Final Evaluation Report

Clearing for Results – Phase 3

30 December 2019

FINAL REPORT for UNDP

Colleen McGinn, PhD
Senior Resilience Specialist
Institute for Social and Environmental Transition (ISET)

ISET

Project/outcome Information		
Project/outcome title	Clearing for Result III: Mine Action for Human Development	
Corporate outcome and output	UNDAF Outcome 1: By 2018 people living in Cambodia, in particular youth, women and vulnerable groups, are enabled to participate in and benefit equitably from growth and development that is sustainable and does not compromise the well-being, natural and cultural resources of future generations. CPD Output 1.5: Institutional measures are in place to strengthen the Expected CPD Output(s): contribution of the national mine action programme to the human development of poor communities.	
Country	Cambodia	
Region	Southeast Asia	
Date project document signed	17 December 2015	
Project dates	**Start**	**Planned end**
	2016	2019
Project budget	US$ 11,179,294	
Implementing party[1]	Cambodian Mine Action and Victim Assistance Authority (CMAA)	
Evaluation information		
Evaluation type (project/ outcome/thematic/country programme, etc.)	Project	
Final/midterm review/ other	Final	
Period under evaluation	**Start**	**End**
	2016	2019
Evaluators	Colleen McGinn	
Evaluator email address	colleenmcginn@hotmail.com	
Evaluation dates	**Start**	**Completion**
	1 October 2019	30 December 2019

[1] It is the entity that has overall responsibility for implementation of the project (award), effective use of resources and delivery of outputs in the signed project document and workplan.

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List of Acronyms and Abbreviations

AP: Anti-Personnel

APMBC: Anti-Personnel Mine Ban Convention

BIA: Baseline Impact Assessment

CFR: Clearing for Results

CfRiii: Clearing for Results Phase 3

CfRiv: Clearing for Results Phase 4

CIDA: Canadian International Development Agency

CMAA: Cambodian Mine Action and Victim Assistance Authority

CMAC: Cambodian Mine Action Centre

CMAS: Cambodian Mine Action Standards

CPD: Country Programme Document

DFAT: Department of Foreign Affairs and Trade (Australia)

DFID: Department for International Development (United Kingdom)

DSA: Daily Subsistence Allowance

ERW: Explosive Remnants of War

FGDs: Focus Group Discussions

GMS: General Management Support

GSI: Gender and Social Inclusion

IMAS: International Mine Action Standards

ISS: Implementation Support Services

KIIs: Key Informant Interviews

KOICA: Korean International Cooperation Agency

LRNTS: Land Release Non-Technical Survey

MAfHD: Mine Action for Human Development

MAG: Mines Advisory Group

MAPU: Mine Action Planning Unit

NMAS: National Mine Action Strategy

ODA: Official Development Assistance

PMS: Performance Monitoring System

Prodoc: Project Document

RGC: Royal Government of Cambodia

SDC: Swiss Agency for Development and Cooperation

ToT: Training of Trainers

TRG: Technical Reference Group

UNDP: United Nations Development Programme

UXO: Unexploded Ordnance

Executive summary

Background and context

Cambodia's landmine contamination is the result of a protracted sequence of internal and regional conflicts that affected the country from the mid-1960s until the end of 1998. The northwestern regions bordering Thailand have some of the highest concentrations of anti-personnel (AP) mines in the world. Other areas of the country, mainly in the east, are primarily affected by explosive remnants of war (ERW), including cluster munitions. More than 64,700 human casualties can be attributed to mines and ERW in Cambodia since 1979, including over 19,7600 deaths (CRS 2019).

With support from the international donor community, the Royal Government of Cambodia (RGC) has made great efforts over past decades to remove landmines and ERW throughout the country. UNDP's contribution began in 2006 through a partnership with the Cambodian Mine Action and Victim Assistance Authority (CMAA). The Clearing for Results Project (Phase I) from 2006 to 2010 aimed at building the national capacity of the Government to manage Cambodia's national mine action program. The second phase (2011 to 2016) aimed to enhance national structures and mechanisms to ensure demining resources were effectively allocated. The program also supported the United Nations Development Assistance Framework (UNDAF). The current iteration of the Clearing for Results Project (Phase III, 2016-2019) has built upon these efforts, and particularly aimed to achieve:

- Mine action policies and strategic frameworks are aligned to national, sub-national, and sectoral policies and planning strategies;
- A CMAA mine action program Performance Monitoring System exists that delivers quality evidence on sustainable development outcome/impact;
- A minimum of 27 km² of the total mine/ERW contaminated areas located in the most affected and poorest provinces are impact-free.

The Clearing for Results Project, Phase III (CfRiii) has been implemented by the Cambodian Mine Action and Victim Assistance Authority (CMAA) with technical and financial support from DFAT, SDC, Canada, UNDP and RGC.

Evaluation objective, purpose, scope, and methodology

This evaluation was commissioned jointly by CMAA and UNDP in the final year of Clearing for Results Phase 3: Mine Action for Human Development. This evaluation assesses the results of the CfRiii program, to confirm accountability and to identify best practices and lessons learned which can inform relevant policies and programs in the coming years.

The purposes of the final evaluation are to:

- Provide information to RGC, project donors, and other stakeholders about the project results/impacts and achievements of the key project deliverables;

- Ensure accountability of project expenditures and the delivery of outputs;
- Inform the implementation of the next phase of Clearing for Results, which is planned to start in January 2020, and other mine action initiatives to support the National Mine Action Strategy (NMAS 2018-25).

Guided by the OECD/DAC criterion for evaluation, this evaluation focuses on assessing the **relevance, effectiveness, efficiency, sustainability, gender sensitivity, and inclusiveness** of the project's contribution to:

UNDAF/CPD Outcome 1: By 2018 people living in Cambodia, in particular youth, women and vulnerable groups, are enabled to actively participate in and benefit equitably from growth and development that is sustainable and does not compromise the well-being, natural and cultural resources of future generations.

UNDP's CPD Output 1.5: Institutional measures are in place to strengthen the contribution of the national mine action program to the human development of poor communities.

This evaluation assesses the *results* of this program: how it has contributed to meaningful capacity building for its partners, and concrete change for communities in mine-affected areas. It was led by qualitative inquiry, although data was triangulated by available quantitative data. As the program's monitoring reports satisfactorily document activities and progress toward indicators, this evaluation has been an opportunity confirm that the program is on track, and also – more importantly – to gauge its results in a nuanced and overarching way, and formulate concrete recommendations for the next phase.

Key Findings and Recommendations

No.	Finding	Recommendation
1	CfRiii's logframe is flawed in several respects, and this compromises the ability of the program to confidently demonstrate concrete results.	CfRiv's logframe should be more straightforward, precise, and oriented toward results (rather than activities). The logframe should 'unpack' different components and frame benchmarks more precisely and place elements within a results chain. Monitoring report templates should be more detailed, and the program should track progress towards all logframe indicators in a single file which is updated periodically.
2	It is difficult to gauge the results of participating in international fora, although doing so is warmly welcomed by stakeholders who point to many benefits. These include *showcasing*	CfR should better articulate the purpose of participating in international fora. It should distinguish between educating officials from disseminating best practices and lessons learned from the

	lessons learned from Cambodia's longstanding mine action sector, as well as learning from global best practice.	Cambodia experience. If the latter is indeed a major aim, then a more comprehensive course of action should be pursued.
3	The capacity building support extended by CfR is widely appreciated. However, results are impossible to fully gauge in the absence of a current needs assessment, strategy, and targets.	This evaluation strongly endorses CfR's current effort to conduct a broad-based capacity building needs assessment. CfR is also encouraged to develop a flexible yet coherent capacity-building strategy. This strategy should clearly distinguish between topics (e.g., landmine technical support, financial management, reporting, gender, data analysis, etc), and between national and sub-national levels.
4	Landmine clearance enables socioeconomic development in some of Cambodia's most remote and impoverished areas. However, CfR represents a unique funding and work stream which should not be diluted. CfR and CMAA are not ideally equipped to implement development programs, but can more directly facilitate linkages to them.	CfR should retain its focus, precisely because it is both exceptional and critical. Although there may be lost opportunities for enhancing landmine clearance-to-development pathways, CfR (and the landmine sector) should not redirect resources nor seek to implement development programs. They should, however, pro-actively seek and welcome other agencies who may be poised to more directly catalyze synergies. UNDP's move toward area-based programming is likely to facilitate this, and so should be encouraged.
5	The foundation for gender mainstreaming has been laid within CfR. An action plan is in place which encompasses key areas. However gender mainstreaming is not yet mature and there are opportunities for a more nuanced approach. Other social inclusion considerations are largely absent. Disability is a particularly striking gap.	CfR should build on its foundation for gender mainstreaming and consider ways to strengthen and nuance the approach. CfR should also consider lost opportunities for mainstreaming disability and other social inclusion topics.
6	The NMAS is aligned with the Maputo +15 declaration, and many parties are	Cambodia's goal of clearing known landmines by 2025 is aspirational and

	especially focused on the international target to rid the world of all landmines by 2025. This is an ambitious aim, and one that is probably unrealistic for Cambodia to achieve.	should be recognized as such. Stakeholders in Cambodia's landmine sector should premise their operational plans on realistic projections about remaining landmine contamination in Cambodia. Stakeholders should *not* assume that the 2025 target will be met.
7	The PMS represents an important and ambitious effort to quantify the development impact of mine action. This is an important nascent effort. Questions surrounding data quality, sustainability, and capacity should be considered. However, many are focused on immediate operational matters, i.e., data collection and database-building.	The PMS is still nascent, and thus now is precisely the right time to review and course-correct if necessary. Decision-makers should realistically assess how sustainable and practical the PMS is, whether it may ultimately 'poach' resources from the mine action national database, and identify opportunities to enhance linkages with development agencies. CfR management should define what deliverables or other knowledge products are expected to be prepared and when, and plan accordingly.
8	CfRiii has exceeded its target to clear landmines, which is a welcome measure of success and effectiveness.	CfRiii should be congratulated for its impressive results, while seeking improvement to further improve effectiveness and efficiency. For example, exceeding targets partially reflects that many suspicious areas do not pose current risk, and so can be released via non-technical survey.
9	Land mine clearance in Cambodia is efficient insofar as the cost per square meter is lower than international norms. However, there are several confounding factors which may exaggerate the cost-effectiveness of operations.	CfR senior management should continue to seek opportunities to improve efficiency in landmine clearance. The evaluation encourages continued use of non-technical surveys and other means to improve efficiency. CMAA should maintain a high standard of quality assurance to ensure no risk of mine accidents.
10	Which locations are prioritized for landmine clearance is a controversial topic, insofar as there are tensions and trade-offs between clearing as per	This evaluation endorses the current approach to prioritize areas according to development priorities (i.e., settlements, agricultural areas, concentration of

	development priorities versus *technical* ones.	identified poor, etc). The chief reasons are that villagers in FGDs unanimously endorsed this approach, and the sector's environmental safeguards need to be strengthened before any shift in emphasis to sensitive habitats. Objections to current prioritization are nevertheless valid.
11	CfRiii's new Mine-Free Village Strategy calls for clearing (or releasing via non-technical survey) the entire boundaries of a village before moving to a new area.	This evaluation endorses the Mine-Free Village Strategy. It makes no sense to leave possible 'pockets' of contamination, which introduces inefficiencies over the long-term. Moreover, the Mine-Free Village Strategy presents many development benefits, including psychological relief and improved land values.
12	Many "cleared" landmines are released following non-technical surveys because all or part of suspected mine areas are in fact safe. Cambodia is a generation on from civil war. Although there are ongoing efforts to update the national database and maps, operators indicate that there are some inaccuracies remain.	Not all suspected minefield sites currently pose risks. This evaluation strongly calls for continued use of non-technical surveys to release land identified as contaminated but which does not currently pose risks.
13	Community outreach and landmine education are an important component of field-level demining operations, but are not explicitly recognized or tracked by CfR's logframe and project documents. Qualitative evidence suggests that these components of the program are strong and sound, but their results are not fully articulated or documented.	A number of institutions in the mine action sector – including the operators – are engaged in community outreach and landmine education activities. However, these efforts are not included in CfR's logframe or monitoring. Going forward, CfR should 'unpack' Key Deliverable 3 to more explicitly address and follow community outreach and landmine education conducted by the operators that it funds.
14	Victim Assistance and disability services are not an explicit focus of CfRiii, although they are part of the mine action sector. There are ample opportunities for improvement.	CfR and/or CMAA should pro-actively identify opportunities to improve victim assistance and disability services. KOICA has expressed interest in financing this unmet need and this should be encouraged.

15	Cultural heritage risks were not systematically investigated, and there are no reports of damage to archeological sites. However, demining operations are suspected to be the source of metal detectors and other equipment used to loot such sites.	CfR should liaise with the Apsara Authority in regard to safeguarding potential archeological sites, and operators should put strict controls on equipment. Any broken or outdated equipment should be securely discarded so as to not fall into the hands of looters.
16	Land conflicts are a pervasive problem within Cambodia. The issue was not investigated thoroughly in this evaluation, but qualitative evidence suggests that protocols are in place and officials in both Phnom Penh and in the provinces can articulate them. Villagers in FGDs did report any controversies or problems, and suggest that demining *improves* tenure security because the improved utility and value of land incentivizes them to sort/upgrade their land documents.	CfR should continue to take measures to safeguard against inadvertently contributing to land conflicts or disputes. Post-clearance monitoring of land use and tenure is also important and should be continued.

Conclusion

Relevance*: Highly Satisfactory (4 out of 4 points).* The CfRiii program is highly relevant to RGC and UNDP's aims and policies. Communities that inhabit areas with landmines are literally and figuratively crippled. Cambodia's remaining landmines endanger the lives and compromise the livelihoods of the people living in their midst. There is, however, opportunity to enhance linkages between the mine action sector and related development efforts. RGC has ongoing decentralization efforts and UNDP is tentatively moving toward area-based programming. Both may ultimately enhance coordination and development impact.

Effectiveness*: Satisfactory (3 out of 4 points).* The CfR program is effective. Significant contaminated areas have been cleared of landmines altogether; other areas with suspected contamination have been released to communities based on non-technical surveys. The program has exceeded expectations on its core metric: square kilometers of contaminated areas that are now confirmed to be safe. Stakeholders are rightfully proud of this achievement. CfRiii has contributed ongoing support to CMAA which is widely appreciated. There are opportunities to improve the effectiveness of the program, however. For example, CfR's impact would be enhanced by a coherent strategy for capacity building, and information management aims and priorities would also benefit from greater clarity. The NMAS is a sound document, and the process of developing it demonstrates strong leadership, ownership, and capacity at senior

national levels. However, the target to clear Cambodia of known landmines by 2025 should be regarded as aspirational rather than operational.

Efficiency*: Satisfactory (3 out of 4 points).* CfR is widely considered to be financially efficient, insofar as the cost of landmine clearance is below global rates. There are, however, confounding factors that are likely to exaggerate this figure. There are dissenting voices that CfR is inefficient insofar as the areas that are prioritized for landmine clearance are *not* usually those with the most landmine contamination (nor the most accidents). Although these concerns are valid, this evaluation endorses CMAA's current prioritization approach which is led by development considerations (such as proximity to settlements and agricultural lands). However, development-led prioritization also introduces certain inefficiencies from a technical standpoint. This can and should be mitigated by generous use of non-technical surveys, These surveys can release land marked as potentially contaminated, but investigations demonstrate that they pose minimal risk at present. Information management poses a number of challenges surrounding data quality, management, financial sustainability, and analysis capacity; these are widely recognized by internal stakeholders.

Sustainability*: Satisfactory (3 out of 4 points).* Landmine clearance itself is highly sustainable: operations are expensive, but benefits are permanent. The less-tangible benefits of the program may be less sustainable. Capacity building efforts currently lack a coherent strategy or priorities, and are further compromised by high government staff turnover. The Information Management component of CfRiii is particularly likely to be unsustainable over the long term. Two important safeguard issues need to be better considered: cultural heritage (archaeological sites) and environmental protocols. The latter should include linkages to long-term natural resource management agencies.

Gender Sensitivity and Social Inclusiveness*: Less Satisfactory (2 out of 4 points).* Gender mainstreaming is a relatively new topic within Cambodia's mine action sector. Fortunately, under CfRiii there have been important strides, including a Gender Action Plan which appropriately spans key areas and appointing a Gender Focal Point within CMAA. However, results to date are fairly superficial. There is opportunity to build on this foundation with stronger and more nuanced effort. Meanwhile, international trends increasingly emphasize gender *and social inclusion* in a way that recognizes intersectionality and other drivers of inequality and marginalization, including disability. This is a topic which *does* present obvious opportunities for the mine action sector to take a leadership role in, yet it is noticeably absent from the CfRiii program. Meanwhile, the victim assistance component of the mine action sector seems to be underserved. This evaluation encourages CfR to think critically about its aims and priorities for gender mainstreaming and other social inclusion topics, particularly disability and victim assistance.

Chapter One: Introduction

This evaluation was commissioned jointly between CMAA and UNDP in 2019 (the final year of the project Clearing for Results Phase 3: Mine Action for Human Development, or CfRiii). The emphasis of the evaluation has been on assessing the results and impact of the CfRiii program, in order to identify best practices and lessons learned to inform relevant future policies and programs.

The purpose of the final evaluation has been to:

- Provide information to RGC, project donors and other stakeholders about the project results/impacts and achievements of the key project deliverables;
- Ensure accountability of project expenditures and the delivery of outputs; and
- Inform the implementation of the next phase of Clearing for Results, which is planned to start in January 2020, and other mine action initiatives to support the National Mine Action Strategy (RGC 2017).

Background and Context[2]

Cambodia's landmine contamination is the result of a protracted sequence of internal and regional conflicts that affected the country from the mid-1960s until the end of 1998. The northwest regions bordering Thailand have some of the highest concentrations of anti-personnel (AP) mines in the world. Other areas of the country, mainly in the east, suffer from explosive remnants of war (ERW), including cluster munitions. Cambodia has reported 5,966 landmine incidents between 1997 and October 2019 (CMAA, 2019a). There has been a sudden upsurge in landmine/ERW casualties in 2019 (71 accidents from January – October 2019, compared to only including 71 landmine/ERW accidents from January-October 2019, compared to only 50 in 2018. While analyzing the reasons behind this upsurge was outside the scope of this Evaluation, knowledgeable stakeholders suggest that the most likely reason in increasing encroachment into Cambodia's forests (CMAA, 2019b.

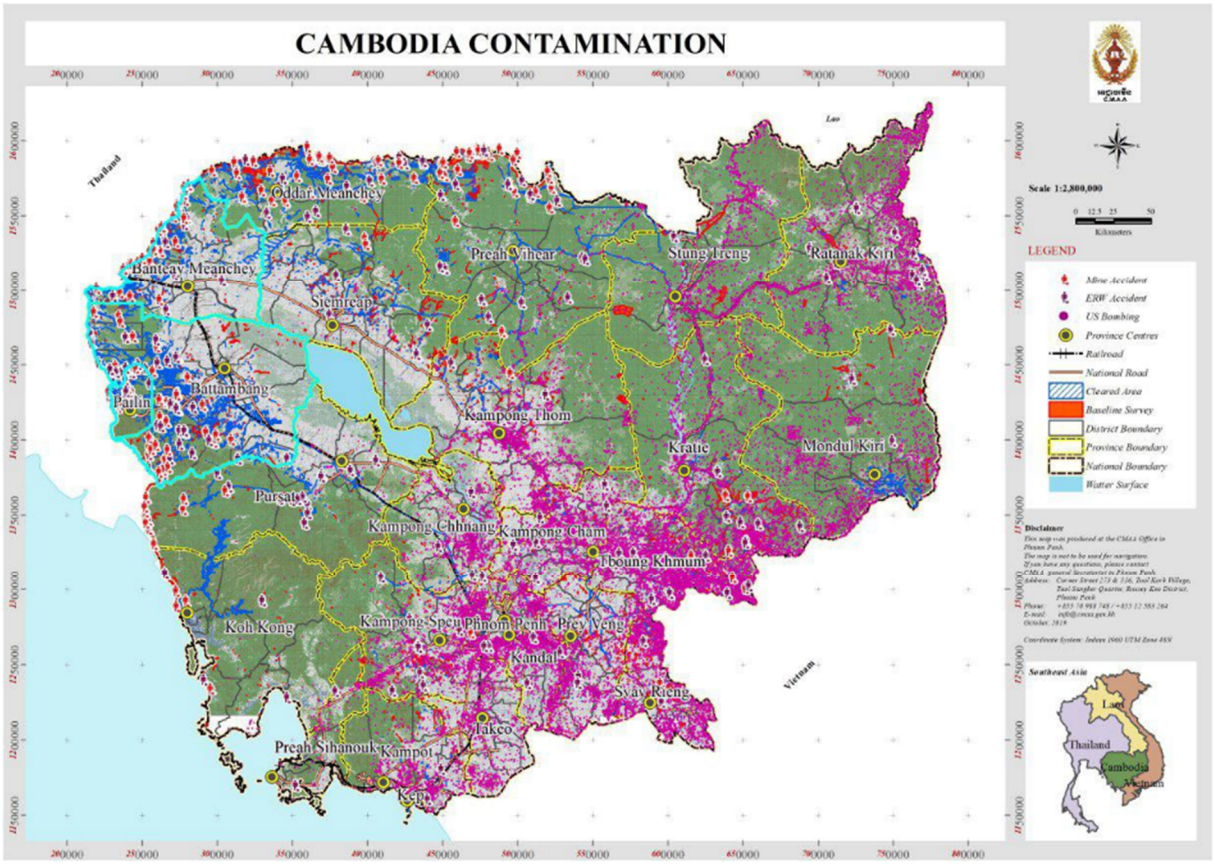
Many of the areas where mines and ERW were and are still located coincide with highly populated poor provinces, such as Pailin, Battambang and Banteay Meanchey. Some of these provinces still register a high incidence of multidimensional poverty (40%), representing over a tenth of the total Cambodian population (OPHI 2013, as cited in UNDP 2015). The pressure to cultivate risky land and/or encroach forest areas puts these populations at high risk of landmine-caused casualties. Meanwhile, fears of farming in contaminated areas has perpetuated poverty among these populations for over a generation.

More than 64,700 human casualties in Cambodia since 1979 can be attributed to mines and ERW. Table 1 shows the number of landmine casualties from 2008-2017 in Cambodia. In 2014, the number of casualties increased, reportedly due to expanding agricultural activities and use of tractors. This underscores the continued risk mines and ERW pose to agricultural livelihoods.

[2] Parts of the background section have been adapted directly from CfR's internal documents.

Clearing potential agricultural areas has significant potential to reduce rural poverty for local populations. For example, Pailin devotes 49% of its land to agriculture, and 25% of its households are classified as 'ID Poor'[3]. Similarly, Battambang devotes 32% of the land to agriculture and 32.1% of the households there are ID Poor. Finally, Banteay Meanchey, where 35% of the land is cultivated, has 21% of the population considered ID Poor (UNDP 2015). In other words, there is strong overlap between landmine contamination and poverty in Cambodia, and so *clearing* landmines can contribute to sustainable human development. CfRiii was designed to reach at least 487,004[4] poor people, improving their livelihoods and making them active part of the Cambodian economy.

Figure 1. Landmine contamination in Cambodia. Source: CMAA, 2019a.



The mine action sector in Cambodia is mature, dating back to 1992. With support from the international donor community, over the past twenty years the Royal Government of Cambodia (RGC) has prioritized addressing landmines and ERW throughout the country. The Cambodian Mine Action and Victim Assistance Authority (CMAA) was established in 2000, in order to oversee all demining and UXO clearance activities and provide assistance to landmine victims. Demining

[3] ID Poor refers to those whose national identity cards designate them as poor. Some public education, medical, and other services are free of charge to those who are ID Poor.

[4] This number is equal to the sum of current ID poor 1 and 2 holders in the provinces that CFRII works in.

activities were fully operational by 2000 with four main operators: the Cambodian Mine Action Centre (CMAC), the Royal Cambodian Armed Forces, the Mines Advisory Group (MAG) and the Halo Trust.

Table 1. Number of casualties due to anti-personnel mines, anti-vehicle mines, and explosive remnants of war (ERW) (LCMM 2019).

Year	Number of people killed (due to anti-personnel mines, anti-vehicle mines, and ERW)	Number of people injured (due to anti-personnel mines, anti-vehicle mines, and ERW)
2008	47	222
2009	47	197
2010	71	215
2011	43	168
2012	43	143
2013	22	89
2014	21	133
2015	18	93
2016	25	58
2017	48	10

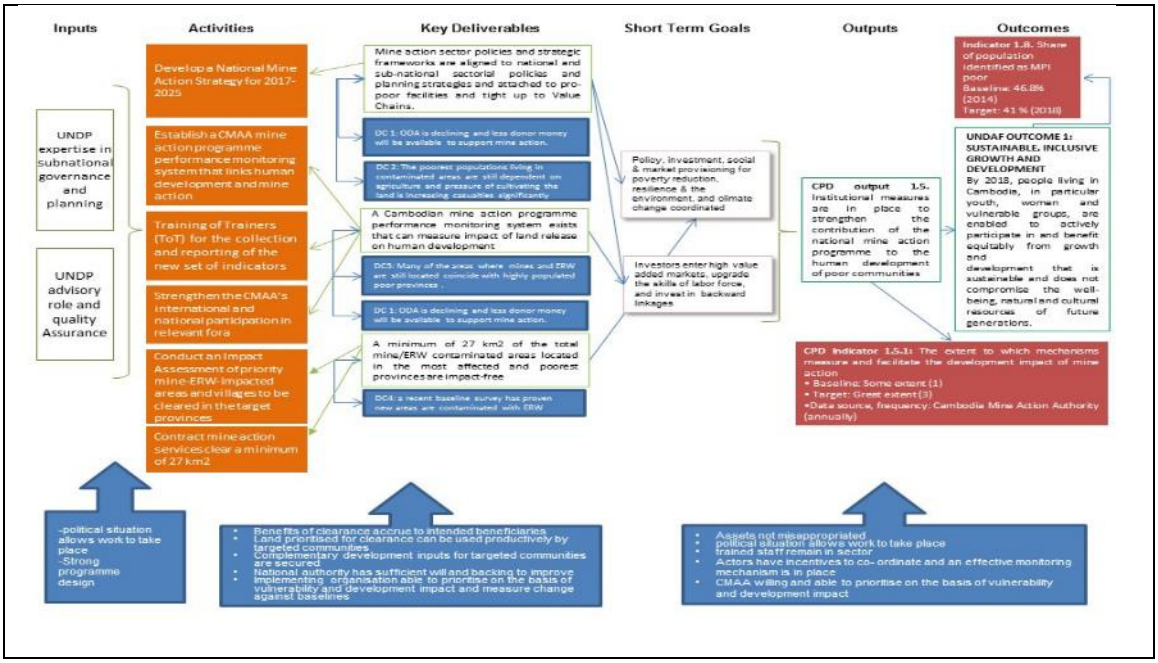
Development partners have also entered the sector by financing clearance operators and technically supporting the CMAA. UNDP's work in mine action began in 2006 through a partnership with the CMAA. The Clearing for Results (CFR) Project (Phase I) from 2006 to 2010 aimed to build the capacity of the RGC to manage Cambodia's national mine action program. The Clearing for Results Project (Phase II), from 2011 to 2016 aimed to enhance national structures and mechanisms to ensure demining resources. Since 2006 DFAT, CIDA, and DFID, and since 2013, SDC, have pooled resources to contribute to CFR. CfRiii represents the third phase of this ongoing effort, which is tentatively expected to close out in 2025.

Evaluation Scope and Approach

The Final Evaluation of CfRiii assesses progress toward the achievement of the project objectives and outcomes as specified in the Project Document (prodoc) and Results and Resources Framework. This evaluation provides information to RGC, project donors and other stakeholders about the project results/impacts and achievements of the key project deliverables, ensure accountability of project expenditures and the delivery of outputs, and inform the implementation of the next phase of Clearing for Results, which is planned to start in January 2020, and other mine action initiatives to support the National Mine Action Strategy (NMAS 2018-25).

The program's theory of change is presented below (Figure 2); its logframe also appears in Annex Seven.

Figure 2: CfRiii's Theory of Change (UNDP 2015).



The intervention supports the following outcomes, outputs, and/or policy goals:

- UNDAF Outcome 1: By 2018 people living in Cambodia, in particular youth, women and vulnerable groups, are enabled to participate in and benefit equitably from growth and development that is sustainable and does not compromise the well-being, natural and cultural resources of future generations.
- CPD Output 1.5: Institutional measures are in place to strengthen the Expected CPD Output(s): contribution of the national mine action programme to the human development of poor communities.
- National policy: National Mine Action Strategy

CfRiii's operations have been defined by three key deliverables:

- Key Deliverable 1: Mine action policies and strategic frameworks are aligned to national and sub-national sectorial policies and planning strategies
- Key Deliverable 2: CMAA mine action programme performance monitoring system exists that delivers quality evidence on sustainable development outcome/impact.
- Key Deliverable 3: a minimum of 27 km² of the total mine/ERW contaminated areas located in the most affected and poorest provinces are impact-free.

The intervention covers 10 communes in Banteay Meanchey, Pailin and Battambang. The project was designed to reach 487,004 people. Its total budget was $11,179,293.84. UNDP's

implementing partner for CfRiii is the CMAA. Since 2006, CfR has been supported by DFAT, CIDA, DFID, and SDC. It aims not only to clear contaminated areas, but also in assisting CMAA's broader capacities and activities. It should be understood that CfR does not aim to *implement* sustainable human development programming, but rather to fulfill a humanitarian imperative which enables sustainable development action.

Evaluation Objectives

The specific objectives of the final evaluation have been to:

- Assess the results achieved by the key project deliverables and the potential impact of the project outcomes on the target communities/beneficiaries, including any changes to beneficiaries' livelihoods contributing to economic growth;
- Assess the effectiveness and efficiency of the project's performance and implementation management systems and procedures;
- Assess the extent to which the project results achieved are sustainable (including national ownership/leadership and capacity to implement, coordinate, monitor and report on the NMAS implementation);
- Identify key challenges and associated risks experienced during project implementation and assess the responses in addressing these;
- Identify lessons learned and good practice (including success stories) which can be used in the design of future programming in line with the NMAS; and
- Provide recommendations to inform the next phase of Clearing for Results, including specific recommendations about how UNDP and CMAA should focus capacity building, in light of the progress during CfRiii (noting the passage of a number of key policies and any ongoing requirements around quality control, data management, and sector coordination).

Guided by the OECD/DAC criterion for evaluation, this evaluation focused mainly on assessing the **relevance**, **effectiveness**, **efficiency**, **sustainability**, **gender sensitivity** and **inclusiveness** of the project's contribution to:

- UNDAF/CPD Outcome 1: By 2018 people living in Cambodia, in particular youth, women and vulnerable groups, are enabled to actively participate in and benefit equitably from growth and development that is sustainable and does not compromise the well-being, natural and cultural resources of future generations.
- UNDP's CPD Output 1.5: Institutional measures are in place to strengthen the contribution of the national mine action program to the human development of poor communities.

A more detailed list of guiding questions appears in the Terms of Reference for this Evaluation is listed in Annex Two, which contains a detailed list of exploratory evaluation questions.

Chapter Two: Evaluation Approach and Methods

Overall Approach

Evaluation research, in general, seeks to address two overarching questions (Pringle 2011):

- *Are we doing things right?* Is implementation going smoothly, are targets being met, is money being managed appropriately and so forth? These questions demonstrate *accountability*, i.e., that the program is doing what it is expected to. This question can be largely answered by *monitoring*, for example in quarterly and annual progress reports, and sound management practices.
- *Are we doing the right things?* Is this intervention really making a difference? Is the underlying strategy strong and sound? How is this intervention effectively contributing to 'big picture' aims? What have we learned from this program that can be useful to others? These questions investigate broad themes and generate evidence which is useful to others. They are well beyond the scope of monitoring, and should instead be the focus of an evaluation.

This program evaluation emphasizes the second question ("are we doing the right things") by focusing on results, impact, and lessons learned. The evaluation approach was led by qualitative inquiry, but triangulated with available quantitative data. To this end, the evaluation presents evidence-based insights that can be applied by UNDP and its partners to the next phase of the program.

An evaluation must be grounded in evidence – including that which is gleaned from monitoring data and reports – and complements ongoing monitoring processes. Evaluations are an opportunity to confirm and validate everyday matters concerning progress, implementation, and management, but they also provide an opportunity to explore overarching questions of relevance, strategy, effectiveness, impact, and learning. Qualitative approaches are often the most suitable for exploring and interpreting phenomena and experience like these in a nuanced and complex way. They are particularly useful for answering 'why' and 'how' questions (Marshall 1996, p. 522), and applying rigorous analytical techniques to unstructured material (QSR International, 2012). In doing so, the researcher seeks to "enter the world of others and attempt[s] to achieve a holistic rather than reductionist understanding [of it] . . . By contrast, quantitative methods are better suited to deductive approaches to inquiry, testing hypotheses and establishing facts and statistical specifics that can be generalized to a population at large" (Bloomberg & Volpe, 2008, p. 80).

The CfRiii evaluation was built on a strong evidence base, sourced broadly across diverse stakeholders, documents, and data. Approaches were both inductive and deductive in an iterative cycle of developing, validating, and revising findings. The evaluation especially rested on

qualitative inquiry using key informant interviews (KIIs) with stakeholders in Phnom Penh and focus group discussions (FGDs) in three landmine-affected provinces. Examples and case studies were identified to illustrate the overall findings. However, when appropriate, findings were also framed by and triangulated with document review and secondary quantitative data analysis. The evaluation reviewed the program's aims and activities using the UNDP evaluation criteria (i.e., relevance, effectiveness, efficiency, sustainability and gender sensitivity and inclusiveness). These themes were explored across the scope of the program's results and activities.

All qualitative data (interviews, FGDs) were conducted by the Evaluator. She was supported by a translator when necessary, and delegated some desk-based support tasks (editing etc.) to qualified assistants.

Key documents included:

- Project documents (e.g., prodoc, annual reports);
- Technical reports produced by program affiliates and consultants (e.g., PMS framework report, environmental/social safeguards report);
- Data and maps provided directly by CMAA;
- National strategies and international strategies and standards (notably the NMAS and Maputo +15 declaration); and
- Relevant international standards, guidelines, and literature.

Fieldwork and Data Collection

Qualitative fieldwork was conducted during November 2019. A fieldwork schedule and list of individuals consulted can be found in Annex Four.

The Evaluator conducted fifteen private interviews with key stakeholders identified by UNDP. The Key Information Interview (KII) sample was purposive, i.e., informants were selected because of their knowledge of the program. KIIs included a broad spectrum of stakeholders, including the implementing partners, UNDP, donors, and other agencies active in Cambodia's landmine sector. In most cases, two or three representatives from each unit or agency attended.

Field visits to five villages in three provinces were conducted; data collection primarily consisted of focus group discussions (FGDs) supported by interviews with Mine Action Planning Unit (MAPU) officials and particularly informative FGD participants. The Evaluator visited one village in Banteay Meanchey, and two each in Pailin and Battambang. The project sites were identified by UNDP according to the following criteria:

- Geographic diversity;
- Variation in perspectives/experiences about program (e.g., different operators);
- Accessibility (i.e., visiting the full suite of project sites must fit into one week of fieldwork); and

- Level of direct benefit from the program.

This evaluation did not include primary collection of quantitative data.

Data Collection Procedures, Instruments, and Analysis

The Evaluator is highly trained and experienced in qualitative research methods. The interviews and FGDs were supported by a semi-structured guide (see Annex Five), but each interview and FGD was unique, and focused on what the participant(s) were most knowledgeable about. The Evaluator transcribed each interview/FGD nearly verbatim, in order to preserve the participants' perspectives most authentically. Phnom Penh interviews were transcribed onto a laptop, whereas in the field, the transcripts were handwritten.

All Phnom Penh-based interviews were conducted in English. A translator accompanied the Evaluator in the provinces, and those interviews/FGDs were conducted through translation.

The Evaluator processed interview notes systematically (whether on computer or by hand) in accordance with best practice in qualitative data analysis methods, to analyze the data in a fit-for-purpose way. Specifically, she used grounded theory conventions to highlight key insights, add analytic "memos", and distill each into a short list of main messages, findings, and recommendations from each separate interview/FGD. Findings were triangulated with available quantitative data, gleaned from project monitoring reports, the CMAA database, and online sources.

Stakeholder participation

Stakeholder participation was high across this evaluation. In Phnom Penh, stakeholders readily agreed (and indeed, were eager) to be interviewed. By and large, stakeholders expressed interest in participating. FGDs were consistently attended by women, although in some cases men reflexively dominated. In these cases, the evaluator directly sought to encourage women to speak directing questions to them. Unfortunately, in some FGDs participants had to depart early. In addition, there were a very few cases where participants seemed uninterested to contribute. These included landless participants who did not volunteer information, but when asked direct questions simply answered, "I have no land to be demined."

Ethical considerations

This evaluation was mindful not to distress participants by treading on sensitive personal information or experiences. Informed consent was verbally introduced at the beginning of each conversation. Participants were informed about how the data (and photos) would and would not be used, and that they could leave at any time or decline to answer any questions. In one case,

an FGD member became teary (recounting a tragic incident within the family); the Evaluator immediately re-focused on the positive (i.e., how program had helped this family) rather than potentially exacerbate distress by asking further questions about this trauma, which had occurred many years in the past. The participant exhibited good spirits by the end of the FGD.

Limitations of the methodology, data, and framework

This evaluation was led by qualitative inquiry, but informed by quantitative data. As such, it is a highly interpretive exercise, grounded in listening to a diverse set of voices and crafting a coherent single narrative and set of concrete recommendations triangulated from across informants and sources. A *limitation* of qualitative research, of course, is that it is difficult to pinpoint precise numeric achievements beyond those which appear in existing project documents and databases. The evaluation was also necessarily restricted by available resources – for instance, this evaluation was *not* resourced for independent quantitative data collection. In addition, time was a limited resource, and the Evaluator focused on the most salient points to strike an appropriate balance between depth and breadth.

A further limitation is that the CfRiii program's logframe is structurally flawed. The format is unconventional and counter-intuitive, and some components are mislabeled. Overall, there is a focus on activities rather than results. For instance, there is a failure to define clear priorities (for example, under the very broad umbrellas of "capacity building" or "gender"), nor are there higher-order benchmarks beyond the program's single core metric: square kilometers cleared. Overall, too many items are miscategorized, missing, and/or vague (especially the intangible components of the program), and a clear results chain is not presented. These issues were also raised in the mid-term evaluation (Blacklock and Tech 2018), but not acted on. It is understood that stakeholders are eager for an evaluation that focuses on impact and results, rather than one that simply recounts activities. However, the flaws in the logframe necessitate an analysis that is largely based on expert judgment rather than indisputable metrics.

Background information on Evaluator

Colleen McGinn, PhD, is an applied research consultant who specializes in coping and resilience, and applying disaster management perspectives to new global challenges like climate change and forced evictions. Dr. McGinn provides research and technical assistance to development agencies across Asia and beyond. As a social scientist, she works widely on gender, social inclusion, and applied research in many contexts. One of her core niches is Monitoring, Evaluation, & Learning (MEL/M&E) and Results-Based Management. She was born in Indonesia and has spent much of her life in Southeast Asia, including the past ten years in Cambodia. Dr. UNG Buntheorn provided translation services in the field, and Dr. McGinn delegated some desk-based tasks (e.g., editing, formatting, data/literature searches etc.) to qualified support personnel. In addition to

Dr. Ung, this evaluation has been greatly improved by support from Mia Chung, Rachel Norton, and Kanmani Venkateswaran.

Chapter Three: Findings

The Findings chapter focuses first on the overarching themes concerning capacity building, management support, gender/social inclusiveness mainstreaming, and sustainable development linkages. All of these topics relate directly to the program's overall output and indicator, but do not fall precisely into its Key Deliverables and associated activities. After this overview, findings from each of the program's Key Deliverables are discussed in turn.

CfRiii Output 1.5: Institutional measures are in place to strengthen the contribution of the national mine action programme to the human development of poor communities

CfRiii CPD Indicator 1.5.1: The extent to which mechanisms measure and facilitate the development impact of mine action

> *"Showing capacity building results is hard especially on an ongoing management basis… But let's not forget that mine action includes capacity development etc., it all goes together as a package… If the mine action authority is weak, operations will be weak too… I think UNDP is shifting more and more money in landmines operations, this concerns me. They want results, but capacity development is key even if it does not produce unambiguous results."*

> *"UNDP's valued added is an accountability mechanism, technical experts, very good quality donor reports, transparency. And UNDP can respond to a wide range of donor needs on various things M&E, all that. UNDP has good systems and responds to wide range of donor needs on various things… and can convene them."*

> *"As for gender mainstreaming, I don't know if it's led to great strides in female employment or anything, but it's on the agenda. People are aware. How it functions, probably not better or worse than other government departments."*

Capacity building. CfRiii provides extensive capacity building support to the CMAA on a wide range of topics, ranging from procurement and other administrative matters to technical assistance on landmine clearance and special topics. Support encompasses formal trainings, advisors, and funding to cover the direct costs of internal meetings, coordination, and CMAA's in-house trainings led by national actors. There is also a good deal of ongoing mentoring and coaching. Capacity building involves both national and sub-national officials, such as MAPU representatives.

Capacity building efforts are widely welcomed by most stakeholders; indeed, most see it as key to the Cambodian mine action sector's success and stability. Unfortunately, due a vague logframe – and a perhaps deliberate decision to keep capacity building flexible and responsive – there are no explicit aims or strategies. The lack of benchmarks, however, compromises the evaluability of

these efforts, as it is extremely difficult to gauge the *results* of the capacity building efforts based solely on the existing documentation and interview data. Nevertheless, stakeholders speak highly of capacity-building support, and monitoring reports document various meetings and trainings.

The last capacity needs assessment is too outdated to be useful, and despite stakeholders' enthusiasm for capacity building there are very diverse opinions on what the fundamental needs and priorities are. The most frequent themes, however, include:

- High government staff turnover compromises the sustainability of capacity-building efforts;
- High need for training/oversight on finance, administration, management, and reporting skills;
- High need for capacity building at the sub-national level;
- Lack of high-level data analysis skills within the Cambodian human resources base;
- Difficulty recruiting and retaining qualified personnel due to low government salaries;
- Relatively low need for training on landmine technical operations insofar as the mine action sector in Cambodia is mature.

Cambodia's mine action sector is making incremental progress toward greater independence from international funding, particularly as some development partners may exit the after 2025. In this context, a coherent strategy is essential to ensure that CMAA is equipped to reduce its reliance on international advisors and funding. At time of writing, UNDP has commissioned a formal capacity needs assessment. The Evaluator strongly agrees this assessment is needed and timely, and further argues that the CfRiv program should clearly articulate aims – and targets – for capacity building.

Management Support. There is broad agreement – although not consensus – that UNDP provides essential support to CMAA which enhances Cambodia's mine action sector. UNDP is absolutely essential for financial due diligence and monitoring/reporting, covering what are arguably CMAA's main weaknesses in fund management. Cambodian nationals especially appreciate UNDP's ability to mobilize funds and coordinate donors, while international stakeholders express trust in the systems and due diligence that UNDP provides. Voices are not exclusively positive, with several stakeholders (both national and international) complaining of high overhead costs and other inefficiencies. Overall, the Evaluator concludes that most development partners are unprepared to finance CMAA directly at the present time, and those who are dissatisfied with UNDP can (and do) fund operators directly. In other words, donors have options, and stakeholders can all find niches that they are satisfied with.

Gender and Social Inclusion. CfR places a high priority on gender mainstreaming, and has made important progress in this regard. A Gender Action Plan is in place (and has been separately, and independently evaluated), and gender has been mainstreamed in several key points across CfR including human resources, community outreach, and data disaggregation. Overall, CfR appears to be is aiming to achieve gender sensitivity (as defined in the table below).

Table 2: Levels of Gender and Social Inclusion (GSI) Mainstreaming (derived from Plan International 2018).

	GSI Unaware	GSI Sensitive	GSI Specific	GSI Transformative
Description	Projects that create, exacerbate or ignore GSI inequalities in pursuit of project goals.	Projects that reach out to and include disadvantaged groups, but maintain existing GSI dynamics and roles in pursuit of project goals.	Projects that support and improve outcomes for a specific marginalized group in pursuit of project goals.	Projects that actively reduce GSI inequalities to enhance achievement of project goals.
Example	A project that consults only with men (assumes men are the target group; women stay at home and have nothing to do with the project focus).	A project that trains men and women in specific tasks related to traditional gender roles.	A project that provides information, training, equipment and finance to women to improve their knowledge and capacity to undertake the project goals.	A project that challenges the traditional roles of women or other marginalized groups, and equips them with tools, skills, perspectives, and resources to overcome barriers.
Outcome	The project is beneficial to men because they gain knowledge and Information.	The project recognizes the different roles men and women play. However, it maintains the existing gender norms and divisions of labor. The deeper inequalities between men and women are not examined or addressed.	The project recognizes the disadvantages faced by women and focuses on delivering specific resources so they have the same opportunities as men.	The project is effective in challenging gender norms about women's role in decision making and in transforming relationships between men and women so they can work together.

Nationally, women constitute 38% of civil servants in Cambodia (Ministry of Civil Service 2016, as cited by Chhuon 2016), but they only constitute 20% of officials trained in CMAA during 2018-2019 (see Annex Nine for a table of training data). There have been concerted efforts within CfR to ensure that community-level data is fully disaggregated, human resource policies are sensitive to women's concerns, women are included in community-level outreach and committees, a Gender Focal Point has been appointed, and gender is mainstreamed by operators as well as CMAA. However, gender mainstreaming is within the mine action sector is still in the nascent phases and has not yet matured.

Landmine clearance is a very specific and targeted topic, with its purpose focused on the single humanitarian imperative of making Cambodia safe from landmines. While the program includes extensive community outreach, it does not aim to transform social relations or underlying drivers of inequality. It instead focuses on an *enabling condition* for development programs which are best addressed by others. Given the scope and purpose of landmine operations in Cambodia, the Evaluator agrees that it is important to fully ensure that the program is gender sensitive, but not re-frame the program in a way that changes its focus or premise. That said, the evaluator concurs with the interviewee who admitted, "Gender is a bit of an add-on." Most interviewees considered disaggregated data, female presence in community meetings, occasional staff gender trainings, and/or the existence of a Gender Focal Point to be enough. Many made comments along the lines of the one who declared, "Gender? It doesn't matter if a landmine blows off the leg of a man or a woman. Landmines do not discriminate." The Evaluator concludes that CfR has laid an important foundation for integrating gender in the mine action sector, but results are nascent and superficial at this time. CfR in encouraged to strengthen its work in this regard.

Current trends in gender and social inclusion (GSI) mainstreaming emphasize two points that are largely absent from CfR's gender mainstreaming efforts. The first is that gender is not simply "women's issues" but addresses distinct and differentiated vulnerability and impact among both men and women. In the mine sector, men may even be *more* vulnerable in some regards: for example, young men are most likely to venture into risky forest areas, and thus are most likely to be injured or killed. Secondly, global gender mainstreaming trends increasingly emphasize intersectionality, i.e., diverse, drivers of inequality and marginalization including age, disability, ethnicity, and poverty. While it is perhaps too early to expect CMAA to embrace the full spectrum of gender *and* social inclusion, the landmine sector is an obvious entry point to better address disability. This may include: collecting data on disabled beneficiaries, cultivating leadership and decision-making by disabled persons, ensuring that the CMAA workplace is accessible, strengthening victim assistance services, and/or structuring the program to ensure that disabled people fully benefit from the program's benefits. This evaluation encourages CfR to think more broadly about what it seeks to achieve within gender mainstreaming, including to frankly articulate what constitutes sufficient mainstreaming for this sector and to set clear priorities and targets accordingly. It also encourages CfR to consider a more nuanced approach to gender and social inclusion, and specifically to take a leadership role in mainstreaming disability within Cambodian government agencies.

Linkages to Sustainable Human Development Programming. UNDP and other stakeholders are keenly interested in how CfR and the mine sector in general advances Cambodia's (and UNDP's) human development aims. It should be understood that the mine sector in Cambodia is by and large *not* directly engaged in overall development planning or program implementation: for example, it does not feed directly into follow-up agricultural extension efforts. Landmine

clearance remains ultimately a humanitarian enterprise, but one that is a necessary precondition that enables development aims, sometimes dramatically so. Notably, there is little demand from stakeholders to move toward integrated landmine-rural development programming. CfR is a unique action area, and it serves a development imperative. As one explained,

> "I would not want to see CfR go into integrated rural development. There are lots of development programs in Cambodia, but this is the only landmine one. I don't want to see that diluted. That said, it does make sense to have some coherent strategy or linkages or something… It should be a coordination linkage, not implementation."

This is the dominant perspective among stakeholders on this issue. There are some dissenting voices, which stem from empathy about pervasive poverty in Cambodia's hinterlands and/or expectations to advance an agency's development mandate. Overall, however, the Evaluator concurs that CfR is correct to focus on humanitarian mine action without venturing into development program implementation. If additional, supplementary funds are available they would of course be welcome. However landmine action resources should not be diverted toward other areas, nor should landmine agencies be implementing these programs. While there are obvious opportunities to more coherently integrate rural development, ultimately this is the responsibility of other authorities and agencies. Instead, UNDP and CfR should play a catalyzing role, since CMAA and its partners are not poised or capacitated to pro-actively engage in development programming, whereas others are.

UNDP and other stakeholders nevertheless can and should explore opportunities to enhance synergies and linkages, and to welcome other agencies who express interest in enhancing the landmine-to-development pathway. The Korean International Cooperation Agency (KOICA), for example, has expressed interest in entering this space and it should be encouraged. UNDP is also looking toward greater emphasis on integrated area-based programming, as a means to break down sectoral silos. This evaluation concurs that such an approach would be welcome.

Case Study from Banteay Meanchey Province. Ms. Chum Deun, age 54.

I was born here in this village, my brother here too. We're from a family of 7 kids! And I am just like my mom, I have 7 children too, plus 8 grandchildren. In the war, we evacuated. I came back in 1995, and we got a new plot of land. The government distributed it to us. Now my household has 6 people: me, my husband, two of my kids plus a partner and grandchild.

After the war, our farmland was full of mines. We could not farm, too afraid. We grew just enough to survive, 1-2 hectares only. I didn't farm on my own land, I would grow something on other, safer land that was unoccupied, and hope the owners wouldn't come back before the harvest. I got away with that. I am poor, so could not send my children to college, only high school. I have many neighbors and relatives, they shared rice if we didn't have enough.

Some operators returned land to me last month. Before, I was too afraid to go there but now I am so happy.

I have two more hectares not yet cleared, but that field is far away. I am afraid to go there to farm, and if I hire machinery and it's exploded, I could never afford to replace it. My remaining 2 hectares are not in the priority area right now. But some of my closer land was in an area they just cleared this year! Although they did not find any landmines on my plot. As for my other land that is out farther away, they did a spot-check and didn't find any landmines, but it's in an area that the operators have not yet thoroughly cleared or declared safe, so I have to be patient awhile longer. But that area is in their queue.

You can see my farm here. This land right here is already safe, but the part with trees and bushes over there, they just declared safe for me to farm. We have a pond with water too, I am so happy! They gave it to me last month! I am poor so could not afford a celebration, but I am so happy! I will grow rice to eat and sell. Now the field isn't ready for farming, I need to do that during the dry season.

Key Deliverable 1: Mine action policies and strategic frameworks are aligned to national and subnational sectorial policies and planning strategies and attached to pro-poor facilities.

Activity 1.1: Develop a National Mine Action Strategy for 2017-2025 that will align Cambodia to the Maputo +15 declaration

"The NMAS took a long time. It was participatory and inclusive and that takes time! About 2 years, maybe it was too participatory! [laughs] But it's a good document, yes. Clear vision, clear priorities."

"The 2025 goal is not to clear all the mines, but all known landmine areas. But there are a lot of risks and assumptions, especially the resources required. If the resources are not there, cannot. The plan is ambitious. It can make sense but money and known mines is key!"

"Clearing landmines by 2025 is not likely... Whoever says the job is getting done by 2025 needs a reality check… Something is clearly missing along chain of communication… Fanciful productivity projections are not the way to achieve this. But it's fine to aim high, why not? It's not impossible."

Indicator: NMAS 2017-2025 is developed.	Progress: Annual reports document steady progress towards the new NMAS, which was launched in May 2018.

Cambodia's National Mine Action Strategy (NMAS) is designed provide an organizing framework for landmine action in Cambodia, and bring it into alignment with international standards, particularly the Maputo +15 Declaration. Supporting the NMAS was a major focus of CfRiii.

The Maputo Declaration on the "Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction" was established in 1999, consisting of commitments to achieve a mine-free world and pursue a comprehensive approach to mine victim assistance. By 2014, thirty of the 161 States that had committed to the 1999 Convention had achieved clearance of all mined areas. In June 2014, the "Third Review Conference of the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction" was held to review the challenges in achieving the 1999 Convention. This meeting resulted in the development of the Maputo +15 Declaration. The Declaration identifies the following goals to be met "to the fullest extent possible" by 2025 through cooperation and partnership:

- Fulfill obligations to destroy all stockpiled anti-personnel mines and clear all mined areas;
- Ensure compliance with the Convention's prohibitions on the use, stockpiling, production and transfer of anti-personnel mines;
- Promote universal observance of the Convention's norms, condemn the use of anti-personnel mines by any actor, and work to prevent any future use;
- Increase efforts to address the needs of mine victims and achieve their full, equal and effective participation in society;
- Ensure the involvement of mine victims in achieving the Convention;
- Strengthen national ownership and capacity, enhance cooperation and establish partnerships for completion; and
- Spare no efforts until the main object and purpose of the Convention are fully materialized.

The supporting Maputo Action Plan lays out a roadmap and mechanisms for progressing toward these goals between 2014-2019.

CfRiii especially contributes to the following four goals of the National Mine Action Strategy 2010 - 2019 (NMAS):

- *Reducing Mine/ERW casualties;*
- *Contributing to economic growth and poverty reduction;*
- *Ensuring sustainable national capacity to address residual contamination; and*
- *Promoting stability and regional & international disarmament.*

Cambodia's latest landmine policy iteration is the National Mine Action Strategy (NMAS) 2018-2025. The NMAS was developed to guide the sector to achieve the following vision: "Cambodia is mine free and the threat of explosive remnants of war is minimized, and human and socio-economic development takes place safely."

The NMAS consists of 8 strategic goals, 27 objectives and associated strategies. Review of the document confirms that it is in alignment with the Maputo +15 declaration. While the NMAS spans a broad scope, many CfRiii stakeholders are especially focused on Goal 1 (release all known landmine contaminated areas by 2025); other priorities include "contribute to economic development, national capacity to address post-2025 residual threats, and information management." The NMAS is comprehensive and clear, identifying specific goals and priorities, as well as practical matters such as mobilizing resources, monitoring and evaluation, and an implementation plan.

Development of the NMAS has by all accounts been strong, sound, and nationally driven. Cambodian nationals involved in the document expressed pride in both the process and the final product, and asserted that they were able to spearhead the process rather than rely on international consultants. As one explained, "CMAA argued can do the NMAS themselves… So we did not hire international consultants, but instead, rely on the in-house staff from CMAA. I am really proud of this, they did it without hiring anyone else." There was wide consultation, and while that slowed progress, it increased enthusiasm, buy-in, and ownership. The landmine sector enjoys the highest level of political support in Cambodia, and clearing landmines is a government priority. Evidence of this includes the fact that Prime Minister Hun Sen personally presides over CMAA, alongside the government's contribution to 10% of CfRiii's budget (including tax exemption to projects implemented by national operators).

The NMAS document acknowledges that "the nature of [landmine] contamination is very complex… The Cambodian mine action sector is reasonably optimistic that it is capable of removing landmines from all known contaminated areas by 2025" (p. 6). While the sector may be *capable* of meeting the Maputo target, it is evident that this is neither a realistic nor reliable *planning* target. The 2025 goal should be considered *aspirational*. Meeting the target is certainly possible, but it is not probable. To do so would require a considerable increase in funding and manpower, and there are indeed efforts underway to mobilize that. It is also tempting to assume that since *past* targets have been exceeded, the remaining contaminated areas can be released at a similarly efficient rate. This is not necessarily the case. Landmine clearance priorities have sensibly prioritized settled and agricultural areas. However, as Cambodia's progress continues, it is increasingly the case that remaining known landmines are in remote areas and difficult terrain like mountains or dense forest. Operators cannot remove landmines in these locations at the

same pace (or budget, for that matter). As one explained, "CMAA is talking about partnering with the army for another 2000 soldiers. That's great, we need boots on the ground. Fine. But we do need to calculate the clearance rate based on the task ahead, not the past rate which was in places that were easier to work in."

As Cambodia advances toward the Maputo goal, landmine clearance may become progressively slower and more expensive. Indeed, there are parallels with public health aims to eliminate (as opposed to contain) a disease vector: the closer one is to attaining the goal, the more difficult and resource-intensive it becomes to finish the job. It is notable that those who are most knowledgeable about landmine clearance operations in Cambodia are least likely to regard the 2025 goal as within likely reach. Some are still confident and optimistic, but list many caveats. An ambitious goal to clear landmines by 2025 is laudable, and may serve to catalyze stakeholders around a clear aim. However, raising unrealistic expectations may be problematic and ultimately backfire, for example by prompting donors to prematurely exit the sector. The mine action sector in Cambodia should continue to rally around the 2025 aim, but ground its operational planning – and fundraising – within more realistic parameters.

Environmental sustainability is a notable and concerning omission from the NMAS. While there is a section labeled "Gender and Environmental Sustainability" (see p. 22), the content *only* concerns gender mainstreaming. Discussion of environmental sustainability is absent. As will be discussed further below, this evaluation recommends much greater attention to environmental impact and management going forward.

Case Study from Battambang Province. Ms. Neuanat, age 43.

"Happy! Happy! My life is better! My land just got cleared this year. Before I could not farm my land, but next year can plant rice, cassava. After demining, I just need to prepare my land during the dry season, clear it of bushes etc. We can do farming now! Happy! Before, our land was empty, couldn't farm our own land. So frustrating!

Now I am so happy my land is clear. I came here when I was a small child, I cannot remember living anywhere else. We came because my parents came back to their homeland. They escaped during the war, but came back after. They came back to their previous land, but it was full of landmines. They tried their best to live and avoid the landmines.

My father stepped on a landmine in 1993 or 1994, he lost his leg. He died just a few years ago. After the amputation, he could not walk or work anymore. He couldn't even go to the toilet on his own. He had gone to the forest to collect something there, and stepped. He did not know there were landmines there.

I am happy my land is clear now. They just cleared my land this year, released it to me a few months ago, in August. My land was empty, now I can prepare it for farming during the dry season. And then next year I can plant rice for the first time in my own field! Around 1 hectare. I can eat and sell this rice. We are four people in my household, all female! I'm a single mom. I take care of my old mother, and my two little daughters age 8 and 10. I am so happy!"

Key Deliverable 2: A CMAA mine action programme performance monitoring system exists that delivers quality evidence on sustainable development outcome/impact

Activity 2.1. Establish a CMAA mine action programme performance monitoring system that links human development and mine action

Activity 2.2. Training of Trainers (ToT) for the collection and reporting of the new set of indicators for the mine action sector

Activity 2.3. Strengthen the CMAA's international and national participation in relevant fora.

"It is very difficult to manage all the information! We are the central database. We need to collect all the data from each operator, record it, and share back. There are lots of technical parts about the national database, it is not easy…. And right now, 100% of everyone depends on us."

"The issue is data from the field. When we go to interview, if they understand our question, fine. But sometimes they don't understand the question, then the answer is off. Like 'price of land before/after clearance.' People who don't own the cleared land often answer wrong. Sometimes the information we get is not good."

"Cambodia is very famous about demining, others around the world learn from us!... We are admired internationally. And Cambodia sends a lot of peacekeepers. We are popular because we know how to demine."

Indicator: Mine action sector performance monitoring system (PMS) that links human development and mine action in place.	Progress: • PMS design completed in 2017, launched in 2018. • MAPU personnel have been trained. • Pilot testing of data collection in 2 Banteay Meanchey villages since November 2018.

Indicator: CMAA actively participates in international and national relevant fora.	Progress: 2016: Two fora participated in by CMAA • Intersessional Meeting of Anti-Personnel Mine Ban Convention in Geneva, Switzerland; • 15th Meeting of State Parties in Santiago, Chile. 2017: Three fora participated in by CMAA • 20th meeting of the National Director and UN Advisor, 7-12 Feb 2017 in Geneva; • Intersessional meeting on APMBC 8-9 Jun 2017 in Geneva; • 16th meeting of the State Parties of APMBC on 18-21 Dec 2017 in Vienna. 2018: Three fora participated in by CMAA: • 21st International Meeting of National Directors and UN Advisors on 13-16 Feb 2018 in Geneva; • Intersessional Meetings to the APMBC on 7-8 June 2018 in Geneva; • 17th Meeting of the State Parties to the APMBC on 26-30 November in Geneva. 2019: Thus far, two fora have been attended • CMAA Mine Action Coordination Committee (MACC) on 20 March 2019; • Intersessional meeting on APMBC on 22-24 May in Geneva.
Indicator: No. of persons (CMAA staff) receiving Training of Trainers on PMS implementation.	Progress: Thirteen CMAA trainers trained in 2017 as part of the Technical Reference Group (TRG- PMS).

UNDP and RGC are strongly committed to information management. There are two significant parallel workstreams: the Performance Monitoring System (PMS), which is a new initiative and Key Deliverable 2 under CfRiii to collect data which systematically demonstrates the socioeconomic development impact of landmine clearance. It aims to complement the national database (established in 2007), which focuses on tracking key data related to the mine sector (i.e., mapping minefield locations, casualties, land releases). While the longstanding national database is not a focus of the CfRiii program, it is an important backdrop to consider when assessing the PMS.

The national database is a longstanding initiative within CMAA, and is the repository for mine action data nationwide. Key sources of data include the MAPUs and the mine operators. The national database generates national maps, provides decision-makers with critical data, and documents Cambodia's progress towards ridding the country of landmines and UXOs. Involved stakeholders indicate that shepherding the national database is a large ongoing effort that poses few surprises, but also many challenges. For example, operators report that the official data is sometimes inconsistent with current field-level evidence. This is unsurprising, especially given

Cambodia's history and long periods of time since baseline data collection. Inconsistency should be interpreted as an acknowledgement of very real (and expected) challenges rather than as a criticism or shortcoming per se. Secondly, while a great deal of information is collected, data analysis is challenging and there are important capacity gaps.

The PMS, meanwhile, is an ambitious and important new initiative within CfRiii to systematically gather, analyze, and ultimately report on the *development* impact of landmine clearance. The PMS is explicitly designed to inform decision-makers at all levels, and to both justify and frame the impact of mine clearance operations from a sustainable human development perspective. Removing landmines is impossible to argue with from a humanitarian or human rights perspective. However, operations are expensive and not without unfortunate side effects (for example, natural habitat destruction). As such, international stakeholders may be under pressure to demonstrate *and quantify* the socioeconomic development gains that can be attributed to landmine action. The PMS is ambitious and far-ranging, aiming to be just such a tool. It has been

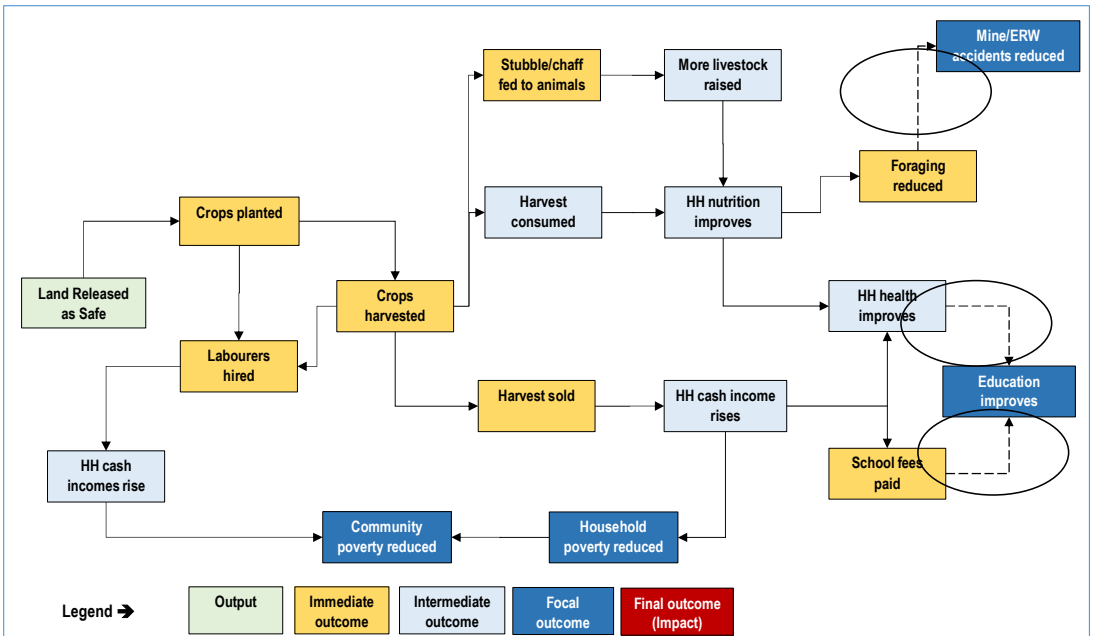


Figure 3. Theory of Change for how landmines enable development. Paterson (2017). These are the outcomes that the PMS seeks to measure.

piloted in Banteay Meanchey, and it is too early to draw clear conclusions about its success and utility. The CMAA team in Phnom Penh exhibits enthusiasm and diligence to tackle this important and difficult task. However, there is a notable focus on collecting data and building a database, without clear vision of what kind of reports or other knowledge products will ultimately be produced.

This evaluation encourages CfR and CMAA to pursue and complete data collection and analysis for the pilot PMS. However, it is important to temper enthusiasm with practical constraints. As one stakeholder explained,

> "PMS faces funding issues. As of now, the database team is supported by different donors, including 6 under CfRiii… Every day more than 100 records come in. And the data needs to QA/QC. Without funding cannot do anything. Then they ask about money in the field. This is so expensive to do! Have to pay for gas, going around, follow-up, liaise with a so many people, all that! There were 20 meetings, more! Just to put together these forms!… The other challenge for PMS is, capacity and people… More analysts are needed. Everything has a timeline and everyone is busy. Money comes with a timeline, so busy. But need to think about capacity together with the timeline… Think about MAPU in the field. They are so old, cannot understand and cannot learn. Sometimes need to arrange a lot. They cannot walk far from home to go places, but transportation costs are expensive. Could get young people with some education, but that's more money... Staff are all paid by projects, and more than the government workers. If CfR wants qualified people, they need proper salaries. This is natural. They have to take care of their parents and children."

The PMS may be ambitious to a fault, and the Evaluator's preliminary assessment is that it is unlikely to be fully utilized, nor will it be sustainable without considerable ongoing technical and financial support and a clearer vision of what reports will be written and for (and by) who. Some of the manifest and potential challenges include:

- A long history in Cambodia of government agencies collecting voluminous amounts of data but not analyzing or applying it;
- Limited capacity within Cambodia for the necessary kind of incisive, high-level statistical analysis;
- Assumptions in PMS documents that the target of removing landmines by 2025 is within reach, and therefore intensive data collection/analysis is warranted insofar that it is only short-term;
- Cost of ongoing data collection are high and unlikely to be feasible without international subsidies. For example, qualified personnel (currently funded by CfR) earn more than civil servants, and the government will not be able to recruit and retain skilled statisticians at standard rates;
- Risk of resources being drawn away from the national database (which tracks action within the mine sector) toward the PMS (which tracks development impact *beyond* mine sector operations);
- Lack of statistical rigor, as the PMS is dated on an intentional decision to collect "good enough" data through MAPU consultations with communities;
- Analytical complexities, since while local people are obviously the experts of their own communities, they typically do not report quantitative data with precision.[5] In other

[5] The Evaluator directly observed this issue during focus group discussions of CfRiii beneficiaries. For example, they tended to report implausible increases in land value post-clearance (for example, $100 per hectare to $30,000 per hectare). This is not an exception or aberration; the Evaluator has lived in Cambodia for a decade and collected both qualitative and quantitative data across development sectors. Cambodians – especially those with weak numeracy – often present their experiences in quantitative terms that are *strictly symbolic* (rather than accurate in any mathematical sense). This confounds survey data across the country and plagues the national Commune Database.

words, community-level data appears quantitative but should be interpreted with a qualitative lens;
- Duplication of efforts, as some operators who are already collecting extensive socioeconomic data reportedly only forward mine-sector data to the national database (which is backlogged);
- Lack of clarity about who will analyze the data, when (e.g., annual versus one-off reports), or what kinds of papers will be written, by who, and for who.

While the intentions of the PMS are justified, it is imperative to clarify the purpose and consider broader issues of long-term sustainability and capacity, particularly in regard to funding and expertise. The initiative should absolutely be allowed to run the full pilot period, but questions concerning practicality, sustainability, and knowledge products resulting from this effort should be confronted *now*. In particular, management should consider:

- Coordinating data collection efforts (including by operators, as well as parallel databases by other government agencies, including the Commune Database);
- Capacity for in-depth, high-level socioeconomic data analysis and reporting within the CMAA;
- Data availability and transparency[6];
- Long-term financing for the PMS, including beyond 2025;
- Whether and how the PMS may (or may not) 'compete' with limited resources/capacities for the national landmine database;
- What (and how frequently) papers or other knowledge products are expected to be written.

Landmine clearance enables development. This school in Battambang Province was built on a former minefield.

The evidence suggests that immediate stakeholders are unsurprisingly fixated on immediate tasks for data collection and database building. In the field, MAPU representatives indicate enthusiasm for reporting further data, but also exhibit a series of capacity and financial constraints. They specifically point to practicalities like DSA, fuel, and that using a tablet "is not easy." Meanwhile, one-step-removed stakeholders are interested in, but not well-informed, about the PMS. The Evaluator is further concerned about the *quality* of the collected data, insofar

[6] There is a long track record in Cambodia of data being *collected*, but not transparently or broadly accessible. The CMAA should challenge this constraint by making the entire database publicly available.

as MAPU representatives are assigned the task of reporting mathematical figures based on community consultations, which are likely to lack precision.

In short, this evaluation encourages the efforts to build the PMS, but calls for a reality check on whether and how the database will be sustained, coordinated, and used over the long term. Early indications are that the PMS is too complex. As piloting completes, the team should pro-actively consider ways to downsize the PMS, safeguard against 'poaching' resources from the national mine action database, align data collection with what is feasible to analyze, and model data transparency and linkages with other agencies. It is also imperative that CfR management better define what papers or knowledge products will be commissioned from this data. Ultimately, the Evaluator concurs with the stakeholder who argued, "Information management needs more focus. The PMS launched last year, but still needs an advisor who can lead on that, someone with M&E expertise to really lead the system."

The second major focus of this Key Deliverable was "participation in international fora." While activities associated with this focus were warmly welcomed by all stakeholders, and specific benefits and gains were presented, it was difficult to gauge *results* with any specificity. In order to do this, aims and intended results from this activity should be clearly identified going forward. In particular, it would be useful to distinguish between different capacity building components and topics.

It would be useful to distinguish between building CMAA's capacity from demonstrating best practice and lessons learned *from* Cambodia globally. Indeed, Cambodia's participation in international for a partially serves to *showcase* lessons learned from Cambodia to other mine-affected countries. Cambodian national stakeholders are proud of their success: a generation on from civil war, the landmine sector is mature, and seen as exceptionally efficient and effective. They are eager to demonstrate this, disseminate best practice from their experience, and take a leadership role in South-South learning. Many stakeholders also point to high demand for Cambodian military units for global peacekeeping operations, in part because of their landmine expertise. This underscores one of the pitfalls of lumping 'capacity building' into a single, vague unit. In the case of CfR, capacity building also includes Cambodia as the *source* of capacity building globally, not only a recipient of international technical assistance. There is opportunity to enhance how CfR disseminates best practice from the Cambodian experience, since it has one of the world's most mature mine action programs. While global concern often focuses on countries like Afghanistan with ongoing conflict and humanitarian crisis, Cambodia is something of a leader in sustained mine action over the long term. To that end, CfR should consider how to disseminate best practices and lessons learned from the Cambodian experience more systematically, extending beyond "participate in international fora."

Case Study from Pailin Province. Mr. Saophan, age 43.

I have lived here 19 years already. We stayed here together, all together after the war. Originally I am from Kampong Chang. The mines are very dangerous, can take lives. I am so scared of mines.

After the program, we are very happy. We can freely go anywhere without fear. Our children live free and happy lives. No more fear.

Before, my farmland had mines on it. I have around 1 hectare. After cleared, I can do farming! I have grown longan fruits for the past ten years. I can profit a lot, 2-3 million riel per year depending on weather.

My household here is me and my two daughters and one son. We all live together, my three grandchildren too. In my family, I'm the only one injured but it wasn't from landmines it was from fighting in the war. After the landmines were gone, we farm corn, many things we can grow! Life is better now.

Key Deliverable 3: A minimum of 27 km^2 of the total mine/ERW contaminated areas located in the most affected and poorest provinces are impact-free

"Many targets have been met or exceeded, so that's obviously good. Cost efficiency, very cheap locally. CMAA is very proud of this. Is it cheap or is it subsidized? I'm not sure. In terms of land cleared, CfRiii has met its targets. But some of the concerns that have been raised are valid, that not all the land was contaminated enough to warrant clearing."

"This is a $4 million problem that is less than halfway through and the deadline is in 6 years. As for livelihoods: this is not what deminers do, or do well, or should…
We need to get rid of the landmines."

"CMAA has its process for selecting areas to select. Ultimately there are values and politics in that."

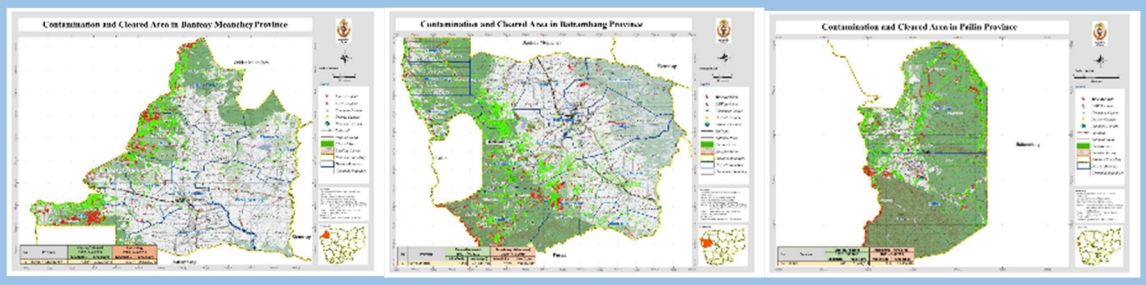
Indicator	2016 Progress	2017 Progress	2018 Progress	2019 Progress (up to 2Q report)
A Baseline Impact Assessment of Priority mine-ERW-impacted areas and villages in the target provinces conducted	Conduct of a BIA on the target provinces to be cleared	This output activity was halted as per Board decision in August 2017.		
Area (km2) of land cleared from mines annually through local planning	8.78 km^2	21.68 km2 (159%) (clearance: 10.05	Clearance: 12.47 km2	Q1 and Q2 clearance: 5.45 km2; LRNTS

process used for human development		km2; LRNTS: 11.63 km2)	LRNTS: 4.74 km2 (71%)	- Clearance: 3.47 km2 (58%);

A more detailed table showing both targets ans progress appears in Annex Eight of this report.

The *raison d'être* of the CfRiii program is to remove Cambodia's remaining landmines; this Key Deliverable was the overwhelming focus of the sector (and budget). Cambodia's landmine removal operations are mature, and have progressed at a brisk pace (see maps below).

Many stakeholders are very proud of their work, and justifiably so. Indeed, targets under CfRiii have been exceeded, and expenses have been contained to well below international norms. These are laudable accomplishments and underscore that CfRiii has been a strong and sound program. It is not, however, without its disagreements and debates. The following discussion will touch upon some of the topics of interest within mine clearance operations, with an aim toward identifying how to make a sound program better.



Landmine contamination maps in the three provinces that CfRiii is active in (CMAA, 2019a).

Prioritization. Operators cannot be everywhere at once, and so some areas must necessarily be prioritized for mine clearance while others fall back in the queue. Which ones are prioritized for immediate action is one of the most controversial debates within Cambodia's landmine sector.

There are two chief schools of thought:

- Prioritization according to diverse criteria, including development ones. This is the current official approach, led by CMAA. It prioritizes clearing areas that are settled and/or are suitable for agriculture, even if landmines are sparse. Other criteria include socioeconomic development criteria (e.g., concentration of identified poor. As one stakeholder argued,

> "We prioritize villages based on casualties, ID-poor, number of people in village, and consult with MAPU. Yes, we target the poor. Operators sometimes complain these are not the landmine concentrations. But they only think about metal, we think about people. We go to where people are most affected. We want to make sure land is being used and focus on affected people. No point in clearing a jungle plot, that won't lead to farming."

  The disadvantage, of course, is that some of the areas of *reported* landmine contamination actually pose little or no risk whatsoever, and clearing them wastes precious resources.

Moreover, most contemporary landmine *accidents* are in hinterlands rather than agricultural fields.

- Prioritization (primarily) according to technical criteria, namely heaviest concentration of landmines and landmine accidents, which is currently in forests and other remote areas. Moreover, one can also argue that this approach in fact benefits the very poorest – those without land – because they are the ones venturing into forests to begin with.

Table 3: Mine area cleared in Cambodia from 2008-2018 (LCMM 2019).

Year	Mine area cleared (km^2)
2008	32.63
2009	33.46
2010	29.69
2011	37.85
2012	45.96
2013	45.59
2014	54.38
2015	46.47
2016	25.33
2017	27.68
2018	41.01

The first option is the one currently endorsed and operationalized by CMAA (and CfRiii). However, the concerns raised by dissenting voices are entirely valid. There is no clear-cut right or wrong answer, but rather choices to be made. The Evaluator concurs that the current CMAA is approach is appropriate, primarily because it is the one that was universally endorsed by villagers across FGDs in three provinces. Their voices were unanimous – and insistent – that clearing all settlements and (potential) farmlands is of the utmost imperative. A second reason is that environmental safeguards within Cambodia's landmine sector are underdeveloped, and so it is appropriate to avoid operations in sensitive habitats for the time being. This point will be discussed in greater depth below.

Mine-Free Villages. In 2018, CfRiii piloted the Mine-Free Village Strategy in three provinces; the pilot was deemed successful and has since been formally approved but not yet fully operationalized. While most of the areas of high humanitarian impact have been cleared, there are nevertheless residual pockets of landmines in some settled/agricultural areas. While the number of remaining landmines may be spare indeed, their presence has a magnified impact on people in the area. For example, land values are marginal if there is any suspicion of landmines, people are afraid to allow their children to play freely, and they report living with fear even if there has been no accident in years. Moreover, clearing all residual areas within a village improves the efficiency of development planning, insofar as programs and donors would no longer need to budget for landmine surveys and clearance. The Mine-Free Village Strategy may not be the most cost-effective approach, but this evaluation endorses this approach as a suitable one. Leaving residual landmines within an area compromises the socioeconomic and psychosocial benefits of landmine clearance. Moreover, from a long-term perspective it makes little sense to leave scattered pockets of mines to be cleared at a later date. The Mine-Free Village Strategy is not simply popular, it ensures that communities enjoy the full benefits of landmine clearance and will be efficient over the long run.

Efficiency and Cost-Effectiveness. CfRiii – and the landmine sector overall in Cambodia – has a reputation for being exceptionally efficient and cost-effective. The program has exceeded its target for landmine clearance, and the cost of clearing a square meter is held to be well below

international norms. Reasons given for cost savings typically include a competitive bidding process and releasing land based on non-technical surveys (which are vastly cheaper than full clearance operations). There are also subsidies to the sector which do not figure into the accounting books. The latter two reasons are the most compelling.

Although cost-effectiveness is a point of pride among many stakeholders, the Evaluator cautions against over-confidence and some stakeholders can cite very specific inefficiencies. It is outside the scope of this evaluation to investigate and re-calculate the true cost of landmine clearance per square meter in a way that fully accounts for these points, but cumulatively they flag confounding variables which deflate the calculated price of landmine clearance in Cambodia. There is little incentive for internal stakeholders to challenge the numbers demonstrating cost-effectiveness. Moreover, CfRiii is a mature program which is operating under UNDP fiduciary standards. Nevertheless, this Evaluator recommends that stakeholders take a more critical view of whether, how, and why the program is cost-effective, and explore opportunities to improve efficiency. Indeed, some donors are choosing to directly fund landmine operators directly rather than via CfRiii, and inefficiencies (whether real or perceived) are a major reason why they do that.

Non-Technical Surveys. Operators in Cambodia frequently release land based on non-technical surveys. In these cases, the teams gather data to identify minefields and other similar hazards, and conduct preliminary investigations of suspected landmine sites. In many cases, they determine that all or parts of areas that have been identified as contaminated do not currently pose risks that warrant full-scale technical operations with physical equipment. Non-technical surveys (NTS) release a significant portion released lands under CfRiii on the grounds that current evidence does not warrant physical landmine removal operations. Some of the reasons for NTS release include that: baseline data on landmine contamination is highly dated and sometimes inaccurate; local people living in landmined areas are very fearful and may exaggerate reports; and a generation on from civil war, some minefields have already been formally or informally cleared. For example, in many cases local people informally cleared landmines themselves (e.g., by burning, which causes them to explode). While these methods are both very risky and unreliable, if an area has been under continuous, plowed cultivation for several years already, operators can consider them to be free of landmines.

CMAA currently prioritizes areas for clearance based in a way which considers development (as well as technical) priorities, and the Mine-Free Village Strategy calls for confirming that the boundaries of an entire village are completely free before moving onto the next. Both approaches are supported by this evaluation, but their chief disadvantage is that they cast a wide net which includes areas with low risk. This disadvantage is best mitigated by continued reliance on non-technical surveys to prevent unnecessary clearance operations.

While some villagers in FGDs voiced a demand for technical surveys everywhere, it is obvious that this is not feasible, warranted, or affordable. One of the chief reasons that demining is cost-effective in Cambodia is use of non-technical surveys. There is no justification for full-scale operations in the absence of evidence that landmines are currently present. This evaluation

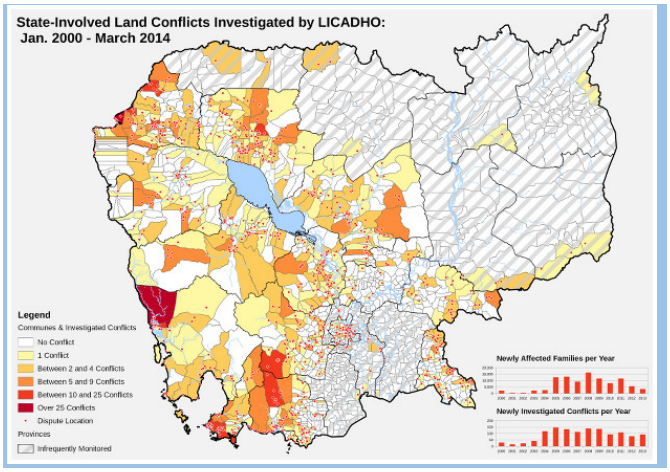
strongly calls for continued reliance on NTS to verify that suspected landmine sites are in fact safe, so that operators can concentrate on real and present dangers.

Community Outreach and Support: Landmine Education and Victim Assistance. CfRiii's project document lumps all field-level operations under Key Deliverable 3, with a single meaningful metric: km^2 cleared. In fact, field-level operations include a broad range of community consultation, outreach, and education, and they offer some victim assistance as well. These important tasks are poorly illuminated by the current logframe and reporting systems, however. It is therefore difficult to confidently gauge the results of this important work. Going forward, CfR is encouraged to 'unpack' Key Deliverable 3 to more explicitly include the community outreach and assistance components of field-level operations (and perhaps categorize under capacity building). Results based on qualitative insight are presented here.

Operators liaise extensively with MAPUs and villagers about their work. FGDs across all three provinces expressed praise and gratitude to the operators, and there were no reported cases of misconduct. Indeed, the villagers welcome both their demining services as well as the influx of resources they bring (e.g., opportunities to earn money by providing them with food, lodging, etc.) Villagers in all FGDs had benefited directly from landmine education. In all cases, they could explain exactly what should be done if they encountered an actual or suspected minefield. They correctly answered all questions about how to report the landmine, what to do to keep themselves safe, and how to mark the location so that operators could find it and other villagers could protect themselves. Although FGDs are not the best forum to confirm *actual* behavior change, it is nevertheless promising that villagers can so confidently explain how they differently dealt with landmines in the past (e.g., by burning or burying them), whereas now they know to new behaviors (e.g., marking sites, retreating, and reporting to MAPU authorities). They also confirm that if an operator is in the vicinity, a reported landmine is investigated promptly. Landmine education is an important benefit of the CfR program, and should be better highlighted as an explicit aim rather than simply 'buried' under the operations Key Deliverable.

CMAA is also committed to Victim Assistance, although again this component is not emphasized in the CfR project documents, and therefore its results are not adequately tracked. This component of the program appears to be weak and focused on immediate medical emergencies rather than sustained assistance to disabled individuals and their families. In Phnom Penh, stakeholders pointed to how demining vehicles can be used as field-level ambulances. However, in the villages people aid that in an emergency a person is taken to hospital by the nearest possible vehicle; it is absurd to think that they would contact a MAPU official to contact an operator working elsewhere in the district. The FGDs included several amputees, and many others who had disabled household members. None were familiar with any services provided or facilitated by CMAA Victim Services, and none reported any technical/vocational education and training (TVET) or other services for the disabled in the area. Although Victim Assistance is not a focus of CfR per se, it is noted that there are clearly lost opportunities to address this important aspect within Cambodia's landmine sector, and bring it up to international standards (see Lebowitz 2011) and in alignment with the Maputo +15 declaration. KOICA has reportedly also noted this gap and is poised to finance it. CfR and CMAA should seize this opportunity.

Social and Environmental Safeguards. A social and environmental safeguards study was commissioned in late 2016. Although the report reviewed the full spectrum of UNDP's social and environmental safeguard standards, the risks it flagged focused on cultural heritage, land disputes, and environmental risks. These risks were explored in this evaluation.



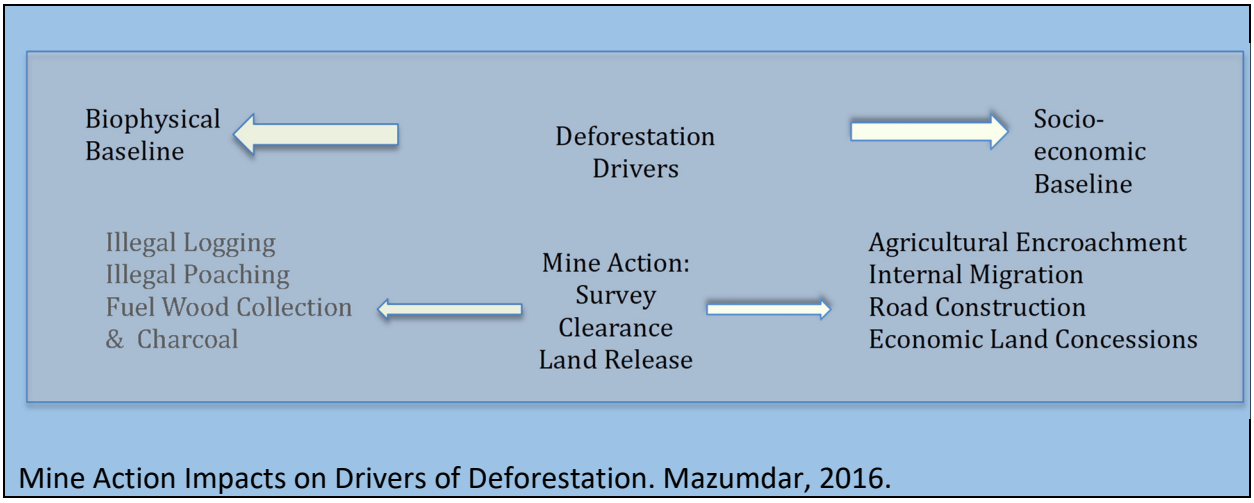
Land conflicts in Cambodia, 2000-2014 (Licadho 2014).

Land disputes and land grabbing are both complex and pervasive in Cambodia (McGinn 2013). It is notable that the "K5 Belt" (where landmines are most concentrated) includes important overlap with land conflicts in Cambodia (see map at left). CfR's social and environmental risk assessment (Mazumdar 2016) discussed this potential at length, and pointed to past problems which have been linked to demining. Full investigation of this complex topic is outside of the scope of this evaluation. However, qualitative evidence gathered for this evaluations suggests that past problems were resolved and that strict protocols are now in place. Villagers in FGDs had no examples or complaints to report, and the evidence suggests that demining has actually *improved* tenure security in many cases. Villagers responded that they were previously unmotivated to sort or 'upgrade' their land documents, because landmines degrade the utility and value of land. Given this situation, villagers did not feel that sorting their land documents was not worth the time, effort, and potential administrative fees. Land values increase following demining, however, and this provides incentive to secure land tenure.

Landmine removal operations may damage archaeological sites. This topic is well outside the evaluator's expertise (or terms of reference), and no informants flagged any problems. The Evaluator therefore contacted a well-respected archaeology scholar with extensive field experience in the Cardamom Mountains. She indicated that she was unaware of any cases of site damage attributable to landmine clearance in Cambodia. However, demining operations are widely suspected to be the source of metal detectors and other equipment used to loot archeological sites. This is a challenging criminal behavior to address, however CfR is encouraged to liaise with the Apsara Authority on matters pertaining to cultural heritage and archeological sites. Operators should also place strict controls on equipment – included broken, dated, or discarded equipment – and dispose of it securely.

Clearing landmines can potentially damage the environment. Mazumdar (2016) discusses these risks at length; risks stem from vegetation removal, disrupting topsoil, and constructing roads so that demining operators and equipment can access wilderness areas. The roads present the most alarming direct risk, insofar as they enable deforestation and other habitat destruction.

Deforestation drivers lie well beyond the landmine sector, but demining is a contributing factor. Moreover, villagers in FGDs spoke openly – and indeed, eagerly – of their intention to convert demined wilderness to farmland. As one declared, "We always clear the forest to farm! Yes!" They openly discussed that while agricultural areas were largely safe, mountains and forests remained riddled with landmine. They looked forward to converting them to farmland.



Mine Action Impacts on Drivers of Deforestation. Mazumdar, 2016.

Currently, environmental protocols related to demining operations are underdeveloped; Cambodia's National Mine Action Standards are said to largely echo International Mine Action Standards (IMAS), but the environment is an exception. Protocols are currently being drafted, but stakeholders are unclear when they will be finished and rolled out. While international operators assure that they meet IMAS standards, there seems to be little or no direct coordination with forestry/environmental issues or agencies. The lack of environmental standards and protocols to protect the environment is troubling.

Environmental risks are only likely to escalate. As landmine clearance progresses, operations will increasingly be in wilderness rather than settled areas. There are also strong calls from some quarters within the mine action sector to redirect emphasis from less-contaminated settled areas towards more-contaminated terrain (namely mountains and forests). Meanwhile, Cambodia's aspirational aim is to rid the country of landmines by 2025. This would necessitate increased focus on demining sensitive habitats. This Evaluation cautions against this in the absence of a strong environmental safeguards regime.

Environmental safeguards and protocols must be urgently improved to fully address environmental risks and safeguards as a matter of priority. CfR is also encouraged to seek partners to address deforestation, habitat destruction, and natural resource management practices *following* demining as well. For example, roads may be needed for demining equipment to access a contaminated area, but will also enable logging and other unsustainable encroachment. Indeed, this is likely to be a much greater environmental risk than direct operations. UNDP's move towards area-based planning may facilitate these key linkages.

Case Study from Pailin Province. Mr. Rusrado, age 62.

I was a soldier in the Khmer Rouge. I was in a landmine accident in 1983 while fighting, it was on that mountain over there. We had our own medical team, and there were no hospitals then. I was transferred to a military base, and after that I did not have to fight anymore. After the win-win solution 33 years ago my unit settled here together, we were each given a plot of land, but it was unlucky land! I was injured by a landmine before I came here, but that was a lucky landmine! It got me off the battlefield [laughs]. I didn't have to fight the enemy anymore after that, because I only had one leg. People with two legs, they died. So that was a lucky landmine. I am still alive! But it is not lucky to have a farm with landmines *after* the war!

We came here in 1998 to farm. This area was all for my unit, we all brought our families, and everyone started farming on the plots of land we were given. We tried to clear the landmines ourselves. There were usually 10 or 20 per hectare, usually in a line. We tried to solve ourselves, for example by burning [so that they explode]. Demining operations started here around 2000. This area might have had the most landmines in Cambodia!

In my opinion, operators should first go to the place where there are farms, this is the most important. Operators always inform people in advance what they are doing, and yes their staff are polite and friendly. They also tell us how to stay safe, how to report landmines, etc.

We get so many benefits from demining! We can grow many things. Before we could not hire anyone to come plow our land, they were too afraid. And we did not have any infrastructure here before, because of the war and the landmines. After, we can get water, roads, a pagoda, etc. But the landmines had to be cleared first.

Mostly we have soft land title here, maybe next year I will apply for hard title. After landmines are gone, land value increases so much! And we can farm. Now my family plants mangoes. The government once invited me to a beneficiaries' workshop in Phnom Penh, I even went to the Prime Minister's office!

Chapter Four: Conclusion and Recommendations

Globally, mine action programs aim to contribute to four broad goals:

1. Reduction of mine/ERW casualties;
2. Poverty reduction;
3. Socio-economic development;
4. Compliance with international commitments and norms (Paterson, Samriteha, & Vanny 2017).

Key Data on Landmine Clearance Operations

- Landmine incidents in Cambodia from 1997 to October 2019: 5,966.

- Areas released via technical survey and non technical survey from 2010 to October 2019: 148,000,353m² and 205,596,645m² respectively.

- Operator accidents/deaths 2017 to 2019: 4 killed.

- Total area cleared from 2017 to 2019 is 270km².

(CMAA, 2019a)

This paper has presented key findings and recommendations, based on evidence gathered and reviewed across this evaluation. Overall the program is strong, sound, and mature. It is achieving important results: removing landmines is a humanitarian imperative, and one that constitutes a necessary (although not sufficient) condition for poverty alleviation and integrated rural development in some of Cambodia's poorest and most remote communities. The CfR program has made important strides to support Cambodia's mine action sector, although there are opportunities for improvement. This evaluation concludes with a brief summary of the program's performance against UNDP's standard evaluation criteria. A rating (ranging between 1 and 4 points) is awarded based on the Evaluator's overall assessment of the program's performance.

Relevance*: Highly Satisfactory (4 points).*

The CfRiii program is highly relevant to RGC and UNDP's aims and policies. Communities that inhabit areas with landmines are literally and figuratively crippled. In addition to the threat to lives, limbs, and peace of mind, landmines inhibit development. Examples include:

- It may be impossible to construct basic infrastructure like roads, water systems, electricity connections, and schools;
- Children cannot play freely;
- Animals must be fenced and fed rather than allowed to roam and subsist naturally;
- Property values are marginal; and
- Farmers are unable to fully use their land.

Cambodia's remaining landmines endanger the lives and compromise the livelihoods of the people living in their midst. Although CfRiii is not a typical UNDP development program – nor should it be – it does indeed *enable* sustainable human development. Moreover, development considerations do influence key decision-making, namely which areas are prioritized for landmine operations. There is, however, opportunity to enhance linkages between the mine action sector and related development efforts, including agricultural extension, disability support

services, and natural resource management. RGC has ongoing decentralization efforts and UNDP is tentatively moving toward area-based programming. Both may ultimately enhance coordination and development impact.

Effectiveness*: Satisfactory (3 points).*

The CfR program is effective. Significant contaminated areas have been cleared of landmines altogether; other areas with suspected contamination have been released to communities based on non-technical surveys. The program has exceeded expectations on its core metric: square kilometers of landmined areas that are now confirmed to be safe. Stakeholders are rightfully proud of this achievement. The use of NTS to release land is probably the major contributing factor behind exceeding the program's target. CfRiii has contributed ongoing support to CMAA which is widely appreciate. This work encompasses formal capacity building, technical advisors, financial oversight, and monitoring/reporting. There are opportunities to improve the effectiveness of the program, however.

The CMAA demonstrates high capacity in some areas, but significant gaps remain. While capacity building efforts have been flexible and responsive, as CfR enters its fourth phase, its impact would be enhanced by a clear strategy which identifies and addresses the most important capacity needs. Meanwhile, field-level operations include community-level outreach and landmine education, but these results are not being captured by the current reporting structure at all. Finally, CfR should distinguish between *building* CMAA's capacities and aligning them to international standards, and *disseminating* best practice from the Cambodian experience to global counterparts.

Information Management aims and priorities need more clarity. The newly established PMS serves an important purpose, but there are important questions about its financial sustainability and whether the data will be effectively used.

The NMAS is a strong document, and the process of developing it demonstrates strong leadership, ownership, and capacity at senior national levels. However, the aim to clear Cambodia of all known landmines by 2025 should be regarded as aspirational rather than operational. It is *possible* to meet this target, but not probable – a point which stakeholders exhibit mixed understanding about.

Efficiency*: Satisfactory (3 points).*

CfR is widely (although not universally) considered to be financially efficient, particularly because the cost of landmine clearance is below global rates. There are, however, confounding factors that are likely to exaggerate this, including subsidies and releasing land based on non-technical surveys. There are dissenting voices that CfR is inefficient insofar as the areas that are prioritized

for landmine clearance are *not* usually those with the most landmine contamination (nor the most accidents). Although these concerns are valid, this evaluation endorses CMAA's current prioritization approach which is led by development considerations (such as proximity to settlements and agricultural lands). The endorsement of development-directed prioritization largely rests on three considerations: community villagers strongly agree with current priorities, the current priorities enable important post-clearance development opportunities (e.g., allow for infrastructure construction, increase land value, etc.), and current environmental safeguards and protocols regarding landmine clearance are weak. However, development-led prioritization also introduces certain inefficiencies from a technical standpoint. This can and should be mitigated by generous use of non-technical surveys to release land marked as potentially contaminated, but when investigated it is clear that they pose minimal risk.

Information management poses a number of challenges surrounding data quality, management, financial sustainability, and analysis capacity; these are widely recognized by internal stakeholders. They are also urged to consider duplication of data collection efforts with other agencies, data transparency, and better plan for knowledge products.

Sustainability*: Satisfactory (3 points)*

Landmine clearance itself is highly sustainable: although operations are expensive, benefits are permanent and enable development over the long term. There are no questions about the sustainability of landmine operations or their impact. However, the less-tangible benefits of the program may be less sustainable. Capacity building efforts currently lack a coherent strategy or priorities, and are further compromised by high government staff turnover. The CMAA is not immune to widespread issues within Cambodia's civil service which make it difficult to recruit and retain qualified staff (for example, low salaries). The Information Management component of CfRiii is particularly likely to be unsustainable over the long term.

There are two important safeguard issues that compromise the sustainable development benefits of the program. Firstly, demining equipment may have been used to loot archeological sites. This is a complicated issue, and CfR cannot be held responsible for criminal behavior. However, it is important that equipment be strictly controlled, and any broken/outdated equipment be disposed of securely. More directly, Cambodian Mine Action Standards do not meet current international guidelines for environmental risk management. While stakeholders reassure that their actual operations are appropriate, they express a weak grasp of the long-term potential for habitat destruction following operations, such as when roads are constructed in forest areas so that demining equipment can access contaminated areas. In addition to updating the CMAS and NMAS to encompass environmental standards, the sector is strongly encouraged to develop suitable partnerships to enhance long-term natural resource management in environmentally sensitive areas.

Gender Sensitivity and Social Inclusiveness*: Less Satisfactory (2 points).*

Gender mainstreaming is a relatively new topic within Cambodia's mine action sector. The good news is that under CfRiii, there have been important strides in this regard. A Gender Action Plan and Gender Focal Point are both in place, and it appropriately spans key areas including human resources, training, and data disaggregation. In other words, there is a solid foundation for gender mainstreaming within the mine action sector. However, results to date are fairly superficial. This is understandable given that this is a new topic in a male-dominated sector, and one that does not present an array of obvious entry points in the same way that community-based development programs do. Many stakeholders continue to express confusion over the purpose of gender mainstreaming and/or imply that the existence of an action plan, some trainings, and/or female representation at community meetings is sufficient. It may be, but CfR needs to much more clearly articulate what degree or level of gender mainstreaming it wants to achieve.

International trends increasingly emphasize gender *and social inclusion* in a way that recognizes intersectionality and other drivers of inequality and marginalization, including disability. This is a topic which *does* present obvious opportunities for the mine action sector to take a leadership role in, yet it is noticeably absent from the CfRiii program. Meanwhile, the victim assistance component of the mine action sector seems to be underserved. This evaluation encourages CfR to think critically about its aims and priorities for gender mainstreaming and other social inclusion topics, particularly disability and victim assistance.

Recommendations

The overall findings and conclusions have been discussed in detail above. This section presents the key recommendations of the Evaluator distilled from the report. For a table indicating linkages to specific findings, management response, and actions please see Annex One.

1. CfRiv's logframe should be more straightforward, precise, and oriented toward results (rather than activities). The logframe should 'unpack' different components and frame benchmarks more precisely and place elements within a results chain. Monitoring report templates should be more detailed, and the program should track progress towards all logframe indicators in a single file which is updated periodically.

2. CfR should better articulate the purpose of participating in international fora. It should distinguish between educating officials from disseminating best practices and lessons learned from the Cambodia experience. If the latter is indeed a major aim, then a more comprehensive course of action should be pursued.

3. This evaluation strongly endorses CfR's current effort to conduct a broad-based capacity building needs assessment. CfR is also encouraged to develop a flexible yet coherent capacity-building strategy. This strategy should clearly distinguish between topics (e.g., landmine technical support, financial management, reporting, gender, data analysis, etc), and between national and sub-national levels.

4. CfR should retain its focus, precisely because it is both exceptional and critical. Although there may be lost opportunities for enhancing landmine clearance-to-development pathways, CfR (and the landmine sector) should not redirect resources nor seek to implement development programs. They should, however, pro-actively seek and welcome other agencies who may be poised to more directly catalyze synergies. UNDP's move toward area-based programming is likely to facilitate this, and so should be encouraged.

5. CfR should build on its foundation for gender mainstreaming and consider ways to strengthen and nuance the approach. CfR should also consider lost opportunities for mainstreaming disability and other social inclusion topics.

6. Cambodia's goal of clearing known landmines by 2025 is aspirational and should be recognized as such. Stakeholders in Cambodia's landmine sector should premise their operational plans on realistic projections about remaining landmine contamination in Cambodia. Stakeholders should not assume that the 2025 target will be met.

7. The PMS is still nascent, and thus now is precisely the right time to review and course-correct if necessary. Decision-makers should realistically assess how sustainable and practical the PMS is, whether it may ultimately 'poach' resources from the mine action national database, and identify opportunities to enhance linkages with development agencies. CfR management should define what deliverables or other knowledge products are expected to be prepared and when, and plan accordingly.

8. CfRiii should be congratulated for its impressive results, while seeking improvement to further improve effectiveness and efficiency. For example, exceeding targets partially reflects that many suspicious areas do not pose current risk , and so can be released via non-technical survey .

9. CfR senior management should continue to seek opportunities to improve efficiency in landmine clearance. The evaluation encourages continued use of non-technical surveys and other means to improve efficiency. CMAA should maintain a high standard of quality assurance to ensure no risk of mine accidents.

10. This evaluation endorses the current approach to prioritize areas according to development priorities (i.e., settlements, agricultural areas, concentration of identified poor, etc). The chief reasons are that villagers in FGDs unanimously endorsed this approach, and the sector's environmental safeguards need to be strengthened before any shift in emphasis to sensitive habitats. Objections to current prioritization are nevertheless valid.

11. This evaluation endorses the Mine-Free Village Strategy. It makes no sense to leave possible 'pockets' of contamination, which introduces inefficiencies over the long-term. Moreover, the Mine-Free Village Strategy presents many development benefits, including psychological relief and improved land values.
12. Not all suspected minefield sites currently pose risks. This evaluation strongly calls for continued use of non-technical surveys to release land identified as contaminated but which does not currently pose risks.

13. A number of institutions in the mine action sector – including the operators – are engaged in community outreach and landmine education activities. However, these efforts are not included in CfR's logframe or monitoring. Going forward, CfR should 'unpack' Key Deliverable 3 to more explicitly address and follow community outreach and landmine education conducted by the operators that it funds.

14. CfR and/or CMAA should pro-actively identify opportunities to improve victim assistance and disability services. KOICA has expressed interest in financing this unmet need and this should be encouraged.

Recommended Reading on International Best Practice in Landmine Action

A Guide to Mine Action and Explosive Remnants of War

- "The Guide addresses best practice in all five pillars of mine action – demining, advocacy and international law, mine risk education, victim assistance and stockpile destruction – as well as in the effective management and coordination of mine action programmes."
- http://www.globalprotectioncluster.org/_assets/files/tools_and_guidance/mine_action/Guide_Mine_Actio_2007_EN.pdf

Mine Action Standards

- List of standards for field action around the world and to guide national level implementation
- https://www.mineactionstandards.org

Gender guidelines for Mine Action Programs

- Guidance on integrating gender considerations into mine action programs
- https://www.mineaction.org/sites/default/files/documents/ma-guidelines.pdf

IMAS Mine Risk Education Best Practice Guidebooks

- Set of 12 guidebooks developed to support the mine risk education component of the International Mine Action Standards
- https://www.gichd.org/fileadmin/GICHD-resources/rec-documents/IMAS-MRE-Guidebooks-2005-complete-en.pdf

Connecting the Dots: Detailed Guidance in the Mine Ban treaty and the Convention on Cluster munitions & in the Convention on the Rights of Persons with Disabilities Connections, Shared Elements and Cross-cutting Action

- Related to Victim Assistance; synthesizes the three detailed treaties to provide a framework for supporting accessibility, employment and education for survivors and people with disabilities.
- https://reliefweb.int/sites/reliefweb.int/files/resources/VA-Guidance-Document.pdf

15. CfR should liaise with the Apsara Authority in regard to safeguarding potential archeological sites, and operators should put strict controls on equipment. Any broken or outdated equipment should be securely discarded so as to not fall into the hands of looters.

16. CfR should continue to take measures to safeguard against inadvertently contributing to land conflicts or disputes. Post-clearance monitoring of land use and tenure is also important and should be continued.

Annexes

Please double-click on icons to open the appendices, which are attached as embedded documents.

Annex 1: Summary Matrix of Findings and Recommendations

Final Annex One Recommendations M

Annex Two: Terms of Reference for Evaluation

undp TOR landmine evaluation

Annex Three: Evaluation Matrix

evaluation matrix annex.docx

Annex Four: Interviews and Fieldwork

Fieldwork Annex.docx

Annex Five: Interview Guide

interview guide annex.docx

Annex Six: Bibliography

bibliography annex cl+tt.docx

Annex Seven: Theory of Change and Logframe

logframe converted to Word.docx

Annex Eight: Data Table of CfRiii Indicators

Indicator Data Table 2016-2019.xlsx

Annex Nine: Training Data Disaggregated by Gender

Gender Data +cm.xlsx

Annex Ten: Social and Environmental Safeguards

social environmental checl