented logic frameworks, and in the use of data analysis for advocacy purposes. The former could be achieved by the TMO TA and ISPA TA studying literature on results based management provided by the evaluator. The latter could be achieved by setting up regular meeting with CMAA data base staff and AVI TAs, both of whom have a solid back ground in analyzing data. Notions of advocacy should be shared amongst the group, and ways to interpret the data for the purpose of advocacy explored. Of course, this should only be done by CMVIS if it is clear on its advocacy role, whether this is in the mine action sector and/or VA and community development in general.

It should be noted though that the ISPA TA is currently being pulled away from his tasks at CMVIS to support HI-B related activities that were previously attended to by the HI-B Mine and

[25] CMVIS 'analytical' work is currently limited to descriptions of the statistics.
[26] As for the PM, he sees the support of the ISPA continue *as is* for the current year and to be reduced to half-time in 2007. Ideally, the PM sees the TMO become CMVIS staff.

Injury Prevention Coordinator. This is happening during a particularly busy time of preparing a number of annual reports, including the CMVIS 2005 annual. All require significant time and input from the ISPA. It should be appreciated by HI-B that requesting the ISPA TA to attend to other matters leaves less time to work with the CMVIS project, thereby reducing the capacity building potential of HI-B TA.

1.2.3.7 TMO TA to transfer monitoring capacity to field supervisors and data gatherers

Long-term sustainability of the project would be strengthened if the field supervisors and the DGs themselves engaged in a process of monitoring for results. Once the TMO TA has established a monitoring framework that monitors project activities for their results, it is recommended to train first the field supervisors and then the DGs in this technique. This would strongly enhance their learning in that it would invite them to measure the appropriateness and effectiveness of key project activities and identify modifications to activities and new initiatives needed to reach optimal results.

Summary of Recommendations

1. HI-B to formulate strategic plan for CMVIS and to increase cooperation with partner agency
2. Review and Revise CMVIS logic framework
3. Strengthen CMVIS management tools
4. Consider reducing number of CMVIS staff at DMO
5. Train CMVIS staff in selected topics
6. Strengthen role of HI-B TAs
7. TMO TA to transfer monitoring capacity to field supervisors and data gatherers

1.3 CMVIS DEPLOYMENT SCHEME AND RESPONSIVENESS TOWARDS BENEFICIARIES

Evaluation Objective
To assess the CMVIS deployment scheme and its expected responsiveness towards beneficiaries [i.e. mine/UXO victims and their families]; propose a revised scheme of intervention if required making the best use of CRC volunteer network

Key questions:

- To what degree is CMVIS current deployment scheme of field staff and volunteers responsive to the needs of beneficiaries?
- What deployment scheme of CMVIS field staff and volunteers would best serve the needs of beneficiaries?

1.3.1 Current Situation

CMVIS currently employs fifteen full time and three part-time DGs. Of these 18 DGs, 13 are so-called provincial DGs (PDGs) and 5 district DGs. Provincial level DGs, as opposed to district level DGs travel to Phnom Penh (PP) once a month to hand over their casualty report forms as well as those of the district DGs. They also submit monthly work plans, receive their salary and discuss any questions that may have arisen during the past month.

In the words of the DGs[27], their main activities are: (1) data collection, (2) emergency victim assistance (VA) in the form of CRC household product kit, encouragement and referral, (3) provision of mine risk education (MRE), and (4) reporting mines and UXO to HMA agencies. As for VA services, DGs provide both direct and indirect VA; direct in the form of providing clothes and food (meat, noodles and rice) obtained from the CRC and indirect through their liaison with victim assistance NGOs. DGs work according to a newly implemented work plan. When there are no new casualties in the cover area, DGs will travel to approximately four to five high casualty villages each day to ensure new casualties are being reported and included in the data base. As mentioned, the plan is flexible and allows DGs to respond immediately to any new incidents that may occur.

CMVIS DGs have been providing VA services since 2000, but only began tracking these in 2004 and *only* to casualties who were injured after 1997. Main volunteers are not involved in providing VA, and MRE, or EOD reporting. EOD reporting by CMVIS started in December 2004. The CMVIS MRE activity is even newer and only began in the beginning of 2006, with training provided to DGs and main volunteers during the annual seminar in December of 2005. MRE resources are currently limited to a photo book. According to UNICEF[28], posters, brochures and other educational materials will only be provided to DGs once they have received more training at the end of 2006.

[27] From KAP survey conducted with DGs March 1-3 2006
[28] From, interview wit UNICEF's Assistant Project Officer of Accident, Injury and Disability Projects, on March 7th 2006.

1.3.2 Main Findings

Most of the findings in the following section are informed by the Knowledge, Attitude and Practice (KAP) survey (see Appendix J). This survey was conducted with twelve DGs during the first three days of March. This survey was designed to assess DGs capacity in terms of their tasks other than that of data collection. It was developed, then translated into Khmer, tested with one of the DGs by the evaluator and assistant/interpreter and consequently modified. Next, all twelve provincial DGs that came to the DMO in early March were asked to provide their feedback. They were provided with a translated version of the KAP, and were then interviewed three at a time by the translator, who ensured questions were properly understood and answered as fully as possible. DGs wrote their responses in Khmer, which were later translated into English.

1.3.2.1 DG deployment and responsiveness toward beneficiaries

The question to be answered is whether CMVIS field staff and volunteers are currently deployed *and* responsive in the best possible way to the project's stated output of support/referral source and advocacy for mine/UXO casualties. This question cannot be sufficiently answered by considering staff deployment alone, and demands a review of field staff VA activities and results of these activities as well. The following sections present related findings.

DG deployment solely considered from the point of view of beneficiary support is appropriate. In areas with high number of casualties, DGs are responsible for a smaller geographic area, thereby spending less time on travel and allowing for more time to provide victim assistance services. When asking DGs the question whether they feel their workload is appropriate given their various tasks, including VA, all commented the workload was appropriate. Though they viewed their responsibilities as significant, they consider that they don't need help from others or for their load to be reduced. Only one DG (BTM province) noted he can help the other DG in his province if he is absent.

1.3.2.2 Victim assistance activities of data gathers

The DGs consider their VA role as comprised of referral to casualties to VA agencies and any other organization that can offer support. They will help casualties with filling out forms for service at the Provincial Rehabilitation Centers (PRC). For most of the DGs that were surveyed, this referral does not go beyond telling the casualty and their families of available services. For a few (4 out of 12), this support includes actively looking themselves to find these services. Visits and encouragement are both named by DGs as important ways to help victims.

DGs collaborated and communicated with a significant number of agencies, NGOs and other service providers in order to provide assistance to mine victims and their families in the year 2005 (see Appendix K). Due to a lack of reporting, it is however unclear what resources were made available to casualties as a result. Although not reported directly by the DGs, one of CMVIS reports to a donor states that 100 wheel chairs were made available by the CRC through the DGs to casualties during the period September 2004 to August 2005. The program manager explained that these were not reported by the DGs as the Field Supervisors provided them.

In a select number of provinces, the DGs will provide emergency supply of house hold products in the form of a CRC kit. This kit contains items such as a sarong, cotton scarf, canned fish, rice, clothes, mosquito net, blanket, and soap. As is evident from Appendix L, this is only the case in five provinces and supported a dismal total of 48 persons. With a total of 865 casualties in 2005, this means that only 5.5 % of all casualties received some immediate support from the CRC.

Why only so few kits were provided in only so few provinces is hard to tell. It could simply be a matter of DGs not reporting this information, or simply a lack of kits made available by the CRC When some of the DGs in the other provinces were asked why they were not providing the kit, they advised that the CRC in their province did not have the resources to purchase the products for the kits. Later queries revealed that many of the provincial CRC offices are unable to raise funds to purchase emergency goods.

Surprisingly, three of the 12 DGs surveyed did not obtain any services for casualties, even though the DG in Kampong Cham reported 61 casualties; the DG in Svay Rien 16, and the DG responsible for five provinces surrounding the PP area 27 in 2005 (see Appendix E and L). All but one of these 104 casualties were caused by UXO incidents. The DG in the PP area reported that 'his' casualties either died from the impact or were not disabled. Still, this leaves 104 casualties and their families in seven provinces without any support, whether this is a kit from the CRC or other services to help the family cope. This likely is not only due to the DGs lack of connections to service providers, but also due to the fact that providers are scarce in some of the provinces. The DG working in the PP area should, off all DGs, have access to multiple resources given the number of agencies that work in the area.

On a field trip to Mondol Kiri two agencies were located, both of which could aid in one way or another, yet had previously not heard of the CMVIS project. A lack of knowledge about available services on the part of the DGs, field supervisors and TMO TA is evident and does in part explain why only limited resources are being made available to casualties.

DGs expressed their frustration at not being able to provide help to casualties from before 1997, as well as with not being able to link victims in general to vocational rehabilitation or employment opportunities.

1.3.2.3 Data gathers victim assistance success stories

During a field trip to Battambang in January of 2006, DGs Dy Kimsay and Khim Khern shared what they considered success stories in terms of providing support to mine/UXO victims and their families:

> *In 2004, I met a woman with disabilities. She is an above-knee amputee. The woman; moreover, has just given [birth] to a baby. As a result, she couldn't go to Battambang Provincial town to get a wheelchair, even [though] I told her everything is free: transportation.... Seeing so, I decided to bring her the wheelchair and after that [the] CRC team which is based in her district, Sampovloon gets this information from me and gives her [a] kit which consists of a sarong, noodles, clothes, rice, and a kromar* (Dy Kimsay – Interview January 19th 2006).

An anti-tank victim got a severe injury on 26 March, 2005. The victim's family at that time referred him to Emergency hospital in Thailand because they were very worried about his conditions at that time. Just one day after the accident, I reached the victim's house. His wife complained [to] me a lot about the high cost of the treatment in Thailand. In such a condition, I tell her about the free services hospital in Battambang. 'It is Emergency Battambang where you needn't pay even a small amount of money', I said to his wife. Knowing this information, his wife feels very happy and promises me to take her husband back from Thai to the Emergency Battambang (Dy Kimsay – Interview January 19th 2006).

Four fathers from four different families die[d] of [an] anti-tank explosion. It was in 2003, in Koah Kralor district where I met the families. Being a Data Gatherer, I decided to contact CRC hoping that the four families [could] get help. As I expected, [the] CRC gave the families some kits consisting of a sarong, noodles, rice, a kromar, and clothes (DG Khim Khern – Interview January 21st 2006).

In January 2005, I met a woman with disability living in Prek Taveng Village, Prek Kreng Commune, Mong Rahsey District; the woman is a two-leg amputee. As you can imagine, she is always finding herself hard to move everywhere. Later on, I on behalf of CRC brought her a wheelchair (DG Khim Khern – Interview January 21st 2006).

These stories provide good examples of the various ways in which the DGs help casualties, although at the same time it is evident that they have yet to understand their role as advocates. This does not negate their incredible good will, often providing small amounts of their own funds to families, or whatever else they can contribute that would help out.

1.3.2.4 CMVIS – UNICEF partnership

In September of 2005, CMVIS and UNICEF began a unique pilot project that sees emergency funds made available for renovating the house of a select number of casualties. This project will run through until October 1st 2006. It was developed without the support of HI-B and funds are directly made available by UNICEF to CRC. These funds are to be used by two DGs in the two provinces of Preah Vihear and Otdar Meanchey.

The experience of a villager in Ek Pheap Village, Pal Hal commune, Tbeng Mean Chey district in Preah Vihear Province serves as a good example of how this project is assisting casualties. This villager lost one hand when using an improvised explosive device crafted from an UXO to catch fish. A grant of $USD 92.77 (371100 Riel) from the UNICEF was provided and a new zinc roof was purchased for the house.

1.3.2.5 MRE activities of data gatherers

DGs were only just trained in MRE in December, and have only been providing it since January of this year. When asked what activities they conduct to increase mine/UXO risk awareness, they named the following: 'tell people about the mine/UXO, knowledge of mine/UXO awareness especially children, making sign for mine/UXO affected area, kinds of mine/UXO, don't do any activities in the mine field, selling or buying mine/UXO to... .' When asked how they perceive their role is in supporting mine/UXO victims, they invariably consider their MRE activities to be part of their VA role.

1.3.2.6 EOD referral activities of data gatherers

As mentioned, CMVIS has been referring UXO to mine action agencies since December of 2004. It does this through the completion of an EOD referral form, which is submitted by the DG to mine action operators active in their area, or to the DMO if none are active locally. For example, from September 2004 to August 2005, a total of 5416 UXO and 1581 mines were reported. Whereas it makes perfect sense to report UXO, as they are often visible, the reporting of mines is somewhat questionable as they generally are hidden from view.

A researcher working on an EOD sector study commissioned by Norwegian People's Aid shared that EOD teams have been able to collect significantly larger amounts (500%) of UXO due to the increased availability of data on the location of UXO by CBURR, CBMRR and CMVIS. Whereas before, EOD staff had to knock on doors to ask about the whereabouts of UXO, these projects now provide information on the presence of such to the EOD sector.

1.3.2.7 Training and monitoring of VA and MRE components

As discussed in section 1.2.1, the current TMO TA has been with the project since September 2005 and has expanded the monitoring role beyond that of monitoring data collection to also include monitoring of victim assistance activities and management of the project. Though results of the project's activities are not being tracked in a systematic way, the current TMO TA has a fairly good sense of what is important to monitor.

1.3.2.8 Consideration of gender

Out of the 18 DGs and 7 main volunteers, only one is female. Issues of safety, as well as women not applying for the post, were mentioned as the main explanation for this by DMO staff. When the DGs were queried about the same, all but two out of twelve, commented that women can be as good DGs as men. Only two cited safety concerns as the reason why women can't be DGs. The gender distribution amongst volunteers is better, with 285 women and 562 male volunteers. In other words, 34% is female.

1.3.2.9 Data gatherers perceived lack of resources

When asking DGs for suggestions that would improve their work performance, they offered the following listed below, all of which related to the provision of more resources to the DGs:

- CMVIS to provide some resources to victims (rice, mosquito net). DG Khim Khern now pays for these items of out of his own pocket
- Provision of funds (approximately USD$60) for occasional overnight accommodation when the travel distance is great (150-200 km)
- More funds for motorcycle repair, gas and ferry fees. The current allowance of USD$30 is not sufficient. DG Khim Khern now pays for these expenses himself
- DGs communicate by mobile phone, yet no funds are available. The suggested amount is USD$10
- Work on the weekend if incident occurs but unable to take a day of in lieu
- Provide uniforms, now only shirts are given, no pants

1.3.3 Recommendations

The main objective of the third objective of this evaluation was to review whether the CMVIS deployment scheme of DGs and main volunteers is responsive to beneficiaries to the best of its possibility. This has been found to be the case and no suggestion for changing the deployment scheme is made. Many other recommendations are made though, all of which seek to increase the influence CMVIS has on reducing the impact of mine/UXO incidents on casualties and their families.

1.3.3.1 Clarify intent of project in terms of its VA role

CMVIS could significantly increase its influence on reducing the impact of mine/UXO incidents on casualties and their families. Although this purpose is reflected in CMVIS stated primary outputs and goals, it is not evident from the objectives outlined in the log frame. This was discussed at length in section 1.2.2.3 and 1.2.3.2. Dependent on what stance CMVIS decides to take on its advocacy role, it may either need to update its objectives or scale down its stated primary outputs and overall goal. This decision will influence the degree to which the following recommendations are relevant.

As a note aside, it was interesting to find out that of the five HMA agencies, CMAA and MAPU/AVI that were interviewed as part of this evaluation, only two were aware of the VA role of CMVIS, thereby suggesting CMVIS role outside the provision of data is not known to its main end-user group.

1.3.3.2 Increase links with VA and CD organizations and initiate partnerships

Most, although not all, of the DGs currently have a fair to reasonable understanding of services available to casualties in a given area. Realizing this, the TMO TA requested all DGs to create a VA book, in which they are to note down the name of each VA organization and the services they provide. This is a good start.

Awareness of VA and community development (CD) agencies that could support casualties is limited, if not almost non-existent, at the DMO level. DMO staff is recommended to strengthen both their knowledge and relationship with such agencies. For the program manager and ISPA TA, this would include doing research to find out which agencies in PP with offices in the provinces could possibly support casualties, and to begin to build relationships with these agencies at a head quarter level. This would facilitate the provision of services to casualties through the DGs at the provincial level.

The TMO TA and field supervisors should work to increase their knowledge of such agencies in the provinces as well and establish relationships with them. The resources that could become available as a result of this should not be underestimated. During a field trip to Mondol Kiri (MK), for example, contact was made with two agencies: KAMA and International Cooperation of Cambodia (ICC). There is dearth of agencies active in MK, yet the main volunteer who worked here for many years as DG had not established contact with either. KAMA provides support to individual families and was actually already involved with one family who was involved in a UXO incident, but was not yet aware of a small child who had become blind as a result of another incident. As a result of stopping in, this boy will now be supported by KAMA, who had never before heard about CMVIS.

Neither ICC or KAMA were aware of CMVIS and were very interested to learn more about it. Moreover, ICC they asked if CMVIS would require any Phong translation services, and if so, they could provide those for free! MRE posters and brochures could thus become accessible to the Phong tribe, five members of which were seriously injured in a UXO incident last year.

To this end, CMVIS is recommended to update its brochures by including some samples of victim assistance information that can be drawn from the data it collects and to distribute this together with a monthly report to any agency they meet on their travels to the provinces.

Lastly, CMVIS DMO is strongly advised to follow up on invitations of VA and CD NGOS, to submit a proposal for a joint project that would make much needed emergency and other resources available to casualties and their families. The Director of Operation Des Enfants de Battambang (OEB) apparently discussed this with the program manager at the end of last year, but this proposition has yet to be carried out.

Lastly, it is interesting to note that to data, CMVIS has not received any queries from CD organizations. This could be either because they don’t know the CMVIS data exists, or because they do not know how it could be useful to them. CMVIS staff is recommended to strengthen its ability to analyze the CMVIS data in a way that could be useful to CD organizations and then to promote the use of this data to these agencies.

1.3.3.3 Training DGs and CMVIS DMO staff to increase VA capacity

Current results in terms of VA and advocacy are in line with what one would expect given DGs capacity (knowledge, attitudes and behavior) and resources (time, money, equipment such as mobile telephone and motor bike) available.

CMVIS is recommended to strengthen its victim assistance advocacy role by training all CMVIS staff, including DGs in advocacy and partnership building.

DGs self-identified[29] the following areas for training:

- Communication/information sharing & partnership building with NGOs
- Mine risk education including mine/UXO recognition
- First aid
- Limited English language skills in key technical terms related to their work, such as referral *versus* advocacy, results, partnership

In addition to the above areas, it is also recommended for DGs to be trained in analyzing the data so that they can ensure that end-users encountered in the field understand how the data can be used to benefit their work and the lives of their clients. DGs named a few other areas in need of training, namely administration and computer skills, however these were not considered relevant by the evaluator given DGs tasks.

As discussed in section 1.1.3.1, volunteers CMVIS ought to be provided with a refresher course at least once a year. This training would be best designed and delivered by the DGs with support from the field supervisor and TMO TA. In those areas where there DGs are not employed, this training should be delivered by the field supervisors and/or TMO TA.

Further, the quarterly meetings with the DGs should be used to strengthen DGs understanding of their victim assistance role. DGs should be asked to prepare for these meetings by continually updating their knowledge about services available in their areas and by forging new partnerships with agencies. As an encouragement to do so, a small incentive scheme that allocates perhaps a CMAC mine awareness T-shirt could be used to encourage DGs to expand this part of their responsibilities.

[29] From DG Knowledge, Attitude and Practice survey March 1-3 2006.

1.3.3.4 DG to Conduct small survey into emergency needs of casualties

The most important needs of mine/UXO victims will vary dependent on who you ask. This is evident from the table[30] outlined below.

Some perceptions of the needs of persons with disability			
Landmine victims[a]	United Nations	ICBL	Basic human rights
Shelter Food Access to water Access to school Primary health services Income-generation opportunities Mine-free environment Land titles Access to prosthetics Access to roads[b] Social standing Mine awareness[c]	Accessibility Education Employment Income Maintenance and social services Family life and personal integrity Culture Recreation and sports Religion	Emergency medical care Continuing medical care Physical rehabilitation Psychological/social services Employment and economic integration Capacity-building and sustainability Legislation and public awareness Data collection Access	Food Shelter Health Education

The DGs, with the support of field supervisors and TMO TA are advised to conduct a small survey of emergency needs of newly injured casualties. The KAP survey indicates that DGs feel that more financial support is needed in the direct aftermath of an incident. As most casualties are poor, the initial cost of transportation to a hospital and medical treatment puts most families into debt for the rest of their life. CMVIS role would be much stronger at this stage if it were to be able to provide some much needed financial support. In order to identify the need for this, DGs are encouraged to conduct a small survey of casualties. Based on the information contained in this survey, DMO staff could write up a small proposal that requests items ranging from cash funds, to food and training to organizations like the World Food Program and AusAid, to name only two.

1.3.3.5 Strengthen reporting of DGs VA role

Field supervisors have traditionally focused their work on the data gathering activity of the DGs alone and need to be much more focused on improving the way in which each DG carries out his VA activities.

As a result perhaps of the lack of attention on the part of DGs to the VA role of CMVIS, DGs VA activities are underreported. Proper reporting of these activities will enable both the field

[30] From: *The role of Mine Action in Victim Assistance*, p. 34, published by the Geneva Centre for International Humanitarian Demining (GICHD), 2004.

supervisors and the TMO TA to evaluate this aspect of the DGs work and to provide appropriate guidance to improve it.

1.3.3.6 Implement criteria for follow-up of casualties that are severely injured

As already discussed in section 1.1.3.1, criteria need to be developed to ensure that data collected on casualties accurately reflects on the situation. This is particularly true for the information contained in category 9 in the casualty report form (see Appendix A). Invalid data on this category reflects poorly on the work of VA agencies and may misinform end-users relying on this information. As severely injured casualties in need of prosthetic are generally only fit a prosthetic six months after the initial injury, DGs would be wise to ensure these casualties are followed up at least more than half a year after initial contact.

1.3.3.7 Strengthen DGs MRE activities

Beyond the identified need for more MRE training, DGs could increase the impact of their MRE activities by distributing mine awareness (MA) posters, brochures and other materials available to educate communities about the risks they face from mines and UXO in their environment. Although Chhaya Plong[31] from UNICEF suggested waiting with the provision of materials until DGs have received further training, DGs themselves reported they felt ready to use materials appropriately. The evaluator supports this and recommends MA materials being made available to the DGs and main volunteers.

1.3.3.8 Strengthen DMO follow-up of EOD referrals to HMA

CMVIS should implement a system for following up on CMVIS generated reports for explosive ordnance disposal (EOD). UXO are being reported, yet CMVIS lacks mechanisms whereby it can follow-up *if* EOD teams actually disposed of the ordnance. CMVIS is recommended to meet with CMAC and JMAS EOD HQ staff, as well as with that of other mine operators with EOD capacity to devise a feedback system that would ensure reported UXO are responded to. Again, this may take CMVIS into the advocacy direction it purportedly adheres to in written documents, but has yet to commit to in practice. Deciding whether CMVIS wants to take on an advocacy role in mine action will determine the relevance of this recommendation.

1.3.3.9 Initiate system for reporting mine marking and MRE referral

As DGs are acutely aware of the need for mine marking and mine risk education (MRE), a reporting system similar to that for EOD should be created. As with EOD referrals, it should implement a structure for ensuring that referrals are being followed up on.

[31] Interview March 7th 2006.

1.3.3.10 Investigate provincial CRC lack of emergency kits

It is unacceptable that CRC in only the five provinces of Preah Vihear, Siem Reap, Kratie, Kampong Speu and Odor Meanchey has emergency kits available. As a CRC project, CMVIS DMO staff ought to investigate the cause of this and request CRC HQ to take decisive action. CMVIS is advised to follow this up closely and to report back to CRC HQ if this situation does not improve. Equally important will be to emphasize to DGs the need to report on any resources made available through them for casualties.

1.3.3.11 Review and modify field Supervisors responsibility

The two field supervisors currently share field supervision duties for the entire country. This would not be an issue if their tasks were limited to spot checking casualty forms. This has been the focus of their work in the past, but since DGs also have a VA and MRE mandate, it will be important for field supervisors to follow up on the results of these activities as well. This will require their solid knowledge of which VA services are available in a given area, as well as their building of relationships with the organizations providing these services. For this purpose, it would be beneficial, if not paramount, that field supervisors each are responsible for a select area. This would also strengthen the relationship between DGs and their supervisors and allow the latter to be more knowledgeable and thus better monitor the VA role of the DGs for which s/he is responsible.

1.3.3.12 Ensure monitoring framework reports systematically on VA results

With increased reporting by the DGs on their VA activities and increased supervision by field supervisors of these activities, field trips by the TMO TA can be better targeted to collect additional information from the DGs and VA agencies; information that informs both quantitative and qualitative indicators in turn serve to improve CMVIS VA component.

A strong monitoring system that focuses on results will ensure that CMVIS reaches the intended output of providing advocacy for, and support to, mine-affected communities and mine victims. Tracking results would enable CMVIS to decide whether existing activities need to be modified or new activities initiated.

The flow chart currently used by the project to show its monitoring framework only shows processes in place to ensure that the data collected is reliable. Once the project has revised its log frame and according management tools to be more results oriented, it would be wise to create a flow chart that describes monitoring processes for all of CMVIS work.

1.3.3.13 Increase number of women DGs and volunteers

CMVIS currently faced a gender in-balance. This is true at DMO level, where only two of the seven paid staff are female, and even more so at field staff level, where only one staff member is female amongst a total of 18 paid staff. This suggests the need for more creative advertising of

CMVIS positions, for example through existing informal networks of women or community groups that are connected to women. The preferential hiring of female staff is recommended until a more equal male/female representation is achieved. In addition, CMVIS is advised to consult with the one female DG about ways in which it could promote more women to work as DG. In similar fashion, CMVIS is advised to focus on recruiting female volunteers.

1.3.3.14 Consider increasing DGs resources

DGs currently pay for work-related expenses out of their own pockets. This is hardly fair. The current gas and motorcycle repair allowance of USD$30 does not consider the area covered by each DG and generally. DGs report this allowance is insufficient. DG Khim Khern, for example, pays for these expenses himself.

CMVIS should provide evidence of the number of kilometers traveled by each DGs and accordingly request for an increase in DG funds for travel and request for more funds if the evidence collected supports this.

More funds should be made available for motorcycle repair, as well as to pay for ferry fees when needing to cross a river to reach an area and to pay for an occasional overnight accommodation when the distance to be traveled by the DG is great. Lastly, DGs communicate by mobile phone, yet no money is provided for this expense. CMVIS should add DG mobile phone expenses as a line in their 2007 budget.

Summary of Recommendations

1. Clarify intent of project in terms of its VA Role
2. Increase Links with VA and CD organizations and initiate partnerships
3. Training DGs and CMVIS DMO staff to increase VA capacity
4. DG to conduct small survey into emergency needs of casualties
5. Strengthen reporting of DGs VA role
6. Implement criteria for follow-up of casualties that are severely injured
7. Strengthen DGs MRE activities
8. Strengthen DMO follow-up of EOD referrals to HMA
9. Initiate system for reporting mine marking and MRE Referral
10. Investigate CRC lack of emergency kits
11. Review and modify field supervisors responsibility
12. Ensure monitoring framework reports systematically on VA results
13. Increase number of women DGs and volunteers
14. Consider increasing DGs resources

1.4 HUMANITARIAN IMPACT

Evaluation Objective
To assess the humanitarian impact of the project on mine action practitioners' work in terms of strategy formulation and priority deployment... This includes demining agencies, HMA NGOs, CMAA, PMAC, MAPU, CBMRR …

Key question:
To what degree does CMVIS currently meet the information needs of end users as it relates to their ability to formulate strategy and decide on priority deployment?"

1.4.1 Current Situation

CMVIS is considered by many as a unique tool for mine action in the world. The 2004 End User Satisfaction study revealed that although there was room for some improvements, the system meets the needs of end-users.

CMVIS current end-user group is diverse, but can be roughly divided into three main categories:

- Humanitarian mine action and associated agencies and authorities, such as CMAC, CMAA, MAG, HALO, MAPUs, JMAS
- Victim assistance agencies such as PRCs, Veterans International (VI) and the Cambodia Trust
- National and international organizations such as embassies, donors, international support agencies like for example the Geneva International Centre for Humanitarian De-mining (GICHD)

As stated in the UNICEF 2005-2006 project proposal, end-user support provides the overall rationale for the project and CMVIS depends on the interest and support of end-users, communities and local authorities for its continued relevance. As with any data base, it is paramount to know what information end-users require and in what format it can be best presented. This evaluation set out to better understand the degree to which CMVIS currently meets the needs of end-users as well as to solicit feedback about areas for improvement. This work was informed by formal semi-structured interviews (for interview guide, see Appendix L) that were held with the following HMAs and supporting agencies:

- Cambodian Mine Action Centre (CMAC) – Deputy Director General, and Director of Operations;
- Mines Advisory Group (MAG) – Country Program Manager
- HALO Trust - Country Program Manager
- Japanese Mine Action Services (JMAS)- Chief of Finance, Project Manager, and Country Representative
- Cambodian Mine Action Authority (CMAA) - Director of Planning and Socio-Economic, Data Base Director and Technical Data Base Advisor
- Mine Action Planning Unit (MAPU) Banteay Meanchey - Australian Volunteers (AVI) Technical Advisor
- Norwegian People’s Aid – Deputy Program Manager

1.4.2 Main Findings

1.4.2.1 Quality of cooperation with CMVIS

HMA end-users are satisfied with the degree of cooperation with CMVIS. They applaud CMVIS for the level of support it has given. In general, they find it straight forward to get information; consider the distribution of the data to be good and the quality of the monthly and annual reports high. One informant commented that one cannot speak about mine action without using information provided by CMVIS as it is the government's goal to achieve 0 victims by 2012, and 0 impact by 2015. Another agency (HALO) had a differing opinion and stated that they like CMVIS and are keen to see it remain, but that they do not believe it is in any way crucial.

1.4.2.2 Suggestions for strengthening collaboration

A number of the HMA and supporting agencies suggest that CMVIS needs to better analyze WHO is their customer and WHAT is their need. A few (HALO and NPA) indicate the level of collaboration is good and does not need to be improved.

JMAS proposed they would like to work more closely with CMVIS in the field. Reason being that from the monthly report and special requests it is not clear: what kind of situation exactly led to the incident and what kind of UXO was involved in the incident? JMAS now has to go the site of the incident, which is time consuming. The agency therefore suggested increasing the collaboration between JMAS and CMVIS DGs and volunteers at the provincial level. This would allow for the sharing of local up-to-date casualty data between JMAS provincial staff and CMVIS field staff. This idea was apparently discussed one year ago with the CMVIS Program Manager, who expressed his interest.

1.4.2.3 How do end-users use CMVIS information

HMA and supporting agencies use the CMVIS information for a wide variety of purposes that are listed below in alphabetical order:

- Checking areas of clearance in annual PMAC work plan for relevance given CMVIS casualty data
- Area reduction: if CMVIS does not report any incidents then operators will check validity of area reduction process and reduce the L1Survey suspect area
- Funding proposals
- Advocacy
- Planning, deployment of mine action (justification for selection of target areas)
- Baseline information to analyze situation.
- Report writing
- Situational analysis
- Planning and monitoring of EOD, CBMRR, CBURR, Technical Survey Teams (TST), MA and mine clearance teams
- Monitoring and evaluation
- Presentations to donors and other key audiences

- Planning, prioritizing EOD
- Development of strategic plans
- Technical support
- Coordination
- Annual demining prioritization planning process (accident location and numbers in any mine affected community are essential criteria in their selection for the demining plan. This data is considered alongside other developmental needs of local communities, but is one of the most important. This data supports the provincial demining action plan each year)
- OLAP (Online Analytical Processing) Cubes, analysis related to specific activities/operations

Quite a few of those interviewed suggested they would be better served *if* CMVIS were to collect some additional types of information. These suggestions will be discussed in section 1.4.3.1.

In as much as HMA agencies use the CMVIS data to plan deployment, they also use data other than CMVIS in order to prevent accidents, namely access to resources/utilization of resources, land pressures, i.e. socio economic impact. CMVIS is seen as providing historical monthly and annual information. For most agencies, operations are not based solely on CMVIS data alone but used as one component/indicator in the planning process. For others, CMVIS data merely supports rather than leads their thinking.

In the words of HALO Country Program Manager[32] from HALO Trust: 'It is clear from the present distribution if mine clearance resources in Cambodia that the detailed information contained within CMVIS has little influence over deployment planning or donor funding. Thus, although it is a good supporting argument for mine clearance in general, and is particularly good for showing overall progress, it therefore should not be thought of as essential.'

1.4.2.4 Perceived reliability of CMVIS data

The degree of perceived reliability of CMVIS data varied from agency to agency and ranged from 60%– 70% according to AVI/MAPU and JMAS to 85% – 95% by NPA and 100% by MAG. CMAC considered the data to be reliable for 80% and HALO Trust as more than 95%. JMAS explained their low confidence rate due to the fact that casualty for one month seems to change when requesting same information the next month. The average confidence rate of DGs[33] is 95%, with 90% being on the low end and 100% on the high. CMVIS office staff rate the reliability of the data as 99% from 1999 onwards, and 80% prior to 1999.

CMAA and MAG both commented that they are not sure if the casualty data east of the Mekong in Ratana Kiri (RTK) and Mondol Kiri that is collected by main volunteers is complete. US bombing data shows that this area was as heavily bombed as Kampung Cham. Yet, RTK reports significantly lower numbers of casualties compared to those reported in KC. Access to the RTK

[32] Email communication March 1st 2006
[33] Information gleamed from DG Knowledge, Attitude and Practice survey conducted March 1-3 2006.

is high due to access to Vietnam, thereby predisposing it to levels of casualties similar to those seen in KC. The question is if casualties in this area are under reported due to the fact that they are receiving care across the border in Vietnam. A recent field trip of CMVIS staff to RTK for the purpose of ensuring no casualties were missed showed the main volunteer in this province had done his work thoroughly. Efforts to increase collaboration with hospitals along the border as well as Thai CRC were made by CMVIS and CRC HQ staff. As significant challenges were encountered, CMVIS staff traveled to Thailand to visit five hospitals and again encountered difficulties in obtaining information as to whether Khmer casualties had received treatment. Only one casualty was reported, and apparently returned back to Cambodia shortly after.

CMAA also reports that in past 2-3 years, CMVIS' data has been increasingly accurate, particularly in terms of the provision of accurate GPS coordinates. This is reportedly evident from the increasing correlation between CMVIS data and that of HALO and CMAC.

CMAC noted they trust the information to be reliable 80% of the time and particularly so if people survived the incident, but doubts whether CMVIS is capturing all the casualties that die as a result of the incident.

HALO notes that CMVIS seems to gather all of the accidents that we hear about, although the reported activity at the time of the accident is not always correct as people will not admit to be demining when it is judged an illegal activity.

From AVI/MAPUs[34] "…limited observations working in the field and comparing with the CMVIS data, there seem to be discrepancies or missed information within the CMVIS dataset." This is based on the incident location, which sometimes could be misleading if the location is incorrect. The village [MAPU] gathered information about historical accident information is very questionable as well. Therefore we feel that CMVIS data is probably the best, most consistent record that should be used as a base, and then supplemented or confirmed by village supplied information." AVI/MAPU suggest that on average 40% of the approximate incident location is incorrect (i.e. mapped at village point, or location is clearly wrong due to typo in coordinate or overestimate of distances). In other words, 60-70% (since 2002) is assumed to be correct. An estimate of the more current (past two years) reliability by AVI/MAPU counts in as having improved to approximately 80%.

1.4.2.5 Responsiveness and consistency of CMVIS to special requests

A total of 25 different end-users requested special information from CMVIS in 2005 for a total of 117 special requests (see Appendix M). Of these 25, ten are considered frequent users.

HMA agencies, CMAA and MAPU/AVI reported that CMVIS is becoming increasingly more consistent and swift in its response to special requests. End-user feedback indicates though that the response time varies dependent on the requesting agency. CMVIS program manager for example, was once requested by the Secretary General of the CMAA to abort a field trip in Battambang in order to respond to a special query. Whereas some agencies such as the CMAA

[34] MAPU AVI Technical Advisor, email communication March 13th 2006

and CMAC generally only have to wait one day, and sometimes not even that, others such as MAG and MAPU have experienced waiting for specific information for a couple of weeks. The current average response rate is 2-3 days, with returns of information sometimes being as quick as the same day and sometime as long as a few weeks.

As for repetitive requests for the same information at different times, CMVIS appears challenged to send out the information on a regular basis *and* in a format that is consistent. MAPU[35], for example, require regular and consistent data sets of raw accident data. For MAPU staff to use the data they need a consistent and accurate incident location. Since this was not happening, MAPU supplied a template to CMVIS, although requests were still returned with incomplete and inconsistent fields of information differing from the initial template. This reportedly has been improving lately. MAPU/AVI reports that CMVIS data usually arrives from CMVIS within a week of request and that DMO is responsive to suggested changes.

MAG's experience has been much the same as that of the MAPUs. It has had to prompt the DMO office repetitively for special reports that supposedly should be sent automatically a monthly basis. Whereas MAPU and MAG have trouble receiving consistent information, JMAS does receive consistent categories from one special report to the next, yet has also had to prompt CMVIS to get it each time. Moreover, JMAS request for monthly specialized reports could not be honored due to the program manager reportedly being too busy.

HALO reports a different experience. The CMVIS team reportedly has always responded favorably to their requests for additional assistance. HALO appreciates the close collaboration between its staff and the DGs and note that, each month, they receive an additional update to the standard report giving us more details as to the exact whereabouts of accidents. HALO sees no requirement for better collaboration on this front.

1.4.2.6 CMVIS responsiveness to end-user feedback

CMVIS does not solicit end-user feedback, but is responsive to this feedback when it is given in unsolicited fashion. As with any data base though, it can not be everything to everyone. One request is a good point in case of the challenge inherent in trying to respond to all requests. Early on Monday morning March 6th, the CMAC Secretary General, phoned one of the TAs about the need for 'real' numbers in the CMVIS monthly report, rather than percentage points to express for example the distribution between those killed by mine/UXO accidents and those injured. The program manager explained that this is not the first time they were posed with this question. Foreigners generally want CMVIS data expressed in %, whereas this poses a challenge to the Khmer audience who would prefer the data in real numbers.

Interviewed agencies were asked how responsive CMVIS had been in the past to feedback. Not all of the agencies interviewed had provided CMVIS with suggestions in the past, but those that had (HALO, NPA and MAPU) reported CMVIS listened and had made changes accordingly. NPA once requested a change in the way CMVIS gathered data about the type of device that caused the incident. Since more agencies had offered the same advice, CMVIS called a group

[35] *Ibid*

meeting and changes to the data collection process were made.

CMAA also perceives CMVIS as responsive, noting that when it recently suggested for CMVIS to increase its MRE and VA activities, it responded favorably.

Interestingly, CMAC noted that it had never made any suggestions for change. Reasons given that the system is perceived as already designed and CMVIS as not being interested in receiving feedback. In the words of CMAC, there appears to be a lack of understanding from both sides and suggested there is a "need to open doors".

1.4.2.7 Awareness of CMVIS services by current end-users and potential users

A number of HMA agencies queried to what extent CMVIS services are known to agencies outside the HMA, VA, donor and embassy community. Although this evaluation did not specifically look into this point, it has become apparent during that community development organizations, for example, could benefit greatly from the information gathered by CMVIS but simply are not aware of its existence. Such awareness may also lead to much-needed services becoming available to casualties.

In similar vein, of all the five HMA, CMAA and MAPU/AVI that are end-users, five were not aware that CVMVIS has a website from which reports could be downloaded, or aware that CMVIS has a mandate beyond that of data collection.

1.4.2.8 End-user perspective on providing financial and technical support to CMVIS

Through the channel of HI-B, CMVIS is supported financially by international donors. With the anticipated decrease in funds for mine action in general, it will become more difficult for CMVIS to compete for the increasingly scarce resources. This evaluation briefly discussed with HMA agencies, CMAA and MAPU/AVI whether it would be interested and able to financially support the project, whether through a fee-for-service subscription, general funds, or technical assistance.

MAG, CMAA and MAPU commented they could provide the project with some limited technical assistance although this would have to be strategically planned and formalized. Four of the five HMA agencies (MAG, HALO, JMAS, and NPA), on the one hand, supported the idea of a paying a subscription fee, but commented that their expectations for service as a result would likely increase. CMAC, CMAA and MAPU/AVI, on the other, felt strongly that the information should be available free of charge. HALO offered an interesting suggestion in that as a result of initiating a fee structure, the system would no longer be widely available. As a result, it would lose its impact as an independently verifiable source and, as such, its value to the subscriber.

1.4.3 Recommendations

The following recommendations were made in large part by the HMA and related (CMAA and MAPU/AVI) end-users. It is interesting to see the large number of suggestions made, indicating that CMVIS would be wise to solicit end-user feedback and to do so on a regular basis. This should much improve the degree of usefulness of CMVIS Data to current and potential end-users, and thereby enhance its humanitarian impact.

1.4.3.1 Solicit end-user feedback on regular basis

CMVIS currently does not solicit end-user feedback. If it does so, it does so on rare occasions, it is done in an ad-hoc manner. This is a major short coming of the project, as the first priority of any data base should be its thorough understanding of the information needs of the end-users. CMVIS needs to create a mechanism by which it can be informed, and continue to be informed about the current and changing needs of its various end-users.

CMVIS needs to solicit end-user feedback and is strongly recommended to set up regular meetings to do so. It may introduce the meeting by providing some of the suggestions described below as a way to begin the discussion.

Suggestions for improving the type of information collected by CMVIS were made during this evaluation. Some examples of these suggestions follow below:

- Identify if those incidents that take place due to people farming happen on their own land, for others working on private land or on public land (knowing what percentage of incidents occur due to people working on private land perhaps lead to the mine action community proposal to use the law to penalize rich land owners who pay farmers to work on land that is mined)
- Identify those incidents that have 0 casualties
- Better clarify the category ‘nothing- exploded beside victim'. From this category it is unclear whether people just happened to be in the wrong place at the wrong time; were wandering through a field as someone detonated a mortar; were actually watching someone else deliberately handle a UXO out of boredom or passive thrill seeking, or where possibly even assisting in the process?

Meeting with end-users would also provide CMVIS with the opportunity to increase their confidence about reliability of data on casualties involved in incidents in the border areas. Give the challenges experienced by CMVIS in collecting data from hospitals in Thailand, and given that casualties will return to Cambodia after treatment, the missing of casualties in the border area is perceived as presenting the little risk to the overall integrity and reliability of the database.

1.4.3.2 Standardizing process for sending out special repetitive requests

CMVIS currently lacks a system that would allow it to send information automatically to end-user groups that request data on the same categories at different times. This system could simply

retain the type of request and prompt the person in charge for sending out the information that it is time to do so. Its process for responding to repetitive special requests needs to be standardized and formalized to ensure the regular consistent delivery of data to all those agencies requesting similar information at set time intervals.

Following up on and implementing the following recommendations would increase the humanitarian impact[36] of CMVIS according to all agencies, except HALO, that were interviewed.

1.4.3.3 Strengthen partnership with CMAA & increase compatibility of data

The current partnership between CMVIS and CMAA is carried out in an ad-hoc fashion; no clear lines of communication exist and meetings are held on an irregular basis. Better information sharing could take place if the link between CMAA and CMVIS was stronger. This would enable the mine action community to access *all* demining related data in one place.

CMAA itself made some suggestions for changing its relationship with CMVIS:

- CMAA invites CMVIS to have all international requests for casualty data to go through the CMAA, thereby allowing CMAA to represent mine action in Cambodia internationally and making it the responsibility of the government
- CMAA also specifically suggests for CMVIS to provide all raw data, i.e. for CMAA to have full access to the data base. According to CMAA, this would require a formal agreement between CMAA and CRC, would increase CMAA ability to query data while at the same time not needing to bother CMVIS to provide the information

CMVIS is recommended to consider the above, but only once a more formal partnership with CMAA with clear guidelines has been established.

1.4.3.4 CMVIS to collect more accurate incident location data

The CMVIS incident location information is currently not considered reliable by MAPU/AVI. MAPU's work is spatial in nature and thus the 'locational' accuracy of the incidents is absolutely critical. For MAPU, accuracy to within 100m would be ideal, but it should be out by no more than 500m. As the data is currently not reliable, it reportedly remains difficult to interpret the method by which location of incident is recorded. MAPU/AVI believes there are inconsistencies in the way that the GPS coordinates, bearing and distances are recorded by DGs. When distances and bearings are taken from village, MAPU needs the exact GPS coordinates of location in village, rather than simply the name of the village. As some of the villages are very long, not knowing from where the compass reading was taken affects the final incident location. MAPU

[36] MAPU/AVI provides some food for thought on the role of incident data on HMA planning processes: "Incident data is an essential criterion in minefield clearance prioritization planning, and so is central to humanitarian reasons for clearance. It is important to state that incidents are not the only criteria for demining prioritization. Sometimes mine and UXO contaminated areas are well known about and managed (by MRE and marking) by local communities and therefore have few accidents. These communities should not be penalized for not having accidents, in prioritizing their minefields. This mine contamination is still affecting their development and economy (MAPU/Avi TA, email communication March 12th 2006"

would like to assume that if GPS village coordinates are not provided and that compass readings are taken from the Village Centre Point. When, however, adding up Village Centre Point GPS coordinates, distance and bearing, the incident location not infrequently appears to be either across the border or in an area not know to be suspect. Thus before any confidence can be put in the location of the incidents, clarification of existing data is required.

CMVIS' provision of accurate incident location information is anticipated to become more important with the introduction of IMSMA4 to Cambodia. MAPU/AVI[37] foresees that the one place where all mine action related data will be stored and accessed will be IMSMA v4, which is to be implemented by the CMAA in the near future. The new IMSMA version 4 is an information management tool, at the core of which is GIS mapping. The map links all the various demining information together whether it be suspect areas, demined or surveyed areas, and of course incidents (for which there is even its own category). All the text based information can be accessed from this map, and thus is more intuitive than the last IMSMA version.

Once all the demining operators utilise IMSMA v4, it will be paramount for CMVIS to ensure the 'locational' accuracy of its incident data. It is anticipated that this would not only allow CMVIS to best serve its clients, but improve the uptake and use of data as well. The foreseeable implementation of IMSMA4 can act as a catalyst to both strengthen the partnership with CMAA (as discussed in section 1.4.3.3) and to review the way in which it collects, enters and records incident location data. CMVIS would remain the casualty data expert. The following recommendations are made in this regards.

1) Using IMSMA4 as a catalyst, CMVIS is recommended to revise its process for recording incident location, and possibly to review existing 'locational' data for the past two years (MAPU/AVI suggested time frame), *before* it is imported into IMSMA. This would enable the entire mine action community to use the same data in the same way.

2) In the absence of GPS capacity on the part of some field staff, use paper maps or aerial photos with a Grid plotted on top of them in the same coordinate system as the GPS. Those staff equipped with GPS is recommended to add the use of aerial photos. This would enable DGs to cross reference their GPS and compass readings and for DGs and main volunteers alike to invite feedback from the casualty and/or local community as to where the incident occurred. MAPU and CMVIS have already discussed they would pilot this method in the two BTM districts of Salakrau and Ou'Chrov.

3) Make procedural changes to the way in which DMO staff checks field data. Increase DMO staff mapping and GIS effort and/or capability so as to be able to check the reliability of the coordinates submitted by DGs. Create a definitive SOP about recording, interpreting and entering the data.

4) Create an extra column named 'off set', to indicate whether the incident location is a precise location or one for which one needs the bearing and distance to calculate the exact location

[37] MAPU AVI Technical Advisor, email communication March 14th 2006

As both MAPU/AVI and CMAA rely heavily on the GPS coordinates provided by CMVIS, it is recommended for CMVIS to meet with both to fully understand their information requirements. HALO, JMAS, CMAC and NPA, however, do not use the incident location GPS coordinates. For MAG, incident location information is not very important; it is considered indicative but not definitive. The agency does plot the data as a way to better understand clusters of casualties. Once CMVIS improves the 'locational' accuracy of its incident data, and this data is imported into IMSMA4, it is anticipated that the uptake and use of this data by mine operators will significantly increase.

1.4.3.5 End-user feedback on monthly and annual report presentation

End-users provided valuable feedback about the presentation of the monthly and annul reports. NPA suggests the following areas for improvement:

- Monthly report to provide information on not only the number of casualties, but on the number of incidents as well
- CMVIS to provide information about the chain of information from point of accident to data collection by DG was greater.

The following feedback on the presentation of the monthly and annual report was made by the interviewees:

CMAC suggest the need for monthly reports to report on annual data ranges, rather than from the month it reports on back to the same month last year (for example, May 2004 to May 2005)

HALO[38] comments that "… the present presentation is flawed in that it reports the number of victims rather than the number of accidents. The combination of this and running the "Most Affected" tables over a variable period, ranging form 13 to 24 months, means that those tables can be deceptive and hard to interpret. Ou Char in Battambang flew into the charts at Number Three last year (presumably after the incident at the warehouse on April 1st), since then it slumped to Number Five in December and then climbed back to Number Two last month despite no other accidents being suffered in the intervening seven months. This is the most acute example, but the general problem is accentuated across the "by district" and "by province" tables."

"Similarly when Prea Palay made it into the charts in November it was because 15 people were hurt in a single incident, giving that one anti-tank mine (un-clarified) equal weighting as 15 separate AP mine accidents in Kouk Romiet is probably wrong."

"The weaknesses that CMVIS has in our opinion are the use of the term "forest" which conjures up images of the Cardamoms when more often than not it is describing the tree lines and scrub on the edge of villages. We believe that the category of "common land" might be a better description for many areas of intensive public ad-hoc land use which at the moment are stigmatized by the term forest, as it does little to encourage further land use. Furthermore the term forest misleads the reader over the definition of the problem in many areas, (Bob Keeley's UNDP study

[38] Email communication, March 1st 2006.

dismissed the idea of clearing the forests as too ambitious), when in fact we are talking about clearing a 100m wide accident causing belt, often with cultivation taking place on both sides of the belt."

The following three suggestions were not mentioned by any of the interviewees but are relevant given the topic of monthly and annual reports:

- The annual report lists the provincial level information in the order from high casualty province to low casualty province. When in the field it proved difficult to find the appropriate province because they are not listed in alphabetical order. This is something worth considering and asking end-users about
- Ideally, the annual report is published as early in the year as possible so that media publicity could be given to the release of the report and attention could be drawn to the ongoing issue of mine/UXO risk in the country
- CMVIS would gain more recognition if it were to write a small column in a number of papers every month that informs the public about the release of the monthly report and provides one or the other interesting fact revealed by the data. This would be an opportunity for CMVIS to alert potential end-users to its existence and would generally raise the profile of the project

1.4.3.6 Promote use of OLAP-cubes

OLAP-Cubes is an Excel software system that is set up for individual users and comprised of a number of categories of information. Once the OLAP-Cubes system is set up, raw data is imported. This data can then be analyzed in whatever configuration the end-user chooses. Although the initial set-up requires time, the subsequent sending out of raw data on a monthly or quarterly basis (dependent on end-user need) is quick and easy.

It is one thing to collect data; it is another to apply it. From interviews, it appears that most of the end-users are not utilizing the CMVIS data to the best of its potential. Ideally, all mine action operators use the CMVIS data beyond the monthly report, yet many report that they limit their number of special requests to CMVIS because they are perceived as being busy. Introducing OLAP Cubes to those end-users that require the CMVIS information in multiple configurations would save CMVIS time and increase uptake of information by end-users. Of all persons interviewed, only MAG knows of the OLAP-Cubes system. When asking staff around the office about OLAP-Cubes, only the ISPA TA knew the term and was familiar with the system.

This is a missed opportunity. As a way to promote HMA agencies to use CMVIS data more, CMVIS needs to promote the use of OLAB-cubes amongst end-users and to teach them how to use it. It would be worthwhile to mention this in the CMVIS brochure.

1.4.3.7 CMVIS to increase end-user capacity to interpret data

A few of the interviewees commented that end-users may not be able to interpret the CMVIS data due to a lack of experience with such. They commented that most end-users use the information for proposal writing but questioned whether it is used to the best of its possibility for deciding on

deployment and informing monthly work plan. CMVIS is recommended to query with various end-users *if* they would appreciate training on interpretation of the data. The provision of such training is very much considered to be part of its mandate.

To this end, MAPU/AVI suggested for CMVIS to present commune and district level data at the MAPU commune and district level workshop and give information on what the data tells about priority areas.

1.4.3.8 CMVIS to consider options to ensure long term sustainability

From main end-user feedback it does not seem feasible to implement a fee-for-service structure. Some support the idea, but just as many don't. If it is implemented, it will be implemented for all. Without the support of all, or at least the majority, the introduction of such a service would effectively reduce the reach of the information, and as a result, its impact would be reduced. As such, it is not recommended to initiate a fee-for-service structure.

The question of long term sustainability cannot be answered without reflecting on staffing structure, salaries for whom constitute the single largest budget item. If not for a recouping some of the project expenses through a fee-for-service system, the cost of the project could be significantly reduced if it were to operate without Technical Advisors *and* if it could rely less on paid Data Gathers and more on volunteers for collecting the data.

The former would require CMVIS to gain some more technical and management expertise, but is essentially feasible. The latter is more challenging. If CMVIS were to use less paid staff, it would have to depend more on volunteers. This would not be an issue, if only it wasn't for the reliance of two of CMVIS main end-users, CMAA and MAPU/AVI, on precise locational incident data, which requires GPS tools and capacity. Without this requirement, CMVIS could consider training, for example, police to collect the data; similar to the way in which CMAC trained 200 police in EOD. According to CMAC, most police are literate and the project has been quite a success. The added benefit of police gathering this data would be that the police could enforce the law on landowners there where casualties were injured working on mined land that was owned by others. Using the law would act as an indirect strategy to prevent and, ultimately reduce, mine/UXO incidents and casualties.

Summary of Recommendations

1. Solicit end-user feedback on regular basis
2. Standardizing process for Sending out special repetitive requests
3. Strengthen partnership with CMAA and increase compatibility of data
4. CMVIS to collect more accurate incident location data
5. End-user feedback on monthly and annual report presentation
6. Promote use of OLAP-Cubes
7. CMVIS to increase end-user capacity to interpret data
8. CMVIS to consider options to ensure long term sustainability

2. Analysis of Progress since Previous Evaluations

This section will report briefly on the progress made by the CMVIS project in response to the recommendations made by two previous evaluations.

2.1 Data Base, Data-Entry and Reporting Systems Evaluation 2002

This evaluation made five main recommendations, three of which have been fully implemented, with two still remaining, one of which is now being acted upon. These three are:

- Be more pro-active in alerting sector specific groups to their findings by developing detailed reports aimed at specific groups of users and the CRC field staff

  This recommendation is much in line with one made by this evaluation, namely the ability to interpret data and use it to advocate. The project's ability to interpret and then use the data for specific purposes remains low today.

- Improve the documentation of the system by developing a) Data Collectors Handbook explaining all aspects of the data collection process with a definition of terms for all of the questions contained in the Mine / UXO casualty Report, and b) user and technical guides for the CMVIS software to help the users and any future developers of the system

The recommendation to develop a Handbook is now being followed up through the development of Standard Operating Procedures. This was not initiated by CMVIS staff, but by the HI-B Mine and Injury Prevention Coordinator who recruited a volunteer to work with the project for this purpose. This leaves one questioning whether the value of developing SOPs is recognized. Without this recognition, it is unlikely that the SOPs will actually be actively used. The SOPs were not yet completed at the end of this evaluation. Technical guides have been developed but could be much improved upon.

2.2 CMVIS End-User Satisfaction Study 2004

The 2004 study made 12 recommendations, two of which were considered inappropriate by CMVIS staff and a third for which consensus was missing. The 'Creation of the position of Liaison and Public Relations Officer' was deemed unnecessary as "CMVIS is generally known and appreciated nationally and internationally. And also, the CMVIS can be integrated to CRC Web-site.[39]" The recommendation to 'Initiate a yearly satisfaction study' was rejected because it was considered "a waste [of] time and money[40]." General consensus was lacking for a third recommendation, namely 'To charge for extra and ad-hoc/customized reports'. In a coordination meeting held with the CRC and HI-B in early 2005, it was decided to charge for extra annual reports. When the project indeed tried to charge end-users for extra reports, end-users refused, even though they had endorsed the idea when it was first proposed. Hence, further implementation of this recommendation was abandoned.

[39] From: Report on the Evaluation and Planning Seminar CMVIS 12 January 2005, no page
[40] Ibid

For the remaining nine recommendations, progress is described below.

- Clarification of the definition of End-Users and updating list of beneficiaries
  The definition 'end user' remains in use to describe the number of people who receive the monthly reports. At the time of the study, the end-user list counted 800 people, which after a thorough clean-up was reduced by 300. Today, though, the system again counts over 800 users. A system for updating this list has yet to be devised.

- Application of procedures
  With the assistance of a volunteer, CMVIS staff is currently in the process of developing and writing Standard Operating Procedures

- To privilege the electronic mail delivery
  At the time of the end-user satisfaction study, approximately only 50-70 copies were sent out by email. Currently, of the total 886 reports sent out monthly, 291 are sent out electronically within Cambodia and to another seventeen countries. The remaining 595 copies are sent out by regular mail to end-users in Cambodia and another seven countries, of which six already receive an electronic copy.

- To Play a Mine/ UXO Liaison Information Role
  This recommendation suggested for CMVIS to increase its outreach activities by initiating technical working groups. CMVIS has not done so and it is questionable whether CMVIS is fitted for this role. The CMAA seems to be a more likely initiator for this activity. As for the suggestion for CMVIV to work together with 'humanitarian sectors' for the purpose of developing joint projects and conduct fund raising; progress has been made. This is evident from the pilot project initiated with UNICEF. Yet at the same time, CMVIS can do more and is encouraged to do so in this evaluation.

- To make the CMVIS data's accessible to all public
  CMVIS has responded to this recommendation by making its monthly and annual reports available on line. Greater awareness of CMVIS data could be achieved amongst community development NGOs and ways in which to do this are presented in this evaluation.

- To initiate discussions and end-users interaction
  This recommendation is much in line with one made in this report, namely section 1.4.3.1. Little progress has been made in this regard since the end-user satisfaction study.

- To refine concepts and/or categories
  Suggestions made no longer hold as the format of the monthly report has changed significantly since the time of the end-user satisfaction study.

- Qualitative information and further explanations of the data's
  The monthly report currently have less qualitative information that in 2004. From interviews with mine action operators, CMAA and MAPU/AVI, it appears that the degree of narrative provided is however considered sufficient. The recommendation to

distinguish between the term ‘incident’ and ‘accident’ has not been followed up on and is again made in this evaluation.

- To simplify the CMVIS reports presentation and make it easier reading
  Much progress was made in this regard. The current monthly reports are perceived as easy to read and providing information as needed. Please refer to the recommendations in section 1.4 for some minor suggestions that were made by mine action operators about the presentation of the monthly and annual report.

- To initiate a yearly Satisfaction Study
  This was not considered feasible due to the associated cost. The essence of this recommendation is still considered valuable by this evaluator; in that CMVIS should devise ways in which to ensure that its end-users are satisfied. Ideally, this should not be done by an outsider once per year, but by CMVIS staff on a regular basis.

3. Conclusion

The CMVIS project has been in existence in its current form for ten years. It is run by much the same staff as it started with and it has much evolved since its inception. Its data gathering activities have increased significantly, both in terms of geographic coverage, type and amount of data collected. Its monthly and annual reports have changed from year to year, thereby showing its ability to respond to changing circumstances. Whereas the CMVIS activities were at first limited to collecting data alone, these now include the provision of MRE, victim assistance and EOD reporting. Significant areas for strengthening these three activities were identified by this evaluation. Many of these areas have been discussed with staff who showed their receptiveness to suggestions by initiating changes, even before the evaluation was completed.

The advocacy role of the project needs to be clarified, whether this is for mine action or for victim assistance. Once this is clear, the overall goal of the project needs to be reviewed and, accordingly, the projects activities in the logic framework need to be adjusted. Whereas CMVIS has primarily managed its activities in the past, it could gain much strength from managing for results first. The achievement of expected results, or the absence thereof, would then guide whether activities should continue as they had, or need to be modified.

End-users are generally pleased with the work of CMVIS, although encourage it to solicit feedback, and to do so on a regular basis. The uptake of CMVIS information could be greater, and avenues to do so are described in this document.

In closing, CMVIS is a project to be proud of. And, anything good *always* has the chance to be better. CMVIS is equipped to do so and with renewed strategic direction from HI-B and CRC will be able to live up to the expectation of achieving an even greater impact.

Appendix A – CMVIS Mine/UXO Casualty Report

GPS ☐

MINE / UXO CASUALTY REPORT

Serial No. ____ Incident No. ____-____ (Fill in one report for each Mine/UXO victim)

❶

1. Interviewer: _____ 4. Agency: _____ 5. Province/Office _____
2. Date of Interview? ____/____/____
3. Place of Interview: _____
   - ☐ Prov Hospital ☐ Private Clinic ☐ Other (specify) _____
   - ☐ District Hospital ☐ Village/Town
   - ☐ Commune Health-centre ☐ Army Camp/ Hospital
6. Informant type: ☐ Government ☐ Community Member ☐ Victim ☐ Family/ Relative ☐ Military ☐ Hospital Staff ☐ Witness ☐ Volunteer
7. Name: _____
8. Address: _____

❷

1. WHERE did the accident take place?	2. Current Address	3. Where will victim go to ?
Village:	Village:	Village:
Commune:	Commune:	Commune:
District:	District:	District:
Province:	Province:	Province:
V-Code	V-Code	V- Code

1a. Local name: _____ 2a. How many months or years ? Month: ____ Year: ____

❸

1. What type of DEVICE caused the accident?
   a. ☐ Mine b. ☐ UXO c. ☐ Sub Munition d. ☐ Unknown e. ☐ Other (specify) _____
   Discribe: _____
   Was Mine/UXO moved to this place from other area ? a. ☐ Yes b. ☐ No c. ☐ Unknown
3. Direction from villlage

❹

1. Distance of Accident Site from
   a. ☐ Village b. ☐ GPS Point
2. GPS Info: 48P 0 ____ UTM 1 ____

Meters: _____ Compass: _____ Describe: _____

❺

5. Victim Information at time of accident
   1. Full Name: _____
   2. Other Name: _____
   3. Age: ____ 4. Sex: ☐ Male ☐ Female
   5. Family Status: ☐ Civilian ☐ Military ☐ Single ☐ Widowed/Divorced ☐ Married If Children, how many? ____
6. WHEN was the Date of Accident? ____/____/____ Day/Month/Year
7. Nationality: ☐ Cambodia ☐ Thai ☐ Lao ☐ Viet Nam ☐ Other ____
8. Occupation:
   - ☐ Soldier ☐ Police ☐ Farmer ☐ Fisherman ☐ Wood Cutter
   - ☐ Driver ○ Moto / Bicycle ○ Car / Truck ○ Tractor
   - ☐ Tradesman ☐ Student ☐ Civil Servant ☐ Monk ☐ Infant ☐ Homekeeper
   - ☐ Gatherer ☐ Development Agency ☐ Labourer ☐ Unemployed ☐ Other Specify _____
   - ☐ Official Deminer ○ CMAC ○ MAG ○ HaloTrust ○ Army
   - _____ ☐ Unofficial Deminer

❻

Information on Accident Area

1- a. ☐ on Road b. ☐ Rice Field c. ☐ in Forest d. ☐ on Mountain/Hill e. ☐ Road side f. ☐ Other
g. ☐ on Path h. ☐ Grazing Field i. ☐ in Village j. ☐ near River k. ☐ near Military Positon (Camp, Base, Checkpoint,etc.)
l. ☐ Mine field m. ☐ Land cleared

2-Was the accident site marked as dangerous at the time of the incident? a. ☐ Yes b. ☐ No c. ☐ Unknown
○ Unofficial ○ Official ← What kind of marking? Was marked before? ☐

3-Has there ever been any Mine/UXO clearance at the accident site? a. ☐ Yes b. ☐ No c. ☐ Current Demining d. ☐ Unknown
○ CMAC ○ NGO ○ Army ○ Villagers ← Who cleared the area?

4-How often did the victim go to the area? a. ☐ First time b. ☐ a Few times c. ☐ Often d. ☐ Unknown

5-Did the victim know there was a MINE/UXO at the site of the accident? a. ☐ Yes b. ☐ No c. ☐ Unknown

6-If they knew there was a mine/UXO, WHY did they go to the area? a. ☐ Economic necessity c. ☐ Other (specify) b. ☐ No other access _____

7-Did victim attend Mine Awareness prior to the accident? a. ☐ Yes → Month/Year? ____ b. ☐ No c. ☐ Unknown
○ Meeting ○ House call ○ Field visit ○ School ← Direct ◇ Indirect → ○ Poster/leaflet ○ Radio ○ TV

8-Was the child victim attending school? (For current Children only) a. ☐ Yes b. ☐ No c. ☐ Unknown

❼ Injury Details

1 **From the mine/UXO explosion, was the victim** a ☐ Killed b ☐ Injured

2 **If the victim died, how long after the accident did they die?** a ☐ Immediately

hours	days	weeks	months

3 **WHERE did the casualty die?**

a ☐ At site of accident b ☐ On the way to health facility/hospital c ☐ In health facility/hospital d ☐ After leaving heath facility/hospital e ☐ Unknown f ☐ Other (specify) _____

	Arm	Fore Arm	Hand	Finger	Above Knee	Below Knee	Foot	Toe	Genitals
Amputation?									
Right ▷	☐	☐	☐	☐	☐	☐	☐	☐	☐
Left ▷	☐	☐	☐	☐	☐	☐	☐	☐	

	Face	UpperLimb	UpperBody	LowerLimb	LowerBody	EntireBody
Wounds?	☐	☐	☐	☐	☐	☐
Burns?	☐	☐	☐	☐	☐	☐
Paralysis?	☐	☐	☐	☐	☐	☐

Deaf? ☐ Very Slight ☐ Slight ☐ Serious ☐ Very Serious

Blind? ☐ 1 eye ☐ 2 eyes

❽

1 **What MEDICAL care did the victim receive FIRST?**

☐ None ☐ District Hospital ☐ Army camp/ hospital ☐ Red Cross Volunteer ☐ NGOs ☐ Other (specify) _____

☐ Treated Self ☐ Provincial Hospital ☐ Commune health centre ☐ Private Clinic ☐ Mine Action Agencies ☐ Unknown

2 **How long before the victim received this first medical care?**

☐ <30min ☐ <60min ☐ Unknown ☐ < 2 hrs ☐ > 2 hrs ☐ No care

3 **How long before the victim reached hospital?**

☐ <30min ☐ <60min ☐ < 2 hrs ☐ > 2 hrs ☐ Did not to hospital ☐ Unknown

Hospital name: _____

❾

1 **Has the victim received any disability services ?** ☐ YES ☐ NO (Mark all services received)

☐ Crutches ☐ Prosthesis ☐ Wheelchair ☐ Rehab/ physical therapy ☐ C D Worker ☐ CRC Assistance

From Org_____ _____ _____ _____ _____ _____

❿ What was the victim doing during the accident?

a ☐ Collecting/ Cutting Wood
b ☐ Collecting Food
c ☐ Fishing
d ☐ Herding
e ☐ Farming
f ☐ Labour
g ☐ Travelling
- *By motor vehicle*
- *On foot/bicycle*
- *By animal/Ox cart*
- *Other*

h ☐ Military Activity
i ☐ Construction (House/ Road)
j ☐ Handling the Mine/UXO
- Moving it: *To sell it*, *Demining*, *To store*, *Play/Curiosity*, *To make area safe*, *Re-use*, *Other*
- Dismantling it: *For fishing*, *Hunting*, *For selling*, *To make safe*, *For hitting*, *Play/Curiosity*, *Other*

k ☐ Playing
l ☐ Defecating
m ☐ Bystander/ Spectator
n ☐ Doing Nothing-exploded beside victim
o ☐ Clearing new land for farming/settlement Demining
p ☐ Demining
q ☐ Burning (Not with mine/UXO)
r ☐ Other (specify) _____

2 Who activated the mine/UXO? a ☐ Casualty b ☐ Someone else c ☐ Cart d ☐ Car/Truck e ☐ Other _____

⓫ Were others injured/killed?

☐ YES → **How many?** Killed? _____ Injured? _____
☐ NO

What are the names of the other casualties?

1	2	3	4
5	6	7	8
9	10	11	12

⓬ Were any ANIMALS injured/ killed?

☐ YES → **How many?**
☐ NO

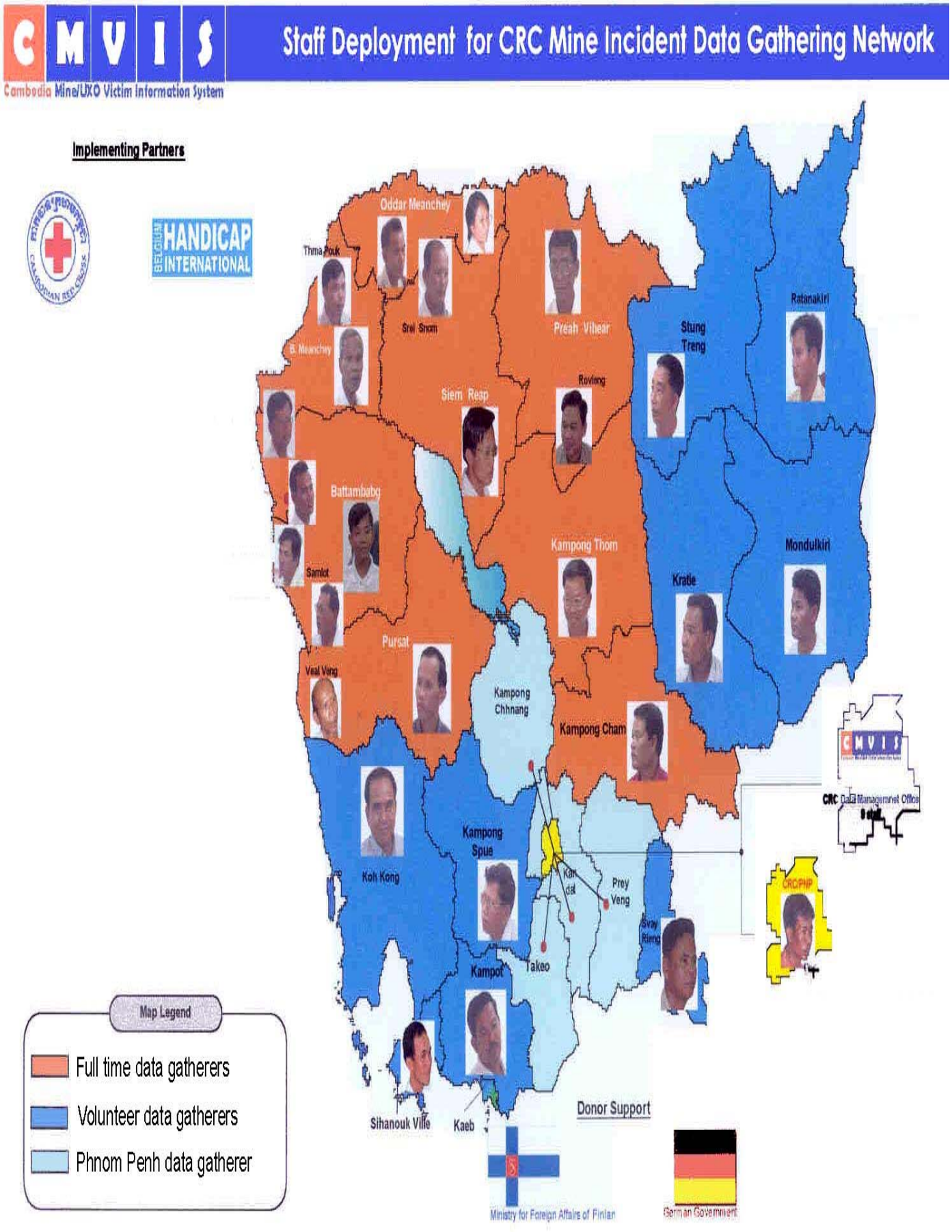
Cow :	Horse:	Pig:	Buffalo :	Other:

Return this form to: CAMBODIAN RED CROSS, 17 RED CROSS STREET, PHNOM PENH

OFFICE USE ONLY	Receipt date:	Form checked by:	Computer entry by:	Entry checked by:

Updated:February, 2006 for year 2006 version 5.0

Appendix B – DG Deployment



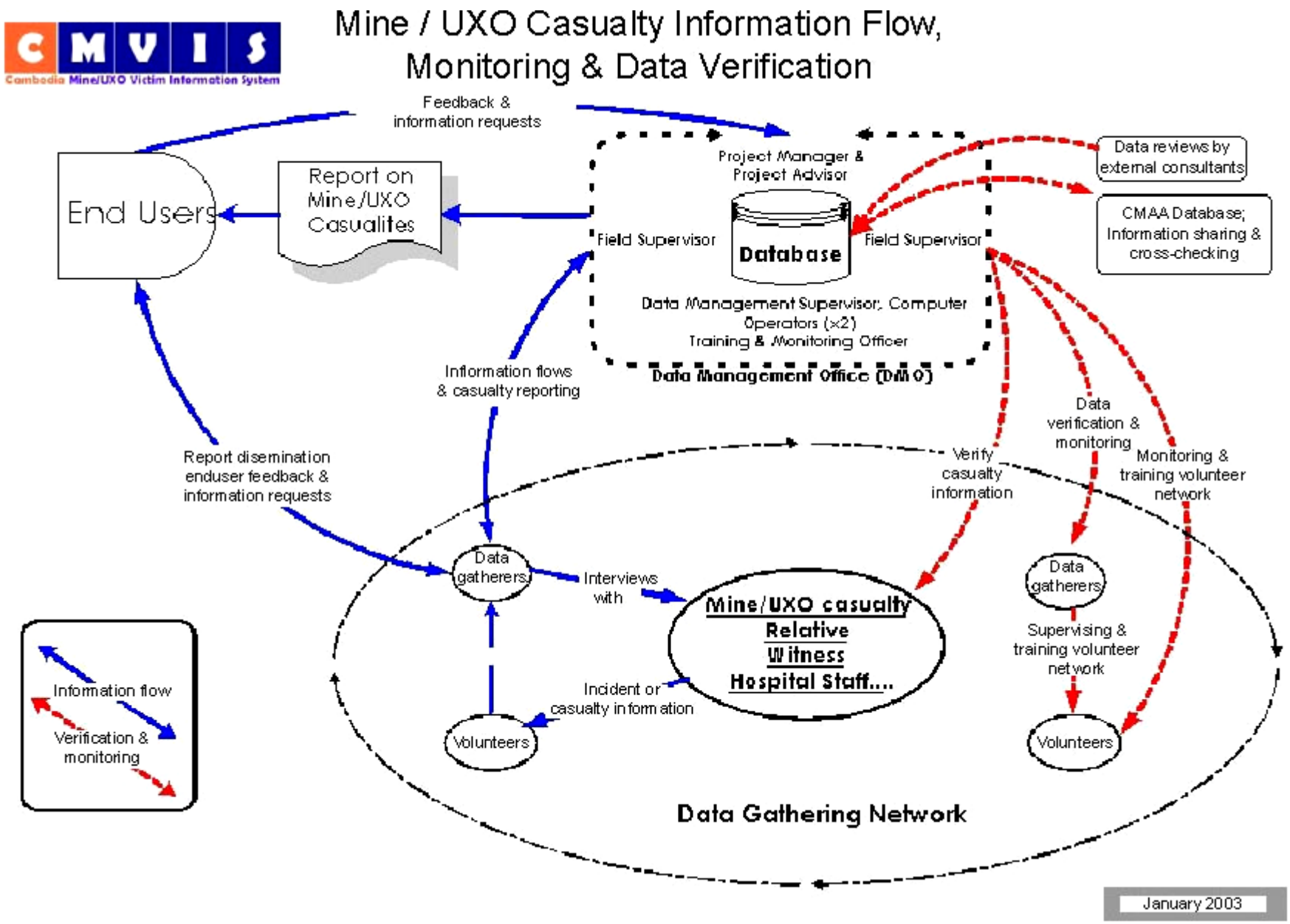
Appendix C - Data Gatherer Field Contacts for 2005

D

DG's name	Province	VC	CC	Health Center	District Office	NGO	VA	Volunteer	Police	Victim	Other
Sous Bunsoeurn	Kampong Speu	V	V	V	V	CMAC NCDP		V	V	V	
Sao Leang	Kampong Cham	V	V	V	V			V	V	V	
Yim Kimsean	Pursat	V	V	V	V	CMAC CBMRR DCO		V	V	V	
Khoun Puthy	Svay Rieng	V	V	V	V			V	V	V	
Khim Khoeurn	Battambang	V	V	V	V	CMAC Catholic Church CBMRR OEB		V	V	V	
Pich Phat	Kratie	V	V	V	V	VI CMAC		V	V	V	
Kov Ping	Preah Vihear	V	V	V	V	LUPO VI MAG CRC		V	V	V	
Mann Sa Im	Banteay Meanchey	V	V	V	V	ZAO PLG WFP JSC CMAC	JSC CFDS CRC	V	V	V	
Ok Pon	Kampong thom	V	V	V	V	CWS ADHOC CMAC LICADHO WCC GTZ WVC		V	V	V	
Noun Srean	Phnom Penh	V	V	V	V			V	V	V	

DG's name	Province	VC	CC	Health Center	District Office	NGO	VA	Volunteer	Police	Victim	Other
Lim So	Pailin	V	V	V	V	CMAC HU MAPU CBMRR		V	V	V	
Yean Nora	Odor Meanchey	V	V	V	V	CBMRR JSC Arobe		V	V	V	
Ly Kimheng	Siem Reap	V	V	V	V	JSC FCU CMAC PRC EOD CABDIC		V	V	V	

Appendix D – Mine/UXO Casualty Data Collection Flow Chart



Appendix E – DG Deployment and Casualties for 2005

DG's Name	Sex	Provinces	District	Commune with Casualties	Villages with Casualties	Total # com-munes in district	Total # villages in district	Total # of villages in cover area	2005		Total	Combined Total Casualties
									Mine	UXO		
Man Sa Im (Full time)	**M**	**Banteay Mean Chey**	Malai	6	38	6	38	**344**	28	9	37	**90**
			Ou Chrov	9	85	9	85		42	11	53	
			Mongkol Borei			13	162					
			Serei Sophorn			8	59					
San Bunchhoeut (Full time)	**M**	**Banteay Mean Chey**	Phnum Srok	6	67	6	67	**313**	0	1	1	**49**
			Preah Net Preah	8	102	8	102		0	1	1	
			Svay Chek	8	73	8	73		14	9	23	
			Thma Puok	6	71	6	71		24	0	24	
Hen Chham (Full time)	**M**	**Battambang**	Banan	8	76	8	76	**170**	3	12	15	**98**
			Rotanak Mondol	4	45	4	45		10	30	40	
			Samlout	7	49	7	49		28	15	43	
Dy Kimsay (Full time)	**M**	**Battambang**	Bavel	6	83	6	83	**188**	1	11	12	**80**
			Kamrieng	6	48	6	48		21	4	25	
			Phnum Proek	5	31	5	31		19	14	33	
			Sampov Lun	6	26	6	26		7	3	10	
Khim Khoeun (Full time)	**M**	**Battambang**	Battambang	10	62	10	62	**397**	0	48	48	**71**
			Koas Krala	6	51	6	51		3	6	9	
			Moung Ruessei	11	111	11	111		7	4	11	
			Sangkae	10	63	10	63		0	2	2	
			Thmar Koul	10	70	10	70		0	1	1	
			Ek Phnom			7	40					
Sao Leang (Full time)	**M**	**Kampong Cham**	Batheay	12	80	12	80	**1725**	0	9	9	**61**
			Chamkar Leu	8	72	8	72		1	0	1	
			Dambae	7	63	7	63		0	5	5	
			Kampong Cham	4	24	4	24		0	3	3	
			Kampong Siem	15	111	15	111		0	4	4	
			Memot	16	173	16	173		2	8	10	
			Ponhea Kraek	9	141	9	141		0	6	6	

DG's Name	Sex	Provinces	District	Commune with Casualties	Villages with Casualties	Total # com-munes in district	Total # villages in district	Total # of villages in cover area	2005		Total	Combined Total Casualties
									Mine	UXO		
			Prey Chhor	15	176	15	176		0	1	1	
			Srei Santhor	14	184	14	184		0	4	4	
			Stueng Trang	14	98	14	98		0	8	8	
			Tboung Khmum	23	230	23	230		0	10	10	
			Cheung Prey			10	74					
			Kang Meas			11	93					
			Koh Sotin			8	85					
			Krouch Chhmar			12	76					
			Ou Reang Ov			8	141					
Nuon Srean (Full time)	**M**	**Kampong Chhnang**	Kampong Tralach	10	103			**552**	0	1	1	**27**
			Rolea B'ier	13	131				0	4	4	
			Sameakki Mean Chey	9	86				0	1	1	
			Tuek Phos	8	67				0	3	3	
			Boribo			9	51					
			Chol Kiri			5	31					
			Kampong Chhnang			4	26					
			Kampong laeng			9	44					
		Kandal	Angk Snuol	16	307	16	307	**1087**	0	1	1	
			Kandal Stueng	28	145	28	145		0	1	1	
			Kien Svay	12	46	12	46		0	2	2	
			Khsach kandal			18	93					
			Koh Thom			12	93					
			Leuk Dek			7	24					
			Lvea Em			15	43					
			Mouk Kampul			11	47					
			Ponnhealeu			14	141					
			S'ang			16	119					
			Takhmao			6	20					
		Prey Veng	Kamchay Mear	8	129			**1136**	0	5	5	
			Baphnom			9	108					
			Kampong Trabek			13	125					
			Kanhchriech			8	91					
			Me Sang			8	118					
			Peam Chor			9	50					
			Peam Ror			8	41					
			Pea Reang			12	84					

DG's Name	Sex	Provinces	District	Commune with Casualties	Villages with Casualties	Total # com-munes in district	Total # villages in district	Total # of villages in cover area	2005		Total	Combined Total Casualties
									Mine	UXO		
			Preah Sdach			11	145					
			Prey Veng			11	142					
			Kampong Leav			8	42					
			Sithor Kandal			11	60					
			Bati	15	169			**1117**	0	3	3	
			Tram Kak	15	246				0	2	2	
		Takaev	Treang	14	154				0	2	2	
			Angkor Borei			6	34					
			Borei Chol Sar			5	39					
			Kiri Vong			12	114					
			Koh Andet			6	68					
			Prey Kambas			13	110					
			Samrong			11	147					
			Daun Keo			3	40					
		Phnom Penh	Mean Chey	1	1				0	2	2	
Suos Bunsoeun (part time)	**M**	**Kampong Speu**	Aoral	8	70	8	70	**1331**	0	1	1	**31**
			Chbar Mon	5	57	5	57		0	4	4	
			Kong Pisei	13	250	13	250		1	0	1	
			Phnum Sruoch	13	118	13	118		0	15	15	
			Samraong Tong	15	286	15	286		1	3	4	
			Thpong	8	75	8	75		1	5	6	
			Basedth			15	218					
			Odong			15	251					
Auk Pon (Full time)	**M**	**Kampong Thom**	Baray	17	181	17	181	**736**	0	2	2	**10**
			Sandan	9	80	9	80		0	3	3	
			Stoung	13	137	13	137		0	5	5	
			Kampong Svay			9	82					
			Stueng Sen			11	55					
			Prasat Balangk			7	64					
			Prasat Sambo			5	66					
			Santuk			9	71					
Sok Chanthach (Main Volunteer)	**M**	**Kampot**	Kampong Trach	14	69	14	69	**492**	0	1	1	**6**
			Kampot	16	62	16	62		0	5	5	
			Angkor Chey			11	78					

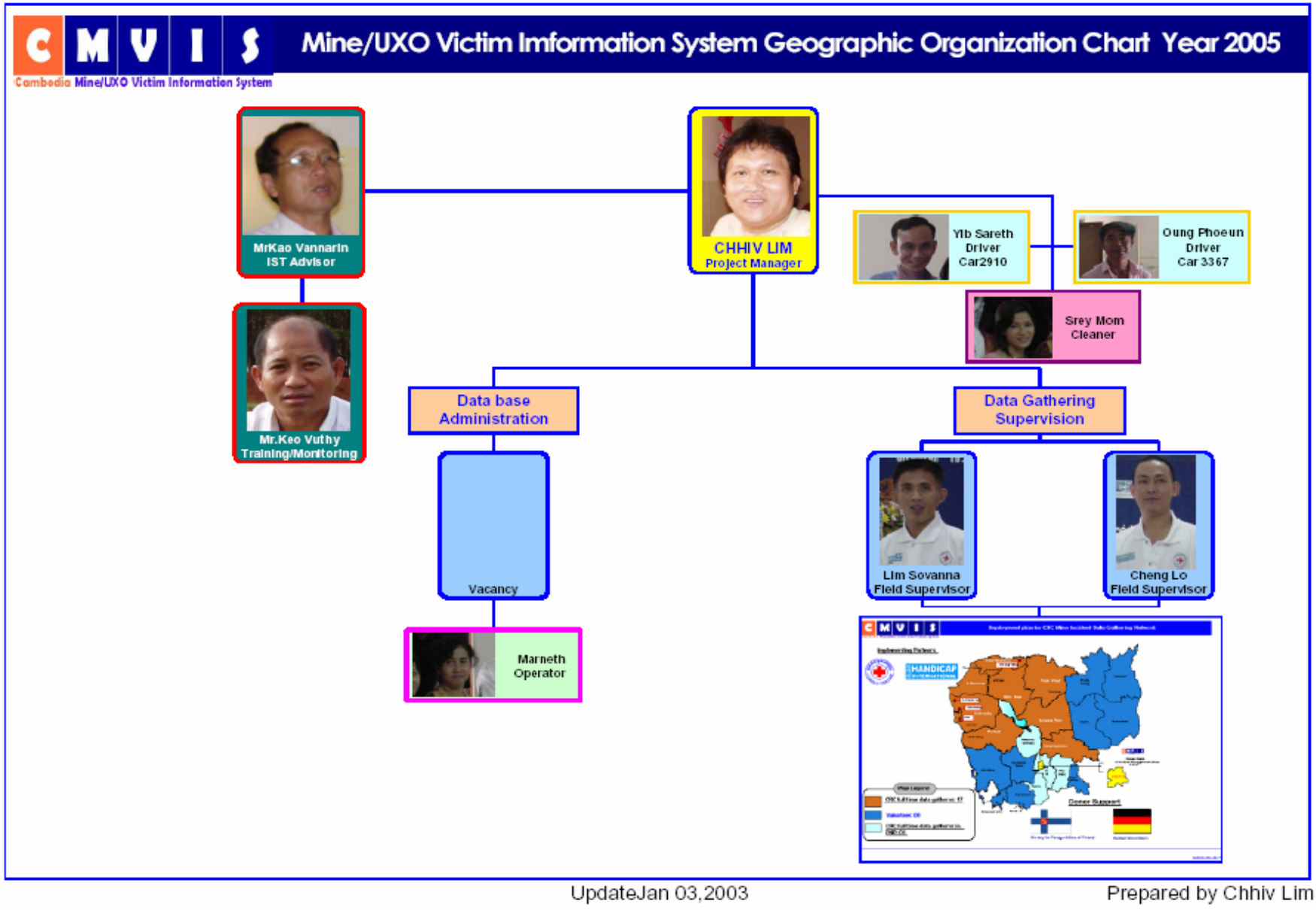
DG's Name	Sex	Provinces	District	Commune with Casualties	Villages with Casualties	Total # com-munes in district	Total # villages in district	Total # of villages in cover area	2005		Total	Combined Total Casualties
									Mine	UXO		
			Banteay Meas			15	133					
			Chhuk			14	73					
			Chum Kiri			8	37					
			Dang Tung			10	54					
			Kampong Bay			6	16					
			Damnak Chang Eu			3	10					
			Kep			3	5					
Chhuon Yada (Main Volunteer)	**M**	**Kaoh Kong**	Botum Sakor	5	24	5	24	**131**	1	0	1	**9**
			Kampong Seila	4	13	4	13		2	5	7	
			Smach Mean Chey	3	11	3	11		0	1	1	
			Kiri Sakor			3	9					
			Koh Kong			4	11					
			Mondul Seima			3	12					
			Sre Ambil			6	35					
			Sre Ambil			4	16					
Pech Phat (Part time)	**M**	**Kracheh**	Chhloung	8	40	8	40	**250**	0	4	4	**24**
			Sambour	10	53	10	53		0	4	4	
			Snuol	5	36	5	36		1	15	16	
			Kracheh			15	77					
			Prek Prasab			8	48					
Lim So (Full time)	**M**	**Krong Pailin**	Pailin	4	36	4	36	**59**	19	16	35	**102**
			Sala Krau	4	48	4	48		49	18	67	
Phay Mala (Main Volunteer)	**M**	**Mondol Kiri**	Kaev Seima	5	25	5	25	**87**	0	1	1	**7**
			Pechr Chenda	4	18	4	18		0	5	5	
			Saen Monourom	4	13	4	13		0	1	1	
			Koh Nheaek			6	24					
			Ou Reang			2	7					
Yean Nora (Full time)	**M**	**Otdar Mean Chey**	Banteay Ampil	5	75	5	75	**151**	5	1	6	**24**
			Chong Kal	4	26	4	26		0	1	1	
			Samraong	5	50	5	50		11	6	17	
Mok Chantha (Full time)	**F**	**Otdar Mean Chey**	Trapeang Prasat	6	41	6	41	**88**	20	13	33	**42**
			Anlong Veaeng	5	47	5	47		2	7	9	

DG's Name	Sex	Provinces	District	Commune with Casualties	Villages with Casualties	Total # com-munes in district	Total # villages in district	Total # of villages in cover area	2005		Total	Combined Total Casualties
									Mine	UXO		
Kov Ping (Full time)	**M**	**Preah Vihear**	Chhaeb	8	26	8	26	**90**	0	6	6	**54**
			Choam Khsant	6	32	6	32		15	30	45	
			Tbaeng Mean chey	6	32	6	32		0	3	3	
Nguon Monoketya (Full time)	**M**	**Preah Vihear**	Kuleaen	6	24	6	24	**117**	1	2	3	**19**
			Rovieng	12	48	12	48		1	15	16	
			Sangkum Thmei			5	24					
			Chey Saen			6	21					
Yim Kimsean (Full time)	**M**	**Pursat**	Bakan	10	150	10	150	**490**	0	3	3	**20**
			Kandieng	9	113	9	113		0	1	1	
			Phnum Kravanh	7	53	7	53		0	2	2	
			Veal Veaeng	5	20	5	20		12	2	14	
			Krakor			11	102					
			Sampao Meas			7	49					
Ly Kimheng (Full time)	**M**	**Siem Reap**	Angkor Chum	7	84	7	84	**885**	0	1	1	**20**
			Chi Kraeng	12	140	12	140		0	10	10	
			Prasat Bakong	19	141	19	141		0	1	1	
			Srei Snam	6	44	6	44		0	6	6	
			Svay Leu	5	34	5	34		0	1	1	
			Varin	5	27	5	27		1	0	1	
			Angkor Thom			4	20					
			Banteay Srey			6	36					
			Kralanh			10	85					
			Pourk			16	148					
			Soth nikum			10	113					
			Siem Reap			10	67					
Tim Daravuth (Main Volunteer)	**M**	**Stueng Traeng**	Sesan	7	40	7	40	**129**	0	2	2	**5**
			Siem Bouk	7	18	7	18		0	1	1	
			Stueng Traeng	4	17	4	17		1	0	1	
			Thala Barivat	11	44	11	44		0	1	1	
			Seim Pang			5	28					
Khuon Puthy (part time)	**M**	**Svay Rieng**	Kampong Rou	12	91	12	91	**690**	0	9	9	**16**
			Rumduol	10	78	10	78		0	4	4	
			Svay Teab	11	86	11	86		1	2	3	
			Chantrea			10	49					

DG's Name	Sex	Provinces	District	Commune with Casualties	Villages with Casualties	Total # com-munes in district	Total # villages in district	Total # of villages in cover area	2005		Total	Combined Total Casualties
									Mine	UXO		
			Romeas Hek			16	204					
			Svay Chrum			17	167					
			Svay Rieng			4	18					
Cheng Min (Main Volunteer)	**M**	**Sihanouk Ville**	Mitta Pheap	5	16	5	16	**91**				**0**
			Prey Nob	14	65	14	65					
			Steung Hav	3	10	3	10					
Dim Nath (Main Volunteer)	**M**	**Ratanak Kiri**	Andoung Meas	4	21	4	21	**240**				**0**
			Ban Loung	3	16	3	16					
			Bar Kaev	3	16	3	16					
Total of Casualties												865

Appendix F – CMVIS Volunteer Training 2000-2005

Number of Volunteers Received Training per Provinces 2000 - 2005							
H_province	2000	2001	2002	2003	2004	2005	**Total**
Banteay Mean Chey	1	50	50				**101**
Battambang	2	50	50				**102**
Kampong Cham	13						**13**
Kampong Chhnang	1	10			8		**19**
Kampong Speu	7		18	8			**33**
Kampong Thom	13						**13**
Kampot	8		2				**10**
Kandal	1		14				**15**
Kaoh Kong		19		15			**34**
Kracheh	1	11		14			**26**
Mondol Kiri	1	15			3		**19**
Preah Vihear		50	50				**100**
Prey Veaeng	1	13		12			**26**
Pursat	1	50	25			19	**95**
Rotanak Kiri	1	9					**10**
Siem Reap	27					14	**41**
Krong Preah Sihanouk		7					**7**
Stueng Traeng	1	8					**9**
Svay Rieng	9		9	5	12		**35**
Takaev	1	11					**12**
Otdar Mean Chey	1		50				**51**
Krong Pailin		50	25				**75**
Total	**90**	**353**	**293**	**54**	**23**	**33**	**846**



Appendix G – CMVIS Organizational Chart 2006

Appendix H - Sustainability Chart for CMVIS 2005

Degree to which tasks are carried out by either CMVIS, HI-B or CRC HQ

		Current Situation			Hi-B Financial Coordinator comments
		CRC-HQ	CMVIS-CRC	HIB	
Management	Administration	20%	80%	0%	HI-B still involved in staff recruitment
	Logistics	25%	50%	25%	
	Finance	50%	50%		
	Human resource	50%	50%		
	Donor reports	50%	20%	30%	
	Budget preparation	0%	80%	10%	Should be 50% HI-B/50% CMVIS
	Expenditure and follow up budget		100%	0%	CMVIS and HI-B are both involved 100%
Operations	Data gatherers		100%	0%	
	Liaison with CRC	20%	80%	0%	
	Data collection		100%	0%	
	Data entry		100%	0%	
	Monthly report setup		90%	10%	
	Monthly report preparation		100%	0%	
	Electrical		75%	25%	
	Planning - Log Frame		50%	50%	
	Reception of guests		80%	20%	
	Project brochures		60%	40%	
	Mine/UXO Victim Annual report		70%	30%	
	Report CD		0%	100%	
	Village code checks / updates		75%	25%	
	Update data collection form		80%	20%	
	Mapping		100%		
Monitoring / Evaluation	Field data		85%	15%	
	Database records		70%	30%	
	Data gatherer activities		85%	15%	
Training	Annual Seminar		80%	20%	
	Volunteers		100%	0%	
	Meetings		100%	0%	
Databases	Compact / repair		60%	40%	
	Queries / AdHoc reports		100%	0%	
	Upgrades		40%	60%	
	Mailing list		80%	20%	
	Backups		50%	50%	
Logistics	Procurement		70%	30%	If purchase is made on HI-B budget, HI-B manages 100%
	Report Distribution		80%	20%	
	Vehicle mainenance		100%	0%	
	Office maintenance		85%	15%	
	PC / hardware / network		60%	40%	
	PC software		60%	40%	
Other	Assistance to Lim		70%	30%	
	Assistance in staff English		50%	50%	
	Liaison with donors	5%	25%	70%	
	Proposal writing	10%	60%	30%	HI-B does 100% of work
	Fundraising	5%	20%	75%	

Appendix I
Sample Log Frame

CMVIS results framework				
Purpose: to support a reduction in mine/UXO casualties in Cambodia and, ultimately, the cessation of mine/UXO related impact on most affected communities			**Project**: CMVIS **Project time fram**e: five years	**Budget:**
HOW?		**WHAT WE WANT?**		**WHY?**
Inputs	**Activities**	**Outputs**	**Outcomes**	**Impact**
Staff TA time, can be expressed in person-days or months Office, equipment, supplies	Collect data	Comprehensive, national information on mine/UXO casualties and the circumstances of their accidents, collected from relevant geographical areas	End-users make decisions based on CMVIS information to inform programs concerned with mine action and mine victim assistance	Reduction of mine/UXO related impact on most affected communities
	Analyze data	Useful, high quality collection of casualty information which reflects the information needs of end-users		
	Disseminate data	Reliable data sent out in timely fashion to right organizations in accessible format		
	Participate in national and international fora on casualty gathering	Other organizations understand the CMVIS system and its benefits	CMVIS is internationally known for its high standard on casualty data collection CMVIS contributes to the development of national and international standards in data gathering	
	Collaborate with and provide info to VA agencies about victims	VA agencies have information to provide appropriate services to victims	Mine/UXO casualties receive appropriate services that contribute to increased quality of life	
	Refer victims to services and provide advocacy on their behalf	Mine/UXO accident survivors have access to disability information and services		

Possible indicators		
Outputs	**Outcomes**	**Impact**
* Data collected by DGsame as during spotcheck * Cross-referenced data with other organizations is same * Congruence between reporting format and end-user organization preference * Level of end-user satisfaction with data * Turn-around time of special requests * Turn-around time of special requests * Extent to which CMVIS information informs programming of end-users * Increase in number of times CMVIS is consulted by other agencies about its system of data gathering * Degree to which VA agencies report CMVIS information facilitates their provision of services to victims * Increase in % of victims that receive services * Increase in number of VA agencies collaborating with CMVIS * Degree to which CMVIS reports are readily on hand when visiting end-user organizations * Increase in number and diversity of services made available to victims as a result of CMVIS support and advocacy * Victim reports of the benefit of CMVIS support and advocacy	* Increase in percentage of end-users using information to inform their work * Increase in the ways in which end-users use CMVIS information * Degree to which CMVIS is mentioned on websites of those organizations with which it shares lessons learned * Increased socio-economic status of mine/UXO casualties * Number of children of mine/UXO casualties attending school	* Improved socio-economic indices in mine/UXO contaminated communities
REACH		
HMA & VA agencies HQ and mine/UXO victims	Families of mine/UXO victims and field operations of HMA and VA agencies	Mine/UXO contaminated communities in Cambodia

Appendix J – KAP Survey

CMVIS External Evaluation
Knowledge, Attitude and Practices Survey of Data Gathers
March 2006

Name: _____
Province (s) responsible: _____
Districts responsible: _____
Telephone number: _____

1. For approximately how many provinces, communes and villages are you responsible?

2. How many casualties were there in total in your coverage area in 2005?

KNOWLEDGE

3. From whom do you get casualty information? How do you know that an incident has taken place? Explain all the people in your network that you contact to get the information you need and with whom you stay in regular contact to ensure you are aware of all casualties? How many days on average between the incident and you collecting the data?

4. How do you decide which victims to visit more than once to ensure your data is correct?

5. When you do not know the village code of a new village, where do you go to get it?

6. What are all your current work activities?

7. Which of these activities support mine/UXO victim and their families directly?

8. Can you think of other activities that you could do that would help mine victims and their families even more?

9. With which agencies, NGOs and other service providers have you collaborated and communicated in order to provide assistance to mine victims and their families in the year 2005?

10. You just began the MRE activity. What activities do you do know right now to increase mine/UXO risk awareness of the people living in mine/UXO affected areas?

11. To whom do you distribute the monthly report?

ATTITUDE

12. How confident are you that your casualty data is complete? Please indicate in percentage.
13. What do you think is your role in supporting mine/UXO victims and their families?

14. Can you give some examples of when you advocated for mine/UXO victims and their families to, for example, hospitals, authorities, and NGOs?

15. Do you feel you have received enough training to give mine/UXO victims as much direct/indirect support as possible (direct support as in information sharing, advocacy or bringing goods, or indirect as in referral source)? If yes, what training have you received? If not, what kind of training do you think would be helpful?

16. Do you feel you have received enough training to provide mine awareness? If yes, what training have you received? If not, what kind of training do you think would be helpful?

17. If there are other activities that you could do that would help mine victims and their families even more, could you do them with the resources you currently have (motor bike, allowance, etc), or would you need additional resources?

18. How would you describe your relationship with CMVIS volunteers, other volunteers and authorities in your network?

19. How is your workload? In other words, could you use more help from other DGs to cover your districts, or can you cover some more villages, communes or districts?

20. Do you think women Data Gathers can be as good as men? If yes, why? If no, why?

21. How would you feel if CMVIS was no longer supported by Handicap International Belgium and was instead supported by the Cambodian Red Cross or another agency?

PRACTICE

The following section will describe three different situations. **For each of the situations, can you explain what you would do, other than completing the data collection form, in terms of supporting the victim and their family?**

Situation 1

A father (age 37) and daughter (age 12) were injured on September 15th 2005 when the daughter stepped on a landmine. The daughter died after three days in the hospital, while the father lived although he lost one leg and injured the other. The family consists of a wife/mother (33) and three other children, all boys aged 4, 8 and 9. They make a subsistence living by farming in a minefield in Ta Taok village, Samlout district, Battambang province. They do not have any animals.

You as the Data Gatherer met the family one-week after the incident in the hospital and then again two months later in their village. Since the father was injured they have not been able to make a living and the hospital treatment left them with a big debt. He has not yet gone through any rehabilitation, and also has not received a prosthetic leg, cane or any other equipment.

Other than completing the data collection form, what, if anything, would you do in terms of supporting the victim (s) and their family?

Situation 2

A man (49), his wife (45) and their three children (age 16, 18 and 20) were traveling in Preah Vihear to visit temples. The whole family lives in Phnom Penh, where the father works as quite a successful businessman. Although they saw the mine signs, they still decided to walk off the path. The man was walking in the front, and stepped on a mine. As a result, he lost his right leg and had to be amputated above the knee. They returned to PP for private medical services. This is when you meet the man and collect your information. When you check up on him two months later, you learn that he received a prosthesis two months later from a rehabilitation centre. They are managing quite well and he has returned to work.

Other than completing the data collection form, what, if anything, would you do in terms of supporting the victim (s) and their family?

Situation 3

Three months ago, you met a man (39 years old) who had lost both legs due to a mine accident while farming in a minefield. He lives in mine-affected area. BTM province. He has a wife and seven children. Since the accident, he has been unable to support his family, and his two oldest children are no longer able to go to school as there is no money for their school fees. To pay for his surgery, they sold their land and house. They are now living in a tiny hut on the edge of the minefield. You had informed the man that he could go to a rehabilitation centre to receive help with learning daily activities and a wheel chair, and you had contacted one NGO in the provincial town that may be able to help the family with a house, and retraining for the man so that he may be able to support his family again. When you visit the family for the second time, you find that he indeed went to the rehabilitation centre, but that the NGO has not yet followed up with the family.

Would you do something? If so, what would you do?

Do you have any other comments or suggestions?

Thank you for your time. Your answers will help to make the CMVIS project even better than it already is

!

Appendix K – DG VA 2005

DGs Victim Assistance 2005								
DG's name	Province	Total # casualty		Casualty		Injury	Service provided	Current Partner NGO
				Sex	Age			
Kov Ping	Preah Vihear	**73**	1	F	47	double legs amputee	Household products (HHP)	CRC
			2	M	33	double legs amputee	(HHP)	CRC
			3	M	47	double legs amputee	(HHP)	CRC
			4	F	45	Polio	(HHP)	CRC
			5	F	44	Her husband was killed by UXO	(HHP)	CRC
			6	M	37	right leg amputee	(HHP)	CRC
			7	M	38	Injured	(HHP)	CRC
			8	M	32	Injured	(HHP)	CRC
Nguon Monoketya	Preah Vihear		9	M		died	(HHP)	CRC
			10	M		died	(HHP)	CRC
			11	M		died	(HHP)	CRC
			12	M		died	(HHP)	CRC
			13	F		died	(HHP)	CRC
			14	M	36	Injured	(HHP)	CRC
			15	F	35	Injured	(HHP)	CRC
			16	M		Injured	(HHP)	CRC
			17	M		died	(HHP)	CRC
			18	M	42	Injured	(HHP)	CRC
			19	M	25	Injured	(HHP)	CRC
			20	M	31	Injured	(HHP)	CRC
			21	M		died	(HHP)	CRC
			22	F	28	Her husband was killed by UXO	(HHP)	CRC
			23	M	41	Injured	(HHP)	CRC
			24	M	46	His nephews were killed by UXO	(HHP)	CRC
			25	M	37	His two brothers were killed by UXO	(HHP)	CRC
Ly Kim Heng	Siem Reap	**20**	26	M	38	left hand amputee	Artificial hand	PRC
			27	M	51	hand injury, left rib broken	(HHP)	CRC
			28	M	13	Injured	(HHP)	CRC
			29	M	?	Injured	(HHP)	CRC
			30	M	11	died	(HHP)	CRC
			31	M	58	died	(HHP)	CRC

DG's name	Province	Total # casualty		Casualty		Injury	Service provided	Current Partner NGO
				Sex	Age			
			32	F	13	Injured	(HHP)	CRC
			33	M	33	left leg amputee	Artificial leg	PRC
			34	M	41	Injured	(HHP)	CRC
			35	F	13	Full Body injured	(HHP)	CRC
			36	M	10	Full Body injured	(HHP)	CRC
			37	F	14	Left leg injured	(HHP)	CRC
Suos Bunthoeurn	Kampong Speu	**31**	38	M	27	died	(HHP)	CRC
Mok Chantha	Odor Meanchey	**59**	39	F	18	Injured	(HHP)	CRC, IFRC
			40	M	30	Injured	(HHP)	CRC, IFRC
			41	M	37	died	(HHP)	CRC, IFRC
			42	M	36	died	(HHP)	CRC, IFRC
			43	M	35	died	(HHP)	CRC, IFRC
			44	M	28	Injured	(HHP)	CRC, IFRC
			45	M	61	Injured	(HHP)	CRC, IFRC
			46	F	55	Injured	(HHP)	CRC, IFRC
			47	M	29	died	(HHP)	CRC, IFRC
Lim Sovanna	Kratie	**24**	48	M	42	Two eyes are blind and two hands were cut by UXO	(HHP)	CRC

Appendix L – HMA Interview Guide

Questions for HMA community

End-user Satisfaction

1. How would you describe the quality of collaboration your agency has with CMVIS?

2. Do you have any suggestions as to how better collaboration with CMVIS be achieved? What benefit would your agency gain from this?

3. To what degree does CMVIS currently meet your information needs as it relates to your ability to formulate strategy and decide on priority deployment? In what other ways does CMVIS information benefit your agency (monitoring, planning, funding proposals, etc.)?

4. How responsive and consistent has CMVIS been to your requests for specific information?

5. Have you provided feedback to CMVIS about their data in the past?

   If yes, what kind of suggestions did you make and did you see changes in the way CMVIS works?

   If not, does this mean you are always satisfied with the data?

6. Are you aware that CMVIS has a web-site? If yes, how often do you visit it?

Reliability of CMVIS Data

7. In your opinion, how reliable is the CMVIS information? Can you give a percentage? Indicate top ten categories for reliability check.

8. In your opinion, what are current strengths of the information provided by CMVIS?

9. In your opinion, what are current weaknesses of the information provided by CMVIS?

10. How much do you use the 'Distance of accident site from' data (category 4 in the CMVIS data collection sheet)? How accurate do you need this information to be: within 100 meters, 500 meters, or 1000 meters?

11. Can you think of data sources with which CMVIS could cross-reference data?

12. Do you have any suggestions for improving the deployment scheme of CMVIS Data Gathers and volunteers?

Impact of CMVIS

13. In your opinion, has CMVIS maximized its possible humanitarian impact on mine action practitioners' work given its current activities? If not, how do you think the role of CMVIS can be expanded?

14. Should CMVIS be the agency that provides a meta-analysis of the data and make recommendations/statements based on this analysis? If not CMVIS, which agency?

15. One of CMVIS' goals is to provide mine victim assistance by acting as a referral source. In your opinion, how is CMVIS performing in this regard?

Future of CMVIS

16. How would your agency respond if CMVIS were to implement a pay-for-service subscription system as a way to raise funds for its operations?

17. If CMVIS were to ask whether your agency would be willing to contribute a staff person to investigate and develop new funding avenues, would your agency be interested?

18. Would you be willing to contribute financially to CMVIS?

Do you have any other suggestions?

Appendix M – Special Requests 2005

Special End-User Requests 2005		
Nº	**Agency**	**Number of requests**
1	CMAC	21
2	CMAA	14
3	HIB / MRT	11
4	UNICEF	10
5	MAG	9
6	NPA	8
7	MAPU	6
8	Halo Trust	5
9	JMAS	5
10	JSC	5
11	World Vision Cambodia	4
12	AUSTCARE	3
13	Cambodian Volunteers for Community Development	2
14	CMC in Japan	2
15	Ministry of Education, Youth & Sports	2
16	National Institute of Population	1
17	Social Affairs, Labor Vocational Training & Youth Rehabilitation Department	1
18	Provicial Action Mine Comity	1
19	Royal Agriculture University	1
20	United States Embassy	1
21	MPWT	1
22	CRC	1
23	Goe Special (Mau Vanna)	1
24	AFP Reporter	1
25	Ngoun Monoketya (to keep archives)	1
	Total	**117**