

CAMBODIA

ARTICLE 5 DEADLINE: 1 JANUARY 2020
(NOT ON TRACK TO MEET DEADLINE)

PROGRAMME PERFORMANCE	For 2015	For 2014
Problem understood	8	8
Target date for completion of mine clearance	6	6
Targeted clearance	6	7
Efficient clearance	6	7
National funding of programme	6	6
Timely clearance	6	6
Land release system in place	8	8
National mine action standards	8	8
Reporting on progress	5	4
Improving performance	7	6
PERFORMANCE SCORE: AVERAGE	6.6	6.6

PERFORMANCE COMMENTARY

Cambodia's efficient application of land release methods has delivered significant gains in the amount of land cancelled and area reduced but clearance has largely focused on land with sparse contamination leaving densely mined areas still to be tackled.

RECOMMENDATIONS FOR ACTION

- Cambodia should present as soon as possible a strategy detailing plans for completing its Article 5 obligations.
- Cambodian Mine Action and Victim Assistance Authority (CMAA) should accelerate clearance of dense (category A1) anti-personnel mine contamination.
- Cambodia should ensure clearance is only conducted of land where there is firm evidence of contamination.
- The CMAA should centralise data management to produce comprehensive and disaggregated data on survey and clearance of mined areas, cluster munition remnants, and battle area contaminated with other explosive remnants of war (ERW).
- The CMAA should present this data in an annual report summarising progress towards strategic targets.
- The CMAA and mine action stakeholders should review land release planning, prioritisation, and tasking to ensure efficient and effective use of mine action assets.
- Priority should be given to support for land release that supports development.

CONTAMINATION

Cambodia is affected by mines and ERW left by 30 years of conflict that ended in the 1990s, with anti-personnel mines believed to cover a total area of 860km². Its anti-personnel mine problem is concentrated in, but not limited to, 21 north-western districts along the border with Thailand that account for the great majority of mine casualties. Contamination includes the remains of the 1,046km-long K5 mine belt that was installed along the border with Thailand in the mid-1980s in a bid to block insurgent infiltration, and ranks among the densest contamination in the world with, reportedly, up to 2,400 mines per linear kilometre.¹

A baseline survey (BLS) of Cambodia's 139 most mine-affected districts completed in 2013 estimated total mine and ERW contamination at 1,915km². The BLS identified 12,982 polygons or hazardous areas affected to some degree by mines, covering a total of more than 1,111km², of which 1,043km² were affected by anti-personnel mines. This included some 73km² of dense contamination but most, covering 892km², contained "scattered or nuisance" anti-personnel and anti-vehicle mines.²

By the end of 2015, the CMAA estimated it still had 7,871 landmine polygons covering almost 860km² out of total contamination estimated at 1,640km² (see Table 1). Of this total, 1,676 polygons amounting to 106km² was densely contaminated.³ The 2015 figure was higher than in 2013 due to the addition of parts of the K5 mine belt that were not accessible to survey teams at the time of the BLS.

1 HALO Trust, "Mine clearance in Cambodia-2009", January 2009, p. 8.

2 Revised BLS data presented in statement of Cambodia to the Anti-Personnel Mine Ban Convention (APMBC) Intersessional Meetings (Standing Committee on Mine Clearance), Geneva, 10 April 2014.

3 Email from Prum Sophakmonkol, Secretary General, CMAA, 18 April 2016.

Table 1: Mine contamination based on BLS results for 139 districts⁴

Contamination classification	Area (m ²) May 2013	Area (m ²) End 2014	Area (m ²) End 2015
A1 Dense AP mines	63,894,629	99,750,628	99,490,452
A2 Mixed AP and AV mines	78,601,787	N/R	40,064,014
A2.1 Mixed dense AP and AV mines	9,154,925	N/R	6,561,919
A2.2 Mixed scattered AP and AV mines	216,840,425	N/R	173,915,747
A2 Total	304,597,137	255,370,490	220,541,680
A3 AV mines	68,187,332	N/R	31,510,235
A4 Scattered or nuisance mines	674,882,897	627,720,309	508,247,851
Totals	1,111,561,995	982,841,427	859,790,218

AP = Anti-personnel AV = Anti-vehicle N/R = Not reported

After years of steady decline the number of people killed or injured by mines jumped by 50% in 2014 to 72. In 2015, the number of casualties resumed a downward trajectory, falling to 29, the lowest annual casualty toll recorded (see Table 2).⁵

Table 2: Casualties by device in 2011–15⁶

Device	2015		2014		2013		2012		2011	
	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
AP mine	2	10	1	36	3	21	2	27	5	28
AV mine	3	14	9	26	12	12	23	14	11	57
ERW	11	68	11	71	7	56	18	102	24	80
Totals	16	92	21	133	22	89	43	143	40	165

⁴ Data received by emails from CMAA, 4 May 2015 and 18 April 2016, and presented by Cambodia to the APMBC Intersessional Meetings (Standing Committee on Mine Clearance), Geneva, 11 April 2014.

⁵ Cambodia Mine Victim Information System (CMVIS) casualty data for 2015, received by email from Nguon Monoketya, CMVIS Officer, CMAA, 18 May 2016.

⁶ Compiled from CMVIS casualty data for 2011–2015.

PROGRAMME MANAGEMENT

The CMAA, set up in September 2000, regulates and coordinates mine action, responsibilities previously assigned to the Cambodian Mine Action Centre (CMAC).⁷ The CMAA's responsibilities include regulation and accreditation of all operators, preparing strategic plans, managing data, conducting quality control, and coordinating risk education and victim assistance.⁸

The CMAA's President is Prime Minister Hun Sen who in 2016 changed the senior officials responsible for managing the sector. Prak Sokhonn, CMAA vice-president and chairman of a Joint Government-Development Partners' Mine Action Technical Working Group maintaining relations with donors was appointed foreign minister in April 2016. Two senior government officials, Serei Kosal and Ly Thuch, were named as CMAA's first and second vice-presidents respectively.⁹ In May 2016, Ly Thuch was also appointed CMAA Secretary General, replacing Prum Sophakmonkol, respected in the sector for his long experience and understanding of mine action, who moved to the Ministry of Foreign Affairs.

UNDP has supported the CMAA through a "Clearing for Results" (CFR) programme since 2006, awarding contracts through a process of competitive bidding. The first two phases from 2006 to the end of 2015 resulted in release of 167.5km² at a cost of \$37.5 million.¹⁰ By May 2016, donors had committed to provide \$11 million for four years, of which \$7 million was committed by Australia.¹¹ For 2016, CMAA issued three contracts worth a total of \$1.5 million. This included two contracts worth \$1.1 million awarded to CMAC to clear 6.97km² in

Battambang and Banteay Meanchey provinces and one contract worth \$0.39 million awarded to the National Centre for Peacekeeping Forces Management, Mines and Explosive Remnants of War Clearance (NPMEC), summarizing the activities of the two units during their one-year mission in South Sudan to clear 2km² in Pailin.¹²

Strategic Planning

The CMAA's management reshuffle came as Cambodia was due to draw up a new strategic plan that operators hoped would help to invigorate donor support. A draft national strategic plan produced by a consultant in 2014 observed that Cambodia's mine action has moved from an emergency phase to a development phase and proposed that "much of the remaining contamination will be dealt with" within the present Article 5 deadline extension request. The plan remained under consideration by the CMAA in 2015 but was not adopted.¹³

A 'Concept Paper' on resource mobilisation released by the CMAA in early 2016 said Cambodia had to deal with contamination totalling 1,638km², of which some 930km² was mined area and 707km² was battle area. It said Cambodia would be able to release 1,545km², or 94% of the total by 2025 through technical survey and clearance at a cost of \$338.5 million but warned that mine action targets were "seriously threatened" by lack of funding. The paper projected annual clearance targets (see Table 3) but gave no details.¹⁴

Table 3: Concept Note Targets

Year	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Area to be released (km ²)	162.4	176.6	177.4	177.4	174.3	171.2	150.7	143	115.8	96.3
Funds required (\$ million)	34.02	39.22	38.22	38.22	37.72	37.12	34.62	33.22	25.82	20.32

The CMAA paper also identified additional financial requirements totalling \$2.4 million, including \$600,000 for risk education, \$500,000 to support data management, and \$500,000 "to develop a formalized knowledge exchange programme with other countries."

The CMAA held a series of technical working group meetings with operators and other mine action sector stakeholders in 2015 and 2016 to prepare a new strategic plan with the intention of completing an initial draft by mid-2016 and a final document ahead of the Meeting of States Parties at the end of 2016. This would provide the basis of a request to extend its Article 5 deadline which falls in 2020. Work on drafting a plan was running behind schedule in 2016.¹⁵

7 CMAC is the leading national demining operator, but does not exercise the wider responsibilities associated with the term "centre". Set up in 1992, CMAC was assigned the role of coordinator in the mid-1990s. It surrendered this function in a restructuring of mine action in 2000 that separated the roles of regulator and implementing agency and led to the creation of the CMAA.

8 Geneva International Centre for Humanitarian Demining (GICHD), "A Study of the Development of National Mine Action Legislation", November 2004, pp. 64–66.

9 Interview with Prum Sophakmonkol, CMAA, Phnom Penh, 11 May 2016.

10 "Clearing for Results Phase II, Annual Report 2014", UNDP, undated but 2015, pp. 18–19. Results included contracts awarded in 2015 for release of 54.1km² at a cost of \$4.9 million.

11 Interview with Prum Sophakmonkol, CMAA, Phnom Penh, 11 May 2016; and Enrico Gaveglia, Acting Country Director, UNDP, Phnom Penh, "Mine Action in Cambodia: beyond clearing landmines", *Phnom Penh Post*, 12 January 2016.

12 Information provided by Tong Try, Senior Project Officer, Clearing for Results/UNDP, 11 May 2016.

13 CMAA, "National Strategic Plan for Mine Action in Cambodia", Draft, January 2014, pp. 10, 18; and email from Prum Sophakmonkol, CMAA, 22 May 2015.

14 "Concept Paper: Cambodian Mine Action Resources Mobilisation", CMAA, undated but 2016.

15 Interview with Prum Sophakmonkol, CMAA, Phnom Penh, 11 May 2016.

Planning, prioritisation, and the effectiveness of the present system of tasking operators meanwhile remained an issue of particular debate. Under existing policy, CMAA identifies priority communes for clearance on the basis of casualty data and provincial-level Mine Action Planning Units (MAPUs) are responsible for preparing annual clearance task lists, working in consultation with local authorities to identify community priorities and with operators, taking account of donor funding and objectives. Task lists are reviewed and approved by Provincial Mine Action Committees (PMACs) and the CMAA. Reviews of the system in 2015 identified weaknesses, notably in reconciling local-level priorities with wider strategic goals.¹⁶

A review of prioritisation in western provinces targeted under the second phase of CFR noted that CMAA top-down guidance did not adequately focus mine action resources on the most impacted communities or development needs. It found that decisions on task selection did not systematically follow official selection criteria, lacked transparency, and appeared to be influenced by ease of access for operators rather than the impact of mined areas on communities. It also noted that the accident data used by CMAA as criteria for assessing prioritisation was too “reactive” and did not sufficiently capture the risks for some new villages set up in areas close to dense (category A1) anti-personnel mine contamination.¹⁷

A review by the Geneva International Centre for Humanitarian Demining (GICHD), citing official data, reported that almost half the land released by full clearance or reduced by technical survey in 2015 contained no mines (26%) or very few (one to three)

devices (23%). It also found that dense anti-personnel mine contamination accounted for 7% of land released by full clearance in 2015 and 3.5% of land cleared in 2010–15. Land contaminated by nuisance or scattered mines accounted for almost half the area released in 2010–15.¹⁸

HALO Trust pointed to the need to avoid clearing land about to reach reclamation status (after three years’ cultivation without mine detonation incidents). It also argued for more clearance of land with highly functional mine types (such as PMN, PPM-2, and 72 Alpha anti-vehicle mines) than areas with mine types known by local communities to be particularly prone to degrading (Type 69, PMD 60, and POM).¹⁹

Operators

Mine clearance is undertaken mainly by the national operator, CMAC, and two international mine action non-governmental organisations (NGOs), HALO Trust and Mines Advisory Group (MAG). CMAC’s Demining Unit 6, based in Siem Reap, came under the management of international NGO APOPO in 2014. A national NGO, Cambodian Self-help Demining (CSHD), has been active since 2011. At the start of 2014 three commercial companies active on a small scale were BACTEC, D&Y, and Viking.²⁰ Three other commercial companies, CMEC Cooperation, Hi-Tech Recond (Cambodia), and MUCC received provisional accreditation. NPMEC had thirteen demining and four explosive ordnance disposal (EOD) teams accredited with the CMAA in 2016, two more EOD teams than at the start of 2015.²¹

LAND RELEASE

Cambodia appears to have released close to 147km² of mined area in 2015,²² but reporting continues to be hampered by the absence of comprehensive, disaggregated data. The 2015 result represented a more than 50% increase over the previous year, achieved mainly by a sharp rise in land cancelled by non-technical survey (NTS) (see Table 4). Land release, however, continued to be focused on land with sparse contamination. Land with dense contamination (categories A1 and A2-1) released in 2015 totalled 1.98km² in 2015, only a slight increase over the 1.65km² released the year before.²³

16 Ibid.; and “Review of MAPU-led prioritization decisions in CFRII target provinces, western Cambodia”, Draft report, 24 January 2016, pp. 4 and 47.

17 “Review of MAPU-led prioritization decisions in CFRII target provinces, western Cambodia”, draft report, 24 January 2016, pp. 3–4, 44–47.

18 GICHD, “‘Finishing the Job’, an independent review of Cambodia’s mine action sector”, Geneva, 30 April 2016, pp. 41–42.

19 Interview with Matthew Hovell, Programme Manager, HALO Trust, Siem Reap, 12 May 2016.

20 Information provided by the CMAA in response to Landmine Monitor questions, 13 March 2014.

21 Email from CMAA, 18 April 2016.

22 Compiled by Mine Action Review from data provided by the CMAA and operators on mined area released by survey and clearance.

23 Data provided by email by the Database Unit, CMAA, 14 September 2016.

Table 4: Mined area released by survey in 2014 and 2015²⁴

Year	Area cancelled by NTS (km ²)	Area reduced by TS (km ²)	Area cleared (km ²)	Totals
2014	22.21	23.77	50.24	96.22
2015	70.38	30.11	46.47	146.96

TS = Technical survey

Cambodia's Article 7 Report for 2015 said it "cleared" a total of 185.34km² but included all forms of land release, including mine and battle area clearance; land released through NTS and technical survey, and areas cleared by the NPMEC that were not identified as contaminated in the BLS.²⁵

Survey in 2015

CMAC, HALO, and MAG conducted a non-technical "reclamation" survey between March and October 2015 following up the BLS to determine the amount of land identified as BLS polygons that had been reclaimed by local inhabitants. The survey resulted in cancellation of 70.38km², of which 49.6km² was cancelled by HALO, 12.1km² by CMAC, and 8.6km² by MAG.²⁶ In addition, CMAC reported that it released 30.11km² through technical survey.²⁷

Clearance in 2015

Mined land released through clearance is estimated to have totalled 46.5km² in 2015, 14% lower than the previous year, although the total is approximate because of data weaknesses. The number of mines that operators destroyed in 2015 also fell by more than half from the 20,479 anti-personnel mines cleared in 2014 (see Table 5).²⁸

The downturn in total area cleared resulted from a fall of more than one-third in the amount of mined area cleared by CMAC, the biggest operator but with more than 1,700 staff struggling to maintain capacity in the face of financial constraints. Germany ended financial support for CMAC's Siem Reap-based Demining Unit 6 and contracts under the Clearing for Results programme were smaller than the previous year. CMAC also cleared 12.5km² of battle area in 2015, less than half the amount of BAC conducted in the previous year and expressed concerns that it would have to lay off staff in 2016 unless it was able to attract additional funds in 2016.²⁹

HALO Trust employed about 1,000 staff, the same capacity in 2015 as the previous year, and cleared 12.25km², marginally more than in 2014. About half the area was land suspected of anti-vehicle mine contamination and cleared with large loop detectors. HALO was able to continue working on parts of the K5 mine belt, where access has been restricted because of border tensions with Thailand. Increasing development along the border, accelerated by construction of a road running parallel to the border and plans for opening dozens of border crossing points, has increased population settlement reinforcing the case for clearance of dense border minefields. HALO expected to expand work on K5 after a directive issued by Prime Minister Hun Sen in March 2016 confirming border clearance as beneficial to people living in the area.³⁰

24 Compiled by Mine Action Review from data provided by the CMAA and operators on mined area released by survey and clearance.

25 Article 7 Report for 2015, Form F.

26 Email from CMAA, 18 April 2016.

27 CMAC Operational Summary Progress Report, 1992–January 2016, received by email from CMAC, 17 May 2016.

28 Compiled by Mine Action Review from data provided by CMAA and operators on mined area released by survey and clearance.

29 Interview with Heng Rattana, Director, CMAC, Phnom Penh, 10 May 2016; CMAC Operational Summary Progress Report, 1992–January 2016.

30 Interview with Matthew Hovell, HALO Trust, Siem Reap, 12 May 2016.

MAG expanded capacity significantly adding seven mine action teams in the course of 2015 along with two sub-contracted mine detection dog (MDD) teams and a mechanical operations unit. It reported a 61% rise in the amount of land cleared although, as with other operators, the number of mines it destroyed dropped sharply. MAG was confident of further improvements in productivity in 2016 as its new teams become more experienced and used HSTAMID detectors in accordance with newly approved operating procedures.³¹

Table 5: Mine clearance in 2015³²

Operator	Areas cleared	Area cleared (m ²)	AP mines destroyed	AV mines destroyed	Submunitions destroyed	UXO destroyed
CMAC ³³	902	22,855,607	4,385	82	N/R	4,554
CSHD	19	673,767	510	3	0	486
HALO	254	12,249,277	2,772	56	0	779
MAG	35	1,226,971	148	2	0	61
NPMEC	89	9,461,409	1,026	13	611	762
Totals	1,299	46,467,031	8,841	156	611	6,642

ARTICLE 5 COMPLIANCE

Under Article 5 of the Anti-Personnel Mine Ban Convention (and in accordance with the 10-year extension granted by states parties in 2009), Cambodia is required to destroy all anti-personnel mines in mined areas under its jurisdiction or control as soon as possible, but not later than 1 January 2020. It is not on track to meet this deadline.

Cambodia stated at the end of 2015 that it expected to release about 868km² over the ensuing five years, leaving around 775km² to be released later. The implied rate of clearance projected in the first five years appeared optimistic, exceeding rates achieved to date (see Table 6).³⁴

Table 6: Release of mined areas in 2011–15³⁵

Year	Area cleared	Area cancelled or reduced by survey (km ²)	Total area released (km ²)
2015	46.47	100.49	146.96
2014 ³⁶	54.38	42.08	96.46
2013	45.59	21.46	67.05
2012	45.96	6.62	52.58
2011	37.85	N/R	37.85
Totals	230.25	170.65	400.90

31 Email from Greg Crowther, Regional Director, South and South East Asia, MAG, 28 April 2016 and interview, Phnom Penh, 9 May 2016.

32 Data received by email from CMAA, 18 April 2016 and from CMAC 17 May 2016. CMAA reported CMAC released 49.15km² through clearance in 2015, more than double the mined area clearance reported by CMAC.

33 Data shown for the mined area CMAC released by clearance is taken from CMAC Operational Summary Progress Report, 1992–January 2016, received by email from CMAC, 17 May 2016. CMAC also reported destroying a total of 7,723 anti-personnel 187 anti-vehicle mines in the course of mine and battle area clearance, but did not disaggregate the items destroyed in each activity.

34 Statement of Cambodia, APMBC 14th Meeting of States Parties, Geneva, 1 December 2015.

35 Compiled by Mine Action Review from data provided by the CMAA and operators, May 2015.

36 CMAA data reported release of 96.2km² in 2014, including 50.2km² released by full clearance and 46km² cancelled or reduced by survey.

In 2016, the CMAA was developing a strategy that focused on achieving clearance of most (94%) of both mined and battle area by 2025, and believed that by 2019 Cambodia would need an extension of less than 10 years. The CMAA cautioned that progress is threatened by funding shortfalls,³⁷ but operators and reviews of Cambodia's mine action programme also drew attention to factors that may impact performance and prospects for achieving its strategic goals.

Land release has accelerated sharply in the past five years but the release of substantial amounts of land through survey and cancellation, particularly in the last three years, suggests operators will be dealing increasingly with land that needs full clearance which may slow the pace of land release in years ahead.³⁸ MAG believes that the CMAA should be congratulated for encouraging and accepting land release through NTS and technical survey as well as full clearance.³⁹ Community and development priorities may require clearance of land with low levels of contamination, but clearance of densely contaminated land has averaged less than 2km² a year for the last five years compared with the 10km² a year that would be needed to complete clearance of these minefields by 2025. GICHD commented that without more focus on tackling these areas "Cambodia will have to address high density APM contaminated areas while international operators may have left the country and external funding may have expired."⁴⁰ Striking a balance between development priorities and addressing these densely contaminated areas is a key challenge for the new national mine action strategy.

37 Interview with Prum Sophakmonkol, CMAA, in Geneva, 17 February 2016; "Concept Paper: Cambodian Mine Action Resources Mobilisation", CMAA, undated but 2016.

38 Interviews with Prum Sophakmonkol, CMAA; Greg Crowther, MAG; and Matthew Hovell, HALO Trust, in Phnom Penh and Siem Reap, 9–12 May 2016.

39 Email from Greg Crowther, MAG, 26 October 2016

40 GICHD, "'Finishing the Job', an independent review of Cambodia's mine action sector", p. 42.