

UNICEF's External Evaluation: Introduction and Justification

This external evaluation of Unicef-supported activities to prevent mine incidents is conducted under the supervision and on the request of the **Children Affected by Armed Conflict (CAAC)** project within Unicef's Advocacy, Planning and Support (APS) programme.

Unicef first started assisting mine victims as part of its support to disabled persons in 1992, but direct support of mine action activities began in 1994 and have increased over the years toward the more comprehensive multi-action support of the present situation where Unicef supports a range of programmes that include, mine clearance, mine field marking, mine incident data collection, mine awareness education, integrated database support and mine victim assistance through various different agencies.

Activities presently supported under the CAAC project and that are evaluated in this report are:

- **Community Mine Marking with the Cambodian Mine Action Centre.**
- **The Cambodian Mine Incident Database with the Cambodian Red Cross and Handicap International.**
- **Mine Risk Education with the Mines Advisory Group and World Education (as of July 2000).**
- **The Integrated Mine Database with the Cambodian Mine Action Centre.**

Unicef Cambodia also have a wider policy of development and assistance (health, education and community development) in mine -affected areas that goes beyond 'accident prevention' objectives. They play a role of co-ordination of implementing agencies as well as a funding source.

The juncture between the present UNICEF Country Programme (1996-2000) and the following planned country programme (2001-2005), the decline in mine incidents, the ratification by Cambodia of the Ottawa Convention banning anti-personnel landmines all contribute to the justification for conducting an external evaluation at this time. An extensive Terms Of Reference was prepared for this evaluation. The resulting report respects the format and depth of the TOR and has covered all identified issues.

The evaluation and this report were conducted and compiled by two external consultants, Christopher Horwood (Team Leader) and Andrea Crossland during June and July 2000. The findings of the final draft were presented to representatives of the partner agencies on the 26th July before final publication of the final evaluation report.

The evaluation team recruited 3 Cambodian teams members to assist with all field research in Battambang, Bantay Meanchey and Siem Reap. In each province the local Ministry of Education attached 2-3 of its staff to the team to assist the village survey work and gain experience of evaluation process for themselves. An extensive number of agencies and representatives were contacted as part of this evaluation, who are listed as part of Annex A. Their invaluable assistance during the evaluation was very appreciated, as was the direct supervision and assistance of the CAAC project officer.

The methodology used was based on direct observation, site visits, village interviews, data analysis, individual interviews and review of documentation. The evaluation of the Mine Risk Education project was based on the above with added emphasis on multiple questionnaires in target and control (non-target) villages. Team member Andrea Crossland took specific responsibility for the development, implementation and analysis of these questionnaires and the evaluation of the Mine Risk Education project. The specific methodology used for this section of the report is explained in more detail in section 3 of the report.

Executive Summary of External Evaluation

An interesting pattern emerges from the evaluation of the 4 mine action interventions that Unicef Cambodia are involved in. Unicef has been actively supporting, influencing and funding a comprehensive package of interventions, some of which are highly effective. The evaluation focused on the specific projects listed below but Unicef has a wider strategic involvement in mine action through its long-term support of disability organisations and community development assistance in mine affected areas. In addition to these, Unicef Cambodia has been involved with the international campaign (to ban landmines) through its funding of conferences in Cambodia and support of the Ottawa Treaty and its implementation.

Through their funding of Community Mine Marking (CMAC) Unicef supports minefield marking and limited clearance in high-risk, high prioritised locations in the north-west of Cambodia. This evaluation shows that the work of these 12 'marking teams' is targeted and cost efficient while maximising benefits to the affected communities due to the limited nature of their clearance. This is in stark contrast to the other demining / clearance units of CMAC which focus on large clearance sites, are inflexible in responding to changes in requirement and which are logistically and administratively cumbersome.

Through their funding of Mine Risk Education in schools (initially through the Mines Advisory Group but now continuing through World Education), Unicef is contributing to what will become a sustainable and formalised mine awareness programme in numerous school clusters in the most affected provinces in Cambodia. The evaluation reveals problems with selection of schools, the issue of non-school attending children and the quality of teacher capacity (in terms of time available and materials) but the project is at a relatively early stage and the findings of this evaluation, if applied, should assist World Education to provide an important contribution to mine awareness through the curriculum. However, the link between mine awareness and actual impact on children and their risk-taking behaviour is still unknown. Despite the availability of important data this evaluation was not able to establish a correlation between mine awareness and incident reduction.

Through their support of the Mine Incident Database (CRC / HI), Unicef is funding a most important development which they first began in 1994 in partnership with MAG. The development of a national database which charts, in detail, the changes in monthly accident rates throughout the country is the first of its kind globally. Additional information collected through the victim questionnaires provided important keys to understanding the dynamics of how and why certain groups and communities in Cambodia continue to sustain mine accidents. The situation is not straightforward and this database provides an excellent tool for analysis, evaluation and more importantly strategic planning through prioritisation. However, this evaluation identifies ways in which the programme can be up-graded and how CRC/HI (with Unicef) can encourage a wider and fuller use and application of the database. It is already having a positive impact and contribution to the mine action sector but its potential could be far greater.

Unicef have also been supporting the CMAC integrated database for some years. This evaluation recognises the importance of such a database and commends Unicef's support in bringing the database up to its current level of technical capacity and sophistication. However the evaluation is critical of the minimal use made by CMAC managers and departments of the database and the general poor use of verifiable data within the organisation. The integration of various different forms of data has made the CMAC database a potentially powerful tool for planning, monitoring and evaluation, but requires a different level of political and managerial *will* from within CMAC if such potential is to be realised.

The evaluation examines the above projects and find that Unicef's involvement is comprehensive insofar that it is involved with the central national agency in Cambodia (CMAC) through funding of marking and clearance, and involved with mine awareness and data-collection through mine action NGOs (HI, CRC, MAG). In addition to this the involvement of Unicef results in a strong degree of synergy with the data from the Mine Incident Database (MID) directly supporting and informing the planning and deployment decisions of mine awareness as well as

mine marking and limited clearance tasks. Equally the data from the MID is an important component of the integrated mine database of CMAC. The MID was also an important tool during this evaluation study.

The evaluation stresses that much of mine action operates on an unverifiable assumption that current interventions are directly beneficial to mine affected communities. This is not an unreasonable assumption and certainly mine action does not add to the threat in any way. However, in terms of verifiable indicators and direct correlation between mine action and reduced statistics no linkage could be made. The tools used at present are not precise enough to indicate these linkages (if they exist) as there are many other factors affecting the context where mine affected communities live, and where mine incidents occur.

The overall statistics indicate that there is a strong and sustained decline, nationally, in the number of mine incidents occurring. This is an extremely positive trend which must not obscure the fact that tens of thousands of people continue to be affected directly by land denial. The massive need for land clearance continues. Equally despite declines there remain hundreds of thousands of mine victims in Cambodia who require on-going wide-ranging assistance. In this regard the evaluation finds that Unicef's involvement since 1992 with disability agencies and the government ministry (MoSALVY) another element of a comprehensive, reinforcing approach to mine action in the wider meaning of the word.

In recent years Unicef Cambodia has made high profile and wide-ranging contributions to the mine action sector in Cambodia. It enjoys a good reputation for both the monetary inputs and the advice it gives as a partner agency. Despite the many detailed findings, critiques and project specific recommendation that this evaluation makes, it must conclude that Unicef's contribution is currently relevant, effective and adds value to the mine action sector, disproportionate to the cost that the programmes entail. This evaluation endorses the current strategic direction of the CAAC in this regard and would encourage Unicef to consider enlarging its contribution in the areas specifically identified in this report..

1. Community Mine Marking: Implemented by CMAC

Unicef has been supporting this project, implemented as part of the strategic operations of Cambodia Mine Action Centre, since the project's inception in March 1997. Unicef has supported the project with successively increased financial contributions over the years and has come to regard Community Mine Marking as an effective and successful activity contributing to lower accidents and deaths from mines in rural north-west Cambodia. The project has not been externally evaluated, by Unicef or other agencies, since it began in 1997. CMAC monitor and audit the project as part of their internal monitoring and quality assurance procedures. The first and last CMAC audit was conducted in December 1999.

1.1 Evaluation of Impact

This evaluation seeks to assess the direct impact of the Community Mine Marking (CMM) activities as set against their stated objectives and goals. It will also evaluate the impact of its activities in terms of secondary or indirect benefits and related issues considered important by the evaluation team. Before considering the level of impact of CMM this evaluation will review the level of achievement attained.

1.1.1 Achievement; set against stated aims, goals and objectives

In the 1997 initial Project Document no aims or goals of the project are expressed; instead five objectives were stated with indicators for measuring the achievement of these objectives. The objectives were:

- A. Accelerate the marking process
- B. Provide a recognisable and more permanent warning of mined areas to the community.
- C. Raise the level of responsibility within the community as to the importance of the permanence of mined area marking.
- D. Assist in raising the level of awareness as to the potential mine/UXO threat.
- E. Support on-going demining operations by providing accurately marked and recorded mined areas.

The 1997 Project Document from which the above objectives are quoted appears to be the only such document developed between Unicef and CMAC. Since early 1999 though to the current date all documentation relating to the CMM project (proposals, internal reports, strategy papers, information papers etc) states that the specific aim of CMM was (and is) to **'contribute to a maximum long-term reduction in mine/UXO -related accidents in Cambodia'**. Alternatively, and more recently CMAC stated that the 'mission' of CMM is to **respond to the emergency need in the community, especially to the movement of IDPs, returnees and in support of community development projects.**¹

The **activities** pertaining to the CMM project identified to specifically achieve these wider objectives are listed as:

- Village Risk Assessment (Also known as Village Survey)
- Long Term Marking
- Limited Clearance Tasks

These activities also contain all the five objectives from the 1997 Project Document as part of their strategy and logic for intervention.

The intended **methodology** can be summarised as using groups of small, and locally deployed, community marking teams using a combination of interventions comprising risk assessment, limited mine/UXO clearance, marking of the risk environment, awareness education and community participation. The CMM project intention is to conduct interventions according to the following priorities: in response to planned risk assessments, in support of CMAC demining units operations and in response to district and provincial requests.²

¹ Briefing paper prepared by CMAM Mine/UXO Awareness Branch for this evaluation.

² Summarised from 1999 Project proposal document for Community Mine Action Project. Unicef.

CMM project documentation claims that it is an ***effective method of reducing casualties and daily risk-taking in high-casualty communes until comprehensive clearance can take place.***

The spirit of Unicef's interest in CMM in its capacity to assist communities directly affected by mines and UXO and therefore this evaluation will focus on the aims and objectives that express this intention rather than the five objectives listed in 1997 (above) which poorly express the overall aims of the project.

Specific quantitative achievements:

Between April 1997 and June 2000 (inclusive) the CMM project has conducted 174 **risk assessments / village surveys**. In Bantay Mean Chey province 84; In Battambang Province 90.

Between April 1997 and June 2000 (inclusive) the Community Marking Teams (CMTs) have established **long terms marking** in 132 locations. 57 of these in Bantay Mean Chey: 72 in Battambang and 3 in Pailin. These interventions utilised approximately 22,000 concrete markers and required the clearance of over 700,000 meters squared. (The CMTs clear safe lanes around the perimeters of areas to be marked: these are not 'cleared areas' but cleared lanes, normally of 1-1.5 m width, in order to set the markers in place.)

Between April 1997 and June 2000 (inclusive) the CMTs performed 163 **limited clearance** tasks, considered emergency tasks, in response to local requests, requests from the UN or NGOs operating in the local areas or part of the CMM planned and assessed work plan. 26 of these tasks were conducted in Bantay Mean Chey, 130 in Battambang and 7 in Pailin.

April 1997-June 2000 Total activities.	Risk Assessment / Village surveys	Long Term Marking	Limited Clearance
Bantay Mean Chey	84	57	26
Battambang	90	72	130
Pailin	0*	3	7

*CMT used survey reports from CMAC Level Survey One instead of conducting their own.

Evaluation Findings:

A Risk Assessment / Village Survey: Evaluation Findings

- 1) **Risk assessment / village survey within the CMM is almost entirely *reactive* to requests from third parties. It is not the interactive information -sharing cycle that its designers hoped for³.** District authorities, local or international NGOs (and UN agencies) contact CMAC or CMM directly with requests for assistance in (limited) mine clearance and/or mine marking. One of the 4 CMT supervisors travels to the identified area to assess the problem and judge the resources necessary to undertake the task. The supervisor then reports to the CMM Field Officer (and Technical Advisor) who develop work plans that include or exclude the task based on a number of criteria. These criteria will not only concern the level of risk around the task and the number of casualties recorded in the area, but also administrative and logistical factors.
- 2) The level of community or village participation at the survey level is normally limited to their identification of mined areas and desired areas for clearance by the village or commune chief. The requests are normally generated by the district level authorities (village-level requests 'filtered' through the commune to the district authorities). With the recent establishment of the Land Use Planning Unit's District Working Groups it may be assumed that many more requests will be generated and directed to CMTs directly from the districts. However this will be a function of how well DWGs understand the different roles CMAC demining units (DUs) and CMTs can play in assisting their problems. The CMAC socio-economic officers who works with

³ As documented by the MUXOA Branch TA and the CMM TA in collaboration with their respective counterparts during 1998/9.

the LUPU needs to ensure the differences are understood better than they are at present. **The CMM project should not exaggerate the level of 'village participation' that occurs in this process.**

- 3) **The survey process has not been formalised and does not result in a survey report that is subsequently forwarded to CMAC Phnom Penh for database entry.** This is an indication of the relative autonomy the CMM enjoys in CMAC. It is also a missed opportunity for CMAC in so far that many of the areas surveyed by CMT supervisors are not known to CMAC as areas of risk, and more importantly, NOT all areas surveyed by CMM are subsequently cleared or marked. Presumably some other entity will one day repeat the effort of registering the area in the absence of a CMM survey report. CMM is also beginning to use CMAC Survey Level One reports instead of conducting their own. This is the case in Pailin at present. If this is a trend that is to continue it should be consciously instituted as an acceptable alternative rather than an undocumented, expedient shift in methodology. The level one reports have to be judged to be suitable substitutes for CMM's own risk assessment report.
- 4) **When working in agreement with an NGO or IO that requires repeated assistance with set tasks (i.e. the clearance of multiple sites for well-drilling) the CMTs do not conduct full risk assessments or surveys.** Instead they are directly tasked by the relevant NGO where to clear and mark. They still fill in a survey form prior to working but this appears to be a formality only. If the NGOs are working in 'affected district' this is considered sufficient justification for CMT to assist them without further assessment. This arrangement is working well at present but CMT should always maintain its own assessment criteria and independence.
- 5) It was noted that while the CMTs seek to work in the areas of highest risk and / or 'emergency' tasks their selection process did not utilise the data provided by the monthly Mine Incident Database (MI/CRC) beyond the district level. The database details trends and statistics at the commune level and on request can supply further detail at the village level. **Operating in a highly- affected district does not mean that CMTs are necessarily operating in a high-risk locality within that district. CMT could make more use of the CRC data in their risk assessment and socio-economic analysis .** If they do not they should at least be clear why they do not want to prioritise down to the village level.
- 6) Prioritisation of mine action is at best an imprecise science and this evaluation observed that current and past deployment of CMTs based on their internal non-formalised survey and selection process appears to have resulted in highly relevant tasks performed consistently in districts of highest contamination. **The impact, therefore, of the village survey / risk assessment activities as judged by the resulting selection of clearance and marking tasks is evaluated to be excellent and appears to have the potential to improve further as the LUPU/LUMU and CMAC socio-economic officers become more established and able.** To date CMM has not received requests through the District Working Groups and LUPU structure (in Battambang) but have in Bantay Mean Chey through the LUMU⁴. The non-formalised and hybrid nature of CMM's assessment and selection process is a weakness only in so far that CMAC as a whole does not benefit from their survey findings.

Findings summary: Risk Assessment / Village Survey

- 1) Village survey / risk assessment within the CMM is almost entirely *reactive* to requests from third parties. It is not the interactive information-sharing cycle that its designers hoped for.
- 2) The CMM project currently exaggerates the level of 'village participation' that occurs in this process.

⁴ This is judged to be a function of the fact that LUPU is concentrating on demining for resettlement and not emergency demining as well as the general ignorance within LUPU of the different mine action responses that CMAC and MAG can offer. LUMU understood the differences more clearly.

- 3) The survey process has not been formalised and does not result in a survey report that is subsequently forwarded to CMAC Phnom Penh for database entry.
- 4) When working in agreement with an NGO or IO that requires repeated assistance with set tasks (e.g. the clearance of multiple sites for well-drilling) the CMTs do not conduct full risk assessments or surveys.
- 5) Operating in a highly- affected district does not mean that CMTs are necessarily operating in a high-risk locality within that district. CMT could make more use of the CRC data in their risk assessment and socio-economic analysis
- 6) The overall impact, of the village survey / risk assessment activities, as judged by the resulting selection of clearance and marking tasks is evaluated to be excellent and appears to have the potential to improve further as the LUPU/ LUMU and CMAC socio-economic officers become more established and able.

B. Long Term Marking Activities: Evaluation findings

- 1) Long term marking is conducted to encourage desired behaviour (i.e. the use of the cleared/marked areas) and provide communities with options towards a safer living environment. It is conducted in high-risk environments. In so far that long term marking includes limited clearance of paths and tracks to provide safe passage, the differentiation between limited clearance tasks and long term marking is tenuous. Many of the areas listed as having received *marking* activities also benefited from limited clearance as part of the marking process, but which is not reported as part of the limited clearance achievements. In this regard the evaluation found that the CMM project only reports its marking activities in terms of numbers of meters cleared to place the markers (i.e. the 1-1.5 m strip cleared in order for the markers to be put in place). **When the clearance associated with placing markers actually includes the clearance of paths and tracks (which are not recorded as limited clearance tasks) then CMM is under-reporting the extent of its assistance to communities.**
- 2) **The name of the CMM project and the function of 'mined area marking' is misleading.** The objective of marking activities is not to mark where mine fields start or stop but to indicate to the villagers, and those passing through villages, where they can be sure to pass safely. It is in fact 'safe area marking'. The TA has attempted to change the name of CMM to Community Mine Action, and CMAC is currently seeking new donor support (from the Japan and USA) under the name of Integrated Mine Action Team Project for the same concept of CMM with additional integration of mine/UXO awareness and EOD teams. While the name is misleading the functions and uses of CMM have also altered as the teams spend more and more time involved in limited area clearance and less in purely marking functions (further discussed below).
- 3) In all villages visited⁶ where CMM concrete markers had been placed the evaluation team questioned members of the local community concerning their understanding of the marking system. **The vast majority of adults and children questioned understood, clearly, the meaning of the concrete markers.**⁶ This is not surprising as they conform in colour and design to conventional mine marking signs used since 1992 throughout Cambodia and their intent is self apparent. **However, in all areas visited, and despite people's understanding of the markers, local population lived, farmed, grazed and transited areas marked as unsafe and mined. i.e behind the CMT markers.** (Numerous photos of this fact were taken for this study and accompany the final report). In all locations visited local population clearly knew they were operating in mined areas and demined it themselves as required or as they came across mines in their daily activities.⁷

⁶ In Bantay Mean Chey and Battambang a total of 32 sites were visited. Adults and children were informally questioned during the visit.

⁷ Annex a briefly lists villages and communes visited for this study. Predominantly, highest risk areas.

They expressed fear but that economic and social necessity was an over-riding factor that gave them no other option.

- 4) Further examination of this reality (called 'village' demining or 'spontaneous' demining) was not within the scope of this evaluation but it raises some difficult questions as to the benefit and relevance of marking *without any clearance* in a highly contaminated area.⁸ Some areas visited were a confusing jumble of multiple mine signs (CMAC survey teams) and CMM concrete markers (some up-right and other flat on the ground) while the people lived and worked in all the areas whether marked or cleared. Despite appearing chaotic and somewhat absurd it was noted that the local population normally expressed appreciation for whatever marking and clearance CMM (and CMAC) had conducted and furthermore these areas where often those where rates of injury and death have been reducing. The assumption is that this decline follows mine action intervention. (Possible exaggerated ; see next section concerning Impact).⁹ In other villages houses built by resettled families were all located precisely in the areas marked by CMM as *not cleared* and *dangerous*.¹⁰ What use these markers serve in such a situation? In the absence of an alternative suggestion for marking strategy, and in the face of declining incident statistics and community appreciation this evaluation cannot criticise the current approach. **However, it does question whether resources used for marking (without clearance) would not be better used for small task clearance (with subsequent) marking.** (According to activity data, this appears to be an evolution CMM is making already, but more for expediency than as a result of specific strategy.)

- 5) Marking is executed using short concrete posts reinforced with wood or bamboo; a painted red/white scull symbol in a square at the top of each post. In all locations visited, where markers had been placed within the last years, the markers were apparent, undisturbed and not vandalised or stolen. Occasionally a marker had been damaged or fallen over but this was rare. In areas where CMM had conducted work during 1997/8 the markers were damaged, removed or vandalised. In both cases (old and recent tasks) markers had been removed by CMAC deminers and village deminers when they had cleared areas adjacent to the concrete markers. In these case the posts had been removed and laid against trees or flat on the ground. **Nevertheless, CMM have successfully identified a marking system that is of no significant value to villagers or where the value of the marker as a warning out-weighs its material use.** But the lack of value is also why many of the markers lack the strength to survive the elements, earth movements and human contact longer than 18 months (sometimes much less). CMM benefits from the overall increase in mine awareness in Cambodia for mine clearance posts, markers, tapes and posters. The contrast between 2000 and 1996, for example, in respect to theft and vandalism of materials and markers is striking, and positive.

- 6) The December 1999 Quality Assurance audit of CMM by CMAC indicated that some mismanagement and possible fraud was occurring with regard to the manufacture and issue of concrete posts. Despite the repeatedly stated intention of the project to manufacture the posts with community participation this does not occur. The posts are contracted out for manufacture in nearby market towns. It is assumed (by the TA) that apart from the logistical ease of such an arrangement it offers an opportunity for a 'commission' to be extracted for the CMAC staff (logistics department) who oversee purchase of markers. The painting and setting of post is conducted by paid casual labour from the village. This can hardly be described as 'community participation'. **Instead of criticising CMM for their failure to involve the community in this respect this evaluation suggests that future CMM proposals avoids mention of post manufacture as an element of community participation.** The community should however be more involved in the initial

⁸ Handicap International intend to conduct a national survey in the second half of 2000, to document the extent of the practise of village demining.

⁹ This paragraph refers to visits in Samlout and Bavel District in Battambang. Nimit in Bantay Mean Chey.

¹⁰ Observed in Reksme Sangka commune in Bavel, Samlout district & Salau Krau in Pailin.

selection process and awareness issues concerning the markers and other mine/UXO awareness messages. (further discussed under Operations).

Findings summary: Long Term Marking Activities

- 1) When the clearance associated with placing markers actually includes the clearance of paths and tracks (which are not recorded as limited clearance tasks) then CMM is under-reporting the extent of its assistance to communities.
- 2) The name of the CMM project and the function of 'mined area marking' is misleading
- 3) The vast majority of the adults and children questioned understood clearly the meaning of the concrete markers. However, in all areas visited, and despite people's understanding of the markers, local population lived, farmed, grazed and transited areas marked as unsafe and mined. i.e *behind* the CMT markers.
- 4) The evaluation questions whether resources used for marking (without clearance) would not be better used for small task clearance (with subsequent) marking.
- 5) CMM have successfully identified a marking system that is of no significant value to villagers or where the value of the marker as a warning out-weighs its material use.
- 6) Instead of criticising CMM for their failure to involve the community in respect to marker manufacture this evaluation suggests that future CMM proposals avoids mention of post manufacture as an element of community participation.

C Limited Clearance Tasks: Evaluation findings

- 1) This evaluation considers the limited clearance (with permanent marking to delineate the limits of the cleared areas) **achievements of the CMTs impressive in number, and relevance in terms of priority, and synergy** with rehabilitation and/or development agencies. 163 tasks have been completed, all in response to direct requests.
- 2) **When conducting limited clearance CMTs act as a *de facto* 'mobile clearance team' with a strong marking capacity, targeting high-risk areas in critical districts of Battambang and Bantay Mean Chey.** CMAC have been planning to develop mobile clearance teams of 33 men (MAGs mobile teams are 15 men while CMTs are 5) since 1995 but to date none have been established. The CMAC demining units are large, unresponsive, admin-heavy interventions with long-term work plans and deployment schedules. To date the 12 CMTs offer the only light-weight mobile clearance capacity in CMAC, and are increasingly utilised in this capacity.
- 3) **The use of CMTs as mobile clearance teams does not directly conform with the 1997 Project Document objectives and subsequent project proposals, but can only be commended for their results.** They have conducted over 163 limited clearance tasks directly in response to district requests or in close co-operation with rehabilitation and development agencies. Typically these limited tasks include, among others, clearing areas for well-drilling (44 tasks), clearing road to create safe access to water/reservoirs (53 tasks), clearing areas for school construction (13 tasks), and clearing areas for health posts (3 tasks). CMTs liaise directly with agencies including UNHCR, WFP, UNDP, CARE, ANS, ZOA, JSC, Peace Boat, ILO, CFDS, Emergency as well as local authorities. Most of the above agencies and various local authorities were questioned for this evaluation. **The consensus was that CMTs performed a valuable and timely service in a highly responsive and professional manner.** For most this was a unique

experience when dealing with CMAC due to the organisation's reputation for centralised bureaucracy and slow, if any, response to urgent, and smaller requests.

- 4) 'Limited clearances' are, however, exactly that. The CMTs facilitate activities (access to land or water) or interventions (well drilling) far greater than the significance of the area of land cleared in terms of meters. Normally conducted in areas of high contamination the areas cleared by CMTs are marked with permanent markers indicating that surrounding land remains contaminated. In all marked areas visited local people were actively using the land marked as *not cleared* or *dangerous*. **Limited clearance therefore is by no means a substitute for full scale clearance and at best acts as a facilitator for other intervention or as a 'damage limitation' and 'risk reduction' assistance in an otherwise high-risk environment.** This evaluation will discuss the issue of Impact below, but clearly CMTs' work cannot have a wide impact on a population living in a contaminated area, although its contribution towards a safer environment is significant. **Care must be taken to ensure that CMTs are not used to clear large areas (greater than 5,000m²-10,000m²) as their efficiency is immediately compromised as a result.**

- 5) Since its inception in 1997 CMM has evolved from being a unit with a strong 'marking' objective to a strong 'limited clearance' (with marking) objective. From a justification that highlighted survey and marking to the current justification that highlights emergency tasks to reduce incidents in high risk areas. It appears that while this evolution has taken place the role and style of permanent markers has remained the same. They are always used in CMT tasks irrespective of the context¹¹This raises some questions for the evaluation. MAG and HALO trust (as well as regular DU teams of CMAC) do not delineate the perimeters of areas which they clear. Some of MAG's work in particular with their Mine Action Teams of 15 men and 7 detectors) is identical to limited clearance tasks undertaken by the CMTs. However they do not leave permanent markers to indicate to communities that the areas outside of the task may be dangerous and un-cleared. In an area such as Samlout (Battambang) MAG and CMM worked on similar tasks (e.g. well clearance) within the same commune. It seems appropriate that agencies use the same marking systems. **Either CMT needs to review why they use permanent markers or MAG and other clearance agencies should review why they do not use markers when they conduct limited clearance in contaminated areas.** It may be noted that even when DU teams stop clearing in larger areas they have not necessarily come to the end of a minefield but often terminate the clearance for strategic or financial cost-efficiency reasons. Again, the areas beyond where they have cleared are not marked as being un-cleared or dangerous. This evaluation is not advocating one system or another but is flagging an apparent 'double-standard' that should be addressed.

- 6) In their capacity to act as *de facto* mobile teams, and less for their marking capacity, the CMTs are valued by CMAC senior managers. In the field the Demining Unit managers (DU1 & 2) expressed strong desire to maintain CMTs in order to respond to the many small scale clearance requests they receive from NGOs and local authorities. The DU2 manager recognised that they were being used as mobile teams: However he suggested that they be maintained once CMAC mobile teams were established (expected in 2001) because the CMTs conduct limited clearance up to 5000 m², whereas CMAC intend to task mobile teams to clear areas up to 3 or 4 hectares. At the CMAC HQ (in PNP but especially the demining unit managers) the CMTs were appreciated for their effectiveness in dealing with small requests and the popularity and visibility they give CMAC at a time when the organisation badly needs some positive press. They also recognise that CMM is popular with donors and a potential fund-raising mechanism. (Ref: current interest to fund Integrated Mine Action Teams-IMATs). **The evaluation finds that CMM enjoys a positive reputation, for all the**

¹¹ An unique interesting exception to this was found at a site completed in 1998 in Yeay Out Village, Nimit Commune, O'Chrov District. The task was to clear a mined military post in a NON-mined village in order to build a school and give access to water. Markers were not left as the context was known not to be mined and they would serve no intelligent purpose. The Supervisor involved (Som Bunrith) did this on his own initiative, but wants to urge CMM to rethink its almost indiscriminate use of permanent markers.

reasons listed above, within CMAC, with development agencies and with local authorities (district and commune).

- 7) Since 1997 CMTs have been conducting a successively increasing number of limited clearance tasks in contrast to marking. In quantitative terms (of meters squared) the ratio was, in 1997, two to one in favour of marking. In 1999 the ratio 1.65:1 in favour of clearance. In the first five months of 2000 the ratio is 2:1 in favour of clearance work. If this trend is to continue **the CMTs need to consider increasing their efficiency as limited area deminers/mobile teams because the current team size of 5 staff with only 2 detectors active at any one time means they are more suitable for very small tasks.** This evaluation observed teams of CMM operating in areas up to 5000 m² in size . This point will be covered in more detail under Operations.
- 8) There is a difficult moral issue that faces CMM as well as other mine clearance programmes. If CMM are used to open mined areas by clearing a specific 'bottleneck', such as a bridge or short access road, can it be said to encourage communities to access mined areas. **In the case of high land pressure and where IDPs or refugees need to settle on any land available and who are willing to take risks in the process, CMM may directly facilitate access to mined area which they cannot clear.** In specific cases looked at in this evaluation the CMM considers itself to be making somewhat safer a process that was taking place anyway...i.e. the de facto settlement of high-risk areas by IDP populations.¹²This evaluation raises this issue for further discussion between Unicef and CMAC but cannot recommend a solution. Possibly certain guidelines need to be established in such circumstances.

Findings summary: Limited Clearance Tasks

- 1) The achievements of the CMTs are impressive in *number, relevance* in terms of priority, and *synergy* .
- 2) When conducting limited clearance CMTs act as a *de facto* 'mobile clearance team' with a strong marking capacity, targeting high-risk areas in critical districts of Battambang (including Pailin) and Bantay Mean Chey.
- 3) The use of CMTs as mobile clearance teams does not directly conform with the 1997 Project Document objectives and subsequent project proposals, but can only be commended for their results. The consensus is that CMTs perform a valuable and timely service in a highly responsive and professional manner.
- 4) Limited clearance is by no means a substitute for full scale clearance and at best acts as a facilitator for other intervention or as a 'damage limitation' and 'risk reduction' assistance in an otherwise high-risk environment. Care must be taken to ensure that CMTs are not used to clear large areas (greater than 5000m²-1000m²) as their efficiency is immediately compromised as a result.
- 5) Either CMT needs to review *why* they use *permanent* markers or MAG and other clearance agencies should review why they do *not* use markers when they conduct limited clearance in contaminated areas.
- 6) The evaluation finds that CMM enjoys a positive reputation within CMAC, with development agencies and with local authorities (district and commune).
- 7) The CMTs need to consider increasing their efficiency as limited area deminers/mobile teams as the current team size of 5 staff with only 2 detectors active at any one time means they are only suitable for very small tasks.

¹² A dramatic example of this was seen at O Bei Chan Commune where 3 CMT teams had worked in 1999 (for NPA) opening over 5 km of road up to the Thai border. Numerous families used to road to immediately access the area and build houses in mined land (K5 mine belt) directly behind CMM permanent markers. This commune has one of the highest incident rates in Cambodia.

- 8) In the case of high land pressure and where IDPs or refugees need to settle on any land available and who are willing to take risks in the process, CMM may directly facilitate access to mined area which they cannot clear

1.1.2 Impact; set against stated aims, goals and objectives

The overall impact of CMM in reducing injuries and deaths and contributing to CMAC's target of zero incidents is the major question facing this section of the evaluation. This will be discussed below, following a short discussion of secondary or complimentary impacts.

A. Increased Awareness:

When CMTs work in a village area conducting marking , limited clearance tasks or both they have an impact on the level of mine awareness at two different levels:

- Firstly, by establishing the urgent requirements with village representatives ('local participation') and then by setting in place the permanent markers, villagers cannot fail to be aware of what is taking place. With on-going dialogue between the village and the CMTs during the task and finally with a clear demonstration to village leaders of the perimeter of the marked area, the CMTs emphasise the function of the markers and the need to maintain them.
- Secondly, **there was strong evidence in all locations visited that the CMAC mine/UXO awareness teams (conducting both village presentations and house-to-house visits) had visited the villages before, during or after the CMTs' work.** This can be confirmed by examining the matrix in annex D. When these awareness teams work in the vicinity of CMTs they emphasise the messages concerning the role of the markers and their importance to the community. This is evidence of the increased integration of mine/UXO awareness and CMT (in terms of teaching content) that is cited as an objective of both this project and the forthcoming Integrated Mine Action Team project. The evaluation also noted that CMAC sponsored TV 'spots' are regularly seen on local television with specific spots relating to mine markers and their maintenance. Few villagers, however, have access to television.
- It could be argued that the awareness teams of CMAC, MAG and World Vision (MATT) are already roving the villages systematically in high-risk areas and therefore this has little to do with the presence of the CMM project. **The evaluation did find evidence that the CMAC awareness teams directly co-ordinated with CMM in order to coincide in areas that they would otherwise not have visited.** As CMM and CMAC awareness teams are supervised and directed by the same CMAC Branch there is little reason for this not to be the case and for such integration to increase.
- Nevertheless one of the direct impacts of CMM intervention (with or without CMAC awareness teams) is raised awareness for villagers of their own environment. How positive this impact is to the community is questionable. **It is unproven that increased mine awareness has any impact upon numbers of casualties in specific areas. To date it is an assumption, one which this evaluation is unable to substantiate.** A dissenting perspective could suggest that it is of little use to alert villagers that the area they have to use for living and working is mined when CMM *cannot* provide resources to clear the land.

B. Facilitation of rehabilitation/development activities:

- **It is clear that the impact of many of CMM's limited clearance tasks have directly facilitated NGOs and IOs to perform activities linked to rehabilitation and development.** These tasks have normally been discrete, small tasks clearing areas for wells sites, schools or clinics. The CMTs have worked closely with Action Nord Sud, Deep, CARE, UNHCR in Battambang during 1999 and 2000 to clear and mark sites for drilling of 44 wells in high-risk environments. Not only does the provision of clean water through wells meet the essential living needs of surrounding communities but in many cases it offers a safe option for water collection in an environment where people exposed themselves to risk by collecting water in high-risk environments. The movement of population in high-risk areas is one of the primary reasons for mine incidents according to the HI/CRC mine incident database. Perhaps it is a weakness of the mine incident report form that it does not itemise 'water collection' as an identified activity. Current data indicate that 54% of all incidents occur as people are involved in activities concerning 'livelihood' including movement to collect water (reporting year May 1999-April 2000).
- NGOs/agencies were asked what they would have done without the assistance of CMTs. The response is that they could not have implemented their programmes. Demining was not a luxury but critical to the process. Agencies also reported that their workers would refuse to work in areas that had not been cleared and marked. **It should be noted that in over 95 % of all tasks undertaken CMTs located and destroyed mines and UXO.** This point is made to illustrate that they operate in known high-contamination areas and are not being deployed merely for area verification tasks.
- The CMTs worked with ILO, ZOA, NPA, JSC and local authorities in Bantay Mean Chey to conduct limited clearance of roads and access areas. These tasks enabled agencies to access areas and open area for rehabilitation and development projects. The clearance tasks were strategically targeted to maximise benefit for resettlement. There is strong evidence that mined access routes not only deny farming land and living areas but also require local population to construct detours and deviations that often lead them through mined or unknown areas. Again the HI/CRC data is clear that a large %age of accidents occur during transit and travel. (May 1999-April 2000; 16% of national incidents were during travel, with women affected as much as 35% in this category) . **It must be assumed that the impact of these tasks is significant even if their direct benefit to a quantifiable number of people cannot be measured.**
- **CMM activities were conducted almost entirely at the request of local authorities throughout 1997/8. Only during 1999 and 2000 did CMTs begin to operate in close co-operation with NGOs and IOs.** This was a direct result of the dramatic political changes in certain districts that enabled agencies (including CMAC) to operate in previously closed conflict areas. It is also an indication of agencies' increased understanding of the role and availability of CMT as a special agency within CMAC. CMTs share a similar role to the Mine Action Teams of MAG and Halo Trust teams that frequently deploy teams following requests from development NGOs to assist with small clearance tasks.

C. Eliminating risk from essential community facilities:

A large amount of CMT's tasks involve direct response to requests from local authorities concerning essential community facilities such as water sources, schools, main access routes or limited residential areas. (Annex C lists all tasks undertaken by CMM since 1997.) In such cases where the facilities are used by the whole community, the whole village benefits and CMTs' work is of high impact. The impact does not, and cannot change the fact that the community may be living in a contaminated area but certain essential communal needs are rendered safe through limited clearance and permanent markers. In 3 cases such clearance tasks have also included pagodas. **The evaluation was unable to measure the precise impact on affected communities of CMTs work.**

The execution of marking and clearing tasks requested by local authorities and NGOs enables CMM to fulfil one of its non-formalised but clear objectives; to respond to emergency needs in high-casualty areas through synergy with development agencies.

D. Contribution to the reduction of death and injury and towards zero incidents.

The overall impact of CMM in reducing injuries and deaths and contributing to CMAC's target of zero incidents is a major issue for this evaluation. It has been claimed by some documentation in CMAC, and quoted by Unicef, that the work of CMTs in particular areas has directly led to the reduction of incidents.¹³ It has also been implied in certain reports from CMM, although with warning *caveats* and qualifications pointing to the *joint* impact of various different mine intervention in an area and not just the impact of CMM.

Making a direct correlation between the work of CMM and incident reduction is hazardous due to the wide range of interwoven factors that prevent a clear linkage being established. **Salient factors to be considered in this context are:**

- Different forms of mine action in terms of mine awareness education and survey, marking, EOD mobile teams and mine clearance have been conducted in numerous areas of north-west Cambodia since 1992. Although mostly not co-ordinated together the net effect has been a considerable investment of multi-faceted mine action intervention.
- Although there are some locations that have received *only* mine awareness there are no locations that have received CMM intervention without mine awareness. Many areas have received multiple visits of mine awareness from different agencies over the years.
- A village is not necessarily a small area. CMM tasks are small and, at best, clear very limited areas, or mark a minority of any village. Villages do not have accidents in one part of a village but in wide areas often some distance from their living areas (if they did have accidents in a specific defined area they would be sure to avoid it). Presenting CMM as having a pivotal effect in a village in terms of reducing incidents is misleading. As discussed earlier it offers 'safer options' and offers valuable 'damage control' but cannot eliminate risk completely.
- In many areas settled communities have been living with mines and UXO for many years and have either activated (stepped on) the most prominently placed mines (thereby removing the future mine risk of those specific mines) or have some idea where the dangerous areas are and avoid these areas. These factors will result in lower accident rates.
- It is common knowledge that there is wide-scale practice of 'village demining' as well as a significant level of scrap metal salvage (UXO) and extraction of explosives from mines for fishing and/or sale. These activities have to be considered as contributing to the lower number of mines and UXO in and around communities. These activities are occurring in all CMM target areas.¹⁴ In terms of demining a far greater area of land and number of mines/UXO are being cleared (to an unknown standard) by villager than cleared by all the mine action agencies.

¹³ Quoted in Unicef's October 1998 Mid-term Review

¹⁴ The findings of the current HI study on 'Spontaneous Demining' will undoubtedly endorse these comments.

- The Cambodian military are also conducting mine clearance in the provinces, to an unknown standard and to an unknown extent.¹⁵
- It is difficult to establish a 'control' when analysing mine affected communities as there are numerous factors that resist cross-comparison and therefore prevent a more scientific analysis: these include the particular mines history of an area (intensity and pattern of contamination), or the predominant economic activities of the population (wood cutters face different risks from fishermen). Another important factor is whether the population has recently been resettled in the area, are ignorant of their environment and the specific mines threat. To what extent particular farmers have to travel to their agricultural field is also an important factor (i.e. passing through possibly mined areas even when their own villages do not have a threat.).

Using statistics to measure impact?:

It is worthwhile briefly to examine the use and misuse of using statistics to analyse mine action and CMM:

- The positive trend, as recorded by the CRC/MI mine incident database, is that nationally the number of mine incidents is falling. A 32% reduction nationally is recorded when comparing April 1999 with April 2000. In terms of averages the rate of incidents in Battambang and Bantay Mean Chey are also falling to a similar degree.
- However, the details of these statistics also show that while there were 30 mine/UXO incidents in Battambang province in the month of April 1999, there were 34 incidents in April 2000, representing a 13% *increase*. This rise exists despite major province-wide mine action with mine clearance, CMM, mine awareness and EOD team operations from at least three separate organisations.¹⁶ Some of these interventions have been going on since 1992. Meanwhile, in Svay Rieng and Pursat, for example, where there has been no mine action intervention in the last 18 months the statistics show declines in incidents rates of 66% and 12% respectively (Jan-April 1999 compared with same period 2000). Without understanding the provincial **context** (politics / population movements etc), these statistics alone are stunning.... but misleading.
- The mine incident database (MI/CRC) indicates that between 1979 and 1997 incident rates in Battambang Province represented 24% of the national total. However in the reporting period January 1999 to April 2000 incident rates in Battambang Province represented 32% of the national total. While this is disappointing reading and possibly an indictment of mine action impact in the province in the last 8 years, the political and military drama played out in Battambang over the years must be taken into account. Fighting, new mine laying, movement of IDPs, resettlement of newly accessed areas etc result in a complex interplay of issues. **In such a context the use of statistics for comparative analysis and evaluation must be treated with caution.**
- Looking more specifically at Samlout district (for example) in Battambang (which has received the most intense and most co-ordinated attention from mine action agencies of any area at one time (1999/2000) in Cambodia) there is a decline in incidents from 49 to 27 incidents in the period January-May 1999 (inclusive) compared with the same period this year. **¹⁷This is a decline of 45% which is excellent, especially at a time when new populations were entering the area, but follows a very intense and on-going mine**

¹⁵ Extensive road clearance by the army, for example, has recently taken place in Veal Veng district in Pursat. An area where mine clearance teams refuse to work due to lack of medical support facilities.

¹⁶ CMAC, MAG, World Vision.

¹⁷ Statistics were obtained by UNHCR who collect their own data in Samlout to complement that of the MID, and also because they require the data with more detail and at greater speed.

action intervention. The work of CMT is part of this mine action effort but cannot be separated out for analysis.

- **The evaluation finds that the impact of CMM alone cannot be measured by statistics at present. Any attempts to suggest that CMM is directly and solely responsible for specific incident declines at the provincial, district or commune level should be avoided.** This does present a dilemma for the impact analysis of this evaluation. As a weaker alternative a matrix has been compiled comprising all mine action intervention in every commune in both Battambang and Bantay Mean Chey since records have been kept (1993-2000). This data is entered by agency and by activity for the whole period and then set against trends in incident statistics. Such a matrix has not been attempted before and was done to see if direct correlation exists between certain mine action interventions and changes in incident levels. See Box One and Annex D.

BOX ONE: Impact:

The matrix is presented as annex D. Some conclusions can be drawn relating to CMM activities and impact as well as the mine action sector in general.

The matrix in Annex D is a presentation of the most mine affected communes in Battambang and Bantay Meanchay in relation to the level of mine action activities that have taken place in each commune since 1992. This is the first attempt at developing a correlation based on integrated database statistics.

The various activities of mine action are mine clearance, mine awareness and mine marking performed by different agencies (MAG, Halo, CMAC and World Vision). There is no weighting system attached to the relative value to a commune between mine awareness and clearance as this is unknown; also the number of visits or size of teams involved are not illustrated. As such it is only a schematic indication of the interventions that took place.

For each commune in each year there are, therefore 7 small boxes which are coloured and ticked indicating the type of mine action that took place in that year. Under these 7 mini-boxes there is a number and a bar chart indicating the number of incidents in that year for that specific commune.

Those of us who have worked in mine action for some year assume that there would be a direct correlation between mine action and injury rates. This matrix reveals that such a correlation does not exist and therefore it is inaccurate to say that the decline in mine incidents in Cambodia is taking place due to the effectiveness of mine action. Mine action may be a contributing factor and have a greater impact in some areas than others, but by no means can a direct positive link be made.

The first two listed communes (in Bantay Meanchey) are included as controls. Without any mine action intervention of any kind from 1992 to 2000 these communes experienced the rise, peak and decline in incidents (down to zero incidents) that can also be seen in other communes where mine action did take place. In some communes there are lower incidents at the same time as extensive mine action operations take place, and in other zones incidents rise while operations are taking place. There appears to be no pattern caused by mine action, but instead mine incident rates change independently and according to other 'rules' and influences. This presentation is included not to criticise mine action or to reduce its importance, but this matrix is added to illustrate the complexity of the problem and how much more work needs to be done before we understand the context and real impact of mines and mine action in Cambodia. We assume that mine action is directly beneficial but the statistics do not allow us to make such a direct correlation.

2. Evaluation of Operations

2.1 Project Structure

The CMM project is an integral part of the CMAC structure. It began in 1997 with 13 Community Marking Teams (CMTs) of 5 staff under the Verification Branch. In 1998 the Mine/UXO Awareness Branch assumed responsibility of CMM operations and management and the teams were reduced to 12 in number.

The Branch Chief in CMAC Phnom Penh (Mr Tang Sun Hao) directs the CMM project through a Field Officer and Technical Advisor based in the Battambang CMAC office. Up to May 2000 the structure of the teams was horizontal; All 12 teams of 5 men had one Team Leader who reported to the Field Officer directly. Since May 2000 all teams have a Team Leader and Assistant Team Leader with 3 further staff and are divided into four components. Each component is supervised by one Supervisor and consists of three CMTs. Now the 4 Supervisors report directly to the Field Officer.

Teams are deployed in Bantay Mean Chey, Battambang and Pailin according to requirement, and are attached to, but not directed by or responsible to, the Demining Units 1, 2 and 3 respectively. Demining Units are directed by the Operations Branch of CMAC in Phnom Penh. CMM is therefore under a separate branch of CMAC.

Since 1999 the CMM project has deployed the CMTs to Districts where they operate from a 'remote' base to avoid time wasted in daily transportation and vehicle depreciation. In Battambang the remote bases for CMM were in Samlout and Rattanak Mondol district but teams have recently been relocated to Pailin town. In Bantay Mean Chey, however, the teams are not remotely located but based in accommodation, and the CMAC base in Sisophon, which results in an unacceptable amount of time spent in daily transport (3-5 hours per day per team). The Supervisors meet in Battambang with the Field Officer (with or without the Technical Assistant) every week.

In Battambang and Bantay Mean Chey the CMM project have HQ offices within the CMAC compound and a light staff of 5 (including medic (2), radio operator, store-man and information clerk (in Battambang). CMM is supported by CMAC Finance, Logistics and Administration departments in both DU1 & 2 (Bantay Mean Chey and Battambang respectively). The Mine/UXO Awareness Branch informed this evaluation that command and control of CMT operations was the responsibility of the DU Managers, however this does not appear to be the reality. In Battambang the CMTs are directly managed by the Field Officer and TA and, when interviewed, the DU2 Manager (Mr Mam Neang) confirmed that CMT operated independently from his direct control, while emphasising the close co-operation that existed. In Bantay Mean Chey, with 2 hours distance from the FO and TA the CMTs are more directly directed by the DU manager (Mr Nou Sarom).

2.1.1 Evaluation Findings: Structure

The current structure is simple and logical and appears to allow swift decision-making and minimal bureaucratic delays. In such a monolithic and centralised organisation as CMAC, it seems as if CMM enjoys special status by being outside of the DU structure. This appears to have developed almost by accident through the handing over of CMM to the M/UXOA Branch in 1998. The presence of the TA within a relatively small team also considerably assists the Field Officer (FO) the project to 'protect' the project from being absorbed by the DU managers. Nevertheless, this evaluation did not note a significant difference in effectiveness or deployment between BTB and BMC locations. **Any attempt to incorporate CMM into the DU /Operations structure should only be considered after some review of the advantages and disadvantages. If CMM works well with the current structure, why change it?**

The beneficial development of creating middle level managers (Supervisors) with 3-team responsibilities was slow (after 3 years) and should have occurred at an earlier stage. Dealing with 12 Team Leaders was not a good structure for the FO.

When the CMM operates in two or more provinces it is inevitable that the TO and TA spend less time monitoring field activities and depend more on their supervisors. The quality of the supervisors (and their on-going staff development) will be an important factor in the success of CMM. **In this regard it was observed that the Bantay Mean Chey teams, with their FO and TA based in Battambang, were less independent of the DU1's influence and became more of a *de facto* DU1 'mobile team'**. Despite the lower level of control by the FO the Bantay Mean Chey teams achieved good results in relevant tasks of limited clearance.¹⁸

2.2 Planning and Prioritisation Process

Planning:

The components used by CMM to plan are:

3. **Work Plans of the Demining Units**; in so far that CMM prefers to conduct marking in areas that the DU can support with demining in the near future. Achieved through communication between the DUs and the FO/TA.
4. **NGOs and IOs** recommending and requesting assistance to conduct their rehabilitation and development programmes. Agencies request directly to the DU (who passes them on to the CMM) or to the FO. Occasionally contact is made with the TA who then connects the agencies to the TO. As these agencies have often taken considerable time to target their programmes in most needy areas it makes good sense to work with them. Risk assessments are not always conducted when working with agencies with programmes for multiple interventions such as well-drilling.
5. **Casualty data** produced by the CRC/HI network is received each month in Khmer and English and shows the trends in incident rates and which communes and districts are the most seriously affected: and important planning tool for a project that seeks to offer 'emergency' relief through its activities.
6. **Provincial /District** requests are received by CMAC and CMM on a regular basis. These are followed up by the supervisors who conduct risk assessment/village surveys as part of the CMM planning process. Requests are not being channels through the LUPU process yet, but are expected to in the future.
7. In the process of a risk assessment the supervisors will have contact with **village leaders and local population**. This group form the last component in the planning process. They will give important information concerning the precise needs of the community, indicate the level that they can participate in the project and details of logistical or geographical obstacle that could affect the task.

Prioritisation: Points of interest

- The central criteria for prioritisation appears to be CMM's desire to work in high-risk areas (as ranked by the casualty data) where emergency intervention of a limited nature can benefit as large a group of local people as possible. Therefore private houses or private land are not targeted; instead communal areas such as schools, pagodas, clinics, access roads and well sites are the main priority for CMM.
- Considerations in the prioritisation process (that cannot be avoided by any operational agency) are accessibility, security, and logistical support. Despite the remote deployment of CMTs since 1999, to be closer their work areas, there are still some areas that would be inefficient to work in due to the excess time and cost needed to reach the location. The wet weather of the rainy season also mitigates the accessibility of certain areas. (Veal Veng in Pursat, for example) The absence of safe or constructed roads in some locations also rules out certain locations for consideration.
- Once the above criteria are satisfied; that the task is both feasible and that it provides emergency assistance to local population, or direct assistance to NGOs working in high-risk areas; then tasks are

¹⁸ This point can be illustrated that the FO's recent decision to bring the 3 Bantay Mean Chey teams into Battambang was over-riden by the Director General of CMAC following pressure from the DU1, who did not want to release the teams.

selected according to practicalities, proximity to remote bases and the sense of emergency assessed for particular areas.

2.2.1 Evaluation Findings: Planning & Prioritisation

- **The prioritisation process use by CMM has a sound basis and all tasks appear to have been conducted in high-risk districts and in response to direct requests.** Tasks do not benefit individuals but communities as a whole. There is no 'prioritisation committee' or forum within CMM for ranking selected priorities: they are based on the judgement of the FO in consultation with his Supervisors and the TA. At the moment this works well and is a strength of the project. However if the teams expand and the work load increases some regular forum or selection committee *may be* required to maintain quality and consist decision-making.
- **Ranking priorities, when all priorities appear to be deserving attention, cannot be a 'scientific' or exact process.** There are too many non-quantifiable factors. No mine action agency inside Cambodia or outside can claim to have a foolproof formula for ranking high priorities. Activities are conducted in sequence that makes operational sense in terms of logistical criteria, proximity to remote CMM bases and fitting in with timetables of other programmes (e.g. drilling rigs schedule).
- **In so far that CMM considers priorities expressed through local communities and district leaders and less through provincial and national authorities the process is judged to be highly responsive and decentralised.** Strong efforts should be made to maintain this method of prioritisation and to further develop the 'bottom-up' approach through the District working groups of the emergent LUPU structures in Battambang and LUMU structures in Bantay Mean Chey. (LUPU is also being planned for Pailin).
- **CMM should make greater efforts to understand the profile of mine-risk at the commune and village level through the monthly casualty data.** At present prioritisation targets high-risk districts but as previously discussed, within districts there can be considerable variation of risk. The HI/CRC mine incident database supplies village profiles on request and already publishes the commune ranking in their monthly reports. Some training may be required to assist the FO and Supervisors to read and interpret the table and pie-charts used in the reports. **Analysis of the 'activities' undertaken by mine victims should also prove useful to supervisors as they discuss priorities with communities.**
- **There was no evidence that the mine/uxo awareness teams (MAT) of CMAC contributed or informed the planning and prioritisation process of CMM.** It appears that MAT works in similar locations to CMM and all sites visited had also been visited by MATs. (See Annex D-Matrix). This appear to be more coincidence and the use of similar selection criteria of the two projects than evidence of co-operation or design. Where the co-operation has be deliberate the mine awareness teams have acted in support of the CMTs and , obviously, not *vice versa*.
- The CRC/HI data is an important tool for prioritisation but other considerations have to be included. In particular the number of potential beneficiaries. In an areas such as Veal Veng in Pursat, for example, the district is ranked highly but this is mainly due to the low level of population spread out over this large district. The actual number of incidents is low. Any limited clearance or marking project in the communes would have low impact and few beneficiaries even though it would appear that the project is carried out in a high-risk area. **This is mentioned here as a warning not to use the CRC/HI data in an overly simplistic manner.**

2.3 CMM Integration with mine/UXO awareness(Mine Awareness Teams-MAT);

Project documentation for CMM frequently cites the intended integration of MAT activities with those of CMM. The intention is that MAT works closely with CMM to supply important village level information to

assist CMM with planning and prioritisation. Further, the intention is that MAT visit all villages targeted by CMM to prepare the communities for the arrival of CMM, to encourage participation and to make communities aware of the importance of permanent mine markers and their maintenance of the markers. The support the CMAC EOD teams in the same manner.

In the recent Integrated Mine Action Team (IMAT) proposal and past project proposals for an expansion of CMM teams¹⁹ the role of MAT is described in detail as performing functions prior to CMM intervention, during and after CMM operations.

2.3.1 Evaluation Findings: awareness integration

- **All documentation seen concerning MAT integration with CMM operations appear to be ambitious.** The reality is that MAT operates at a far faster speed than CMM and has its own work plan and schedule. The idea of multiple visits to CMM target communities, before, during and after interventions is unrealistic and assessed to be unnecessary. The positive fact is that in all locations where CMM operates, the MATs (as well as MAG and World Vision in many cases) have had some intervention.
- However, it is important that MATs assist CMM to emphasise the importance of the markers to the community and ensure that members of the community understand how to co-exist safely with the remaining danger in a village where CMM operates. If MATs visit villages long before CMM or fail to discuss markers with local communities during their presentations then there is serious lack of integration between the two interventions (although under the same Brach Chief). **At the moment the situation is judged to be weak and somewhat 'hit and miss' where sometimes the timing and message of MATs visits coincide with CMM intervention work and others it does not. CMM and MAT should discuss this issue and come to a more realistic level of integration and support and not develop an over ambitious model.**
- The evaluation noted that the awareness branch have commissioned TV 'spots' with clear messages for communities not to tamper with markers and signs. This information is obviously only available to those with TVs (and their neighbours).
- **There is little evidence that MAT is any better than CMM itself at information collecting for prioritisation.** Where MAT could serve an important role is by passing requests for marking or limited clearance on to CMM based on its village visits. MATs already perform an important reporting function for CMAC EOD teams (i.e. documenting villagers where urgent EOD interventions is required) and recently MAT have started to teach village leaders how they can make official requests to CMMs. MAT visits a high number of villages and could be more useful 'scout' for CMM.
- The problem of CMM relying on another wing of an organisation to fulfil a crucial part of its activities (i.e. educating the community about the markers) is that CMM does not have control of MAT and success relies on close co-operation and MAT availability. **This is the case at present and mine awareness is not well-integrated with CMM, because their integration and village visits cannot be guaranteed.** It seems appropriate that CMM develops this capacity to some degree within its own teams. Even as a back-up secondary skill for the Team Leader and his assistance, for example. At the end of the day the village have to know about the markers and understand their importance, whether the MATs are available or not.²⁰ This is one of the stated aims of the project.

¹⁹ Unicef project proposals for CMAC Community Mine Action Project (1999) based on CMM TA drafts

²⁰ The TA attempted to introduce safety briefing presentation by the CMMs to the villages in 1997/8, but this was not enforced and has not become a formal requirement of the Supervisors.

2.4 Project documentation and reporting to CMAC; Evaluation Findings:

- The CMM office in Battambang maintains hard-copy records of all survey / risk assessments conducted as well as marking and limited clearance reports conducted by the CMTs. These are completed by the Team Leaders (previous to May 2000) and now by the Supervisors. Most records are also entered on computer at the Battambang CMM computer station. The forms used are the standard CMAC survey, marking and completion reports used by the DUs. (The evaluation was able to compile lists of all individual CMM interventions from April 1997 during the study and which were used to construct the matrix of annex D)
- Reports are transferred regularly to CMAC Phnom Penh either through the DU Operations channels from Bantay Mean Chey or Battambang. The Database office in CMAC expressed satisfaction with the flow of reporting received from the field from CMM. The CMM reports are entered into the database as standard clearance or marking activities but note is maintained that the tasks are performed by CMM and not DUs. The process is digitalized and therefore clearance task of any size can be entered correctly into the database assuming the co-ordinates are correctly reported.
- The TA position is funded by Unicef . The TA reports directly to the Project Officer of the Children Affected by Armed Conflict Office in Phnom Penh as well as his line managers within CMAC. Reports are generated on a quarterly basis as well as at the end of each funding cycle. The TA also generates various other reports, drafts for project proposals, observations and strategy papers which are copied to Unicef CAAC as well as appropriate authorities within CMAC.
- This evaluation found that the reporting process was adequate and the project details, achievements and future plans were well-documented. Documentation generated for information and promotion of CMM within CMAC and at the Mine/UXO Awareness Branch was weak in comparison. It has to be noted that apart from the MUXOA Branch chief, none of the Khmer nationals in CMM speak or write English. Without the presence of the TA the reporting profile should be expected to be very different and inadequate for Unicef's purposes.
- **Presentation of CMM's work and achievements is weak. Like CMAC in general they have an obsession with numbers and tables.** Not only are the numbers of mines and UXO removed during their work fairly unimportant, **but expressing the progress in terms of meters squared is meaningless and unhelpful.** It is not just that the average person struggles to imagine what, *for example*, 3679 m² looks like in real life, but the point of small-scale clearance and marking is to perform specific tasks useful to the local communities. Continually presenting their progress in terms of 'meters squared' casts doubt over whether the CMM and the MUXOA Branch understand the significance of their own project, while at the same time under-presents the excellent assistance their work actually achieves. Very recently CMM have made attempts to indicate the end-use and communal benefit of their clearance. This was done in the most cursory manner and needs to be elaborated and increased in the future. The TA should take a strong role in assisting CMM to develop presentation skills. Tables of numbers of metal fragments found etc serve little use in humanitarian mine action. This evaluation does not see this point as 'cosmetic' but it strikes at the heart of CMAC's corporate understanding and rationale for its humanitarian mandate.

Team Efficiency: Evaluation Findings:

Efficiency here will be examined in three parts:

- Administrative/Logistical efficiency
- Team operational efficiency
- Overall impact efficiency: cost/benefit

2.5.1 Administrative/ Logistical efficiency:

- **This evaluation found the remote location of CMTs to be an efficient and overdue development of project administration.** In 1997/1998 and early 1999 CMTs were travelling between 2-6 hours a day from Battambang to reach their work sites. Not only was this a considerable burden for the fleet of vehicles, and affected the moral of the staff but the number of work hours on site (and machine hours) were limited and a highly inefficient use of time. Now teams are based close to their task areas (maximum 1 hour) and the number of machine hours performed by teams has greatly increased. This has been documented by the TA.
- This report has already mentioned that the lack of bureaucratic paperwork and simple command structure of CMTs enabling **decision-making to be swift and efficient.**
- Problems of recruitment, positions vacant, deaths in the team²¹ and a high level of absenteeism in the past has led to CMM effectively fielding 9 full CMTs out of the full 12 teams funded. This was a serious under-performance that has only recently (2000) been addressed. Problems with vehicles and equipment also contributed to CMM's inability to field the full 12 teams. These were administrative and logistical failings that persisted particularly during the public crisis of CMAC in 1999 but have been resolved. Unicef's independent funding of CMM assists the project to deal with certain logistical issues faster than the slow logistical process of CMAC in general. **Unicef funding allows a degree of leverage and independence,** despite complaints from CMM that the CMAC Finance department often releases their designated money at slow speed.
- In terms of the working week, the CMTs operate for 5 days and take the week-end off. They are situated in the remote locations some hours from their families and homes. The supervisors return to Battambang central office for meetings and salary collection on Friday afternoons and Saturday mornings. There has been some discussion concerning the benefits of working in 21-day cycles (a system used by Halo Trust) followed by a full week vacation for staff to visit their families. This approach would not necessarily be more efficient in terms of days worked and could contribute to higher stress and less motivation (some evidence of this reported by Halo). **This evaluation does not recommend any change to the current system.**

2.5.2 Team Operational Efficiency:

- The CMTs are teams of five men of whom one is the Team Leader; another the Assistant Team Leader. The team is equipped with 2 detectors which all 4 team members (including the Assistant Team Leader) share. They operate two-man drills when clearing areas. **At a time when CMAC is moving towards a one-man drill (used extensively by Halo Trust) CMM needs to be sure why it maintains a two-man drill and show whether this approach contributes more to operational efficiency.** This evaluation is not qualified to recommend one system against the other although it appears that an increase in detectors and an adoption of a one-man drill could reduce the negative efficiency impact of absenteeism, illness and detector failure (repair) can have on such a small team.

²¹ From 65 staff 3 (2%) have recently died of AIDS-

- The speed of the CMTs in terms of areas cleared and detector speed was judged by the CMAC audit of December 1999 to be in line with CMAC DU clearance speeds. However, **two detectors are a limiting factor for the CMTs unless they are working on very limited clearance tasks** (there must always be a minimal distance between detector-operators). In sites where CMTs were observed, groups of 2 or 3 CMT worked in unison to increase the speed through an increased number of detectors working at any one time. The advantage of small teams is that they can be independent in a single vehicle. Adding two more detectors and operators to each team may increase their efficiency but would require an additional vehicle which would not be full utilised (in terms of space) and would add considerable capital and expendable costs to the project. When asked, Supervisors agreed that more operational detectors would be desirable but suggested that more teams were created. Deploying teams in unison on larger tasks does appear to solve the efficiency issue and appears to be increasingly the practise of CMM. However this practise not only makes the site management top-heavy but reduces the amount of tasks CMM can address at one time.²²
- It appears that on some of the larger limited clearance tasks and in perimeter clearance for marking the use of dogs could greatly assist the speed and efficiency of the CMTs. This is the case in other countries. The Swedish TA finally hope to start fielding working dogs this year (July 2000 onwards) and there is a possibility that they could assist CMTs. However **it is by no means certain that this would increase the efficiency of the CMTs as the successful use of dogs also depends on their efficient integration into operational methodology and systems**. The CMTs already have an established and functioning operational system; the FO and TA need to plan very carefully where and how dogs could enhance their teams efficiency , if indeed the dogs become available.
- An important operation achievement that deserves comment is that while locating and destroying approximately 6000 mines and 1000 UXO since 1997 **the CMM has sustained no operator accident**. Equally there have been no reports of accidents or mine sightings in land following intervention by CMTs. A cautionary note must be recorded in this evaluation; that during this study and during a visit to CMTs in Pailin, **procedures were observed that were in violation of CMAC SOPs**. The TA and FO are currently conducting an inquiry into the extent of these practises in the teams²³, as well as seeking to have future permission from CMAC Phnom Penh to disarm mines in specific situations. Until this issue is resolved CMTs are strongly advised to stay within SOPs . **Clearly the FO and TA are responsible to ensure this. The credibility (and relative independence) of CMM would be seriously damaged if an accident resulted from unauthorised operating procedures.**
- The evaluation noticed that a large number of markers had been used during the project's live-span and yet comparatively few were seen at project sites. The evaluation visited approximately 12% of all tasks undertaken by CMM. A spot check was made at CMM largest task in O'Beichan in O'chrov Commune in Bantay Meanchey. (CMAC minefield number MO153) where CMT had cleared and marked about 4 km of road between May 1999 and February 2000. The final report indicates that 526 concrete posts had been purchased and set in the ground. If the teams set posts in the ground at approximately 25 meter intervals on both sides of the road they would have needed only 480 posts to cover the whole area. A physical count of all post visible revealed only 134 used. Even allowing for 20% error in counting due to high grass at the project site it only raises the number to 162 posts...a discrepancy of 364 posts. 364 posts represent a monetary value of \$582. Additional 'ghost' labour charges for the setting of 364 posts could be approximately \$400. These were found in a single task. The CMAC QA audit of December 1999 raised the issue of the accountability for posts and labour costs but it appears to remain un-addressed.²⁴ **The TA and**

²² Where 3 teams work together on a limited clearance task the force of 15 men would have a supervisor, 3 team leaders and only 11 operators with 6 machines.

²³ CMTs had disarmed and placed together over 60 mines found on one site.

²⁴ Documentation seen concerning that village labour to place posts suggests that a casual labourer places one post per day; an unacceptable speed that suggests some graft is occurring..

project FO are responsible to monitor and address any irregularities and abuses (even if they are taking place in other CMAC departments handling aspects of the CMM project). Unicef as a major donor should demand that the project operates with maximum transparency and honesty.

2.5.3 Overall Impact Efficiency; Cost/benefit:

Cost benefit analysis in mine action and most humanitarian interventions is hazardous due to the many benefits and elements of the intervention that defy *financial* evaluation. This is particularly the case when the objective of an activity is to save life or limb. At what point is it ever 'too expensive' to save lives and limb? Nevertheless, it can be seen that CMTs are able to perform with mobility and flexibility and have in the last 3 years performed over 296 marking and limited clearance tasks. These have been conducted in 13 districts, over 200 villages benefiting at least part of the relevant communities in all locations. Certain tasks (clearance for wells or clinics or access roads) benefit the whole of a village. It will never be know how many potential injuries and deaths have been avoided by their activities. **This evaluation judges that relatively, and in comparison with the work of demining units (large scale concentration in a very limited number of sites annually) CMTs offer a very effective and efficient use of mine action investment.** The CMAC EOD teams and MAG Mine Action Teams (mobile teams) are other examples where fast-moving small-scale impact can be effective and efficient, although it should always be as a complement and not as replacement to larger scale area clearance. This finding will be strongly represented in the overall recommendations.

2.5 CMM Coverage: Evaluation Findings.

Between April 1997 and June 2000 the following activities were reported by CMM:

April 1997-June 2000 Total activities.	Risk Assessment / Village surveys	Long Term Marking	Limited Clearance
Bantay Mean Chey	84	57	26
Battambang	90	72	130
Pailin	0*	3	7
Totals	174 surveys reported	132 marking tasks	163 clearance tasks (with marking)

*CMT used survey reports from CMAC Level Survey One instead of conducting their own.

2.5.1 Location/ Affected Areas:

- According to CRC/MI Mine Incident Data Battambang is the highest priority province in Cambodia for mine action representing 31.7% of all current casualties. (Jan 1999-April 2000). Bantay Mean Chey is the second highest priority province representing 18.5% of all current casualties. CMM have worked in these provinces (and now Pailin) for the last 3 years conducting 296 direct interventions with marking or limited clearance (with marking).
- **Within these provinces interventions have been conducted in 13 districts, of which the vast majority (95%) have taken place in the 10 districts all included within the top 30 ranked 'most affected districts'.** A high number of all these tasks have taken place in Sala Krau (Pailin), Samlout and Rattanak Mondol (BTB) and Mailai (BMC) which are four of the five highest ranked affected districts in Cambodia: 118 marking and clearance tasks (40% of total) were conducted in these four districts alone.
- According to the data rankings CMM have conducted their operations in all of the affected districts of Battambang and Bantay Mean Chey, but with greater concentration of effort on the most affected districts.

As such this evaluation must conclude that the CMM coverage within its provinces of operation has been excellent up to a district analysis.

- When analysed against 'most affected commune', the CMM activity locations do not coincide as dramatically as the data at the district level. In some cases CMM operates in communes ranked highly in the CRC/HI data and in other case they work in nearby communes. This evaluation felt that further statistical analysis would not serve any purpose and that in some cases the database definitions of communes was weak in view of the new boundaries and new naming that is occurring. Besides, **the CRC/HI ranking is a guide and tool for planning and analysis and is by no means the only rationale for field operations.**²⁵
- In terms of 12 CMTs (5-man teams) with 3 working in Bantay Mean Chey and 9 in Battambang and Pailin, the capacity for wide-ranging coverage is weak merely due to the lack of available teams. Considering the size of CMAC and the number of demining operators the 60 staff of the CMTs represent a disproportionately small element considering the level of need from local communities and NGOs for limited clearance work. CMAC and donors should review their rationale for current the current divisions of labour and operational profile.²⁶

2.5.2 Community end use of clearance and marking:

The spread of local authorities and agencies with whom CMM has worked is impressive. They have multiplied the end result or added value of their work by co-operating with agencies with development and rehabilitation infrastructure plans in affected areas. Eleven international organisations and NGOs in total. **A strong illustration of synergy through co-ordination.**

Equally the type of end use for which they have conducted tasks is commendable. Water access and well drilling have been a predominant objective for CMM activities representing 50% of all clearance tasks. Opening roads, clearing land for schools, clinics, NGO offices, a pagoda and dwelling areas have all been tasks that benefit communities as a whole and cover the essential community needs of potable water, shelter, education, health and religious practice. Clearly the other vital human need for food, (and therefore agricultural land) cannot be covered by CMTs, that concentrate on small task/high-impact operations. **This evaluation finds that the coverage here has been excellent** notwithstanding the high %age of work focusing on clean water supply.

2.6 CMM Field Officer: Management Capacity

In so far that the good management of CMM and its successes in terms of achievement should be attributed, in part, to the Field Officer, this evaluation has to conclude that the FO has a high capacity for management. The TA confirms that the FO has a close and strong control of his teams and directs all aspects of the CMM operations in close discussion with his supervisors. The DU manager in Battambang has good working relations with the FO and expressed confidence in his management capacity. The MUXOA Branch chief expressed the same. The creation of supervisors and the remote location of staff, for example, were management decisions that were long overdue, but it appears that the FO has to await approval on all these and other decisions. A process known for its slow speed in CMAC when involving administration, human resources and logistical changes.

²⁵ An important additional issues, for example, is the assessment of the number of beneficiaries that stand to benefit from any intervention.

²⁶ The limitations of coverage are compounded, for example, when CMM teams are tied up on large projects for many months, such as road-clearance in O Bei Chan in Bantay Mean Chey where 3 CMTs worked for over 7 months on a single task.

It should be pointed out that the FO is more of a co-ordinator than a director. He works within a hierarchical system (CMAC) where he is by no means a major player. He is directed by his Branch Chief (MUXOA) who allows him a high degree of field autonomy. He steers a somewhat difficult course between the various DU managers and the CMAC departments for who are unused to dealing with a CMAC agency that is relatively autonomous within the provincial CMAC hierarchy. A fear expressed by the TA is that without the presence of a TA the CMM would be more susceptible to being dominated and absorbed by the larger (and institutionally speaking, more powerful) Demining Units. However this is more to do with the power status of CMM and less a result of the FO management capacity, which is judged to be sound and improving. The TA plays a strong role as an advisor but all field management decisions are made by the FO himself. His inability to speak English is not judged to be an obstacle as all project proposal writing, presentation report etc are written by the TA and/or Branch Chief.

2.7 Further TA requirements

The role of the TA has been important since the inception of the project in 1997. His contribution as an advisor has assisted the project at many levels and his presence has been both an important buffer against interference from other CMAC authorities as well as an important link with the main donor: Unicef. **The fact that the same TA has been involved in the project for 3 years has been a great strength and unique in CMAC** where most TA stay in Cambodia for 6 -12 months maximum.

It is the assessment of this evaluation that if the 12 teams of CMM are maintained and deployed on the same basis as the present time the importance, or added value of the TA's role will diminish rapidly. The command structure, prioritisation process and achievement levels are sufficiently established, and under the guidance of the Branch Chief in PNP should continue well. **In this scenario an 'exit strategy' or phase out could be planned for the second half of 2000.** For the TA role, not Unicef's involvement. If Unicef continues to fund CMM and manages this project within the Children Affected by Armed Conflict department it may be adequate for the project officer to monitor and follow the project without the position of TA after the end of 2000. This however depends on the understanding of the issues and the motivation/interest of the relevant project officer in Unicef. The current project officer has both the competence and motivation to take a strong partnership role with MUXOA Branch and FO. Unicef needs to recognise these requirements are non-negotiable if it wants to maintain their involvement and support of CMM as a partner and not just a donor.

If the CMM concept is increased in size (for example 6 new teams comprising 30 men) and national coverage (i.e other provinces) **there would be a need to maintain a TA to assist the FO with the expansion and monitoring** of new teams in other locations²⁷. The current TA considers that 2 would be necessary: one operating in the field while the other in Phnom Penh.

CMAC are currently seeking funding for the Integrated Mine Action Teams (IMATs). If funding is found and these teams were created it is uncertain where they would be placed within the CMAC hierarchy or whether they would be seen as additional CMM teams or a separate activity. As described in the project proposal their intended function is identical to that of CMM's current practise. If the IMATs were added to the responsibilities of the current FO, a TA would definitely be an important addition.

2.8 Training needs of CMM staff

This is not included as part of the evaluation due the on-going discussion at present between the TA, CMAC and Unicef concerning staff training. This evaluation is aware of the current proposals which seem entirely reasonable and appropriate for CMM staff. It is one of the main areas of the TA terms of reference and any comments made here would merely repeat what the TA has designed and planned.

²⁷ The evaluations recommends expansion to other provinces and into more areas in existing provinces. In Siem Riep the PMU express considerable interest in co-operating with any new CMTs in his area. Particularly to operate in Oddar Meanchey.

2.9 Level of community participation: Perspective of CMM/ Perspective of villagers.

Increasingly communities are being encouraged and assisted to directly contact CMAC or their respective communes concerning mine/UXO issues, clearance requests, mine victim data, EOD and land disputes etc. In terms of participating in the prioritisation and selection process for mine clearance, marking, mine awareness and other mine action interventions this is the most important development in recent years. This development is still emerging and part of the LUMU and LUPU initiatives in Battambang and Bantay Mean Chey and which need to be encouraged in all affected provinces. However the process is also assisted by CMAC mine awareness teams, CMTs and various CMAC staff encouraging village leaders, commune leaders and district authorities to use specific report forms to submit requests.

Village/commune level participation in clearance prioritisation and correct end use of cleared land is by far the most important level for community participation. CMM mention village participation in project documentation and as part of their objectives but little evidence was seen of this during the evaluation. Villagers are employed to place permanent markers in the ground but actual manufacture occurs in market towns outside of the village areas. Even if post were made locally this would be no indication of community participation as the labour is paid for at higher than average daily rates.

This evaluation would stress that the most important level of participation for the villages is firstly at the selection and prioritisation level. Secondly the villages need to co-operate with mine awareness education and specifically the maintenance and care of the markers. In some cases village need to show additional participation by building a small bridge or make access easier for CMM teams (and other NGOs/CMAC deminers etc) if they want to be assisted. It may be mentioned that to achieve the task of marking and clearing a limited area the CMTs should not be too bound to involving the community beyond the essential elements, as in most cases the communities are struggling with survival issues and no added benefit can be identified. This comment is made in respect to CMM and not to mine awareness or other mine action interventions that may choose to maximise community participation.

Issues concerning sustainability are incorporated in some of the above sections. They will not be repeated here but are specifically identified in the recommendations in the following pages.

Central Findings: Community Mine Marking Project

- In the absence of mobile teams within CMAC, the Community Mine Marking programme fulfils a critical function of response to requests in high-risk mined areas. Not in their originally-designed capacity of marking but in limited clearance tasks (with marking).
- CMTs are administratively 'light', highly responsive and efficient when deployed for appropriate tasks.
- The impact of the CMM's work benefits a disproportionately high number of people when considering the relatively small areas where CMM have cleared/marked. The impact in terms of facilitation of NGO/IO intervention, community access to essential needs and access for larger CMAC Demining Unit clearance (as well as mine awareness) is evaluated to be highly positive.
- The existence of any direct correlation between CMM activities and declines in accident rates is assumed but cannot be reliably measured in any location.
- Even if CMAC develop mobile teams in the near future CMM will continue to perform a unique role of limited clearance of small tasks in high-risk areas.

Specific recommendations:

Impact Issues

1. That CMM does not exaggerate its intentions or activities with relation to 'village participation' in terms of prioritisation, information-gathering, concrete post construction and setting, in future proposals or expectations. Current approaches work well and their impact will not be enhanced.
2. That CMM could increase its relevance and effectiveness by using mine incident data at the village and commune level to target mined areas for marking and clearance. At present this is done to the district level.
3. That the title of CMM be changed to reflect the activities they predominantly perform.
4. That CMM review its role in limited clearance work, what size of task it will be limited to and whether it should effectively be seen as a mini mobile team capacity, and therefore refocus energy away from marking and into small tasks of limited clearance requirement
5. That CMM understands the limitation of measuring impact by suggesting direct correlation through simplistic use of mine incident data, but that nevertheless it continues to seek tools for evaluate its impact in humanitarian terms such as injury reductions and numbers of beneficiaries.

Operational Issues

6. Any attempt to incorporate CMM into the DU /Operations structure should only be considered after some review of the advantages and disadvantages. If CMM works well with the current structure, why change it?
7. That CMM reviews its use of permanent markers, their value and the issues concerning the role of mine marking based on various findings in this evaluation, through discussions with Operations staff in CMAC, and other NGOs.
8. That survey and marking / clearance reports generated by CMM but be formally and regularly submitted to the integrated database in CMAC Phnom Penh (through the MUXOA Branch).
9. That CMM review the effectiveness of their supposed integration with MUXOA and re-consider the idea of developing their own internal capacity for limited mine awareness and village education with specific relation to the meaning and maintenance of mine markers etc
10. That CMM take clear steps to respond to suggestions of (limited) financial irregularities made in this report and the 1999 Audit and that CMM strives to maintain the reputation for being free of corruption and cost-efficient.
11. That CMM should, based on its efficiency and success in the last few years and presented in this report, be expanded in terms of number of teams and into other provinces as soon as possible..

12. That CMM use 'remote location' of CMTs as the standard in all provincial operations. That CMM review / investigate whether the one-man drill system could be appropriate for CMM. That generally based on specific findings in this report CMM review how they can make their teams more efficient for the type of tasks they have to address.

Sustainability Issues

13. That CMM continues to use the same TA that has worked in the project for the last 3 years. If an exit strategy is required for the TA's involvement in CMM the current TA should be the one to effect this.

14. That if the project does not expand the TA's role should not extend beyond the end of 2000, but that Unicef maintains a strong partnership relationship with the project once the TA leaves.

15. That if CMM expands into other provinces and expands in size a TA should be maintained and should have dual responsibilities to support the field as well as the Branch chief in Phnom Penh.

16. That the MUXOA branch chief become more creative and proactive in promoting the concept of CMM and its expansion (assuming this is acceptable within the CMAC overall strategy).

Overall Recommendations:

1. CMM should be maintained, supported and expand in size for at least the next 2-3 years by Unicef.

2. CMT should seek to supplement CMAC in as many high risk provinces as possible and where NGOs do not already meet the needs.

3. CMM should go through the numerous findings that support the recommendation presented in this evaluation to see where action can be taken to up-grade in enhance the project. Unicef should work with CMM to monitor this process.

2. Mine Incident Database: Implemented by the Cambodian Red Cross and Handicap International.

Unicef Cambodia has been supporting mine incident data gathering in the country since late 1994 when the Mines Advisory Group initiated data gathering in the north-west provinces. Between 1996-1998 MAG handed over all responsibilities (for a nation-wide system of data gathering) to HI and CRC who had also developed a data gathering programme in the mid-nineties.²⁸ Unicef was closely involved with the funding and promotion of these data gathering initiatives with MAG, HI and CRC but this evaluation will focus on the specific 3-year mine incident database project agreement between Unicef and Handicap International/CRC. The timeframe for this project is Jan 1st 1999 to Dec 31st 2001.

It should be noted that the current database is unique in the world in terms of coverage and detail. No other mine-affected country has a comparable database where village level incidents are regularly collected, compiled in a single document and widely disseminated. In all other severely mine-affected countries mine action agencies, disability organisation, national planners and donors operate in an information vacuum, concerning mine incident statistics, or at best with partial and irregular information. The database implementers (HI,CRC), and donors (Unicef, Finish MoFA) should be commended for this achievement, irrespective of the other findings of this evaluation that follow.

2.1 Impact Evaluation

2.1.1 Achievement set against stated goals, aims and objectives.

Although the project objectives are described in the original 3-year proposal submitted to Unicef in 1998, they are better defined and expressed in the 2000 proposal. This evaluation will note findings against the overall long-term objectives and then with the five immediate objectives separately:

Stated Long-term development objective²⁹:

1) First *The nation-wide data collection network will monitor the impact of mines / UXO incidents on Cambodian society, documenting and reporting on the progress of mine action agencies towards eliminating the danger, including the verification and entry into force of the terms and conditions of the Mines Ban Treaty.*

Findings :

- The data base does **not** monitor the impact of mines/UXO incidents on Cambodian society. It only documents, on a monthly basis, the individual cases of mine/UXO casualties in most provinces of Cambodia. An analysis of the impact of mines on society is a very different, and more ambitious, activity.
- The data base, also, does **not** document or report on the progress of mine action agencies towards eliminating the mines threat. It is a false assumption that there is a direct correlation between mine action intervention and the verifiable reduction of threat or incident rates.
- It is also wrong to link the mine incident data base with the verification and entry-into-force of the Mines Ban Treaty. The mine incident data base is **not** equipped to document and report on the progress of the verification and entry into force of the Treaty³⁰. Some of the data could be used in a tangential way to support other information or findings but a direct relationship is not possible.

²⁸ HI/CRC original data gathering was historical to cover the years prior to 1995.

²⁹ This stated objective and those following are taken from the 2000 Proposal document from HI.

³⁰ The 26th June 2000 Kingdom of Cambodia report to the UN Secretary General, reporting on their adherence to the Treaty conditions make no mention of or use of the mine incident database.

- 2) **Second** *Data collection and victim monitoring will provide verifiable indicators of the successful implementation of the stated goals of achieving zero casualties and rebuilding the lives of mines/UXO survivors.*

Findings:

The data base does indeed provide the statistics that reflect the monthly incident rate of mine and UXO casualties in Cambodia. That is its *raison d'être*. If the number of incidents decline, as they currently are, the database will reflect a movement towards the stated goals of zero casualties. If the numbers of incidents increase, as they did significantly in 1996, they will not. However, a significant finding of this evaluation is that the rise or fall of mine incidents is **not** necessarily a direct function of mine action. Consequently the data base will **not** necessarily provide verifiable indicators of the successful implementation [of mine action towards] the stated goal of achieving zero casualties. Equally the data base cannot indicate whether any 'rebuilding' of lives of mine accident survivors is taking place. At best it can offer a planning tool and direct information for agencies that seek to work towards such a goal.

This evaluation does not want to appear pedantic or question semantics, but clearly the current objectives of the project are poorly identified and exaggerated. **It is suggested that in the future the aims of the project be clearly and simply stated and a list of possible uses of the data base be attached as outputs but not as central objectives.**

Immediate development objectives

Five objectives

- 1) *To maintain a national database on all recorded incidents and victims to monitor the current level of mine and UXO casualties. Incident data from a national data collection network will be input into a data base producing monthly reporting and analysis of casualty trends, accident locations and affected communities.*

Findings: This central objective is being met and will be evaluated in more detail in sections below. However, little if any analysis of the data is conducted by HI/CRC. The narrative sections at the beginning of monthly reports are *descriptions* of the statistics and not an *analysis*.

- 2) *To promote the use of the national data base as a planning and monitoring tool for mine action programmes such as mine clearance and mine awareness and victim assistance agencies. Planning and verification units of CMAC and other mine clearance agencies will incorporate the data in their operational work plans.*

Findings: There is some evidence of promotion of the data base and evidence that it is used as a strong tool for monitoring and planning in the mine action sector. The evaluation finds that there is ground for increased application of the database and will outline the issues in more detail in sections below.

- 3) *The data collection network will provide contacts, referrals to agencies in the victim assistance and rehabilitation sectors to ensure that services reach the affected population.*

Findings: Although there are cases where this objective being met, this evaluation found that the scope for increased application is considerable and the current use of the data base by this sector is poor and does not meet the stated objective. (See below for details)

- 4) *The most mine-affected communities in Cambodia will be identified and mobilised to assist the Mine Incident Database Project to document the continuing impact on their community and assess progress towards reducing the effect of the mines.*

Findings: In so far that village leaders and, in certain cases, volunteers assist in the reporting process of the HI/CRC network, this objective is being met. However the language of the objective suggests something more ambitious than what is really taking place.

- 5) *Strengthen the institutional capacity building of CRC within the database project in terms of database administration and overall project management to enable CRC to run the project in 2001.*

Findings: This objective is definitely being met and is an on-going work. It will be discussed in sections below in more detail.

2.1.2 Use of the mine incident database.

Table One at the end of this section illustrates the findings from the agencies contacted with relation to the end-use of the mine incident database. These contacts include mine action agencies, disability organisations, government ministries, embassies, rural planning agencies and Unicef itself.

In June 1999 the Mine Incident Database Project (MID) sent a survey questionnaire to all addressees on the distribution list. Approximately 30% responded. Some of the findings of this survey are mentioned below.

In July 1999 the MID project organised three sectoral meetings with end-users. (Mine Awareness / Planning / Rehabilitation). Apart from being a useful forum to bring agencies together for discussion and information-sharing some important points were raised:

In the **Mine Awareness sectoral meeting** (7 agencies represented) a major point raised by end-users was for the MID to clarify in more detail what villagers meant by 'tampering' with UXO or mines. One year later there is still no documented and regular information from MID on this issue. This appears a remarkably slow reaction to a genuine end-user concern.

In the **Rehabilitation sectoral meeting**, (13 agencies represented) the most striking finding was that the MID was of very limited use to rehabilitation agencies due to the switch in their focus away from mine victims and more onto disabilities in general. This was due to the changing profile of needs in Cambodia.

In the **Planning sectoral meeting** (5 agencies represented) it was clear that to some degree all three mine action agencies found the MID an important tool in their planning and operations. One representative is quoted as claiming that the MID statistics prove that 'mine action works' in reducing casualties: a correlation that this evaluation challenges due to lack of specific verifiable data illustrating such a relationship. Somewhat strangely, CMAC's Planning, Operation or Awareness departments were not represented at the meeting.

The current evaluation findings in terms of generic end-use are broken down as follows:

Information uses and project promotion:

People *like* information and statistical compilations. As such the monthly report is welcomed and taken seriously by all parties contacted. It can be assumed that all those that receive the report would prefer to receive it than not. Equally other agencies working in mine-affected areas but not on the distribution list would probably welcome the report if offered. Agencies, departments and a wide range of representatives value the ability to track the mines problem through the CRC statistics; even if this means no more than knowing the most recent month's total figure of casualties. Whether this is an acceptable justification for the wide distribution of the report is not for this evaluation to judge. The distribution list for the monthly report identifies 127 addressees who receive between them 279 reports in English and 417 in Khmer (696 total). The majority of the total number of reports distributed are sent to agencies who are in some way involved in mine action activities or have a direct interest in casualty levels. Clearly only a small fraction of these are directly involved in mine awareness or mine clearance operations.

For agencies directly involved in mine action the provincial, district and commune ranking (beyond the planning uses of the report) offers good justification for their operations to themselves, their head offices and to their donors. As such the report is an important information and project promotion tool. As such it is also useful to

embassies that directly support CMAC, MAG, HALO or other mine related agencies. Non-mine action NGOs and embassies, national authorities and newspapers also valued the report as an authoritative gauge of the human impact of mines in Cambodia. The mine incident monthly report is, therefore, found to be an effective and popular information tool and is effectively used to support project promotion in terms of fund-raising and project justification.

Project-level strategic planning:

According to the MID survey questionnaire of June 1999 (sent to addressees on their monthly distribution list), 78% of those who responded (i.e. 40 of the 51 responding agencies) claimed to use the MID for planning and/or operations in their work: an extraordinarily high number of agencies. This evaluation is doubtful of the veracity of this response and suggests that respondents were over-liberal in their use of the terms *planning* and *operations*. The independent findings of this evaluation are presented below.

The use of the mine incident database for strategic planning at the project level is found to be significant but partial. Few agencies operate programmes where their central objective is to address the emergency needs of those at direct and on-going risk from mines and UXO. Clearly it **is** the overall aim of the three mine clearance agencies, but even within CMAC there is an ambivalence with their top priority as '*clearing land for resettlement*' and not specifically a response to highest-risk communities. (While many areas designated for resettlement are high risk zones the majority of mine / UXO incidents occur outside resettlement areas). The time-frame of this evaluation prevented a comprehensive analysis of the end use of the database but definite findings were established. The details of this section are clearer when separated as follows:

- a) **CMAC:** Because of the ambivalence mentioned above and the lengthy process CMAC demining units use for work-plan development, the database is not used as an important tool in the planning process for demining units. High casualty rates are only one of a range of factors taken into account at the planning level. Both Demining Unit Managers in Battambang and Bantay Mean Chey spoke highly of the report and promoted the use of the Community Mine Marking Teams to respond to NGO and district/commune-level requests in high-risk areas. DU work-plan schedules are annual programmes that are very inflexible due to the centralised and highly controlled process of planning used. The DU managers may appreciate the data but beyond deploying the small and mobile CMM teams to assist in high-risk areas, the best they can do is hope to operate in the most relevant areas at a future date. In the absence of mobile teams and without flexibility the DU are restrained as to how much use they can make of the database. None of those contacted appeared to be aware that they could request village level data from CRC/HI or appeared to want to base selection of mine clearance sites on such detail. The database reports are generally used as a tool for selection to a district-level only, and only occasionally to a commune-level where particular communes are identified as needing mine action attention on the basis of the statistical findings. **The database is therefore only partially used by the CMAC demining units for strategic planning.**
- b) Special mention should be made here of the **Project Management Unit (PMU) in Siem Riep, and part of CMAC.** There was clear evidence that the PMU use the data for deeper analysis and selection of locations for clearance operations. They were able to do this due to their semi-independent existence in Siem Riep with direct funding from external donors. They claim their selection process is independent of the CMAC process and 'un-hindered' by local PRD structures. Further, that they generally accept NGO and village requests for clearance but reject those that do not appear on the district and commune ranking of the database report. **This was a positive finding and indicated a full use of the database as a tool in the local site selection process.**
- c) **The Community Mine Marking Teams (CMMT), within CMAC,** do have as their primary objective the aim 'to respond to the emergency need in the community' and have consistently operated with their 12 teams in districts (but not always communes) that rank in the highest-affected areas of Cambodia. Part of their stated selection criteria for short-term work plans and responses to NGO requests for marking and clearance is the mine incident database. Once again, they did not use the service that CRC/HI provide of village level

statistics or even the commune level ranking in their selection process. The reason given is that there are other criteria and factors that form part of the selection process and that operating in the highest-risk districts was sufficiently reactive for CMM. **The database is therefore an important tool for the CMM and could become more important if they exploited the commune and village-level analysis available from CRC/HI.**

- d) **The socio-economic officers within CMAC** are directly involved with the LUPU and LUMU agencies as part of the Provincial Rural Development structure (in Battambang and Bantay Mean Chey) to identify and select priority requests for CMAC. No evidence was found that these officers used the database as criteria for discussion or selection in their work. In Bantay Mean Chey the socio-economic officer claimed he had never seen a CRC/HI report in English or Khmer despite their availability since 1996 and that the DU Manager (sitting some doors away) had the most recent copy on his desk and a file full of back-issues.
- e) **The Mines and UXO Awareness Branch in CMAC** also claim to use the database extensively as a planning tool for work-plan and schedule selection for their awareness presentations etc. Indeed, many of the most at risk communes were visited in the course of this evaluation and evidence of CMAC mine awareness visits was apparent. The mine awareness officers in Battambang and Bantay Mean Chey reported that their work-plans for village visits were directly based on the mine incident data, however the mine awareness officer in Bantay Mean Chey, for example, had not seen a copy of the report for 5 months. The MID report offers an insight into the behaviour of mine victims which CMAC awareness staff appear to appreciate and have placed, for example, added focus in their presentations of the dangers of 'tampering'. Equally the MID illustrates the comparative rise in UXO incidents since 1998, encouraging awareness teams (in CMAC and MAG) as well as the CMAC EOD teams to place more emphasis on the UXO problem facing villages.
- f) **The PRDC and LUMU/LUPU:** The newly empowered and emerging LUMU and LUPU agencies were found to use the database to a low level. Members used the reports to keep informed about the trends in mine incidents and where the worst areas were situated, but it was unclear how the data played a role in area selection, if at all. Both the LUMU and LUPU members contacted stressed that their agencies dealt with longer term land management issues in mined areas and were not established to react to emergency needs. In Bantay Mean Chey the Director of the PRDD was enthusiastic about the report but never used it in LUMU meetings. In Siem Riep a representative of the PRDC claimed that he had never seen a copy of the report, neither had he heard of it.
- g) **The Halo Trust** report that they only use the statistics for internal confirmation that they are operating in the relevant areas where loss of life and limb is an on-going problem. They regard themselves as an organisation focusing on interventions that meet live-saving needs as a priority and therefore find the database useful in this regard. To date they have found that all areas they select through their own methods (without the use of the database) coincide with the high-risk districts and communes in Siem Riep and Odtar Mean Chey.
- h) **The Mines Advisory Group** use the mine incident database as a central tool for strategic planning for both mine clearance and mine awareness operations. The database is used to assist selection of clearance tasks in Kompong Thom and Battambang where MAG work closely with development NGOs. But in Pursat and Preah Vihear where they have recently commenced clearance operations MAG have directly used the database statistics as the central factor in site selection. MAG also uses the MID as a main tool for selecting priority villages for mine awareness activities as part of MAG's community liaison programme. They also use MID information to monitor and evaluate the impact of mine awareness.³¹

³¹ Reported by various MAG staff during the evaluation and in a specific memo from the MAG Director dated 26/7/00.

In mine awareness presentations and schedule planning, MAG also rely very closely on statistics from the database so that the village visits respond to the needs in a timely and relevant way. As MAG was the agency that started the whole data collection concept in late 1994 it may not be surprising that it invests more importance than other agencies in the monthly data produce from the current database. These positive findings were established through meetings with MAG representatives both at the head office and the field centres and operational documentation provided by MAG.

- i) **Survey Level One.** Although the current level one survey (implemented for CMAC by GeoSpatial) aims to cover the whole country, planners are claiming that the MID is an important tool for targeting and adding important social information to back-up the village level data they aim to collect. It is a tool that other survey groups working in other mine-affected countries will not have the use of due to the uniqueness of the MID in Cambodia.
- j) **Other Agencies** No evidence was found that other agencies, whether they be (disability) rehabilitation groups, development NGOs, donors or embassies used the mine incident database statistics for strategic planning at the project level. At best the information acted as additional intelligence within a wide range of information that these groups used to make strategic decisions.

Monitoring and evaluation:

There is little evidence that the database is used effectively as a tool for evaluation or monitoring to date. (For this report the term 'monitoring' is used to refer to specific mine action project monitoring and not a general monitoring of the wider mines situation.) Clearly the documentation of data has the potential to be a useful tool for analysis and programme monitoring and evaluation. It can also be used irresponsibly to suggest causal linkages that are only assumptions and do not necessarily, actually exist. There are CMAC and Unicef reports citing declines in incident rates and attributing them to specific mine action interventions, but this evaluation judges these to be based on false or unverifiable assumptions. As mentioned in other sections of this report, changes in mine incident rates are influenced by a wide range of factors, where mine action does not *necessarily* play a major role (to date).

Nevertheless, the mine incident reports are charting a real and sustained decline of incidents throughout Cambodia since early 1999. Even though mine action may not be shown to be the major reason for this national decline, the database provides excellent evidence that the trend is downwards and advancing towards the stated goal of *zero accidents*. As such is it appropriate for CMAC, UNDP and other agencies and/or donors to use the data to illustrate the fight against mine incidents is generally being won and as part of their monitoring and evaluation of their policies.

See table on following page:

Table: Summary of different end-users reported use of the monthly mine incident report:

End User	Information use & Project promotion	Project-level Strategic Planning uses	Monitoring and Evaluation uses	Comments
CMAC Mine Awareness (MUXOA)	YES	YES	YES	Definitive interaction with data; informing policy and monitoring.
CMAC: Community Marking Teams (CMT)	YES	YES	YES	Data a central tool for planning
CMAC: Demining Units (DUs)	YES	Indirectly	NO	Low-level and indirect use by passing work in high risk areas to CMM
CMAC: Project management Unit (PMU)	YES	YES	NO	High use of data for site selection
CMAC: Socio-economic officers	Unknown	NO	NO	Little understanding or the potential use of the data; some officers do not receive the statistics at all
Survey Level One	YES	YES	N/A	High use of the data both now and to be expected in the future.
HALO Trust	YES	NO	Indirectly	Indirectly used for evaluation of Halos independent site selection process.
Mines Advisory Group	YES	YES	YES	Extensive use of database in all areas
Cambodia Trust	YES	NO	NO	Low level of interest or understanding of how the data could enhance their work
Veterans International (VI)	YES	YES	NO	Consider the data a valuable tool for reporting and promotion; use it in planning much less
IRCR	YES	NO	NO	ICRC's current role in Cambodia as a service provider for other agencies negates a strategic use of the data
National Council for Disabled People (NCDP)	YES	NO	NO	Non-implementing agency
Cambodia Disabled Peoples Organisation (CDPO)	YES	NO	NO	Advocacy agency
Handicap International (HI)	YES	NO	YES	Should be using the information far more in provincial outreach to mine victims: no strategic use at present
Disability Action Council	YES	NO	NO	Co-ordinating agency only
AmCross	YES	YES	YES	Direct follow-up of listed victims from MID and strategic planning based on data
UNICEF	YES	Yes:Through partners	YES	In so far that Unicef acts as a partner as well as donor it is committed to full use of the data
European Union	YES	YES	NO	Use data for strategic targeting of funding and choice of project funding
UNDP	YES	NO	NO	For UNDP the MID 'justifies' the success of CMAC
Land Use Planning Unit (LUPU)	YES	NO	NO	Have little present understanding of the potential use of the data . LUPU could be a prime user.
Land Use Management Unit (LUMU)	YES	NO	NO	Have little present understanding of the potential use of the data . LUMU could be a prime user.
Embassies	YES	NO	NO	Not wishing to micro-manage their partners it is not surprising embassies/donors don't use the data for strategic planning
World Vision	YES	YES	YES	Impressive use of data to direct and shape their program
International Campaign to Ban Landmines (ICBL)	YES	YES	YES	In a different way from others in this list the ICBL use the data as fully as possible.

2.1.2 The contribution of the database to mine victims.

- It appears, that while the MID is directly useful to mine action agencies in targeting operations effectively and while it rigorously documents the national changes in incident data, it does **not** directly assist mine victims to any significant degree.
- **One of the main concerns of the data gathering personnel working within CRC is that they are unable to offer any assistance to the mine victims that they interview for the MID.** Invariably mine and UXO victims are the poor, who, due to economic necessity, are living near or in minefields in the first place. Once a member of the family injured or killed (the majority of the victims are the male bread-winners) the hardships are greatly compounded. Typically the problem is less if the victim dies, but an seriously injured family member has a high economic cost for any family. During this evaluation CRC staff frequently raised this issue and their desire to assist the victims in some way rather than just extract information and leave. It is understood that CRC head office is also looking into ways it can assist the victims more. Food assistance is considered the most appropriate and they are looking for donors to assist and develop this idea. Given the declining number of mine victims and the relatively low cost such a project would cost this evaluation would encourage the development of this idea on humanitarian ground. There would, however, be difficult issues to resolve concerning transparency, logistical practicality and which victims are eligible for this suggested one-off hand out (i.e. are those with minor fragmentation injuries to be treated equally as amputees or the families of victims that die due to their injuries ?)
- CRC Data Gatherers (DGs) do let mine/UXO victims know of agencies near-by that can offer assistance in terms of medical support and limb replacement / wheelchair assistance. As such the DGs assist rehabilitation agencies through *informal referral*. DGs and CRC claim that they continually receive requests for information from victims while interviewing them. The rehabilitation agencies, however, claim that they have their own village-based survey and referral systems and that there is already a high level of support for mine / UXO victims. As such the rehabilitation find the MID useful and important information but they are not directly using it to follow-up reported victims, except in isolated cases.
- It can be assumed that the MID does assist the mine victims by providing rehabilitation agencies with statistical evidence and justification for on-going programmes: As a fund-raising and awareness-raising tool. As victim-assistance is part of mine action, and as victim support a stated objective of the Ottawa treaty, the MID which is directly used by the International Campaign to Ban Landmines (ICBL) and the Landmines Monitor serves to raise the on-going needs for victim support in Cambodia to a wider audience. These are, however, indirect benefits only. The MID information is also of interest to other external groups such as the Landmine Survivors Network.
- **As this evaluation is illustrating, the most powerful use of the MID in mine action is by enhancing the ability of mine action agencies to prevent future accidents rather than offering significant and direct assistance to existing mine victims.**

2.1.3 General perception of the database.

The MID is highly regarded by those that receive it, both within Cambodia and externally. Despite various changes some users would like to see in the format, information content, presentation and regularity, there is wide consensus that it is an excellent database and should be a permanent component of the mine action profile in Cambodia. Even critics within the sector that are normally cynical about projects that do not directly support mine clearance, value the investment and use of funds that supports MID and delivers the monthly report. The only dissenting comments focused on the question of coverage. Some doubt the realistic coverage possible by CRC's small team of data-gatherers, and they suggest that the real figures may be some percentage higher than currently reported. Particularly in provinces where access and communication is poor (Ratanakiri, Monduliri,

parts of Preah Vihear etc). Despite this the general perception is that the database is *at least* 90% accurate, and most users consider it a highly reliable source of information.

This evaluation concurs with the above perspective and considers the MID a vital component for current and future mine action planning and evaluation. It offers stakeholders a crucial understanding of the scope, location and changing nature of the problems they face. The details within the report also provide vital information concerning the behaviour of communities at risk that can, and should inform strategic decision-making in a wide range of mine action interventions. Although the data-gathering programme, which has developed into the current MID, started in late 1994, Cambodia remains unique in having a national database of this nature. None of the other severely mine-affected countries benefit from such a system, although it appears that HI in Afghanistan is seeking to establish a similar project. How other country programmes can *effectively* target and design their mine clearance, mine awareness and victim support interventions without such a database (and without national Level One surveys) should be seriously challenged.

2.1.4 Indicators for progress measurement.

Since CRC/HI assumed all MID responsibilities in 1998 the data-gathering structure and report has developed significantly, culminating in June 2000 with all provinces of Cambodia finally being covered. The issue of effective coverage of the whole country will remain a challenge for CRC but the report content and format is already well-developed. The *progress* of the project therefore needs to be measured taking into account the following factors:

- CRC/HI and their direct donors need to establish to what level they expect the database to serve the three categories of information and promotion (i.e Public Relations), strategic planning (and operations) and monitoring and evaluation. These expectations should be realistic and focus around the prime user-agencies in the mine action sector.
- Regular contact with these identified users and periodic monitoring of the end users' operations will indicate to what extent the database is being used. Currently this is not well defined. For some agencies and some interventions the database will, at best, serve to *assist* their objectives, and in other cases the database will *directly guide* the strategic planning and operations. CRC/HI themselves can monitor the changes over time in the use of the data they generate. This will be a important progress indicator.
- Some examples may illustrate the above points more clearly:
 - e.g.1)** As more information accumulates concerning victims' behaviour and the understanding of what is meant by the term 'tampering' (responsible for 19% of all incidents in 1998/1999 but in June 2000 the tampering percentage jumped to 45%) mine awareness agencies (CMAC/MAG/World Education/World Vision) should adapt their presentations and materials to respond to villagers needs.
 - e.g.2)** As CMAC units deploy (DUs , CMMTs and future 'mobile teams') to what degree are they targeting high-risk areas illustrated by the report. To what level is the data *formally* used in selection and deployment decision-making, both centrally and at the field level.
 - e.g.3)** In terms of 'negative confirmation' mine action interventions taking place in communes and villages which do not feature as high-risk areas need to be challenged to justify their operations. In this respect the Demining Regulatory Authority should be using the statistics to monitor mine action agencies.
 - e.g.4)** Newly established LUMU and LUPU-style provincial rural development sub-groups need to illustrate how they incorporate the statistics of the MID into their decision-making process. If they do not they should be able to explain why such data does not serve their needs.
 - e.g.5)** If a bi-lateral or multi-lateral donor funds mine action in areas not featured as high-risk according to the MID they too should be challenged to identify their objectives.
 - e.g.6)** If victim assistance agencies (prosthetics, wheelchairs, psychosocial assistance, surgical assistance and vocational training etc) are not providing adequate services in zones where numbers of

casualties are high, CRC/HI need to be pro-active in alerting these groups to their statistical findings, and to encourage agencies to use the data in strategic planning etc.

- Concerning the issue of credibility, MID currently enjoys high respect. As such Cambodian government agencies, donors, UN and NGO agencies, international monitoring bodies and newspapers publish and quote the MID reports as an authoritative source of information. They will also increasingly be used for monitoring, evaluation and analysis (as they have been in this study). An indication of the degradation of the reputation of the MID will be illustrated by any reversal of this trend. In this regard a strong progress indicator is the maintenance and increase of MID's authoritative reputation. This *may* become an issue as CRC assumes full control of the project after 2001, and/or if funding for the project reduces, affecting coverage and reliability.
- Another indicator of progress in the use and relevance of the MID will be the number of agencies requesting more detailed village and commune level statistics. The frequency of these requests will also be indicative. Currently few agencies are aware of this service and CRC/HI does little to promote their services.
- Operational progress indicators are an internal issue between CRC/HI and their supporters and will not be covered in this evaluation beyond the observations and findings made in the following section ; Operational Evaluation.

2.2 Operations Evaluation

2.2.1 Project structure and staff deployment.

The MID project agreement is between Unicef and Handicap International. It is administered by the Mines Co-ordinator (with a national Field Co-ordinator and an expatriate Technical Advisor) within HI Cambodia's Mines Department. The Cambodian Red Cross (CRC) is the partner / implementers for the national programme with approximately 30 national staff directly associated with the project. The CRC director of the project is head of the CRC Programme Department with 4 other national programmes to manage. **The structure of the CRC team is a straight-forward management hierarchy where all staff appear to have valid and full-time positions within a project structure with minimal administrative or bureaucratic distractions.** The two full-time HI staff associated with the project, work along-side the CRC team and are based in the CRC Data Management Office (DMO) in the suburbs of Phnom Penh³² A copy of the staff organigram is included as annex E.

A total of 6 CRC staff are based in the Phnom Penh DMO (including the Project manager, driver and cleaner). The current number of staff deployed in the field is changing at present following the stated objectives for year 2000, to reduce field staff from 29 to 19 field staff. This is already underway as high-incident areas are identified (and staff retained) and low incident areas have the CRC data-gathering personnel replaced by a 'CRC network'. There are currently 4 provinces where the network concept using CRC volunteers and existing local authorities is being tested. There are 3 provinces where CRC do not field data-gathering staff or have CRC networks in place. Information from these low-incident provinces (Takeo, Prey Veng and Kampong CChnang) is gathered through contacts with project partners (NGOs?). A map of the current CRC deployment is included as annex F of this report.

In high-incident provinces the provincial data gatherer for CRC is supplemented by data-gatherers responsible for particular districts. There are seven provinces operating with this arrangement.

³² The separation of the MD Office from the CRC central office in PNP is indicative of a historic lack of integration between the two entities. Plans are currently underway to re-locate the MD Office closer (opposite) to the CRC Head Office.

This evaluation finds that the **dynamic nature of staff deployment, (adapting the staff deployment profile to meet changing needs of districts and provinces) is a positive indication that CRC/HI are working towards a sustainable and responsive strategy.** Further issues of coverage and deployment are covered in sections below.

The recent placement of CRC staff in the last three provinces (previously not covered) of Ratanakiri, Mondulakiri and Stung Treng is a positive development. CMAC database maps based on Bombing data received from the US army indicate that vast quantities of bombs were dropped in these areas between 1970-75. Experience from PR Loas indicates that UXO incidents from similar weapons occur to a significant degree but are often unreported and un-recognised by central authorities. **The evaluation questions why the deployment of staff (requiring only 3 extra staff) into these areas was not effected sooner.**

2.2.2 Role and capacity of CRC.

As the major implementers of the MID project the role of CRC is clearly central to its success. Their current role is to implement the whole project with some support from HI; their future role will be to sustain the project independently. Originally CRC was identified as the appropriate partner for this data-gathering programme in preference to CMAC due to the extensive and historic network of volunteers and village-based involvement the Red Cross movement has in Cambodia. The idea was to harness existing CRC structures, knowledge and staff / volunteers to effect the MID over the medium to long-term. In this regard it was entirely appropriate for MAG to have handed over the programme in 1998, and for HI to withdraw in the near future as technical support is no longer needed (planned for 2001).

This evaluation finds that CRC remains the most appropriate agency in Cambodia to sustain the MID. As a national agency it has both the field experience and contacts as well as the respect needed at the central level to implement the work. It would be a major endeavour for another agency to duplicate the role of CRC and its ability to obtain support and co-operation at the village level throughout the country. **They are illustrating that they have a high capacity to execute the MID (with HI assistance), and caution is strongly advised if donors and planners seek to reduce support to CRC at present.** The present testing of 4 provinces with CRC networks to replacing paid CRC data gatherers also needs to be carefully monitored. **This evaluation regards small savings in the project budget, through reduced staffing, as a false economy that could totally undermine the basic objective of developing a national database.**

There are aspects of the project that CRC does **not** have the capacity to perform well at present, hence the continued requirement for HI technical assistance. Areas where the CRC staff appear to lack capacity and experience with respect to the MID are:

- Mastery of the technical aspects of the database and computer programme manipulation.
- Analysis and interpretation of statistical information.
- Initiative and creative thinking to adapt and develop the programme as part of the wider mine action sector.
- Confident interface with end-users and the international / national humanitarian sector.
- Issues of presentation, promotion, public relations and fund-raising concerning the MID.³³

None of the CRC team have had previous experience in the mine action sector and therefore miss the experience that would enable them to see the mine action environment, and their contribution to it, in the wider context. CRC staff appeared to be very narrowly focused. More exposure to the mine action sector should be developed. This would not be difficult to organise with the co-operation with mine action agencies. **MID staff,**

³³ If CRC are to successfully deal with the international community and raise funds independently for MID the problem of language (English) acquisition cannot be under-estimated. This issue alone may require the programme to maintain a full-time or part-time expatriate far longer than 2001.

particularly in the HQ, should not see themselves as statistical 'accountants' but as key contributors to mine action in Cambodia.

However there is no reason why CRC cannot perform all aspects of the work in the future. HI have almost 18 months to continue transferring skills and develop the CRC staff potential.

2.2.3 Current role and future exit strategy of Handicap International.

- In light of the above observation, it is judged that **HI's involvement in MID is critical to the process of project maturation (2000-2001) and imminent CRC independence (post- 2001)**. In the area of data-collection, information flow and programme management CRC already have a high level of capacity. At the HQ level (the DMO) CRC still need considerable assistance:
- The presence of a technical advisor, fluent in English and able to analyse / summarise the statistical information, write project reports and proposals and interface with other international mine action NGOs is in itself a great assistance to CRC. If CRC are to operate with less dependence on HI the transfer of these skills will be of primary importance.
- **Technically the CRC computer team in Phnom Penh are still not confident to operate self-sufficiently.** The original Technical Advisor (TA) assigned to the programme was technically competent to manage the database and produce regular reports with graphics and summary narratives. However this TA often worked alone and was unwilling or incompetent in transferring skills to his Khmer counterparts. Consequently a technical vacuum currently exists which has temporarily (for the last 6 months) been filled by the CMAC integrated database Senior Technical Advisor (who is also funded by Unicef). This was, however, an informal arrangement which will end by the end of July 2000 as the STA's contract comes to an end. The technical vacuum will continue, and although CRC intends to meet their shortfalls with training from commercial computer specialists. There may also be an option of 'borrowing' the CMAC technical advisor (attached to the Integrated Database) for specific assistance on an occasional basis . This is currently being discussed between CMAC, Unicef and HI/CRC.
- The role of the HI Mines Co-ordinator has been important to the development and promotion of the project. Being an expatriate with involvement in different aspects of mine action his contribution to the conceptual development of the project, its promotion and its successful funding has been important. The CRC project director (who also directs 4 other national programmes) has probably does not have the necessary experience, language abilities nor time to replace the role played by HI in this regard. The MID Project Manager is even less able or equipped than his superior to fulfil this role. This will be an important factor as HI devolve these responsibilities to CRC in 2001. CRC realise this and are petitioning HI to stay involved in the project for another 5 years.
- When international agencies in joint projects follow through with exit strategies there are always some compromises and trade-offs to be made. Some aspects of projects are enhanced while others are lost. **The important issue is that the product, the database itself and its link with end-users is strongly maintained.** If Unicef continues to support the MID project, as it intends to for the coming years, the role of the project officer within Unicef CAAC directly working with CRC may increase in importance as HI withdraw their involvement. This is the nature of partnership, and Unicef should ensure that the project officer responsible is able to work well with CRC and offer strong support beyond the process and management of funding donations.

2.2.4 Information collection and information flow.

Information is received, by CRC field staff, from a wide variety of sources, typically at the provincial and district level. Sometimes from the village and commune level. The information alerts the location-specific CRC data gatherer (DG) of a village or commune location where the incident(s) took place and the location of the victim. This information may come to the DG some weeks (but normally within the month) after the event. As soon as possible the DG personally visits the community (or hospital location) of the injured or killed person. The DG does not attempt to visit the location of the accident.

16 CRC staff are currently (July 2000) being trained in the use of GPS so as to be able to provide the mine action agencies (through the integrated CMAC database) with GPS referencing close to accident locations. They are not required to go to the place of the accident but take position readings from the nearest 'safe area'. This evaluation feels that this is a dangerous distraction for the DG who are not qualified to approach potentially mined areas. Of all the operators in the mine action sector the DGs are probably the most ill-equipped to perform a task that in other scenarios would be conducted by trained surveyors with medical back-up, transport, mine training and probably communication capacity. DG have none of these. **It is felt that this is misguided development in MID and has not been properly thought through by MID or the mine action agencies. This evaluation also seriously doubts that the GPS readings will be used to any higher degree than incident details available at present.**

All Mine/UXO Victim Information Forms (2-page questionnaire) are filled in by CRC staff only and are the sole document used for data entry. Every victim identified and reported on in the MID has been visited and questioned by a CRC DG.

At the end of every month the provincial CRC DGs visit Phnom Penh to submit all completed forms, meet with computer operators and their managers and collect their salary from CRC HQ. This occurs between the 1st and 3rd day of each following month. Delays in reporting can occur, for example when the CRC staff are notified of an accident 3 weeks after the event but cannot visit the victim and take the form to Phnom Penh until several weeks later. However, all incident data includes a *date* of incident and therefore within every 2 month cycle the information flow is automatically self-correcting.

Between the 15-20th of each month the reports are finalised in Khmer and English, and over 690 copies dispatched to end-users by mail.

This evaluation finds:

- That the current system works well and serves the Data Management Office in a timely manner enabling the report to be finalised within 2 weeks after the reporting month.
- That the victim questionnaires are all maintained centrally on the original forms. Provincial DGs have to make photocopies of their reports or copy information by hand into note books if they wish to have their own record system. This seems an inadequate system resulting in the DGs having no ability to respond to questions or details from NGOs and other interested parties. In effect it dis-empowers them to represent CRC MID well in the province and district.
- This evaluation suggests that routinely each provincial DG team are sent a tabular listing of all the reports they make each month so that the provincial DGs can build up their own files with sufficient details to assist agencies interested in seeing details of the monthly incidents. The only alternative is for interested parties to contact the PNP DMO (through a postal address only) centrally. This process can take a long time and is a deterrent to outside agencies seeking details and information. It is a little ironic that having collected the information in detail (to the village) level they receive the report that only illustrates district and commune level statistics without even showing the monthly incremental increase by commune or district (The monthly increment is only depicted by province. The district and commune tables only rank the 'worst' 30 provinces

with totals from January 1999) **CRC/HI should seek to give their own staff better feedback and empower them with data to serve their local environment with relevant information.** DGs interviewed could answer very few questions accurately or with confidence concerning their own data collection³⁴.

- **CRC/HI could enhance capacity and motivation in the DG teams in their work far more than is currently occurring.**

2.2.5 Coverage issues & project interaction with information providers.

The MID project operates through direct and regular contact with specific information providers throughout the country.

These are typically local authorities (village / commune / district), CRC /IFRC volunteers, hospitals and health centres. Additional information is sometimes provided through CMAC, NGOs, UN agencies and individuals. The level of interaction differs from province to province depending upon communication restraints, severity of the mines threat, access and co-operation / motivation of the information providers.

As the changing nature of the mine problem is illustrated over the months and years, and as the project matures CRC is able to use its own data to inform the re-shaping of their data collection staff deployment. Reducing staff where least needs and increasing resources where incidents are high.

Volunteer Networks:

CRC is increasing its 'training and development' of volunteer support of data gathering in high-incident areas. Their target is to train 200 participants from high-risk villages during 2000. In Odtar Meanchey alone apparently, 80 CRC volunteers are already participating in the 'network'.. The evaluation was informed by CRC staff in Bantay Meanchey that 397 IFRC volunteers assisted them with data-collection in 4 districts alone. CRC also claims that volunteer networks have been established in the four provinces where CRC had recently withdrawn staff . The reference to large volunteer networks were frequently discussed during the evaluation. In the opinion of this study these claims raise important questions. **Volunteers and communication networks are not established without organisation, communication and some degree of incentive or motivation. CRC/HI need to be very clear what networks they can rely on and have genuinely established and how much is wishful thinking.**

Theoretically the establishment of a communication network to achieve coverage was always the objective of the data gathering initiative (under MAG as well as CRC/HI). CRC were obvious partners for HI due to their extensive rural reach in terms of contacts and potential participant. There is, however, little evidence that the participation of these volunteers has been secured and maintained through training and less evidence that they can be monitored to take on the role of *de facto* data gatherers .

The contradiction facing CRC/HI is that the mine casualty rates are falling, requiring less and less staff for follow-up (and report completion), but they have vast areas of the country to cover with relatively few representatives. They are therefore committed to reducing their staff presence while at the same time increasing the capacity of a reliable framework for data gathering. The evaluation finds this to be a sound approach but cautions that the following criteria must be met if the integrity of the data base is to be maintained:

That the nature and capacity of the alternative framework (volunteer network) needs to be understood and measured. This will undoubtedly require some level of training and assessment.

The reliability of the communication system from village to province should be assessed and tested.

³⁴ In the current system it is possible for a DG, reporting in a lower-incident area to submit reports and yet never see that particular commune represented at all in any reports from the MID (because they only report on the top 30 by ranking). It is also possible for DGs in general to have no idea of the incremental changes in their own or neighbouring communes/districts.

Overall, CRC, HI and donors should be clear what they wish to achieve: a database will require data-collectors, monitors and quality control personnel. **The prime objective is to develop a reliable system of information of high quality not the lowest running costs and lowest staffing structure possible.**

Low-incident Provinces:

Particularly with the identification of consistently low-incident areas, CRC is seeking to develop local sustainable networks of information providers using unpaid volunteers, village / commune / district authorities and health post (including hospital where relevant) personnel. CRC is currently experimenting with 4 provinces as test areas where a local network is being developed³⁵. In these areas the CRC data gatherer salary has been curtailed (April 2000) but they continue to operate as a focal point for liaising with the local network and ensuring that in the increasingly rare cases of an accident, the complete form reaches the Phnom Penh database. They are offered a \$5 payment for each form completed and delivered. **It is too early to evaluate or verify if this new approach is working. CRC/HI staff feel confident that due to the low number of incidents in the 4 provinces it presents little risk to the overall integrity of the database coverage.** The CRC Project Manager and the HI Field Co-ordinator have also assumed responsibility to monitor these provinces themselves. According to the database for May and June 2000, a total of 10 incidents occurred in 2 of these 'low-incident zones', while none occurred in the other 2.

In the absence of a system to quality control the veracity of these statistics, we have to assume that more incidents did not actually occur in the above example. The alternative supposition is that other incidents may have occurred but the withdrawal of a salaried CRC data gatherer from the province reduced CRC's capacity to be informed. The same assumption has to be made for the three provinces where CRC has never fielded data gathering staff.: These are Takeo, Prey Veng and Kampong CChnang provinces. Since the end of 1996 no incidents at all have been reported from these three provinces and *assuming* there is some communication network in-place (local structures not CRC generated) CRC are correct not to field staff in these areas. However, **CRC/HI need to remember they are working under an assumption, that effective communications networks operate in all areas, which needs to be tested from time to time.**

There is no difficulty in verifying data compiled by CRC as every report can be traced back to an individual. Clearly the main difficulty monitoring the MID process is to know what may have been missed.³⁶ **It is the judgement of this evaluation that in provinces where incidents are a rare occurrence there is less likelihood of incidents occurring without report to local and district authorities due to the relatively high dramatic impact on the community.**

In Rattanakiri, Mondolkiri, and Stung Treng only 2 incidents were reported throughout 1999 and only a further 2 have been reported in 2000. Historically the number of incidents reported in these provinces since 1979 is so low that together they represent 0% of the historical total. In these areas CRC has recently positioned staff responsible for gathering data and developing an information network. These areas are very sparsely populated, thickly forested and present serious access problems. **This evaluation totally endorses the decision to place CRC MID staff in these provinces to establish such a network and test directly the assumption, long-held, that there are negligible incidents in these zones.** It is understood that the placement of staff in these areas, as anywhere else is temporary and subject to change based on programme priorities.

High incident provinces:

High-incident provinces are divided into high-risk areas and low-risk areas and receive CRC attention according to their severity. In high-incident areas data gathering takes place with regular contact with village and commune

³⁵ These are Kampot, Kampong Cham, Kampong Speu and Svay Rieng.

³⁶ Trauma Care Foundation suggests exactly this: that based on statistics compiled in sample cases in other countries the MID are probably missing a significant number of deaths (as opposed to injured) in their reporting.

leaders, but only in very specific few locations. CRC staff face considerable challenges in data collection in rural areas, over long distances and in seasonally inaccessible communes. The difficulty of national coverage can be illustrated by the following examples:

- a) In Bantay Meanchey there are 7 districts, 63 communes and 638 villages to be covered by 2 CRC staff. If they were to conduct village-level coverage only once a month they would have to visit over 10 villages each, every day of the week throughout the month. Even visiting all commune leaders on a monthly basis would require a different commune to be visited every day of every week by each of the staff. That would be without considering the actual visits to the victims that is necessary for the MID.³⁷ Coverage is therefore only possible through selection and targeting of high risk areas and relying on informal networking to complete coverage for the province. In the case of Bantay Meanchey CRC has identified only 17 villages for regular visits (2 times a month), representing 2.7% of the total. One of the CRC data collectors is responsible for these villages while the other monitors the rest of the province through visits with district leaders, hospitals and health posts. In some cases heads of schools are also included. For 97.3% of the villages in Bantay Meanchey CRC mainly rely on existing communication channels between village -- commune -- district leaders, hospital records and head-teachers and the amorphous 'volunteer network' with whom they only have contact when the volunteers contact the CRC office in Sisophon by radio or in person.
- b) In Siem Riep the situation is similar with 4 CRC staff covering the 17 districts of Siem Riep and Odtar Meanchey together. The senior CRC staff member covers 6 districts himself comprising 48 communes and 358 villages. Faced with such numbers it is not surprising that he relies totally on information provided by existing networks of the provincial administration, health centres, school authorities and NGOs. He recognised that there were CRC 'volunteers' in all the areas but said their participation was informal and could not be relied on. Despite the need for these four staff to monitor a huge area and travel extensively there were only 8 incidents in both provinces in June of this year, necessitating minimal victim follow-up.

In conclusion the findings in this section are:

- That CRC/MI are flexible and effective in deploying and adapting the profile of staff locations to meet the changing needs of the database. 80% of the accidents occur in 7 provinces where CRC have their located approximately 80% of their field staff. They are matching resources to incident levels.
- The on-going division of provinces, districts and communes into high and low-incident categories illustrates a reactive and well-managed programme.
- That CRC/MI should be very aware that the data they receive is as only as good as the communication network that they create or exploit.
- That MID currently operate under the (un-tested) *assumption* that in areas where they do not have field staff they have good alternative communication networks.
- The reduction and re-deployment of CRC provincial staff may have a cost in terms of complete coverage but that they will always have to make a trade-off between the development of a sustainable and cost-efficient structure, and the obtaining of complete information.
- In this regard the evaluation finds that the current coverage appears to be excellent and probably reports at least 90% of the incidents that occur.³⁸ Efforts to obtain a perfect system (100%) will be an exercise in 'diminishing returns' where the marginal benefit to the MID will not justify the necessary extra cost. Furthermore the difference between 90% and 100% accuracy will make no difference to the end use and effectiveness of the MID. **Donors and CRC/MI are cautioned not to treat the project as a numerical,**

³⁷ Data is only entered into the database from completed victim report forms. At present forms are only completed by CRC staff.

³⁸ This figure cannot be verified but is chosen to allow for a 10% data deficiency nationally. It should be remembered that 80% of the accidents occur in 7 provinces where CRC have their highest concentration of staff.

quasi-scientific exercise, but to remember the end use of the data is the final test of its relevance to mine action.

2.2.6 Technical analysis of the database.

The technical equipment used in MID is judged to be technically adequate to meet the current and future needs of mine incident data collection. Essentially the MID needs to document and tabulate the information received from the field. The breakdown of data into component parts and separation of data in pie-charts is a strong analytical tool that illustrates the wide range of information that can be gathered from a 13-question victim report form. This is achieved through a pre-formatted Excel programme file that extracts and compiles information once the basic data is entered by the CRC computer operators. It is understood that the Senior Technical Advisor (STA) for the CMAC integrated database has, in recent months, developed the software to facilitate straightforward data entry with pre-designed formula that effect statistical analysis and develop pie-charts automatically ...or at least following simple demands. The first TA associated to the programme failed to develop such software and once he left the programme (Jan 2000) the CRC staff were highly dependent on the STA's contribution.

It has already been noted in this report that the STAs involvement in the MID ends July 2000 and the current TA is not qualified to support MID with software manipulation and development. There is a vacuum in this regard which will undoubtedly cause CRC problems in the future and will probably not be adequately met by commercial computer consultants. **The absence of a computer-technical TA will limit the vision and possibilities of MID's development to some degree. CRC/MI need to plan how to resolve this situation. As mentioned there are discussions concerning the continued 'sharing' of the CMAC STA for both programmes.**

2.2.7 Analytical / Data interpretation capacity.

The analytical capacity of the MID staff both centrally and in the field is judged to be very weak. This is a problem endemic to Cambodia and is both a cultural and educational issue. From the educational side, in terms of staff development and capacity-building far more emphasis could be put on analysis and interpretation of data. The current TA needs to consider this as a key element of his terms of reference. Concerning the cultural aspects, it needs to be appreciated that the western analytical model and logical approach is not necessarily valued or understood by other cultures, including Cambodia. There may, therefore, be always limitations to the potential of the MID CRC staff to be confident and competent in analysis and interpretation.

This weakness need not be an obstacle to the future development of the MID project. The primary objective of the project is to gather as comprehensively as possible the incident data nationally. It is then required to present information in a clear and accessible format (with some separation of data into pie-charts that express relationships between different factors etc) and make it widely, and regularly, available to potential end-users. This is currently being achieved by the MID. It may not need to be the role of the MID to interpret and analyse the data to any further degree. **Clearly the CRC senior staff need to understand the relevance of specific information but analysis and interpretation should be the responsibility of the end-users themselves, in particular the co-ordinating and regulatory authorities of mine action in Cambodia.**

2.2.8 Report dissemination and quality of service to end-users.

The monthly report of the MID is disseminated widely to mine action agencies, IOs & NGOs, government ministries, embassies, donors, selected international organisations and Cambodian newspapers. The current distribution list includes 127 addressees who receive between them 696 copies of the report. every month. MID expects to print 1000 copies of its annual report. However the findings in this regard are:

- **Various key agencies or departments within agencies are failing to receive the report even though they are on the mailing list.** Agencies found to receive the report on a negligible or sporadic basis include, the socio-economic officers and mine awareness officers in CMAC, provincial offices of disability organisations including HI, JSC, CDPO etc, LUPU and LUMU officers, certain Provincial Rural Development Departments. Blame for this could lie with false addresses, the postal system, and the internal distribution system of various larger organisations (e.g. government ministries / CMAC)
- **The database mailing list needs to be reviewed and updated on a regular basis.** The mine action world and the relevant stakeholders change by name and organisation regularly. There are various obsolete names and addresses in the current address list.
- **The correct distribution of Khmer and English copies should be monitored more closely and reviewed.** On various occasions those consulted claimed that they received English versions which they could not read and were unaware that a Khmer version existed. This needs to be followed up. The suggestion below concerning CRC staff controlling provincial distribution could assist here.
- **There are agencies within Cambodia (e.g. Lumu and LUPU) and international agencies that should definitely be included on the mailing list.** The UN focal point for mine action (UNMAS), the UN focal point for mine awareness (UNICEF HQ), the Geneva International Centre for Humanitarian Demining (GICHD) and the Survey Action Centre (SAC) in Washington are international bodies that need to receive the data. Another important venue for the report is the James Madison University Humanitarian Demining Centre; JMU operates the most comprehensive web site on mine action world wide.
- **It is suggested that the MID use their existing provincial contacts and CRC staff to ensure distribution of the report at the provincial level.** Copies for the PRD, local authorities, ministries' provincial departments, departments within CMAC, NGOs offices and others could be very effectively distributed by CRC staff. Normally in provincial towns the government, CMAC and NGOs offices are close to each other and if the CRC representative personally handed the document to the intended end user not only does it create stronger working relationships but raises the profile of the CRC representative while increasing CRC's reputation as an effective 'service provider'. Of course it would also ensure that the copy actually reached the relevant end users and the process could encourage increased usage. **This relatively small change in CRC dissemination approach could yield considerable benefits.**

There is an urgent need for CRC to review the format of the report. There are some strong reasons to support this.

- Among the Khmer nationals interviewed for this evaluation there was a universal preference for tables and a widespread dislike for pie-charts, which they found difficult to understand and interpret. Although this may come as some surprise to those who regard pie-charts as accessible presentation tools, CRC/HI needs to accept that they must either train end users to understand pie-charts (!), find an alternative way to express certain information or ignore the issue.
- Equally the graphs that incorporate numerous ranges of data over time are impressive but probably neither comprehensible nor of interest to most users. What may look attractive and accessible in colour radically changes when photocopied in black and white. Most users receive their copies in black and white.
- The document is too big. Monthly reports do not need to be so large; much of the information is unnecessarily repeated and re-configured through different presentations. The **annual report** can be full and a **6 month report** can include more graphs and detail but **the monthly report would definitely benefit from being shorter.** The report loses its impact when so much arrives on people's desk so regularly...it is also an immodest use of paper.
- Another idea could be to continue to produce a full monthly report for specific and key end-users while the others are sent only 2 or 3 pages of summary.

- Specific sectorial reports are not recommended as they could deepen sectorial separation at a time when integration of different aspects of mine action is important. Also CRC/MI would have to assume a censoring role by selecting which information they felt would be relevant to each sector.

There is also an urgent need to up-grade the precision of information gathered. As mine action matures and our collective understanding of the context improves, different questions need to be answered. In this light this evaluation recommends that the questionnaire and DG training considers the following changes to the questionnaire and its application:

Farming: There is a difference between whether a farming incident occurs while the farmer is clearing new land for cultivation (i.e. land preparation) and a farming incident in land currently under cultivation. The implication is that if this category is clarified it will be seen that farming accidents predominantly occur when land is being cleared and prepared for future cultivation and that this category of agricultural land should be prioritised before existing cultivated land.

Duration of presence: The questionnaire should seek to extract whether people who are new to an area are more susceptible to mines/UXO incidents than those who know and live in the area. If this is the case there could be a stronger justification for marking and of targeting new-comers with mine awareness.

Tampering: This is a term that needs to be broken down into more precise activities. Was the victim directly playing with a device or fooling around with it out of curiosity? Was the victim actually trying to open the device for explosive compound (for sale or fishing etc)? Was the victim stripping the device for scrap metal sale? Was the victim actually conducting 'village demining'. CRC/MI are aware of this need but are slow to implement the changes.

Passive or active victims: There is a difference between being the person who actually disturbs and activated a mine or UXO and someone who is nearby or watching. Both may be victims and will probably be listed equally as victims doing the same activity. In fact one was active ('primary') while the other was passive, or at least 'secondary'.

Incidents versus casualties: There is a need to clarify that in certain incidents (particularly with UXO) more than one person is injured or killed. (normally caused by a primary victim, but which directly affects the secondary victim(s).) Accident statistics will therefore normally be higher than incident statistics.

These suggestions are made in this evaluation not to satisfy an intellectual curiosity but because the findings from a **more precise information base will have direct use for end-users who need more relevant information to strategically direct their mine clearance and awareness programmes.** DGs should have the maturity and comprehension to understand the differences and be able to draw the answers from the victims they interview. **If they are currently unable to cope with these subtleties, CRC/MI need to invest some time assisting the DGs towards a greater understanding.**

CRC/MI should re-direct some of the energy it puts into the development of a many-paged monthly report toward the effective promotion and servicing of individual end-user requests. Communication and response mechanisms need to be enhanced as does the knowledge that such a service is available.³⁹ In the last year they have received on average one request every 10 days. With the DMO situated out of town, off-line in terms of the internet and not speaking English it is not the easiest office to make requests to. The June 2000 MID report advertises the request service for the first time but only gives the postal address of the DMO. Not only is the postal service unreliable but slow and users (especially outside Phnom Penh) are unlikely to use it. Not surprisingly perhaps all of the 33 requests made to MID in the last 14 months were made by expatriates, (NGO / UN staff) and CMAC Branch Heads. These requests were also mainly made through HI (expatriate) and not to MID. During the evaluation a request from UNHCR Battambang was made, by letter, via the CRC DG representative for particular information.; 5 weeks later MID had not received the request. It is unknown if there are other examples of this nature.

³⁹ Most agencies and individuals contacted throughout the evaluation were not aware that MID offered a request service.

A corollary to the issue of prompt and accessible service-provision is the maintenance of quality of information. CRC/HI needs to monitor the provision of customised information to ensure that it is entirely consistent with actual data received. Once data operators start to draw information out of the data base without pre-formatted commands can be used care should be taken that information is accurate. Some isolate recent examples have illustrated the need for more attention.

CRC/HI are committed to improving this situation as soon as possible and the evaluation encourages them to this end.

2.2.9 Further technical assistance requirements.

Comments and finding relating to this sub-section are made in various sections of this evaluation and need not be repeated here.

2.3 Sustainability Evaluation

2.3.1 Assessment of use of CRC as project implementers.

- CRC are, and intend to continue being, the project implementers of the MID. They have developed an high capacity for collecting the data and are developing networks and deployment strategies, with HI's assistance, that suggest they can sustain and manage the project activities into the future.
- The management in Phnom Penh, at CRC HQ, appears to understand the project 's importance but are possibly more attracted by the promise of high visibility and external funding that the project can bring them. CRC is a large national organisation and MID a relatively small project and their involvement to the mine action sector is periphery. They have strong access to the mine action sector and funding avenues through their connection with HI and not surprisingly they are currently pushing for HI to remain involved for another 5 years. In this regard **HI should ensure that the key CRC staff in Phnom Penh and in the field interact more with other agencies in the mine action sector before they withdraw their involvement. The MID and CRC have to be seen as insider' agency if their advantage and impact are to be maximised.**
- The assessment is that CRC are the ideal Cambodian entity to continue the MID but donors should maintain a close monitoring and support role as HI withdraws responsibilities. If increased support from HI or international agencies is judged to be necessary in 2002 and beyond then it should be made available. **The paramount objective is to create a sustainable system that delivers high quality information to serve the mine action sector. That such a system be operated by national staff and overseen by a Cambodian agency can only be a secondary objective.**

2.3.2 Security of future project funding & cost-recovery of project costs.

- HI has secured funding through the US and Finland for MID for all 2001. Unicef in intending to maintain commitment to the project in 2000 and 2001. Although there is a strong donor commitment to mine action in Cambodia in general, all agencies have to work to secure funding on an annual basis. This is true for the NGOs as much as for CMAC and therefore a guaranteed funding base for MID up to the end of 2001 is assessed to be a healthy funding situation to be in. There is no reason why HI and other mine action agencies cannot assist CRC, after 2001, to win project funding. This is another reason why MID and CRC need to become more closely linked with the mine action community in general.

- It is clear that CRC are somewhat nervous about funding security for the project and have recently asked HI to remain involved in the project for a further 5 years. **If the MID maintains and enhances its quality of information, request service, dissemination and relevance, this evaluation sees little reason for future funding to be insecure.**
- The issue of cost recovery has been raised in relation to charging certain end-users a monthly or annual amount in return for the service they provide. It is not certain whether the impetus for this has come from insecurity concerning future project funding or based on the principle that a user should pay something for a service provided. In the June '99 user survey questionnaire filled in by 51 respondents, only 31% said they would be willing to pay for an annual or a monthly reports, representing only 15 agencies. With the annual budget of \$263,000 in 2000 it is clear that the few willing agencies would have to be charged an unacceptably high for cost recovery to be meaningful.
- It is hard to persuade agencies that have been receiving a free report for 5 years (initially through MAG) to start paying for it. The key agencies would probably end up making contributions by charging it to the same donors that CRC could raise project funds from. Also CRC are not facing a threatening funding crisis and agencies have little incentive to pay if they assume that the report will still be produced if they do not pay! The issue of cost recovery raises other issues such as how MID will treat those agencies that do not want to pay but consider themselves end-users? Which agencies would be exempt from payment and on what basis? Would the amount charged represent number of copies sent, size of the agency, whether expatriate or not, or level of end-use? How would photocopying of the document be prevented and unauthorised use of its information? Finally, what would be the advantage of MID losing readership and end-user relevance because some agencies refused to pay for the report?
- **This evaluation considers the issue of cost recovery to be inappropriate and that it should be forgotten.** Instead CRC/HI would enhance their funding security by maintaining a quality product and liaising closely with stakeholders in the mine action world to establish strong support both morally and financially. This evaluation illustrates that the MID enjoys high relevance and reputation in the sector: this is its most valuable asset to secure future funding.

2.3.3 Changes in the Cambodian mine problem & its impact of the project's needs. The sustainability of current information network.

The number of injuries and deaths caused by mines and UXO in Cambodia is reducing at a remarkable rate and it may be assumed to continue this down-ward trend. The most dramatic reduction occurred following the cessation of factional conflict. The current level of mine action activities and donor interest cannot be assumed to continue endlessly. The mines threat for Cambodia has already reached its peak and is now declining. The issue of land denial and socio-economic vulnerability due to mines remains and the number of incidents per year are still unacceptably high. Zero casualties is the objective.

MIDs will be operating, in the coming years, in a sector with changing needs as the threat diminishes. The life of the project should be considered as finite and will probably be required to meet short and medium-terms needs only. It should be assumed that there will not be a long term requirement for MID. It would be hard to justify a national network dedicated to mine /UXO incident collection when a low level of incidents is the norm. The CRC network system harnesses an organisation that is already in place and will remain in place whatever happens to MID. By using local authorities, health workers and IFRC/CRC volunteers throughout the country the MID is left with a relatively small contingent of paid staff to manage and deploy, and/or lay off. **This will be one of the great strengths of the CRC approach as the mine problem reduces over coming years. The information flow will continue through established systems even if the project reduces the number of DGs.** As such the information flow is sustainable and highly appropriate in a context of changing needs that probably necessitate successive reduction in project size and scope.

Therefore, CRC/HI should appreciate that their role is finite, targeted and that at a certain point their reports will no longer serve the function it does today. This will be in the medium term. In the short term the information remains highly relevant and they should continue to be adaptive and focus on the contribution their report can make to the decline in incidents that will, eventually make their role irrelevant!

Central Findings: Mine Incident database

- The MID is performing a vital and unique function within the mine action context in Cambodia and provided valuable information that assist different agencies and government bodies in multiple areas of their activities.
- The MID project is operating with a tight budget and has an organic and changing management / deployment approach that is entirely suited to the nature of the work. For what MID contribute this evaluation judges the MID to be cost-effective and inexpensive.
- As of mid-2000 MID can claim to operate a national system of information-gathering which is the only system of its kind world-wide. The collaboration between HI and CRC has been very effective in achieving this objective and the role of Unicef in supporting and directing the project has been important.
- That there are various areas where the collection and dissemination of data and the end-use of data could be improved, and a systematic response to the findings and recommendations in this report will lead to an enhanced and effective programme. This is a realistic target for HI and CRC as all changes are possible with current capacity and financing.

Specific recommendations

Impact Issues

1. That the future aims and objectives of the MID project be clearly and simply stated and that the focus be on the delivery of a quality product and not additional unachievable mine action objectives. In this regard CRC / HI need to review the realistic expectations of the possible uses for the MID and work specifically to achieve them.
2. Following from the above point, CRC/HI should increase their regular contact and involvement within the mine action sector and increasingly work with end-users to both promote the MID services and to deliver specific end-users with the product that is most useful to their needs. Increased contact will result in increased use.

Operational Issues:

3. Recommend that CRC/HI and donors recognise that the current cost of MID are not high in relation to the product and tool they offer the mine action community and that in this regard 'false economies' are not made to try to achieve the lowest budget programme possible. The focus has to be on the quality of the product and its effective use.
4. The current inclusion of GPS-related activities be urgently reviewed by CRC/HI staff with technical representatives of CMAC and the Demining Regulatory Authority. This evaluation does not recommend the use of data gatherers as *de facto* technical accident surveying agents for demining organisations. Unicef would also be implicated if an accident occurred.
5. That the provincial DG be given far more feed-back, statistical resources and encouragement to allow them to interface with other mine action partners with authority and act more fully as MID representatives. These vital CRC staff need to be more 'empowered' locally.

6. CRC/HI need to develop a definite strategy concerning the technical needs of software management and development at the DMO. The ideal situation would be to operate a sharing arrangement with the STA for the CMAC database.
7. More focus is put on DG and Phnom Penh CRC staff to gain a deeper understanding of the reason for the MID and a deeper familiarisation with mine action issues in Cambodia.
8. As observed in various findings CRC/HI need to rigorously review the current monthly report in terms of content, format, length and dissemination.
9. As part of the above review additional important details concerning mine victims need to be included in the report and therefore the training of DGs. The details of these are in listed in this evaluation and have direct relevance to particular end-users.
10. CRC/HI need to consider creative strategies to promote the use of the MID and the project as a service provider and to enhance the added value it offers the mine action end users in Cambodia. There is considerable scope for increase activity here: effective use of a limited report is considered better than partial use of an extensive many-paged report.

Sustainability Issues:

11. That the project drop the idea and pursuit of 'cost recovery' through charging end users.
12. That as CRC depends more and more on community networks and volunteer networks it works hard to establish, maintain and monitor the system. Clear strategies need to be developed on monitoring, testing and evaluating these emerging networks. This recommendation deals with the issue of developing quality control and could be extended to cover all aspects of CRC field data gathering.
13. That CRC remain confident that they are operating a project with high quality results and relevant application in the mine action sector and that therefore they can expect to receive regular funding. They should not down-size or make strategic decisions on the presumption that funding will be difficult to obtain once HI have withdrawn from direct involvement in 2001.
14. That CRC also recognise that if the incident reduction currently occurring continues, there may be reduced need for a MID in coming years. Such a situation should be welcomed by all stakeholders in the mine action sector, but needs CRC to understand that its role with MID should be finite.

Overall Recommendations:

1. **The MID project should be maintained as a vital component of effective mine action in Cambodia.**
2. **The MID project should not be expanded but should expect to develop strategies to develop well-functioning communication networks anticipating the finite life-span of the current initiative.**
3. **Unicef's support of this project has been important strategically and financially and the supervision of the project should continue to come from the CAAC department.**

3. Child Mine Risk Education (CMRE) -MAG

Since 1994-1995 Mine Advisory Group (MAG) has worked in partnership with UNICEF, developing and applying a Child Mine-Awareness Education project. Initially the project activities, were developed in Battambang province focused on children and their communities, educating on the dangers of mines and unexploded ordinance (UXO). Later in 1995 the Child Mine Awareness Education program expanded to include Banteay Mean Chey province and again later in 1998 responding to the need, a Child Mine Awareness program was established in Siem Reap thereby establishing a Mine Awareness program in the three provinces of the North West. It is in these North West provinces, that border Thailand, where the conflicts and warfare of the 1980's occurred and therefore these are the heaviest mined and UXO areas in the country. In 1997 there was an increase in military conflict especially in these North West provinces leaving behind additional mined areas, UXO's and internally displaced families.

During the time period 1995-1998, through the MAG Child and Community teams, Mine Awareness Education presentations were held at village level throughout the districts of these provinces limited only by security and access issues. According to one report Mine Awareness Education presentations between 1996-1998 had reached out to a total of *'around 140,000 children in Battambang, Siem Reap and Banteay Meanchey'⁴⁰*... *' and a total of 14,491 adults with a further 411 teachers participating and receiving training'*. Curriculum and materials designed for child instruction were developed during this time including video, posters and booklets for distribution⁴¹.

The 1999 MAG submitted a new proposal to UNICEF, 'Child Mine Risk Education' (CMRE). This proposal was submitted to UNICEF early 1999 and in July the proposal was accepted retroactive to the previous May. This new proposal was developed so that a formal collaboration would take place with the Ministry of Education, Youth and Sports, (MoEYS. This is stated in the proposal that the sustainability of the Child Mine Risk Education (CMRE) activities would occur through its integration into the National Curriculum and also ensure the development of a monitoring system of CMRE trained teachers.

MAG senior management decided to discontinue their involvement in the CMRE after the first year as they felt it no longer fitted into MAG's country strategy. As a result of this decision the agency World Education-Cambodia took over the CMRE activities starting July 2000. It was during this transition stage that the UNICEF evaluation of the CMRE took place.

3.1 Evaluation of Impact

The impact of Child Mine Risk Education set against the stated goals and the objectives.

3.1.1. Review Project objectives and level of achievement.

Long Term Objective

1. 'Improve the conditions of life in mine-affected communities in Cambodia'⁴.
- In the MAG proposal May 1999, objectives were described as 'Project Summaries'.

Objectives (Project Summaries)

1. Collaborate with Ministry of Education, Youth and Sports (MoEYS) to integrate Child Mine Risk Education in the national curriculum by trained teachers in mine risk education programming.
2. Collaboration with NGO's to integrate Mine Risk Education in non-formal education activities.
3. Educating children in safer behaviour in mine contaminated environments.

⁴⁰ Landmine Related Project- Unicef -Summary of Achievements 1996-1998

⁴¹ Children Affected by Armed Conflict unicef-1999

Objective 1: Collaborate with Ministry of Education, Youth and Sports (MoEYS) to integrate Child Mine Risk Education in the national curriculum by trained teachers in mine risk education programming

Findings: A close working co-operation and collaboration has occurred between the MoEYS and MAG over the years especially at the provincial level. This long term relationship and co-operation can be appreciated by the introduction of mine awareness into two national text book, grade 4 and grade 10 in 1988 which was advocated by MAG. The integration of Child Mine Risk Education into all grade textbooks has not occurred. There will be a review of all school syllabuses at the end of year 2000 and all school textbooks will be reviewed and revised as necessary in the year 2001. This is an opportune time for the inclusion of CMRE into the national curriculum. This objective is in the process of being achieved.

Objective 2: Collaboration with NGO's to integrate Mine Risk Education in non-formal education activities.

Findings: MAG has not developed collaboration with NGO's to integrate CMRE into non-formal education activities especially to reach the non attending school children. Although MAG trainers document that they have contacted many NGO's in the target provinces, the main purpose was to instruct NGO staff on Mine Risks and not as a means to collaborate together to train NGO staff to present CMRE into a non-formal education activity and reach the child out of school.

One of the constraint in the non-achievement of this objective is that the majority of the NGO's working in these high risk mined areas usually deliver a service of emergency health service, health education, infrastructure development or focus on small agriculture development projects and do not have activities in non-formal education to facilitate the CMRE to target communities.

Objective 3: Educating children in safer behaviour in mine contaminated environments.

Findings: The CMRE through MAG and the Provincial and District school education system has presented CMRE in 47 target schools, educating 16,309 school children on mine/uxo risk behaviour and safe behaviour. The education of the child has been to develop the child's understanding of what actions with mines and uxo's are dangerous and what actions can keep them safe. Of the children having had CMRE training 84 % said they had change some behaviour with the majority of them saying they would never touch mines/uxo and if they go herding they would tie the animals. These children also said they would report mines/UXO to their teacher or parent, something they did not do before.

It was found that children who had received CMRE training were very clear about explaining mine risk messages and the 45 children who were interviewed showed confidence and were able to discuss, 'Safe herding' 'Safe Travelling' and to explain the meaning of 'Stop! Think! Choose! Act!'. These children have only received CMRE this year, and a follow up will be needed to determine if these education messages have been retained and have influenced behaviour change over a greater period of time.

Children who have been overlooked are those who do not attend school in the target areas. This situation is discussed later when discussing 'children not attending school'.

Findings

- A close working co-operation and collaboration has occurred between the MoEYS and MAG over the years especially at the provincial level and the objective to this activity is being achieved.
- MAG has not developed collaboration with NGO's to integrate CMRE into non-formal education activities especially to reach the non-attending school children. The major constraint in not achieving this objective is that the majority of the NGO's working in the high risk mined areas deliver more emergency type services and not activities in non-formal education .
- It was found that children who had received CMRE training were very able to express themselves and were clear and confident in their CMR presentations, also they were able to discuss mine risk behaviour during the interviews.

3.1.2 Small village survey

Small village surveys were carried out to distinguish between area covered by mine risk education (MRE) and area not covered by MRE and between children attending school and children not attending school

Villagers have had some exposure to mine awareness through presentations in one form or another over the past years. Therefore to identify child/adult behaviour change as a result of one or another mine awareness presentation is unverifiable. The village CMRE evaluation surveys data was collected and analysed. General findings from this survey and the questionnaire used in this report. The detailed analysis of the survey is in an attached report

A variety of data sources and multiple techniques were used in the small village survey and both qualitative and quantitative evaluation approaches were utilised to assess behaviour attitude and knowledge.

Using the following methods, information was gathered in the provinces of Battambang, Banteay Mean Chey and Siem Reap Provinces with visits to thirty villages, fifteen villages in target areas and fifteen villages in non-target areas (control). The control areas in Battambang and Siem Reap were communes chosen in the same target districts using the Mine Incident Data report. In Banteay Mean Chey Province communes in the district south of the target area was chosen for the control area, having the same distance and road conditions from the provincial capital as the target area. Only villages with primary schools were included in the survey.

At each village the survey team interviewed six villagers with a separate questionnaire for each category. Those interviewed at village level were the village chief, a school teacher, a parent with a child at school, a child attending school, a parent with school age children but they did not attend school, and a child not attending school, a total of 6 types of questionnaires. Also 137 student teachers graduates of CMRE training completed questionnaires. A total of 317 completed questionnaire were used as the basis of the village survey analysis.

Methods used in the small village surveys:

1. **Semi-Structured Group Meetings**, using guiding questions. This resulted in facilitation of three groups of children and one group of women.
2. **Semi-Structured One-To-One Interview**. Children who had been injured by mines were interviewed using a list of questions to guide the interview while documenting the child's story. These injured children were in target and non-target villages and were met during the course of the village evaluation. Five mine-injured children were interviewed.
3. **One-To-One**. An applied questionnaire to key informants. These questionnaires were used to assess mine/uxo risk behaviour and any behaviour change that had occurred in villages targeted for CMRE using as a control villages where there had been no CMRE activity. There was a separate focussed questionnaire for the village chief, the village school teacher, a parent with a child at school, a parent with a child who did not go to school, a child who attended school and a child who did not go to school. A total of six questionnaires per village were completed and six villages visited in each target area and in each non-target area (control) of Battambang and Banteay Mean Chey provinces. The evaluation team went to three villages in both target and non-target in Siem Reap province. A total of thirty villages were assessed.
4. **Direct Observation**.
5. **Self applied questionnaire**. This method was used at the pedagogy primary schools in Battambang, Banteay Mean Chey and Siem Reap provinces. The student teachers after an instruction session then completed one questionnaire each. All the student teachers had attended a MAG CMRE training course. A total of 137 students completed the questionnaire.
6. **Secondary Data**. Source from documents, reports and papers.

Overview of village survey results.

From the initial village surveys results it appears that children who had received CMRE training were able to confidently explain Mine Risk messages, all 30 children interviewed were able to describe and discuss, 'Safe Herding' and 'Safe Travelling' and they were confident to explain the meaning of 'Stop! Think! Choose! Act'. These responses demonstrated that the children had listened and learnt at their CMRE classes and showed a sense of confidence in their knowledge.

In comparison the survey found that many of the children attending school in non-target areas were unable to describe any clear mine risk messages and only a few children interviewed could explain mine/uxo risk messages, including 'Safe Herding,' 'Safe Travelling'. Many of these children had experienced some mine awareness from NGO village presentation, radio, TV and from posters. The distinct difference between the children attending school in CMRE target areas and non-target areas was that children in the target areas had the confidence and the ability to describe and discuss the risk behaviours associated with mines and uxo that school children in the other areas did not have.

If by having CMRE knowledge children's behaviour has changed then it expected that mine/uxo related incidents will be reduced. The monthly data on mine incidents does disclose which commune and village the child casualty lives. Reviewing this report for the past 12 months 1999-June 2000 it states that one school age child was injured in April, the casualty was a 15 year old male from Lvea commune, a CMRE target area in Battambang. The boy had stepped on a mine while herding. There is no information to say if this boy had attended a school or not. In Battambang for this same time period there had been 102 child mine/uxo incidents. This indicator of school attendance is not in the information collected by the mine incident victim questionnaire. If rectified the results could be of use to mine awareness / educational agencies

From the survey interviews with children not attending school in the CMRE target areas revealed limited knowledge on mine risk behaviour with the majority of these children responding to questions most frequently with, "I don't know". These children are especially at risk to mines because they are the ones during the day collecting firewood wood, herding the animals and collecting wild foods from the forests. These non attending school age children living in high risk areas exposing themselves to the risk of mine/uxo injury daily. These children need CMRE. Not only must CMRE cover schools through out the high-risk target areas but also children not going to school must equally be served. There are further discussions on the child not attending school in this report.

Most families and children in target and non-target areas have had multiply exposures to short mine awareness messages from the radio, television, other NGO mine awareness presentation, posters and videos. The individually applied questionnaires were used to determine if CMRE had any impact on child behaviour change and if it was possible to differentiate this knowledge and behaviour change from other mine messages.

One consistent response from the parents whose children went to school in the target areas was in the inquiry of family communications. The parent with a child in school and receiving CMRE and the child attending school and receiving CMRE responded to the question, 'Have you talked to your children about mines/uxo?' or to the child, 'Have you ever talked with you family about mines/uxo?' both parent and child said 'Yes'. Their responses to the following question of 'Who did you talk with about mine and uxo?' they replied 'My children', or 'With mother, father, sister and brothers'. All those interviewed, 100%, responded "Yes, we talk with our family about mines/uxos". When compared to the non target areas, parent with a child in school and a child attending school there were very few parents or children who said they talked about mine issues at home with their children, and school children if they said 'yes' it was with their fathers they had talked not with other family members.

Parents of children not attending school and children not attending school said they never discussed mines/uxo with their family and demonstrated that general family communications were limited. The child who does not go to school usually is from a very poor family. The family work long hours to acquire their minimal daily basic need, and on inquiry it is found that they have lived through tragic circumstances often resulting in fragile family

structures (see case study at the end of this section). Further investigation is needed to study family communications process and how culture, education and poverty encourages or interferes with the family communication process.

From these findings it appears that CMRE has been a motivating factor encouraging children to talk about mine/uxo issue with their family, encouraging family communications and a sharing of information through a family setting.

Findings:

- Small village surveys were carried out to distinguish between area covered by mine risk education (MRE) and area not covered by MRE and between children attending school and children not attending school. Interviewees were randomly selected at village level. Selection of the 'Child at School' was not by age or grade but by the fact the child attended school in the target or control areas.
- From the initial village surveys results, it appears that children who had received CMRE training showed a sense of confidence in their knowledge and were able to describe and discuss, 'Safe Herding' and 'Safe Travelling'. These children were certain in their explanations and their responses demonstrated that they had listened and learnt CMRE correctly from their classes.
- Children not attending school in the same target areas had limited information on mine risk behaviour with the majority of the 30 interviewed children most frequently saying, "I don't know".
- The survey showed that children receiving CMRE communicated more with their families about mines and uxo than did other family groups.

3.1.3 Knowledge of School Teachers.

Because of the initial time delay the proposed CMRE training activities were started in November and December 1999 with the training of trainers and MoEYS counterpart staff with a nine day workshop followed by the review and training in May 2000. CMRE Education counterpart trainers with the support of MAG CMRE trained 347 village teachers in the CMRE target areas during the year from January to June 2000. The student teachers at the Primary Pedagogy College in Battambang and the Pedagogy College in Banteay Mean Chey received CMRE training in June. The students at the Siem Reap College of Pedagogy received their MRE training early July 2000.

Among the student teachers interviewed one was a young student teacher, 17 year old, she had started secondary school around 1995. During her interview she said that she felt very limited in her knowledge about mines and uxo and wanted to know more about the mine/uxo situation in Cambodia. Other students said they wanted to have more in depth instruction on Cambodia and the mine/uxo situation before starting the CMRE training.

Many of the student teachers interviewed in the Pedagogy Colleges said they had not lived nor visited mine risk areas with 16.78% of the student saying they had. This means that 83.22% of the student teachers receiving CMRE has not lived nor visited a mine risk area and had limited or no life experience of mines nor UXO. This is to be expected as college students usually come from more urban areas and have completed primary and secondary schools. Because of this and because they will be teaching CMRE in primary school after they graduate they felt they had need for a longer introductory course on mines/UXO before commencing CMRE training.

Table 3.1 Student Teachers With Previous Exposure To Mine /Uxo Areas By Province

(Primary School Student Teachers: Experience of High Risk Mine/UXO Areas
Graduates of Child Mine Risk Education Training Course 2000)

Province:	Female:	Male:	Total:	Students from/visited mine/uxo area	% From risk area
Battambang	33	21	54	10	18.51%
Banteay Mean Chey	34	21	55	4	7.27%
Siem Reap	17	11	28	9	32.14%
Total:	84	53	137	23	16.78%

Some of the student teachers had experienced living or had come from villages that were in high mine risk areas. It would be beneficial, as part of CMRE participatory learning to have these experienced students teachers present their own life experiences related to mines /uxo during the training course to those students teachers with no life experience.

At the village level, village teachers who were older and had lived and taught through civil conflict were able to discuss mine risk behaviour and dangers not only from the CMRE training but also from other mine awareness presentations and their own experience.

The teachers both at the village and college level appeared well motivated and discussed their interest in the CMRE studies and teachings. They talked about the CMRE classes helping to keep the local children safe in their daily lives and how they hoped more teachers from other communes could introduce CMRE into their classes

Findings:

- 82% of the student teachers receiving CMRE training had not lived nor visited a mine risk area and had no life experience of mines/uxo therefore they felt they had a need for a more intense mine uxo introductory course before commencing CMRE training.
- The teachers both at the village and college level were well motivated and discussed their interest in the CMRE studies and teachings.

3.1.4 Correlation between MRE and Mine Incidents.

For the same reasons explained in detail in section one and two of this report no correlation can be made. MRE has not been active long enough and it cannot be shown that mine awareness in Cambodia or any country has a direct impact on the reduction of injuries and deaths. There are too many non-quantifiable data to make a verifiable correlation. Nevertheless it is not an unreasonable assumption even if it cannot be shown to have a direct impact.

3.1.5 Indicators to measure progress

Progress indicators collected on a regular basis had not been developed. There was no regular collection of data. Two of the evaluation team members in Battambang were school inspectors with the Provincial Education Department, one of them in was in charge of covering a CMRE target area. They had no understanding of monitoring, the purpose of monitoring and the use of indicators. A copy of the CMRE school-monitoring form was produced although no completed forms could be found. World Education-Cambodia states in their project document that a great deal of emphasis will take place in the monitoring of CMRE starting with the training of counterparts.

To assist in monitoring progress and impact of the CMRE, appropriate indicators must be used. The CMRE counterpart staff, need adequate training in monitoring so they are able to assist in the collection of monthly progress indicators and assess the projects progress.

The counterpart staff interviewed was unaware of having job descriptions although job descriptions were developed for the CMRE project. Future review of these job descriptions and discussion with counterparts would clarify staff and counterparts roles and assist them to monitor their own actions and performance.

According to the project document the CMRE purpose is to,

'alert' the at risk children to the danger of mines/uxo present enabling them to identify dangerous objects, teaching the proper conduct when finding a mine or crossing an unknown zone, and the proper reaction when accidents happen.'⁴²

The reduction of child mine/uxo injuries is the intended purpose of CMRE. A set of indicators to measure the progress of the project would show if there was a reduction in child mine injuries in targeted areas, identification of mine injuries caused by direct involvement or as a child observer, CMRE teacher training progress, and the children involved in CMRE who do not attend schools in the target areas.

Recommended Progress Indicators

On a monthly basis, simplified by using a matrix layout the following progress indicators are recommended :

1. Number of child casualties by mines/uxo with age, address, and activity. Cases recorded monthly with cumulative data for the year and from the first record.
2. Number of child casualties by mines/uxo who live within the CMRE target area with age, address, and activity. Cases recorded monthly with cumulative data for the year and from first record. Also presented as a % of the total monthly child casualty data.
3. Number of child casualties who do not attend school. Cases recorded monthly with cumulative totals for the year and from the first record.
4. Number of child casualties who do not attend school who live within the CMRE target areas. Cases recorded monthly with cumulative totals for the year and from the first record. Also presented as a % of the total data.
5. Number of incidents where children, as observers, have been injured by a mines/uxo. Cases recorded as # of children per incident. Monthly records with cumulative totals. Also presented as a % of the total data of child casualties.
6. Number of mines/uxo reported by children during the month, should include name of village and commune.
7. # of school children receiving CMRE . Totals recorded by month with cumulative totals for the year. No duplication.
8. # school age children, who do not attend school, who received CMRE. Name of village commune district. Totals recorded by month with cumulative totals for the year. No duplication.
9. # of village teachers trained per month. Cumulative totals per month and year include name of village school and commune the teachers were from.
10. Number of student teachers trained per month and from which Province with cumulative totals.
11. Teaching materials released each month and to where.

CRC HI Monthly Incident DataBase can be used as a tool to assist in the recording of monthly data and with their assistance specific child casualty monthly indicators can be developed. The collected progress indicators can be used as a planning guide, assist in program direction, assist in the writing of progress reports and to identify general progress. Other indicators can be added as needed. As CMRE covers a wider target area it will be easier to assess, through the indicators, the impact of CMRE and determine if it is an effective method to decrease child casualties. CMRE project has been active and running as a pilot project for the past eight months, as it develops and covers a wider risk area the use of the indicators in determining the impact will become increasingly relevant.

⁴² MAG CMRE Project document 20 May 1999 p.3

Findings

- The counterpart staff possess few or no monitoring skills. World Education-Cambodia is planning training for counterparts in monitoring. This training will assist in their involvement in the collection of accurate monthly progress indicators.
- Counterpart staff were unaware of having job descriptions therefore future review of these job descriptions and discussion with counterparts would clarify staff and counterparts roles and assist them to monitor their own actions and performance.
- It was found that there was no regular CMRE process indicators collected. Recommended are 11 point progress indicators that can be reported in a matrix layout

3.2 OPERATIONS**3.2.1 Teaching methodologies .**

MAG CMRE teacher trainers have presented the use of a number of different teaching techniques in the training course . These techniques have included role-play, storybook presentations, a song, video, presentation of posters and maps, lecture using the student centre approach. From the 30 village teachers interviewed 70% used the song and lectured and 29% included the use of posters in their classes. This is supported by the fact that 100% of the school children interviewed knew and liked the song . Only one teacher had tried to use role-play in his CMRE teachings.

The major constraint for the village teacher in not being able to present different methods of teaching, is one of time and classroom structure. The primary school teacher is responsible to teach all subjects to a class and as mentioned before may hold two different classes a day. The CMRE training encourages the teacher to have students sit in a circle yet 100% of the schools visited had school desks made of long planks of wood with attached benches where up to eight children sit, these heavy benches were not made to be moved around. There is usually little space between the front row and the black board leaving only a small open area for role-play, which does not encourage role-play activities to take place. Because the teachers must work in this kind of environment, lecture, songs and poster presentation seem to be most appropriate in this kind of setting.

The World Education-Cambodia proposes to focus on participatory approaches and, although the teachers need the exposure to different teaching methods to broaden their skills and prepare them for the future, they do need to learn more effective ways to lecture or use participatory learning within the context of their teaching environment. The evaluation team observed teachers practising CMRE during their training in classrooms at the provincial town and district schools quite unlike the dirt floor, crowded classrooms they will use at their village school. Opportunities must be taken to do CMRE practice sessions at village level to give the trainers a realistic look at the situation and to allow the teachers a genuine practise .

Trainers, teachers and staff at the Pedagogy Research Centre expressed that there was a need to focus more on the content of the subjects during training sessions. The Pedagogy Research Centre representative said that there was definitely a need to deliver more lesson content in the CMRE training and if necessary to reduce the amount of time given to the training of teaching methods. The reason explained was that by concentrating on the content of the subject matter the teacher would feel more confident presenting CMRE.

Findings:

- MAG CMRE teacher trainers have presented the use of a number of different teaching techniques in the training course . These techniques have included role-play, storybook presentations, a song, video, presentation of posters and maps, lecture using the student centre approach.
- 70% of teachers teaching CMRE interviewed said the teaching methodology they most used was the singing and lectures. This is supported by the fact that the school children interviewed knew and liked the 'mine song.'

- The major constraint for teachers in not being able to use different methods of teaching in CMRE is one of time and classroom environment.
- It was found that teachers, trainers and staff at the Pedagogy Research Centre felt there was a need to have more lesson content in the CMRE training.

3.2.2 Staff capacity to provide MRE

During the CMRE training primary school teachers were given some flexibility in to the daily amount of time to present on CMRE. They were taught to give 5-10 minute presentations inserted into the mathematics and Khmer classes.

The actual lesson time used by village teachers in teaching CMRE was that 32% said they teach twice a week for 5-10 minutes usually just before the last class of the day. Teachers presenting 5-10 minutes once a week to their class was 60% and 8% of the teachers said they taught 30 minutes once a week. The school children substantiated this information when they were asked 'How often do you receive CMRE at school'. The teachers said that the weekly teaching fitted into their schedule and they would continue with the weekly presentations.

All thirty village teachers interviewed felt they were giving important messages to the children and many of these teachers requested to have more information so they could discuss and answer many of the questions the school children ask, a majority of the teachers said they hoped they would receive refresher CMRE training during the next year. This request indicates their motivation to continue with the classes and their own learning. The enthusiasm and interest the teachers showed when discussing CMRE was encouraging.

As has been previously discussed there is a need for more subject content in the training. The CMRE content must come from the syllabus lesson plans and the trainers must be confident in the subject matter before teacher training. The pilot phase of CMRE has been completed and before the next training of teachers the trainers must be well instructed in the understanding of CMRE subject-content. According to the School of Pedagogy Research the MAG CMRE trainers were knowledgeable and were competent to teach the different teaching methods.

Findings:

- A majority of the teachers said they hoped they would receive refresher CMRE training
- 60% of the teachers taught CMRE 5-10 minutes once a week: 32% of the teachers presented 5-10 minutes twice a week: and 8% of the teachers said they taught 30 minutes once a week..
- The MAG CMRE trainers were knowledgeable and well able to teach the different teaching methods

3.2.3 Materials used

During 1999 a curriculum for primary schools and three teacher reference manuals were developed including a Mine Risk Education alphabet for grades 1 and 2. A storybook was reviewed for grade 3 to 6 and a set of multi-function pictures for grade 3-4 was produced.

The training of trainers took place in November and December 1999 and the first set of village teachers was taught CMRE in January 2000 with training materials being handed out.. The number of teachers taught and students receiving CMRE may be higher than documented because of the situation found at many schools during the evaluation. Many teachers teach 2 sets of children a day, one in the morning and one in the afternoon, there were instances of teachers sharing one class room to teach 2 classes.

Many of the teachers and students noted that posters placed in public areas did not last long due to the weather and public damage. Posters in buildings could last longer up to 2 years, the concern was how would the CMRE project maintain the replenishment of these materials as they became used, worn or destroyed?

Of the greatest concern to the village teachers was the lack of training materials, mostly posters and notebooks. The teachers wanted to know how they could request more teaching materials. Village teachers said that after the CMRE training there was not an equal distribution of CMRE materials with some teachers receiving more

than others. All teachers trained in CMRE must receive equally the same amount of materials as they are given materials to put up in the classroom and for their own CMRE preparation.

The student teachers interviewed also said they were concerned because they had not receiving enough training materials to use in the CMRE classes. In Siem Reap the student teachers had not received any materials because there was no delivery. On investigation it was found that there had been a delay in the transfer of CMRE materials to Siem Reap. Receiving materials on time takes logistic management and pre-planning, and support from line management.

If the teachers in the future do not receive enough materials to use in the classroom, especially the posters, will they loose some of their motivation and enthusiasm?

Findings:

- Many of the teachers and students noted that posters placed in public areas did not last long due to the weather and public damage.
- Material to be used in CMRE classes and training must be made available to teachers prior to training. All teachers must receive the same quantity of materials

3.2.4 Prioritisation to select villages and schools for MRE.

The selection of the MAG CMRE target areas was based around discussions with the UNICEF Education department in June 1999 where it was recommended that the initial pilot CMRE target focus should be in a school cluster system.⁴³ Although MAG produced a criteria for CMRE target selection which had one of the priorities as, 'areas where there was a high incident rates of child casualty due to mines and UXO', this priority was not followed through. Further discussions and selection through cluster schools and the Mine Incident Database, the CMRE target areas were selected.

The district areas selected for CMRE did have high child mine-casualties rates yet when looking at data from the commune level within those districts there was a sharp difference of mine rates. It was found that the child mine-casualty rate was zero in the communes chosen for the pilot phase of CMRE where as other communes in the same district had high rates of casualties. This situation is supported by the fact that villages in the CMRE target areas Battambang and Banteay Mean Chey Provinces when asked if they had there own village demining team in the 12 target villages, 1 village said they did their own demining (8.33% target area). In the 12 control villages, 10 village (83.33%) were demining their land, this indicates that there has been limited or no mine risk in the CMRE target areas compared to the control surveyed areas

The Mine Incident Report for May 1998 - May 1999, data available when the MAG proposal was written and when the pilot phase initiated, shows the child mine casualty by communes. In Battambang the communes in the district of Bavel, where CMRE pilot phase was started up, the following child casualties were reported.

⁴³ MAG CMRE Project Activity Report May-October 1999 p.2

Table 3.2 Child Mine Casualties by Commune and Activity, Bavel District, Battambang Province.
Battambang Province - Child Casualties Mine /UXO May 1998-May 1999⁴⁴

District	Commune	Casualties 1998-1999	Age	CMRE Pilot Phase	Activity
Bavel	Bavel	0	-	Yes	
Bavel	Lvea	0	-	Yes	
Bavel	Prea Khpos	2 males	5 yrs. and 15 yrs.	Yes: 2 schools No: 1 school	Herding
Bavel	Ampil Pram Daeum	15 females 7 males	2 yrs – 13 yrs 3 yrs – 18 yrs	No	14 travelling 5 tampering 2 collecting food
Bavel	Kdol	2 males	3 yrs. and 17 yrs.	No	Farming

Choosing the cluster school area of Bavel and Lvea commune in Bavel district, Battambang province, for the pilot CMRE phase logistically seemed justified as they were located in a district with a high child incident casualty rate and these communes had all season road access, yet the exclusion of schools in communes of Ampil Pram Daeum, Kdol and Khlaing Meas, Bavel district where the child casualty rates were very high was not addressed. These three communes lie west and south of Bavel commune and can be accessed, even in the rainy season, by dirt roads as the evaluation team can verify. Schools in these communes are not part of any formal school cluster group. The same situation of low or no child casualty rates in the CMRE target communes and higher rates in neighbouring communes was found in Banteay Mean Chey and Siem Reap provinces.

In the World Education-Cambodia proposal,⁴⁵ there will be further training activities in Bavel district but they do not include the communes of Ampil Pram Daeum and Kdol commune, communes which were placed in the top 20 communes in the country as most affected by mines and uxo in 1998-1999. The proposal includes its CMRE activities in Bavel in the commune of Khnach Romeas where there have been no child casualties since 1997.

When MAG CMRE staff in the provinces were asked about the criteria for the selection of CMRE target areas they always referred to the high incidence of child mine/uxo injuries in the areas chosen but they agreed they it was districts they were referring to and not communes. Referring to district child mine/UXO incident rates and not communes they were less informed of the number of children injured. It was reported that the CMRE training staff in the three provinces do receive monthly Mine Incident Database reports but they need to use it and possibly be trained in how to read it and draw useful information from it.

All CMRE projects need to base their selection of target areas on the findings of the Mine Incident Reports and to use the commune level data. How can the progress of the CMRE program be monitored if the areas of mine risk behaviour occurs in areas where the is minimal to no risk? How can the impact of the program be measured in communes where there can be neither reflection nor expression of effect? **Clearly the poor selection of target schools is a serious failing of this project and one that runs against the essential aims of the project itself.**

Findings:

- The selection of the MAG CMRE target areas was based around discussions with the UNICEF Education department in June 1999
- Targeted districts had high child casualty rates but the communes chosen within those district for the pilot phase of CMRE had no casualties.

⁴⁴ HI Incident Data Base Mine/UXO Bavel District May 98-May 99 Child 0-18 Years.

⁴⁵ World Education Cambodia CMRE Project Proposal May 2000 Annex.

3.2.5 Coverage of Child Mine Risk Education.

At the time of the evaluation the CMRE was just completing its target phase and the total target areas covered during this period was 6 cluster schools in 3 Provinces. As can be seen by the data of schools covered, teachers trained and students taught CMRE that there has been an intense training coverage at the schools targeted. Now that CMRE will reach out to other areas it is hoped that during the next year there **will be coverage in the higher risk areas.**

Table 3.3 MAG Community Liaison Statistics for Pilot Project 31 May 2000

Pilot Phase: MAG-CMRE Training Coverage January – June 2000

Battambang Province					
District	Cluster	Schools	Classes	Students	Teachers
Bavel	Bavel and Lvear	16	129	6040	84
Banteay Mean Chey Province					
Svay Chek	Svay Chek and Sarong	21	172	7264	204
Siem Reap Province					
Chi Kraeng	Kouk Thlork and Spean Thnaut	10	56	3005	59
Total:	6 School clusters	47 Schools	357 classes	16,309	347 teachers

The World Education-Cambodia proposal bases the school activities through cluster schools. Although there is reference in the proposal to schools out side of clusters groups it does not describe how they will be identified or how they will be included in the CMRE. Schools that are found out side of the cluster areas are schools that have been renovated or built since 1996, especially along the Thai-Cambodian border. These schools are often in high mine risk areas often where there has been armed conflict and where now new villages have been formed or internally displaced people have resettled. UNHCR has assisted many villages in their resettlement and in some villages supported the building of a school.

As an example of schools not in a cluster group, are those in Kdol, Klaing Meas and Ampil Pram Deaum communes, Bavel District, Battambang province which in World Education-Cambodia CMRE Proposal are excluded in the plans for 2000-2002. **This evaluation finds this to be a serious omission.** Already this year mines in Kdol commune have injured seven children and there have been child casualties in Chrang Bat village, Klaing Meas Commune. One village chief in Klaing Meas commune said that six adults in his village have been killed in the past two years by mines.

Village chiefs of the surveyed target villages said that there was a need for CMRE for all children even if there was no mines nor uxo in the area. They said that when children travel with family members during the New Year holidays and Pchum Ben time, usually visiting relatives in other villages and picnics in the hills that it was during these times the children were at risk.

The prioritisation for the initial coverage of CMRE should be in communes with the highest mine accident risk followed by other communes of the same district .

Findings:

- There has been an intense CMRE coverage within the schools of the target areas
- Only cluster schools have been targeted even though there are schools found outside of cluster groups.
- The pilot phase of CMRE has been in communes with no child mine casualties during the past two years.

3.2.6 Presentation skills (MAG CMRE trainers and school teachers)

Because of the transitional stage of the CMRE project no MAG teachers were observed in presenting CMRE training.

3.2.7 Strategies to reach children not attending schools (NGO collaboration peer education efforts)

Children who do not go to school in the CMRE target areas have not received CMRE. Previous to the start up of CMRE, MAG had and still continues to present Mine Awareness education to villagers, separating groups into children and adults. This activity is in villages requesting Mine Awareness or has been identified as in high-risk area (Identified by MID). Through this village mine awareness training both the child in school and out of school have an opportunity to attend. Although no information was available concerning what type of children attend the children groups, it should be presumed that some of the children at these mine awareness training do not go to school.

Every provincial and district education officer interviewed was helpful in providing figures on how many children attended school but none had any figures nor estimates of how many children, of school age, did not attend school.

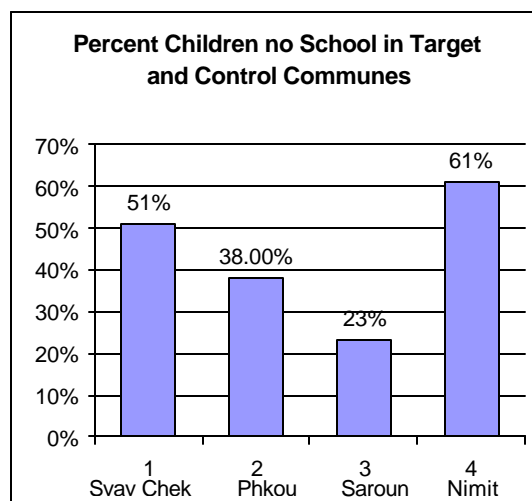
The village chiefs interviewed had information on the children of the village. Numbers of children who attend school and the number of children who do not go to school, this data was broken down into age groups 6-12 and 13-16 with some village having 13-18 age group. This information was held in the village planning books and were updated every year according to the village chiefs. The evaluation team found in 95% of all villages visited in Battambang, Banteay Mean Chey and Siem Reap Provinces a 'Village Book' The evaluation survey team was able to obtain numbers of children attending school and children not attending school from this source.

Many children of school age do not go to school. A total of 23% of school age children in all the CMRE target areas do not attend school and had not received CMRE..

In the project document World Education-Cambodia Cambodia plans to cover CMRE in Poipet Commune,

A total of 3,195 children attend school in Poipet commune. Children of school age not going to school is 7,018, that is 68.71% of the children in Poipet. Commune do not go to school.

Between 1999 to June 2000 14 children were injured or died because of mine injuries and 1 child was injured with a UXO in Poipet commune. The Incident Data Base stated that all 14 children were 'tampering' with mines, 7 of the children were injured the same day, same village and the youngest was 1 year old which could imply that many children 'tampering' mine injuries are caused by watching an adult take apart a uxo/mine as they can sell the metal and 'powder'. (See section 2 on MID) As one 10 year old girl who did not go to school said when asked, 'What would you do if you see an adult holding a mine or uxo?' answered, " I would watch and see the explosion, then run"



Banteay Mean Chey Province 2000

In the non-target areas 50% of the children interviewed lived in areas where mine fields and uxo are common place. As one fifteen-year-old girl said, 'Our village is on a mine field', a mine explosion had injured her 50 meters from her house. Although the children in non-target areas were more exposed to mines and uxo than in

target areas these children showed limited knowledge in their mine/uxo 'smartness' and in their knowledge of mine risk behaviour, knowledge that they needed to help them survive. Although many had attended a village presentation there was no regular ongoing mine awareness meetings for children where discussions could take place. Many questions the children asked during the evaluation were very good questions and indicated that mine/UXO are in the children thoughts as children asked, 'Why does a UXO not explode when fired but when we touch it, it explodes?' 'If a mine is in the ground along time will it get old and not work one day?'

The children as did the adults knew there was no alternative but to risk their lives daily to collect firewood and take the animal to herd or that land had to be cleared and the forest searched for edible wild foods.

Economic opportunities are limited or non-existent in these mine risk areas as families often live off the 'commercial path and they live on small parcels of land that need clearing. In some house areas and gardens there are mine markers placed there by de-mining survey teams. Income generating opportunities need to be developed to assist these communities, to give them other alternatives to the high-risk activities of foraging for food and collecting firewood. As firewood supply dwindle yearly children have to search deeper into the forest into unmarked mine risk areas.

Table: 3.4 (source 'Village Book')
Children Who Do Not Attend School in CMRE Target Area Battambang

Battambang Province – CMRE			
Village:	Child School	Child No School	Percent
Spean Kandal	377	63	14.31%
Duch Proat	286	10	3.49%
Kampong Chhnang	180	110	37.93%
Kbal Thnal	233	93	39.91%
Lvear	482	57	11.8%
Por	200	28	12.29%
Total for Target Area:	1758	361	20.53%

All the above villages have primary school but not all have secondary classes, which could account for the difference in school attendance.

CMRE presented through non-formal education activities is essential, especially as yearly there are an increased numbers of children not attending school or are dropping out as their family economic situation worsens.

Teachers, parents and children were asked how to reach non-attending school children and the majority felt that Mine Risk Education presentations in the village, in the early evening, for these children would be good.

Majority of the schoolteachers said they did not have time to teach CMRE lessons to children after school but they said there might be some other village volunteers who with training could do the teaching. Schoolteachers are some of the lowest paid government civil servants, and have to spend most of their free time finding way to supplement their salaries.

The project reports suggest the support of teachers teaching the out of school child and through the peer-to-peer education. Village communications must be considered when promoting the child-to-child peer education CMRE. What relationship exists between village children attending school and those who do not? The children who do not attend school usually live in small grass huts on the edge of the villages or even in the fields outside surrounding villages. These children have a high risk of mine injuries because they spend the day herding the animals, collecting firewood or wild foods from the forest. They rarely associate or have time to associate with village children who do go to school. The children who do not go to school return home with the wood, the animals or with the farm labourers at sunset, they eat, then sleep then start their routine again with the sunrise the next day. To expect a schoolchild to teach or talk about mine risk education to a non-attending school child puts both children in an unrealistic situation. There must be a review and investigation of this process before it is put into practice and evaluation of the communication relationship between village children.

Findings:

- Economic opportunities are limited or non-existent in the mine risk areas.
- Majority of the school teachers said they did not have time to teach extra CMRE lessons
- School child to teach or talk about mine risk education to a non-attending school child could be unrealistic.

3.2.8 Structure with MoEYS and Provincial Department of Education

There has been a close working relationship between MAG and the Pedagogy Research Centre in Phnom Penh. At the November- December 1999 CMRE workshop Education counterparts came from the MoEYS Phnom Penh and from Battambang Banteay Mean Chey and Siem Reap. MAG CMRE linked with thirteen persons from the education department these included provincial directors of primary education and head or deputy head of target cluster schools. Now that World Education-Cambodia will take over the CMRE and that they have had previous links with the formal education system there should be little change in relationships. Communication between Ministerial level, provincial and district level needs to continue and the development of an CMRE organisational chart will assist in the lines of communication.

Findings:

- There has been a close working relationship between MAG and the Pedagogy Research Centre in Phnom Penh.

3.2.9 Rationale for introducing MRE into the National Curriculum

There has been discussion between MAG CMRE and the Ministry of Education Youth and Sport. Introducing the CMRE into the national curriculum would guarantee that all children attending school would receive the information on mine risk behaviours and therefore reduce the child mine casualty rates in Cambodia. Having the CMRE within an official system also assists in having a monitoring system in place and supports the sustainability of the CMRE program.

The integration of Child Mine Risk Education into all grades has occurred in the 4th grade and the 10th grade Moral textbooks, where there are lessons and pictures of mine awareness. These books were developed and first printed in 1998 and will be reviewed and revised as necessary in the year 2001 curriculum. The review of all school syllabus which will occur later this year and the revision of all text books in 2001 is an opportune time for the inclusion of CMRE into the school text books of all grades, as is already seen in 4th and 10th grade books and in the teachers manual. Having CMRE appear in other grade books will take be a matter of involvement between the MoEYS, World Education and UNICEF. CMRE as a subject can be placed in the Moral textbook as with grade 4 and 10 grade. In the Moral text book subjects on 'Peace', 'Human Rights' and 'Buddhist Practice' among others are included which seems most appropriate for the placing of CMRE. All student teachers interviewed said that the Moral textbook is where they would want to see the CMRE. These textbooks would be used countrywide.

Finding:

- With CMRE in the National Curriculum all children attending school will receive education on mine risk behaviour.
- A monitoring system will be in place and the sustainability of the program CMRE supported.
- All school text books will be reviewed and revised as necessary in the year 2001

3 Sustainability:**3.3.1 Commitment and understanding of CMRE project by the Ministry of Education Provincial Departments of Education and schoolteachers.**

From the interviews with the counterparts in the Ministry of Education, at the provincial level and with the school teachers, there was an expressed commitment to CMRE and to the assistance they feel it can give to children in high-risk areas. Many of these persons interviewed had from the past, first hand experience to the effect mines have on families and lives. There was found to be a commitment and understanding of the CMRE project in the department of education by all those involved, at all levels

UNICEF and World Education Cambodia support to the MoEYS will need to continue especially in the supply of training materials used in CMRE. The MoEYS does not have the economic means to supply teachers with materials. MoEYS does have the expertise in curriculum development, which needs to be utilized. The teachers and school inspectors lack monitoring skills as well as an understanding of the purpose of monitoring. With ongoing training the monitoring capacity of the CMRE counterparts should improve.

Findings

- There is a commitment to the issues of assisting the children to lead safer lives in high-risk area by the Ministry of Education, the Provincial Departments of Education and the schoolteachers.
- The MoEYS does not have the economic means to supply teachers with MRE materials
- The teachers and school inspectors lack monitoring skills.

3.3.2 Monitoring requirements to supervise CMRE delivered by school teachers

At the time of the evaluation there was no ongoing monitoring process in place although there were plans for future training.

World Education-Cambodia has included in their plans training on monitoring techniques for counterparts and teachers in the CMRE training. This needed activity will develop the capacity of the teachers and hopefully can eventually be used to monitor other school subjects.

Findings:

- There is no ongoing CMRE monitoring process in place at the time of the evaluation.
- World Education-Cambodia has plans to hold monitoring training for counterparts and teachers.

3.3.3 Time frame required before handing over to Ministry of Education

As the MAG CMRE has only just completed its pilot project it is too soon to make an estimate of time required before handing the program over to the Ministry of Education. The decision to determine how long a time period is needed must come from a successfully placed working monitoring process and from the Ministry of education. Further information from teachers, village chiefs and demining agencies that have first hand knowledge of the situation in these high-risk mine/uxo areas will confirm the decision.

Findings:

- It is too early to estimate the time frame needed before handing CMRE to the Ministry of Education.

3.3.4 Capacity of schoolteachers to reach children not attending schools through extra curricular activities and peer education.

It is not because of capacity that schoolteachers cannot teach out of school children but because most of the schoolteachers do not have the time to teach CMRE lessons after school. The teachers could not volunteer time to do this teaching as school teachers being some of the lowest paid government civil servants, have to spend most of their free time finding way to supplement their salaries.

There must be a review and investigation of cultural and realistic practices of the child-to-child peer education process before it is put into practice in the villages; the expectation could put both children in an unrealistic

situation. A possibility could be the enlistment and training of the local Buddhist monks and nuns in CMRE to reach the child that does not go to school. Cambodian Red Cross volunteers, the Traditional Birth Attendants and Village Development Committees members should be considered as CMRE teachers or at least through them generate ideas on how to reach the out of school child. Other ideas to reach the out of school child could also come from discussions with parents of these children and the children themselves.

Findings:

- Teachers do not have free time to teach children not attending school CMRE.
- Too much expectations of a child to child peer CMRE education process.

3.3.5 Capacity of NGO to continue delivering MRE to children not attending school through non-formal education.**Findings**

- No action has taken place in this area. **See 3.2.7**

Case Study

Lot Chun Nee a 15 years old girl.

Village Russai Sammaki, Nimit Commune, C'Chrov District, Banteay Mean Chey Province.

Her story told on 30 June 2000 Banteay Mean Chey Province.

"I was born in a refugee camp on the Thai Cambodian border in 1985. We lived in the camp with my mother and father, grandfather and grandmother, a younger sister and younger brother. When I was six I started school in the camp. In 1993 we were ready to leave the camp and return to Cambodia and just before we left my father was killed when a bomb blew up on a fire.

We were placed in the village of Chai Thmei in Samraong Commune it was very difficult living as we had no land and we could not grow any vegetables or rice. CMAC came to the village 5 or 6 times and gave us presentations about mines and how to be careful. Then my grand father was offered some land in the new village of Russai Sammaki but before we moved there my mother became sick and died and so did my younger brother.

Our new life at Russai Sammaki was better because we had a piece of land 60 meter by 150 meter to grow vegetables and rice and a small grass hut to live in. There was no official land title for this land but everyone knew it belonged to grandfather. In Russai Sammaki village and around there are mine signs everywhere, we all live in a minefield. I have not gone to school since leaving the refugee camp, but I do know how to read and write.

Last year my grandfather was ill and died. My grandmother and my sister, who is one year younger than me, and I, we grew the vegetables and rice. In February of this year I went to collect firewood. I went on the same path as I often go and where I have seen many people walk in and out. After I collected the firewood I was walking home on the same path and was so close to home, about 50 meters from my house, when the ground exploded because I had stepped on a mine. Many people from the village came to help me as they had heard the explosion. Our neighbour used to be a soldier and he helped me a lot because he knew what to do. I was taken to Mongul Borei hospital which took many hours to get to. (4 hours in the dry season, road impassable in the rainy season) I stayed in hospital for one month. My left leg was amputated above the knee and my right leg had many wounds. I am not sure who paid my hospital bill I think it was CMAC.

My grandmother, Mrs. Sai Sin, still takes care of our land and home in Russai Sammaki village. When I left the hospital I was put here in this orphanage and my sister is here too. HI made an artificial leg for me but I don't like wearing it because it hurts. I like being in the orphanage because here there is a school, food and a place to sleep. When I grow up I would like to be a seamstress, my sister doesn't know yet what to do.

To other children who live near mines be very careful especially when getting firewood. I was careful but I still hurt myself. Fighting people who tried to kill each other put the mines there and the mines also stop the military people from moving. When they get rid of all the mines then life will be all right. "

Lot Chun Nee is a very bright, articulate 15-year-old girl. The evaluation team met with her twice. At the first meeting she walked using crutches and at the second meeting she tried to wear her above knee prosthetic leg, but it was clear she was not comfortable. She said it was difficult to wear the prosthesis because of the stump pain she had, which was also complicated by her almost non-use of the prosthesis. The Cambodians who know Chun Nee said that she is clever and has a very good command of the Khmer language.

Recommendations on next page.

Central Findings: Child Mine Risk Education Project.

- The MAG CMRE had just completed the pilot project and was handing over the project to another agency when the CMRE evaluation took place. As the CMRE evaluation took place during this transfer period many issues could not be fully addressed.
- The impact of CMRE has the probable potential to reduce child mine/uxo accidents only if all school-aged children receive CMRE.
- Children who had received CMRE training showed a sense of confidence in their knowledge. These children were certain in their explanations and their responses demonstrating that they had listened and learnt CMRE accurately.
- Children not attending school in the same target areas had limited information on mine risk behaviour
- The survey showed that children receiving CMRE, communicated more with their families about mines and uxo than did other family groups.
- Criteria and prioritisation for the selecting CMRE target areas needs to be reviewed.
- Children who do not go to school, 20.53% in the pilot target areas and 68.71% in Poipet commune must be targeted for CMRE as they seem to be the most vulnerable group and are have greater daily risks to mine accidents.

Specific recommendations:

Impact Issues

1. Further investigation is needed to study family communications process and how cultural, education and poverty encourages or interferes with the family communication process.
2. Part of participatory learning would be to have the experienced students teachers present their own life experiences related to mines /uxo during the training course to those students with no experience.
3. To assist in monitoring progress and impact of the CMRE, appropriate indicators must be used.
4. Development of job descriptions is needed which would clarify staff and counterparts roles in the CMRE and assist the staff to monitor there own actions and performance

Operational Issues

5. Material to be used in CMRE classes and training must be made available to teachers prior to training.
6. All teachers trained in CMRE must receive equally the same amount of materials.
7. It is recommended that any CMRE planning utilises the Mine/UXO Incident Report using it as a guide to prioritise commune selection within a district and that World Education-Cambodia Cambodia reviews its prioritisation for CMRE training and criteria to prioritise future CMRE activities.
8. Village practices must be consider when promoting education through the child-to-child peer CMRE
9. It is recommended that there is the identification, promotion and inclusion of schools that are not in school clusters to be placed into the CMRE training and to assist these school to link into the Provincial School system
10. It is recommended that there is a review of the NGO situation at the provincial and district level, to identify and support those local agencies that are in place and are familiar with the area and have mandates in development and or education. These identified agencies can be trained to take on non-formal education activities and assist in facilitating the CMRE to children who do not go to school..
11. It is recommended that the 'child-to- child' peer education plans be reviewed. Local NGO support to provide mine / uxo awareness and risk behaviour education to those children not attending school. The CMRE training of local Buddhist monks and nuns, Cambodian Red Cross

volunteers, the Traditional Birth Attendants and Village Development Committees members should be considered as CMRE teachers. At least through them direction could be generated on how to reach the out of school child also ideas could come from discussions with parents of these children and the children themselves.

12. Communication between Ministerial level, provincial and district level needs to continue and the development of a CMRE organisational chart is needed.
13. The review and revision of all text books in 2001 will be an opportune time to include CMRE into the general curriculum

Sustainability Issues :

14. Emphasis on monitoring skills training for provincial and district education department.
15. Review and investigation the child-to-child peer education process before it is put into practice.
16. Support and distribution of CMRE training materials to teachers

Overall Recommendations:

That Unicef continue to fund MRE education but that it should work closely with WE to ensure that the findings of this report are addressed, where possible, rigorously.

That Unicef should continue to work with WE and its mine action agency partners to explore monitoring and evaluation mechanisms to increase the level of understanding concerning the real impact of awareness training and whether a correlation can be made linking mine awareness and mine incident decline.

4. CMAC Integrated Mine Database

This section of the Unicef external evaluation will differ from the other sections in terms of size and scope. Due to Unicef's planned curtailment of funding for and involvement in this project at the end of July 2000 and Unicef's general understanding of the strengths and constraints of the integrated database, this evaluation will deal with the issues in a more general manner. The project under review, in terms of Unicef's involvement, officially began in July 1997 and has been supported for 3 years.

1.1 Objectives

Project Objective:

The specific project objective was to develop and maintain a computerised information management tool to assist planning, operational, monitoring and evaluation and reporting needs of CMAC by establishing a database/geographical system that integrates the following data: Mine / UXO survey, mine /UXO intervention, mine awareness intervention, mine/UXO accidents, USA bombing data, socio-economic information and land titling.

Findings: That the Senior Technical Advisor (S TA) and the team of CMAC database staff have successfully developed and maintained the computerised system desired, its terms of information management programmes and software are established and functional. The database systems are fully capable of providing the information that could assist the planning, operational and M&E and reporting needs of CMAC. However, the database is under-utilised within CMAC and is only operating to a low level of its potential effectiveness. Reasons for this will be illustrated below.

Project Rationale:

The project rationale was to assist CMAC and other mine action-implementing partners to organise and disseminate information that accurately reflects their achievements and the remaining threats facing Cambodia with regard to mines and UXO. As such it performs the function of a 'service provider' within a sector whose national, primary goal is to clear mined land and achieve the objective of zero casualties.

Findings: While the integrated database project has successfully developed systems and human resources to function as a service provider that could assist the whole mine action effort in Cambodia, it plays a very weak role in this regard. This is the direct result of low level of reporting of information from all parties as well as a low level of interest from the database's intended clients to utilise it in planning, operations, M&E and reporting activities. CMAC branches have in the past been negligent in this regard. The situation is improving slowly but the effectiveness of the database is entirely hostage to reliable information flows and accurate reporting procedures. These are not being respected by various branches within CMAC. Some of the reasons for this is the absence of an accurate, regular reporting culture in CMAC, some due to permissible human error and some reasons appear to be a deliberate desire to use unauthorised data to distort accuracy and transparency.

Nevertheless it should be noted that according to recent report commissioned by UNDP⁴⁶, there is an failure of communication between the field realities of marking and clearance in changing circumstances and the ability of the database to cope with such changes. The UNDP report focuses on the issue of minefields with specific numbers and dimensions being cleared in segments or partially cleared (for good reasons) resulting in the database rejecting the clearance reports due to a breakdown in computer logical sequence. These issues have yet to be resolve between Operations Branch and the Database.

⁴⁶ Socio-Economic Evaluation of CMAC. Dominique Pierre Guéret. July 2000. UNDP.

4.2 Overview of development and progress of CMAC database.

CMAC has maintained a computerised database of varying quality and sophistication since 1993 when CMAC was developed out of the UN Mine Clearance Training Unit (part of UNTAC). The development of the initial rudimentary database system (relying on dBase III tables) to the current concept of an integrated and more powerful database began in 1997. By late 1999 the project had successfully integrated the different information systems. The current expanded and enhanced capacity consists of a system integrating tabular information (managed by FoxPro software), digitised information in mine location boundaries using AutoCad software and aerial photography processing. The tabular information and digitised information feed into a Geographical Information System (Arc View GIS software).

The tabular database integrates information from mine action (mine clearance and mine awareness), the mine incident data, the EOD and UXO survey data, US bombing data and Survey level 1 data. It was intended that it would also integrate socio-economic information and land titling but at present procedures and adequate information flows prevent inclusion. The geo-referenced digitised system holds information from the same sources and can integrate the data in the GIS application.

The 6 national staff in the database department of CMAC work with the STA and have been sufficiently trained to use all computers and programmes currently in use. The database has no staff outside of the Phnom Penh HQ office. They are not qualified, however, to change the existing programmes to meet changing needs etc. Their operational capacity is high, therefore while their capacity to develop and adapt the existing system is weak. The technical assessment of the database is that it is powerful and sophisticated enough to meet all the needs of CMAC and the mine action sector. It appears that an expert computer technician is still required on a part time or full time basis to support the national staff.

4.3 Impact of the database.

The impact of this successful internal development of the database department since 1997 has been minimal in terms of its assistance to any of the identified functions of planning, operations, M&E and reporting. It is greatly under-used and actively abused within CMAC. Some reasons for this are listed below:

- A disappointment among the most senior directors of CMAC that the verifiable statistics reveal that CMAC has achieved so much less in recent years than they had hoped, and a far lower figure than they like to promote with donors and other international agencies. Consequently they have persisted in certain cases in the use of exaggerate totals of land cleared and mines removed. In some case they quote figures 100% higher than those the database can verify.
- In addition there is an failure of communication between the field realities of marking and clearance (in changing geographical and political)circumstances and the ability of the database to cope with such changes. The UNDP report mentioned earlier highlights the issue of minefields with specific numbers and dimensions being cleared in segments or partially cleared (for good reasons) resulting in the database rejecting the clearance reports due to a breakdown in computer logical sequence. Clearly this inflexibility irritates Operations staff who feel their labours are not being documented accurately and who feel that the database should serve their needs and not vice versa.
- Any sophisticated information system is only as good as the quality of information being entered. The data received by the CMAC branches and field offices has been poor and reveals a negligent attitude in the agency towards accurate information and respect for reporting procedures. Procedures are in place but not respected. Data is often duplicated, falsified, erroneous, and partial. The database staff claim that if they return records to field offices with queries they receive no reply.

- A fear among certain CMAC staff that the database will reveal errors and expose corrupt or irregular practises, such as the re-verification of the same minefield 3 times, or the duplication of clearance or exaggeration of minefield areas cleared.
- Ignorance, inexperience or confusion among certain managers as to how the integrated database could assist them in their planning and operations. In addition to this there is an absence of accountability and cost-efficiency analysis in CMAC ; an area where comparative data from different DU and from different technologies could be analysed to advance efficiency.
- Lack of confidence: CMAC's database is well know to have been weak and lacking in accuracy for some years. NGOs involved in mine action have always know that CMAC database information was flawed; they worked in the regions and could see error at first hand. CMAC staff and TAs also suspected it and so since 1993 data has never been taken seriously. Of course this is a self-fulfilling cycle in so far that if people do not take a data base seriously the information submitted will be poor or incorrect while people's use of that data reduces. This lack of faith in the database, compounded by the corruption, management scandals of 1999 still affects the database's reputation reduces its positive impact. In this respect there is a strong contrast with the CRC/HI mine incident database, which is treated seriously and respected for its assumed accuracy.
- In the early days the CMAC database was used extensively as an effective tool for Public Relations. Visitors and donors were easily impressed to see the maps and production of printed plastic overlays. It is still effective as a tool of PR. Few operators used the database for hard data and now that the expanded and advanced system refuses to endorse the exaggerated claims of certain CMAC documents its not surprising that it provides minimal service to the various departments of CMAC. According to the CMAC database staff this situation is currently changing, particularly in relation to the Planning and MUXOA Branches. Operations continue to operate its own database of clearance achievements which differs considerably from the integrated database information. This continues to be a conflict issue between the database department and Operations Branch.

It may be noted that CMAC claims to be conducting deep reforms in the agency and that the new director appears committed to reconcile informational differences between departments and the database. The situation is improving but the fact remains that the impact of the database as a service provider is low , with much space for improvement. The MUXOA and Planning branches are now beginning to use the database resources with increased regularity. As mentioned much of the confusion lies in the mass of unverified information and different survey attempts that have formed the basis of the database. With the current Survey Level One, the database will start receiving on a national basis detailed minefield information in a standardised format. When this is completed for the whole country the underlying basis of the CMAC database will have changed and it will gain the authority as a resource of systematic and verifiable data. As the current TA has written; **'The flawed Mine Action database will then have become obsolete.'**

Also, if the Level One results from Kampot and Kaeb represent a national trend there should be a very significant reassessment and reduction of areas considered mined. In these areas the level one result revealed that earlier surveys had created a 85% exaggeration of the problem . These two provinces are not representative of the more mine-risk areas of Cambodia but the example is still striking.

Not only have different CMAC branches restricted the database capacity by with holding data or supplying flawed data but the NGOs have been poor information providers, offering little or partial information of their activities. Due to the geo-referencing basis of the CMAC database, GPS and/or grid references are essential on site sketches for data to be recorded accurately. The NGOs, MAG, Halo, Cofras/Cidev and NPA in earlier years all were weak contributors of data and did not support the concept of an integrated database well. The result today, for example is that CMAC reports of NGOs achievement are low and incorrect, only compounding a sense of disbelief concerning the database among crucial mine action players. This evaluation would suggest it

is better to not to quote total clearance rates for agencies if the database can only represent a small part of the agency's achievements. 'Figures not available' may be preferable to absurdly low agency totals.⁴⁷

The above observations deal with the difficulties developing and disseminating *basic* information that CMAC has always sought to generate from its database. However, the special feature of the integrated database project was to develop a powerful ability to merge, cross compare, integrate and display *different* data together. Not only is the use (and therefore impact) of the database concerning basic tabular information low, but the use and appreciating of integrated data is almost not existent in CMAC or outside. The Database department, and the STA in particular, generate some *integrated* information of their own initiative but generally there is a lack of understanding in CMAC as to how an integrated database can assist their work.

These appears to be considerable scope for the database department to prepare some examples of the scope of their work and hold a short workshop for as many CMAC senior staff as possible to illustrate the type of *integrated* information the database can now generate. This evaluation would strongly recommend such a workshop .

⁴⁷ A recent Demining Regulatory Authority document to the UN secretary General quoted MAG as having cleared 0.2 Km 2 in Cambodia since 1992, for example.

4.4 Access to the database.

The most accessible service provided by CMAC database to outsiders has always been the production of maps. With the digitalised system detail and accuracy is considerable. CMAC have never promoted themselves outside of the mine action community as a service provider for data and/or maps but despite this requests for maps is the most frequent request for the database department.

CMAC is situated some distance out of town, the database staff are only represented in Phnom Penh, and for some the uniformed and army-booted staff can intimidate people from approaching the organisation that appears quasi-military. Those within the mine action world know the database and make requests for maps but little else. CMAC produces reports of its work but agencies would not consider it their business to seek detailed data concerning CMAC's operations independently. This evaluation study has, however, and has found some remarkable comparative data available when requested directly to the database department⁴⁸. Due to scope and nature of this evaluation these findings cannot be discussed.

Access for CMAC department and staff, to the database is very open. The department operates as a service provider and has an open-door policy at all times. The problem has already been mentioned that the database is accessible but it lacks reliable information and serious end-users. Unicef have found the database very accessible and an excellent service provider during recent years. During the course of this evaluation the database was able to provide excellent integrated data concerning mine awareness and mine incidents, developing the matrix that is annex D, providing maps displaying mine accident changes over years and other tabular information to assist this study.

4.5 Final comments:

This evaluation finds that the CMAC integrated database is an essential department in the central mine action agency in Cambodia. At the very least CMAC has to be able to document in a digital manner identified minefields / UXO and the clearance of these minefields / UXO. **The existence of a database for an agency of CMAC's size should be considered non-negotiable.** Unicef's involvement, however, in such a database is negotiable.

By funding the STA position in CMAC since 1997 Unicef has assisted CMAC to greatly enhance the database by giving it an integrated capacity based on geo-referencing and digitalisation. Even though, to date, CMAC does not use the integrated database effectively, Unicef have assisted CMAC to develop a system that can greatly increase their understanding of the complexity of the mines threat as it is interwoven in Cambodian society. The data base is also able to prepare comparative analysis to enable managers to increase efficiency and identify problems more clearly.

While Unicef's support for the integrated database can be commended this evaluation questions why Unicef did not make certain demands on CMAC linked to their financial support. Unicef has been aware of the chaotic nature of reporting within CMAC and the abuse and severe under-use of the data base department by CMAC management. It would have been easy for Unicef to build in some conditions to encourage CMAC managers to take a more positive approach to the database department and the correct use of data throughout the organisation. In this respect the evaluation finds Unicef to have been very weak as a funding partner. Unicef's relationship with other mine action partners has been markedly different and far more positive.

This evaluation endorses Unicef's decision to curtail funding of the CMAC integrated database in July 2000 and would not advise a resumption of funding. The integrated database has been developed and it is

⁴⁸ For example a comparison (map) between the most severely at-risk districts in Cambodia and the location of visits from the CMAC mine awareness teams in recent years makes sober reading. The database also assisted greatly with the compilation of Annex D: Mine action matrix...

now up to CMAC to use the system appropriately. There are far more effective uses for Unicef's money in mine action, uses that are also far closer to the central mandate that guides Unicef and specifically the Children Affected by Armed Conflict department, which has been funding this initiative to date.

Central Findings: Integrated database

- That the integrated database has been developed to a high technical level to provide CMAC and any external mine action agencies with integrated data concerning a wide range of issues. But that there are some important deficiencies concerning the flexibility of the database to process field data that does not conform to the systems 'logic'.
- That the CMAC database has been very underused and abused, to some degree, over the years. It is still enduring a seemingly endless struggle to secure accurate and timely reporting from the various CMAC branches.
- That, if used correctly, the database could be a powerful monitoring, planning, performance-enhancing and promotional tool for the organisation. Currently it is not exploited in any of these areas to any serious degree.

Specific Recommendations

1. That CMAC senior managers seriously review their understanding and commitment to the data base.
2. That the database prepares some clear presentations and illustration to senior staff and managers of the usefulness of the database to assist their work, the importance of integration of data, and not just the production of colourful maps.
3. That the database works to resolve the specific problems concerning the database's inflexibility with field data, as highlighted in the recent UNDP report and mentioned in this evaluation
4. That CMAC management commits itself to accurate and regular reporting as laid out in all SOPs concerning this issue. That all departments are required to submit verified report to the database on a monthly basis.
5. That the database staff are given some clear avenue/ procedure to raise issues of irregularities, poor reporting and negligent reporting to the highest levels in CMAC (Director General). This special privilege could only be a temporary measure in order to turn around the current situation.
6. That CMAC commit themselves to totally transparent reporting procedures and that their database is accessible to outside agencies and individuals. There is no role for parallel (and different) Branch databases.

Overall recommendation:

1. That the integrated database of CMAC be recognised as a powerful and necessary component of the agency and national mine action, and as such needs adequate financial and technical support.
2. That Unicef do not consider funding the integrated database for the future and that any other future donor should establish strict criteria and conditions on future funds that CMAC meet the above recommendations .
3. That Unicef support the database by encouraging (and requiring as a condition for funding, where possible) other mine action partners to co-operate and collaborate with the integrated database as much as possible to empower it with the information it needs to be the central national database.

5. The Partnership Role of Unicef in Mine Action.

This section is added to the evaluation following expressions of interest from the Unicef Representative, the Project Officer of Children In Need of Special Protection (CNSP) and the evaluators themselves. It is compiled based on information and observations made during the evaluation as well as the comments made by participating representatives from Unicef's mine action partners at the workshop presentation held on the 26th July 2000, where the findings of the draft evaluation were discussed.

5.1 How Unicef sees itself.

Since 1994 when Unicef Cambodia first funded mine awareness / social mobilisation activities through MAG, it has sought to play far more of a role than that of a funding agency. Unicef sees itself as a partner that can offer experience and advice to the mine action sector through its experience with other 'social mobilisation' interventions to do with children and communities in general. It seeks to have an active involvement with implementing partners during project conceptualisation and design as well as a active role in the on-going projects.

Unlike other donors Unicef seeks to be involved in the sectors it funds offering added value through advice, monitoring, networking with a wide range of stakeholders and cross-linkages with similar programmes in other fields. As a funding agency that needs to solicit funds from other donors (governments, UN agencies and Unicef committees) it is clearly expedient that Unicef act as fully as possible as representatives of the proposed project to their funders. But the motivation for involvement is far greater than the need to be an effective resource mobilizer; Unicef feel its has a contribution to make through its implementing partners and uses its co-operation and collaboration and funding leverage to achieve this.

5.2 Findings and Observations.

Overall Unicef does meet many of its own objectives as a partner agency in mine action (as expressed above), but to varying degrees with different projects and depending on the experience and interest of the specific project officer assigned to the partner agency and task. Not surprisingly it probably views its own role as having greater value than that which the partner agency would give it. However in some cases the partner agencies freely admit that Unicef have a major influence in their programmes.

Community Mine Marking.

The CMAC CMM project was developed in collaboration with Unicef in 1996 and Unicef was one of its initial funders. The concept of community marking to develop safe areas in high risk communes as a support function within marking and verification sections of CMAC came out of early discussions between HI, Technical Advisors and Unicef. Unicef has remain a major donor of this project since 1996.

The MUXOA Branch manager expressed positive comments concerning Unicef's support concerning its advice and interest in the details of the programme and its development over the years and its linkages with mine awareness. The CMM Technical Advisor is directly funded by Unicef and regularly reports to the CAAC Project Officer. Regular discussions are held between the TA and the Project Officer (PO) who actively monitors the work of CMM. It is understood that CMM has co-operated with this evaluation and is entirely open to implementing necessary changes suggested in the evaluations recommendations, in so far that they are compatible with CMAC's operational objectives.

The current PO previously worked in CMAC, he understands the CMAC structure and capacity and has close links with all Branch chiefs. He is also motivated to encourage positive change in CMM and takes step to communicate with CMAC whenever necessary. These facts have enabled the PO to maximise Unicef's partnership and 'added value' in respect to CMM. This evaluation notes that in the past, previous Unicef's POs

did not have the same understanding or interest in CMM/CMAC and the consequent Unicef involvement was far less.

Mine Incident Database.(MID)

The CRC and HI express strong positive approval of the level of involvement Unicef has taken in the mine incident database project. The database structure and concept was taken over from MAG in 1998 but Unicef had been closely involved with the inception and early development of the database since 1994/5. Initially Unicef encouraged the use of the MID as a tool for social mobilisation through MAG's mine awareness teams and the use of the database as a planning and evaluation tool for mine action agencies was little appreciated. At this time the concept was new for MAG and Unicef, and the Unicef representative responsible was not a mines specialist. Since 1998 and the employment of the current CAAC PO, the involvement of Unicef in the development of the MID and its promotion as an important tool for a wide range of end-users has been far greater. HI and CRC confirm that the POs involvement has been important for the design and development of the project and intend to use the findings of this current evaluation to reform and up-grade their current programme.

It may be noted that the PO has close professional and social links to HI, not least through other programmes of HI which CAAC fund, which facilitates easy co-operation and interaction with the organisation.

Mine Risk Education

Unicef have been funding MAG in mine awareness and data-gathering programmes since 1994. They have always had more programme involvement with MAG, in comparison with most of MAG other donors, but the partnership relationship was never particularly deep. Most of the initiatives developed from MAG itself. However with the formulation of the MRE project in 1998, Unicef did work with MAG to develop an approach that would be more ministry-based, curriculum-based and child-targeted. It had already funded MAG's schools presentation and teachers training programmes before 1998 but these were MAG initiatives which were not formalised with the Ministry of Education and were not sustainable. Beyond the formulation of project proposals and the successful approval for funding it appears that Unicef had low involvement with MAG's MRE programme.

MAG's decision to cancel its involvement in the programme before the end of the first year of the 3-year programme, created some tension between Unicef and MAG as the CAAC PO looked for another partner to take over the project. MRE remained part of Unicef's strategic objectives but no longer part of MAG's. In this respect the positive, instigating role of Unicef can also be noted. Another donor would probably have dropped the programme but Unicef have secured another implementing NGO to complete the project.

Nevertheless MAG's perceptions are that Unicef has been a useful and interested donor but have not influenced the programme's direction or content to a high degree. There was little evidence in the programme that either CAAC or Unicef's Education departments were involved with MRE at a detailed level. In the provinces Unicef Education staff were unaware of the project even though MRE operates in the same cluster school groups identified and organised by Unicef. The arrival of this evaluation team was the first real involvement they had had with MRE. Low follow-up of the MAG MRE and the delay of the start of the programme do not indicate a strong partnership role by Unicef and the CAAC PO.

The CMAC Integrated Database.

Unicef have been funding the STA for the CMAC database since 1997 and have been appreciated by CMAC for their continual support of this position (up to the end of July 2000). Due to the technical nature of this programme it is not surprising that Unicef's involvement with the project has been limited. Unicef's desire to create an integrated database and one that more accurately incorporated social as well as mine-related database has been fulfilled to some degree with relatively limited input from Unicef and the PO. The STA and the PO have been in regular contact, and the CAAC department has been, somewhat ironically, the most prolific end-user of

database maps and analysis. UNICEF's partnership with CMAC senior management concerning the database and the end-use of the database information has been low.

Concluding comments.

This evaluation finds that over-all Unicef's involvement with its mine action partners over the years has been high and very positive, particularly in the last 16 months. It cannot be ignored that the current PO in CAAC has particular expertise, interest and historic relationships that enable him to be highly effective in representing Unicef as a partner/donor in mine action. The level of Unicef involvement with implementing partners is seen positively, and as a clear added value by the partners. What could have been seen as *interference* and *micro-managing* in some cases is seen, instead, as *constructive engagement*. If however another PO was employed who sought to maintain the same level of involvement but neither had the same understanding or motivation Unicef's role could become negative to the partners.

This issues was raised by many of the partners and is highlighted here to caution Unicef to ensure that they recruit suitable staff with relevant experience in the CAACP PO function. Clearly the position of PO with mine action programmes should not be dependent on personal characteristic or individual style but based on required qualifications, a motivation for the work, and procedures to follow in achieving a good balance with partners, between being a donor and a partner.

Finally, this evaluation itself has been a clear indication of Unicef's close involvement with its partners and strong interest in programme-specific details and recommendations. It has brought partners together, with Unicef through the evaluation investigations and the workshop of the 26th July⁴⁹. These partners had not met together before as partners in the Activities to Prevent Mine Incidents programme.

One CMAC participant at the workshop expressed the view that in the absence of CMAC taking a lead role in holding discussion forums and workshops on mine action issues, Unicef should fill this role.

⁴⁹ List of workshop participants included as annex G