CAMBODIA

MINE ACTION REVIEW

CLEARING THE MINES 2022

ARTICLE 5 DEADLINE: 31 DECEMBER 2025
NOT ON TRACK TO MEET DEADLINE

KEY DATA

ANTI-PERSONNEL (AP) MINE CONTAMINATION: MASSIVE

NATIONAL AUTHORITY ESTIMATE

716KM²

AP MINE CLEARANCE IN 2021

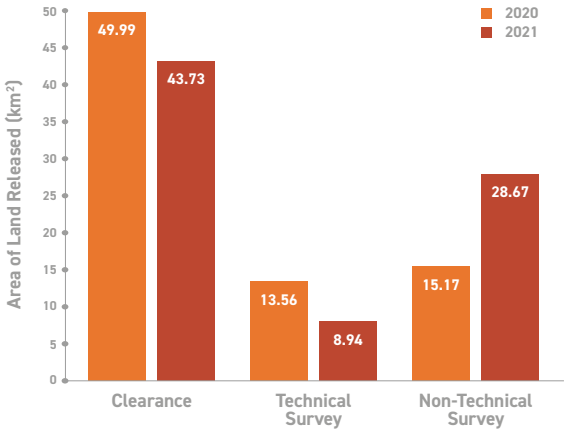
43.73KM²

AP MINES DESTROYED IN 2021

18,770

(INCLUDING 12,683 DESTROYED IN SPOT TASKS)

LAND RELEASE OUTPUT



CURRENT LIKELIHOOD OF MEETING 2025 CLEARANCE TARGET *(as per the Oslo Action Plan commitment)*: **LOW**

KEY DEVELOPMENTS

Cambodia's estimate of anti-personnel mine contamination fell sharply from 801km² at the end of 2020 to 716km² at the end of 2021. The amount of land released through survey in 2021 was a 30% increase on the previous year, while the clearance output in 2021 fell compared to 2020. A ground data verification initiative resurveyed 73km² and found more than one third of the area could be cancelled through non-technical survey. A land reclamation non-technical survey conducted by Norwegian People's Aid (NPA) in three western provinces resulted in cancellation of 11.4km². Cambodia declared the south-eastern province of Kep to be mine free in February 2022, the first of 16 provinces it aimed to declare mine free by the end of 2023. A ban on operations by international demining organisations within seven kilometres of its international borders remained in place in Cambodia. Thailand and Cambodia resumed contacts on cooperation over survey and clearance of mined areas on their border but did not reach agreement on new survey or clearance projects.

RECOMMENDATIONS FOR ACTION

- **Cambodia should expedite clearance of mined areas close to its international borders, recognising the need to accelerate clearance of dense contamination on the border with Thailand.**
- **Cambodia should reach agreement with Thailand on locations for survey and clearance in un-demarcated areas of their common border.**
- **The Cambodian Mine Action and Victim Assistance Authority (CMAA) should prioritise funding for quality assurance (QA) capacity in order to increase the number of QA teams and train them to monitor survey activities of all operators, ensuring that all survey is evidence-based; that cancellation and/or reclassification of mined area is applied wherever appropriate; and that new, previously unrecorded mined areas are verified before entry onto the national database.**
- **The CMAA should continue its efforts, through projects such as the data verification project, to attempt to identify non-evidence-based and inaccurate survey data included in the Information Management System for Mine Action (IMSMA) database and should discuss the possibility of cancelling them via desk analysis.**

- **Cambodia should continue to improve its information management systems by eliminating discrepancies with operator data and ensuring timely synchronisation of reporting.**
- **The CMAA should review the Cambodian Mine Action Standards (CMAS) to determine whether the criteria for cancellation and reclamation of mined areas can be strengthened.**
- **Cambodia should either commit to a clear timeframe for equipping, training, and deploying the proposed 2,000 additional deminers from the Cambodian Armed Forces or pursue other approaches to increasing capacity, including through other national entities, such as Cambodian Mine Action Centre (CMAC).**
- **Cambodia should commence the next clearance task as part of the pilot border clearance project with Thailand, and should seek to conclude a bilateral cooperation mechanism that would enable both nations to survey and clear all mined areas along the shared border.**
- **Cambodia should finalise the new Gender Mainstreaming in Mine Action Plan (GMAP) for 2021–25, which will replace the existing GMAP 2018–22, and provide regular progress updates on implementation of the plan.**
- **The CMAA should ensure that Mine Action Planning Units (MAPUs) work closely with the local communities, to help ensure that elaboration of annual work plans is well informed, focusing on contaminated areas requiring clearance and identifying those mined areas that can be cancelled through non-technical survey rather than released through clearance.**

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2021)	Score (2020)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	7	An 11% drop in Cambodia's estimate of its remaining mine contamination attested to the progress of land release and the fact that little contamination was added to the database in 2021. Non-technical survey and a land reclamation non-technical survey project cancelled significant amounts of land from polygons awaiting clearance but Cambodia still lacks access to determine the extent of minefields in un-demarcated areas of the border with Thailand believed to be densely mined. Cambodia still does not disaggregate confirmed hazardous areas (CHAs) and suspected hazardous areas (SHAs) in line with international best practice.
NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT (10% of overall score)	8	8	There is strong national ownership of mine action in Cambodia and an enabling environment for mine action, with good oversight from the CMAA. There is a Technical Working Group on Mine Action (TWG-MA), which brings all stakeholders together, as well as a Mine Action Coordination Committee (MACC) and eight Technical Reference Groups (TRGs), including one on survey and clearance. The Cambodian government contributes to mine action but seeks additional international assistance to help fund deployment of additional deminers from the Royal Cambodian Army.
GENDER AND DIVERSITY (10% of overall score)	8	8	The CMAA has an action plan for gender mainstreaming which has undergone three updates, the latest being adopted in November 2021. The CMAA's quality management teams and the mine action planning units (MAPUs) have all received training on implementing gender mainstreaming. The percentage of female staff employed by operators varies from around 18% in CMAC to 38% in HALO Trust but more women appear to be holding senior positions. The CMAA also has a Gender Mainstreaming Team (GMT) that was established to coordinate with the technical reference group on gender (TRG-G), one of eight TRGs helping to coordinate the sector.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	7	7	Strengthening information management is one of the goals of Cambodia's national mine action strategy and the CMAA has continued to make improvements in recent years. The IMSMA database is still being upgraded from New Generation to Core with support from the Geneva International Centre for Humanitarian Demining (GICHD) but the backlog in uploading operator reports was largely cleared in 2020. The CMAA has since requested monthly reports from operators to try to synchronise reporting and eliminate discrepancies, although these continue to afflict land release data in particular. Cambodia submits Article 7 reports annually.

Criterion	Score (2021)	Score (2020)	Performance Commentary
PLANNING AND TASKING (10% of overall score)	7	7	Cambodia has a comprehensive National Mine Action Strategy 2018–25, a detailed three-year implementation plan 2021–23, and land release targets set out in its 2019 Article 5 deadline extension request. Implementation, however, is proving challenging. The targets were calculated based on almost doubling capacity by deploying an additional 2,000 military deminers, but this faces major challenges in training and equipping and has not yet proved possible. As a result, the gap between land release targets and results has widened.
LAND RELEASE SYSTEM (20% of overall score)	7	6	Cambodia has national mine action standards (CMAS) that are broadly compliant with International Mine Action Standards. The CMAA is proactively reviewing and developing standards in consultation with operators. The CMAA has also taken steps to accelerate land release through non-technical survey and initiatives such as a ground data verification project that resurveys existing polygons but it also needs to strengthen quality management to ensure evidence-based survey that does not result in areas without mines being added to the database.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	6	7	Cambodia released a greater amount of mined area through survey in 2021, compared to the previous year, but its clearance output was a decrease on 2020. Land release outputs remain well below targets and the level needed to meet its Article 5 deadline. A ban on international demining organisations working within 7km of Cambodia's borders has halted clearance of areas with the country's densest mine contamination and talks with Thailand have yet to open up access to disputed areas of their common border.
Average Score	**7.0**	**7.0**	**Overall Programme Performance: GOOD**

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Cambodian Mine Action and Victim Assistance Authority

NATIONAL OPERATORS

- Cambodian Mine Action Centre (CMAC)
- Cambodian Self-help Demining (CSHD)
- National Centre for Peacekeeping Forces Management, Mines and Explosive Remnants of War Clearance (NPMEC)

INTERNATIONAL OPERATORS

- APOPO
- The HALO Trust
- Mines Advisory Group (MAG)
- Norwegian People's Aid (NPA)

OTHER ACTORS

- United Nations Development Programme (UNDP)
- Geneva International Centre for Humanitarian Demining (GICHD)
- ASEAN Regional Mine Action Centre (ARMAC)

UNDERSTANDING OF AP MINE CONTAMINATION

Cambodia estimated anti-personnel mine contamination affected 716km^2 at the end of 2021 (see Table 1), down from 801km^2 a year earlier, a drop of close to 11%. The CMAA recorded contamination in 8,287 suspected hazardous areas, 636 less than at the end of 2020.[1] This represented a much bigger drop in the level of contamination than the previous year, reflecting two main factors: Cambodia released a significant amount of land through clearance and survey; and unlike the previous year, Cambodia added only small amounts of previously unrecorded contamination to the database in 2021.[2] This is a significant step forward from 2020 when it added 75km^2.[3]

1 Article 7 Report (covering 2021), Form 4; and email from Ros Sophal, Database Unit Manager, CMAA, on behalf of Prum Sophakmonkol, Secretary General, CMAA, 26 July 2022.

2 The CMAA reported no previously unrecorded mined areas were added to the database in 2021. However, HALO Trust reported finding hazardous areas amounting to 4.3km^2 and MAG located 43 areas amounting to 2.8km^2. Emails from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 26 July 2022; Lasha Lomidze, Programme Manager, HALO Trust, 25 March 2022; and Alexey Kruk, Programme Manager, MAG, 13 May 2022.

3 Article 7 Report (covering 2020), Form 4.

Table 1: Anti-personnel mined area (at end 2021)[4]

Province	SHAs	Area (m^2)
Banteay Meanchey	1,841	116,442,689
Battambang	1,241	106,094,920
Kampong Cham	11	979,586
Kampong Chhnang	42	3,277,627
Kampong Speu	407	46,227,152
Kampong Thom	531	48,457,217
Kampot	134	12,386,126
Kandal	2	63,203
Koh Kong	363	23,986,221
Kratie	104	17,117,345
Mondulkiri	62	8,399,249
Oddar Meanchey	964	90,271,930
Pailin	388	21,942,426
Phnom Penh	13	1,122,444
Preah Sihanouk	22	1,681,425
Preah Vihear	651	82,665,894
Prey Veng	1	5,900
Pursat	639	57,270,228
Ratanak Kiri	20	2,690,487
Siem Reap	695	60,992,311
Svay Rieng	93	9,382,708
Takeo	55	3,626,856
Tbung Khmum	8	817,955
Totals	**8,287**	**715,901,899**

Cambodia continues to grapple with the challenge of precisely defining the extent of its contamination. A Baseline Survey (BLS) conducted between 2009 and 2012 across 124 districts resulted in inflated polygons and missed many hazardous areas. A 2018 Cambodian Mine Action and Victim Assistance Authority (CMAA) analysis of land release data found that, on average, nearly one third of the areas the survey had classified as dense contamination (A1) and half the area classified as scattered contamination (A4) had already been reclaimed for use by the population.[5]

The CMAA launched a land reclamation and non-technical survey in 2015 to verify contamination data and avoid planning for, or deploying, survey/clearance assets on land that had no mines or was already back in use. It had planned to complete this exercise in 2020 but later extended the target completion date to 2023.[6] To compensate for the weakness of contamination data, operators such as The HALO Trust and Mines Advisory Group (MAG) conduct pre-clearance survey[7] but the significant drop in the end-2021 estimates attests to progress in defining Cambodia's remaining challenge. CMAA data for some of the worst-affected provinces shows that mined areas remaining in Banteay Meanchey province dropped from 138km^2 at the end of 2020 to 116km^2 at the end of 2021 and in Battambang from 154km^2 to 106km^2 over the same period.[8]

Progress in survey and clearance allowed Cambodia to declare the south-western province of Kep as mine free in February 2022,[9] the first of nine provinces that Cambodia plans to declare mine free by the end of 2022.[10] The other eight provinces (Kampong Cham, Kandal, Kampong Chnnang, Phnom Penh, Preah Sihanouk, Prey Veng, Takeo, and Tbung Khmum)[11] were estimated at the end of 2021 to have mined areas affecting a total of 11.52km^2.[12] The CMAA has also named another eight provinces it aims to declare as mine-free in 2023, which combined have mined area totalling almost 195km^2.[13]

However, Cambodia still does not know and faces a significant challenge in determining the full extent of the mined areas on its border with Thailand where the contamination is densest but where many areas are inaccessible due to decades-old disputes over the demarcation of the border. In 2021, the government suspended demining within 7km of the border with Thailand, an area which accounts for close to half Cambodia's known anti-personnel mine contamination.[14] Other mined areas located in un-demarcated areas of the border with Thailand have yet to be accessed and surveyed to determine their extent. Two of the provinces initially earmarked for declaration as mine free in 2022 (Kampot and Ratanak Kiri) and three provinces targeted for 2023 (Kratie, Svay Rieng, and Kampong Thom) have mined areas in the border belt where operations are suspended.[15]

4 Article 7 Report (covering 2021), Form 4.

5 CMAA, National Mine Action Strategy 2018–2025, p. 8.

6 Statement of Cambodia on Article 5 implementation, APMBC 18th Meeting of States Parties (virtual meeting), 16–20 November 2020.

7 Emails from Lasha Lomidze, HALO Trust, 25 March 2022; and from Alexey Kruk, MAG, 13 May 2022.

8 Article 7 Reports (covering 2020 and 2021), Form 4.

9 "Kep is declared as the first mine-free province in Cambodia," EAC News, 28 February 2022, at: https://bit.ly/3KRvmoK.

10 Statement of Cambodia, APMBC Intersessional Meetings, Geneva, 20 June 2022.

11 The list of provinces to be declared mine free presented to the 2022 Intersessionals Meeting was later amended to omit Kampot and Ratanak Kiri and include Kampong Chnnang and Tbung Khmum. Email from Prum Sophakmonkol, CMAA, 14 September 2022.

12 Article 7 Report (covering 2021), Form 4.

13 Statement of Cambodia, APMBC Intersessional Meetings, Geneva, 20 June 2022. The eight provinces are Kampong Chnnang, Kampong Speu, Kampong Thom, Kratie, Mondulkiri, Siem Reap, Svay Rieng and Tboung Khmum.

14 Interview with Prum Sophakmonkol, CMAA, in Geneva, 21 June 2022. In a presentation to the APMBC intersessional meetings in June 2022, Cambodia identified 3,961 mined areas in 12 provinces and amounting to 305.8km^2 located less than 7km from the border and 4,326 areas amounting to 410km^2 outside that border zone.

15 Statement of Cambodia, APMBC Intersessional Meetings, Geneva, 20 June 2022.

Cambodia's mine hazards are a legacy of 30 years of conflict that ended in the 1990s concentrated in, but not limited to, 21 north-western districts along the border with Thailand, which have accounted for the large majority of mine casualties. The K5 mine belt, which was installed along the border with Thailand in the mid-1980s in an effort to block infiltration by armed opposition groups, ranks among the densest mine contamination in the world. The conflict also left significant contamination from other explosive remnants of war, including extensive areas affected by unexploded US submunitions (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Cambodia for further information).

NATIONAL OWNERSHIP AND PROGRAMME MANAGEMENT

The CMAA was established by royal decree in 2000 with the mandate to regulate, monitor, and coordinate the mine action sector in Cambodia. The CMAA has Prime Minister Hun Sen as its President and government Senior Minister, Ly Thuch, as first vice president. Its Secretary General, Prum Sophakmonkol, manages CMAA's planning and operations.[16] The CMAA has noticeably strengthened in recent years, and its roles and responsibilities have become more clearly defined.[17] CMAC, which was established in 1992, had previously been responsible for regulating and coordinating the sector in addition to undertaking clearance. Since 2000, CMAC's activities have been limited to conducting demining, risk education, and training.[18] CMAC, which conducts both humanitarian and commercial survey and clearance, is Cambodia's largest mine action operator.[19]

Since 2004, Cambodia has had Provincial Mine Action Committees (PMACs) and Mine Action Planning Units (MAPUs) in mine- and CMR-affected areas tasked with establishing clearance priorities in consultation with affected communities to ensure that clearance addresses their housing, agricultural, and infrastructure needs.[20] MAPUs meet regularly with all mine action operators to plan annual mine action activities.[21]

The Cambodian government established a Technical Working Group on Mine Action (TWG-MA) as a consultative mechanism between the government and implementing partners.[22] It meets on a bi-annual basis and is attended by the CMAA, relevant ministries, operators, and donors.[23] TWG meetings were suspended in 2020 due to the COVID-19 pandemic[24] but resumed online in 2021 and were scheduled to be held in-person in 2022.[25] The Mine Action Coordination Committee (MACC) and eight Technical Reference Groups (TRGs)[26] have been established by the CMAA to facilitate coordination and feedback at a strategic and technical level in areas such as survey and clearance, explosive ordnance risk education, victim assistance, information management, gender, cluster munitions, performance monitoring, and capacity development.[27]

The operating environment for mine action in Cambodia is permissive, with the government open to the presence of international operators and supportive in administrative actions such as the granting of visas, approval of Memoranda of Understanding (MoUs), tax exemptions on demining equipment, and facilitating the importation of equipment.[28] The CMAA is open to the trialling and use of innovative survey and clearance methods and tools to improve efficiency.[29]

The mine action sector receives technical support from a range of international organisations. UNDP's Clearing for Results programme has supported Cambodian mine action since 2006, aiming to promote efficiency and ensure clearance supports development priorities. The programme, which is now in its fourth phase (1 April 2020 to 31 December 2025), is focusing on releasing mined areas in the most affected provinces through Land Reclamation Non-Technical Survey (LR-NTS) and clearance, supporting victim assistance, mine risk education, gender mainstreaming, and strengthening the capacity of the CMAA to lead the sector and support the development of national sustainable capacity to address residual threats.[30]

16 CMAA, "Legal framework and mandate", at: http://bit.ly/2W7r3dJ.

17 Interviews with Su Yeon Yang, Project Coordination Officer, and Tong Try, UNDP, 23 April 2019; and Rebecca Letven, Programme Manager, MAG, Phnom Penh, 25 April 2019.

18 CMAC, "20 Years' Achievement in Mine Action 1998-2018 and Path Ahead", 2018.

19 Interview with Heng Rattana, Director General, CMAC, Phnom Penh, 25 April 2019.

20 Geneva International Centre for Humanitarian Demining (GICHD), "Landmines and Land Rights in Cambodia", December 2010, pp. 9 and 13.

21 Email from Zlatko Vezilic, Programme Manager, NPA, 5 May 2020.

22 CMAA, National Mine Action Strategy 2018–2025, p. 24; and email from Tong Try, National Mine Action Adviser, UNDP, 18 June 2019.

23 Emails from Prum Sophakmonkol, CMAA, 1 July 2020; Oum Phumro, CMAC, 9 June 2021; Rebecca Letven, MAG, 7 April 2020; and Zlatko Vezilic, NPA, 5 May 2020.

24 Email from Matthew Hovell, Head of Region SE Asia, HALO, 9 April 2021.

25 Email from HALO Trust, 25 March 2022; and telephone interview with Portia Stratton, NPA, 13 May 2022.

26 The eight TRGs address Survey and clearance; Mine Risk Education; Victim Assistance; Information Management; Capacity Building; Gender; Cluster Munitions Survey; and the Performance Monitoring System.

27 CMAA, National Mine Action Strategy 2018–2025, p. 24; and emails from Tong Try, UNDP, 18 June 2019 and 27 July 2021.

28 Emails from Prum Sophakmonkol, CMAA, 11 September 2019; Rebecca Letven, MAG, 7 April 2020; and Lasha Lomidze, Programme Manager, HALO Trust, 15 May 2020.

29 Emails from Zlatko Vezilic, NPA, 4 April 2019; Rebecca Letven, MAG, 9 May and 28 June 2019; and Damian O'Brien, HALO Trust, 10 April 2019.

30 Emails from Tong Try, UNDP, 28 July 2021; and Naomi Konza, Project Coordination Specialist, UNDP, 18 April 2022.

The Geneva International Centre for Humanitarian Demining (GICHD) supported the upgrading of the CMAA's information management system as well as gender mainstreaming and the development of Cambodian national mine action standards.[31] NPA, as part of a United Kingdom-funded partnership that includes MAG and The HALO Trust, conducts capacity development activities in support of the CMAA on gender equity and mainstreaming, information management, knowledge management, planning and prioritisation, quality management (QM), and strategic planning.[32]

The Cambodian government contributes funding for clearance and management of the sector.[33] This support includes covering the expenses of the CMAA and providing funds to support planning and prioritisation, Quality assurance (QA)/quality control (QC), database management, the Cambodia mine/explosive remnants of war (ERW) victim information system (CMVIS), and risk education.[34] The cost of the database unit is, however, shared by NPA and the United Nations Development Programme (UNDP).[35]

The Cambodian government also provides a 10% in-kind contribution to any new donor funding.[36] The Cambodian government has reported contributing just under 30% of the total funding to the mine action sector (US$99.49 million of US$340.2 million) in 2010–18.[37] Cambodia funds mine and ERW survey and clearance by CMAC and the National Centre for Peacekeeping Forces Management, Mines and Explosive Remnants of War Clearance (NPMEC).[38] Local authorities coordinate and provide security support to survey and clearance operations on the ground.[39] Cambodia has estimated it would need almost $119 million for CMR clearance in 2020–25.[40]

ENVIRONMENTAL POLICIES AND ACTION

In 2021, Cambodia introduced a national mine action standard on environmental management (CMAS 20), and discussions continue on further amendments or additions to the standards. As of June 2022, the CMAS was being translated from English into Khmer. In the meantime, most operators reported following internal environmental policies and standing operating procedures (SOPs). APOPO updated its in-house environment policy in 2020, which has three main chapters on "Know", "Protect", and "Act", with recommendations carried over into an SOP on environment.[41] MAG said it followed international mine action standards (IMAS) on environmental management and protection and had its own SOPs to minimise environmental damage.[42]

The HALO Trust said its deminers only cut small vegetation and do not cut trees or any vegetation with stems thicker than 3cm. Bamboo stems are cut sufficiently to accommodate detector heads only. Latrines in minefields and remote demining camps are established away from water sources and waste is carefully managed in pits. Camps are established closest to worksites to avoid long travel. HALO teams travel in groups to minimise vehicle usage, although COVID-19 measures temporarily limited the numbers of passengers per vehicle, and it was planning in 2022 to purchase electric motorbikes for mobile teams' activities.[43] MAG reported its operations follow IMAS (07.13) and the national strategy which take account of the need for vegetation and ground preparation, biodiversity conservation, measures to avoid soil erosion and pollution and managing deminer worksites to ensure proper disposal of waste including human waste, plastic, rubbish and waste water.[44]

GENDER AND DIVERSITY

The CMAA has developed a Gender Mainstreaming in Mine Action Plan (GMAP) in line with the objectives of the National Mine Action Strategy 2018–2025. Two earlier GMAPs covered 2013–15 and 2018–22. The latest version, approved at the end of 2021 and covering the period 2021–25, sets out three strategies, building on the earlier plans. These are: developing implementation of GMAP guidelines through monitoring and evaluation of the performance of MAPUs and operators; building capacity of CMAA gender teams, MAPUs, and operators, and collecting data on the mine action needs of women; and promoting inclusive participation in mine action, including through collecting sex-, age- and disability-disaggregated data (SADDD), developing a CMAS on gender mainstreaming, and advocating for more women in decision-making positions.[45]

31 Email from GICHD, 1 July 2020.

32 Email from Portia Stratton, NPA, 21 April 2021.

33 2019 Article 5 deadline Extension Request, p. 12.

34 Email from Prum Sophakmonkol, CMAA, 1 July 2020.

35 Emails from Rune Dale-Andresen, Country Director, NPA, 26 September 2020; and Portia Stratton, NPA, 21 June 2021.

36 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 6 September 2020.

37 2019 Article 5 deadline Extension Request, p. 6.

38 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

39 Ibid.

40 2019 Article 5 deadline Extension Request, p. 55.

41 Email from Michael Heiman, Regional Manager, APOPO, 1 April 2022.

42 Email from Alexey Kruk, MAG, 6 May 2022.

43 Email from Lasha Lomidze, HALO Trust, 25 March 2022.

44 Email from Alexey Kruk, MAG, 6 May 2022.

45 Gender Mainstreaming in Mine Action Plan 2021–25, December 2021, pp. 6–7.

The latest National Mine Action Strategy three-year Implementation Plan (2021–23) sets out activities in support of these goals.[46] NPA, as part of its capacity development, is supporting the CMAA with training on gender mainstreaming in mine action, on implementation of the GMAP and the development of associated guidelines, and on how to use gender- and age-disaggregated data in planning and prioritisation.[47] GMAP guidelines require 26 forms to collect data that are fully "SADDD".[48]

A CMAA Gender Mainstreaming Team (GMT) was established to coordinate with the Technical Reference Group on Gender (TRG-G), one of eight TRGs ensuring coordination of the sector. The TRG-G is composed of representatives from UNDP, the Ministry of Women's Affairs (MoWA), the Ministry of Social Affairs, Veterans and Youth Rehabilitation (MoSVY), MAPU, operators, and international and national organisations working in risk education and victim assistance.[49] Of the CMAA's 216 employees in 2021, (20%) were female, with women in 12 of 49 (24%) managerial level positions and 28 of the 104 (27%) office staff, but only four of 63 field positions (6%).[50]

As at April 2021, women made up 30% of Cambodian Self-help Demining (CSHD)'s workforce, with women in 5% of managerial/supervisory roles and 33% of operational positions.[51] APOPO finished the year with a similar proportion of women employees who accounted for 23 of its 72 staff, but they also made up more than one third of the total staff holding managerial positions and nearly half of its operations posts.[52]

CMAC said it is working to promote gender in mine action by providing equal employment opportunities for women, encouraging recruitment of women to management positions, nurturing a gender-friendly working environment, and promoting gender mainstreaming in all CMAC's activities. CMAC also said its strategy considers social norms and promotes gender mainstreaming in a culturally sensitive fashion. CMAC ensures its mine action teams are gender-balanced, and an increasing number of women have been employed as deminers and in operational support positions in the field. As at June 2021, CMAC employed 178 female staff representing 13% of its workforce. Of these, 23 women were in managerial/supervisory positions and 86 were in operations posts.[53]

The HALO Trust reported women continued to make up 38% of its employees in Cambodia, including 43% of operational staff (50% of HALO deminers are women). The proportion in managerial and supervisory positions drops to 30%, a significant increase on the 18% in 2020 and 9% the year before. Women made up about 40% of operations staff, a slight dip from the previous year, but it aims to keep a 50-50 split between males and females when hiring staff. HALO deploys gender-balanced survey and clearance teams to help ensure it consults all groups of the local community.[54]

MAG started developing an action plan to promote gender and inclusion to follow up the findings of an assessment conducted in 2021. It operates mixed gender community liaison teams gathering information on the location of CMR and doing pre-clearance assessment of their impact. Women made up 37% of MAG's 525-strong team in Cambodia at the end of 2021, including 40% of its deminers and a majority (61%) of its medics. Women held 25 of the 93 staff in managerial or supervisor positions, including the heads of finance, human resources, and procurement.[55]

Women were less than half (45%) of NPA's total employees in Cambodia in 2021, but close to two thirds (64%) of its operations personnel, including its operations supervisor and an operations officer. It said it recruited local staff from different ethnic communities to ensure teams could communicate effectively with minorities. Its main office staff included female managers for its support service department and finance.[56]

INFORMATION MANAGEMENT AND REPORTING

The CMAA's database unit (DBU) is responsible for collecting, storing, analysing, and disseminating data in support of planning and prioritisation.[57] The DBU has taken a range of actions in the past two years to increase the accuracy of data and the efficiency of information management, working closely with international partners. The CMAA has used the Information Management System for Mine Action New Generation (IMSMA-NG) since 2014 and in 2020 started the process of upgrading the system to IMSMA Core, working with the GICHD. IMSMA Core was not fully operational in 2021 as the CMAA was still in the process of migrating data to the new system.[58]

46 CMAA, Three-Year Implementation Plan 2018–2020, Phnom Penh, undated, but 2018, p. 14.

47 DFID Capacity Development Report, Activity Detail Extract, 18 September 2018.

48 Emails from Portia Stratton, NPA, 21 April 2021; and Tong Try, UNDP, 27 July 2021.

49 CMAA, National Mine Action Strategy 2018–2025, p. 22; and email from Tong Try, UNDP, 27 July 2021.

50 WhatsApp message from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 1 June 2022.

51 Email from Chhun Bora, Training and Monitor Officer, CSHD, 19 April 2021.

52 Email from Michael Heiman, APOPO, 1 April 2022.

53 Email from Oum Phumro, CMAC, 9 June 2021.

54 Email from Lashe Lomidze, HALO Trust, 25 March 2022.

55 Emails from Alexey Kruk, MAG, 29 March and 28 May 2021 and 6 May 2022.

56 Email from Portia Stratton, NPA, 19 April 2022.

57 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 10 May 2022.

58 Emails from Lasha Lomidze, HALO Trust, 25 March 2022; and Alexey Kruk, MAG, 13 May 2022.

Operators reported continued improvements in the CMAA's information management. They said a substantial backlog in uploading operator reports which delayed availability of data has been largely cleared and most survey and clearance reports had been submitted to IMSMA. The CMAA DBU has also requested monthly progress reports from all operators to verify and quality manage the data they submit against the data in IMSMA. The reports are intended to help eliminate discrepancies which operators said are rare,[59] although still apparent in available data on land release.

A Virtual Private Network set up by the DBU in 2018 enables operators to submit daily operating data directly to the IMSMA database.[60] The CMAA has also worked closely with the GICHD on the development of an application for daily data collection, a web application for QA/QC, and a dashboard to view the output summary in order to assist planning and decision making, to allow for mobile data collection in the field and to allow MAPUs and quality management teams (QMTs) to enter data online, and to verify the data submitted by operators.[61]

The CMAA continued to hold regular meetings of its Technical Reference Group on information management discussing issues and solutions for data reporting and sharing. These were conducted online in 2021 in line with COVID-19 regulations but were able to resume in-person in 2022. The CMAA database unit said it also had regular meetings with operators once or twice a month to sort out any data issues.[62] Despite the increased contacts between CMAA and operators on data, operating results continued to show significant discrepancies.

PLANNING AND TASKING

Cambodia currently pursues a National Mine Action Strategy for 2018–2025 which was officially launched in May 2018 with eight goals for clearance of mines, cluster munitions remnants, and other ERW. The first goal is to release all known mined areas by 2025 through planned land release of 110km^2 a year from 2020. The CMAA has also issued Three-Year Implementation Plans setting out activities and indicators to implement the strategy.[63]

Cambodia submitted an Article 5 deadline extension request in 2019 with revised land release targets for 2019–25, with annual land release targets that were initially set to increase from 110km^2 a year in 2020–21 to 146km^2 for the remainder of the extension period as additional deminers are projected to come on board and become operational.[64] The targets assume that significant additional international funding will be secured allowing for deployment of 2,000 additional Royal Cambodian Army deminers. That has not yet happened and the annual release targets for 2022 to 2025 have now risen to nearly 179km^2.[65] The annual land release targets also assumed that no new contamination would be added to the database, but more than 74.8km^2 of previously unrecorded mined area was added to the database in 2020 while the 78km^2 that Cambodia reported it released in 2020 and 81km^2 in 2021 fell well short of the annual extension request targets. [66]

As of April 2021, CMAA reported that 818km^2 of mined area remained, equating to annual land release targets of 163.6km^2. As previously indicated, current capacity and land release output indicates there will continue to be a significant gap between predicted and actual land release output for 2021. The COVID-19 pandemic also risks impacting operations. In addition, many of the remaining mined areas are harder to reach minefields or mined areas that were not fully released previously.

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Mine action is conducted according to Cambodian Mine Action Standards (CMAS), which are broadly consistent with IMAS,[67] though the National Mine Action Strategy (NMAS) 2018–2025 emphasised the need for efficient use of resources and the CMAA has worked on developing CMAS with support from NPA funded by the United Kingdom Foreign, Commonwealth and Development Office (FCDO) and in consultation with other mine clearance operators.[68]

59 Emails from Lasha Lomidze, HALO Trust, 25 March 2022; Michael Heiman, APOPO, 1 April 2022; and Alexey Kruk, MAG, 13 May 2022.

60 Email from Rebecca Letven, MAG, 9 May 2019; and interview with Prum Sophakmonkol, CMAA, Phnom Penh, 24 April 2019.

61 Emails from Prum Sophakmonkol, CMAA, 1 July 2020; and Ros Sophal, CMAA, 16 August 2021; and interview with Ros Sophal, CMAA, 30 June 2021.

62 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 10 May 2022.

63 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021.

64 Statement of Cambodia, Fourth Review Conference, Oslo, 27 November 2019.

65 Statement of Cambodia, APMBC Intersessional Meetings, Geneva, 20 June 2022.

66 Emails from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 17 September 2021 and 26 July 2022.

67 Emails from Rebecca Letven, MAG, 7 April 2020; and Zlatko Vezilic, NPA, 19 March 2020.

68 Emails from Prum Sophakmonkol, CMAA, 11 September 2019; and Zlatko Vezilic, NPA, 4 April 2019.

Cambodia reported in June 2022 that it had approved 17 standards for implementation.[69] CMAA data in August 2022[70] showed 18 standards to have been approved and in use, although seven of these were listed as due to be updated.[71] Newly approved standards included a CMAS chapter on explosive ordnance risk education and a standard for the protection of the environment. A new standard for mechanical demining was ready in final draft but awaiting comments from CMAC. Drafts of standards for Gender and Victim Assistance required further discussion and standards for Management of Training and Underwater Clearance required development.[72]

In December 2020, the CMAA launched a "ground data verification" project that revisited mined areas which had already been surveyed to confirm whether they required clearance, included land that had been reclaimed or areas that could be cancelled through non-technical survey. The pilot project visited mined areas totalling 55km^2 in three of the most mine-affected provinces, Banteay Meanchey, Battambang, and Pailin, and confirmed that only 34km^2, less than two thirds of the total, was mined. It concluded that 21km^2 (38%) of the mined area could be released through non-technical survey.[73] By the end of 2021, the project had verified 72.7km^2 and identified 25.6km^2 that could be cancelled through non-technical survey.[74]

The CMAA and demining organisations continue to explore measures to increase land release efficiency and avoid the persistent problem of clearance assets deploying to land that has no mines. The CMAA reported that operators cleared 53 mined areas covering almost 2.32km^2 that were found to have no mines in 2021, more than double the 23 minefields totalling over 1.12km^2 that were cleared despite the absence of mines in 2020.[75] However, HALO Trust and MAG alone reported clearing a total of 2,692,148m^2 that had no mines. HALO Trust said it cleared 43 sites covering 2,388,748m^2, most of it land classified as A2-2 (scattered and mixed AP/AV mines) but also 58,057m^2 of supposedly dense anti-personnel mine contamination and 0.8km^2 of area classified as having scattered anti-personnel mines. MAG reported clearing 8 sites covering 303,400m^2 that had no mines.[76] No data were received from CMAC.

OPERATORS AND OPERATIONAL TOOLS

Demining in 2021 was conducted mainly by the national operator, CMAC, and two international non-governmental organisations (NGOs), HALO Trust and MAG. International operator APOPO works in partnership with CMAC. CSHD also continued to support the programme.

APOPO worked in partnership with CMAC in Siem Reap and Preah Vihear provinces and in partnership with MAG in Battambang, conducting technical survey and clearance of mined areas with mine detection rats (MDR) and so-called "SMART dogs". The dogs wear a harness fitted with the Swiss Mine Action Reduction Tool (SMART), an electronic track-and-trace system which allows remote monitoring of the dogs as they work at distances of up to 100 metres from their handlers and generates IMSMA-compatible data.[77] The SMART dogs also used for survey and clearance of cluster munitions (see *Clearing Cluster Munitions Remnants* report on Cambodia). APOPO's mine survey and clearance productivity dropped in 2021 as it shifted some of its capacity to work on CMR clearance and in 2022 it expected to add capacity working with CMAC in Preah Vihear province, consisting of an MDR team, a technical survey dog team, a mechanical asset, and a manual clearance team.[78]

CMAC operates with five Demining Units comprising survey teams, manual clearance, mechanical, and EOD teams. A sixth Demining Unit collaborates with APOPO operating animal detection systems.[79] In 2021, CMAC had 76 demining teams with 640 deminers; 14 non-technical survey teams, totalling 70 survey personnel; and 4 technical survey teams totalling 20 personnel. From March 2021, CMAC re-formed its technical survey and clearance teams from five-person to seven-person teams.[80] APOPO provides CMAC with MDRs and MAG reported contracting three mine detection dog (MDD) teams to CMAC. NPA provided funding for two CMAC manual teams to conduct technical survey in Kep province as part of the drive to declare parts of southern Cambodia mine-free as well as to conduct technical survey in Banteay Meanchey province close to the border with Thailand.[81]

69 Statement of Cambodia, APMBC Intersessional Meetings, Geneva, 20 June 2022.

70 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 5 September 2022.

71 Seven standards due for updating included Reporting for investigation of demining incidents; Safety and occupational health (two standards); Personal protective equipment; Baseline survey; Land release; and Cluster munition remnant survey (CMRS).

72 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 5 September 2022.

73 Emails from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 14 May 2021; and Portia Stratton, NPA, 17 August 2021.

74 Email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 26 July 2022.

75 Ibid.

76 Emails from Lasha Lomidze, HALO Trust, 25 March 2022; and Alexey Kruk, MAG, 6 May 2022.

77 GICHD, "Field Trials of the SMART System and Technical Survey Dogs in Cambodia, Final Report", December 2021, pp. 6–10, 12 and 15.

78 Email from Michael Heiman, APOPO, 1 April 2022.

79 CMAC Operational Achievement Report, March 2021.

80 Email from Oum Phumro, CMAC, 9 June 2021.

81 "Signing ceremony on partnership cooperation agreement between CMAC and NPA", CMAC Press Release, 9 March 2022; and email from Sron Samrithea, Deputy Programme Manager, NPA, 5 July 2022.

HALO Trust worked with 85 manual clearance teams and 765 deminers in 2021, a small increase on the 82 teams/738 deminers deployed in the previous year. It also deployed 11 non-technical survey teams with 33 personnel, an increase of two teams from the previous year. HALO said it expanded its use of HSTAMID dual sensor detectors, which it estimates saves the programme millions of dollars in time, labour, and materials, by sharply reducing the need for manual investigation of detector signals generated by metal waste.[82]

MAG maintained its non-technical survey capacity with eight two-person community liaison (CL) teams and a total of 19 CL personnel in 2021. Its clearance capacity also remained unchanged from the previous year. Its 17 mine action teams conducted technical survey as well as clearance. MAG reintroduced use of drones to support non-technical survey (NTS), clearance and post-clearance impact assessments by collecting data on terrain and land use.[83]

NPA's operational focus in Cambodia remains on survey and clearance of areas affected by cluster munitions (see *Clearing Cluster Munitions Remnants* report on Cambodia) but from April 2021 it also deployed four teams to conduct Land reclamation NTS + Baseline Survey (LRNTS + BLS) in Battambang, Banteay Meanchey, and Pailin, funded through the UNDP Clearance for Results programme.[84]

Table 2: Operational clearance capacities deployed in 2021

Operator	Manual teams	Total deminers	Animal Detection and handlers	Machines	Comments
APOPO	3	18	3 MDR teams 38 rats/24 handlers 1 TSD team 4 dogs/4handlers	2	28 rats and 16 handlers, 4 SMART dogs and 4 technical survey handlers worked in partnership with CMAC. 10 rats with 8 handlers worked with MAG.
CMAC	76	640	7 MDD teams (40 dogs and 40 handlers)	11	
CSHD	1	12	0	0	
HALO Trust	85	765	0	3	Also 11 NTS teams with 33 personnel
MAG	17	136	2 MDD teams, 8 dogs, 8 handlers 1MDD team, 2 dogs, 2 handlers	4	In partnership with CMAC In partnership with NPA
Totals	**182**	**1,571**	**38 rats/24 handlers 54 dogs/54 handlers**	**20**	

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2021

Cambodia released a total of 81.34km^2 in 2021, marginally more than the 78.72km^2 it reported the previous year. Official data shows it achieved this mainly through clearance (of 43.73km^2) while 28.67km^2 was cancelled through non-technical survey and almost 8.94km^2 was reduced through technical survey.[85] Operators reportedly destroyed 18,770 anti-personnel mines in 2021, a small increase (of 5%) on the 17,957 destroyed the previous year.

SURVEY IN 2021

The CMAA reported that Cambodia increased the amount of land released by survey by 30% in 2021 to 37.61km^2 mainly through a jump in the amount of land cancelled from 15km^2 in 2020 to nearly 28.7km^2 in 2021 (see Table 3). HALO Trust reported cancelling 11.4km^2 in nine provinces in 2021, most of it in Banteay Meanchey, Kampong Thom, and Oddar Meanchey.[86]

82 Email from Lasha Lomidze, HALO Trust, 25 March 2022.

83 Emails from Alexey Kruk, MAG, 6 May 2022; and Tony Fernandes, MAG, 16 September 2022.

84 Emails from Sron Samrithea, NPA, 5 July 2022; and Naomi Konza, Project Coordination Specialist, UNDP, 18 April 2022.

85 Article 7 Report (covering 2021), Form 4; email from Ros Sophal, on behalf of Prum Sophakmonkol, CMAA, 26 July 2022. The Article 7 Report miscalculates the sum total of land released through non-technical survey, technical survey, and clearance as 78,360,293m^2.

86 Email from Lasha Lomidze, HALO Trust, 25 March 2022.

LRNTS conducted by NPA under the UNDP's Clearing for Results programme accounted for another 11.14km², representing 15% of the 74.49km² of mined area surveyed under the LRNTS project.[87] In addition, MAG reported it cancelled 7.27km² in Battambang province,[88] which, combined with the other operators' results, would raise the total cancelled area to nearly 30km².

Table 3: Cancellation through non-technical survey in 2021[89]

Province	Area cancelled (m²)
Banteay Meanchey	10,041,918
Battambang	9,066,686
Kampong Speu	935,164
Kampong Thom	2,354,691
Kratie	821,268
Oddar Meanchey	2,501,048
Pailin	1,538,085
Preah Vihear	172,550
Pursat	289,862
Siem Reap	951,119
Total	**28,672,391**

Table 4: Reduction through technical survey in 2021[90]

Province	Area reduced (m²)
Banteay Meanchey	2,878,142
Battambang	4,627,545
Kampong Thom	114,350
Oddar Meanchey	48,586
Preah Vihear	55,296
Pursat	554,710
Siem Reap	656,892
Total	**8,935,521**

CMAA data showed less area reduction occurred in 2021, amounting to 8.94km², down from 13.56km² in 2020.[91] HALO Trust said it reduced 0.45km², mostly in Pursat province[92], and MAG 1.99km² in Battambang.[93] CMAA data showed that CMAC reduced 14.62km² through technical survey in 2021, almost one third more than in the previous year.[94]

CLEARANCE IN 2021

Cambodia's anti-personnel mine clearance was lower in 2021 than in the previous two years. CMAA data recorded clearance of 43.73km² in 2025 (see Tables 5 and 6), a drop of about 13% from the 49.99km² it reported in 2020 and also less than in 2019 (see Table 8).[95] The total number of anti-personnel mines destroyed, at 18,770 in 2021, showed a modest increase on 2020, although official figures suggest the numbers destroyed in clearance and EOD reversed. The 6,087 anti-personnel mines destroyed in the course of clearance in 2021 represented a little under half the level of the previous year, but the CMAA reported another 12,683 anti-personnel mines were destroyed in EOD tasks, roughly double the number in 2020.[96]

A decision by Cambodian authorities in July 2020 to halt clearance work by international operators on the K5 mine belt along the border with Thailand, later extended to a 7km-wide zone along all international borders, appears to have contributed to the drop in area released and mines destroyed through clearance in 2021. HALO Trust and MAG both had to relocate assets working close to the border, where the densest contamination is located, and shift to lower priority tasks. HALO also noted that an increasingly limited number of tasks are suitable for much faster clearance using large-loop detectors.[97] CMAC also recorded 14% less area cleared in 2021 than in 2020 and the number of anti-personnel mines it cleared dropped by almost half.[98]

COVID-19 prevention measures also caused operators to lose some weeks of operations in 2021 as they followed mandatory 14-day isolation of deminers before deployment to the field or after infection. APOPO said it did not lose any working days due to the pandemic in 2021[99] but HALO Trust had 205 cases of COVID infection among its deminers in 2021 and MAG also reported infections that resulted in lost working days and necessitated transfer of some deminers to hospital.[100]

87 Email from Naomi Konza, UNDP, 18 April 2022; and UNDP, Clearing for Results IV, Annual Project Progress Report 2021, p. 4.

88 Email from Alexey Kruk, MAG, 6 May 2022.

89 Email from Prum Sophakmonkol, CMAA, 14 September 2022.

90 Emails from Ros Sophal, CMAA, 17 September 2021 and 26 July 2022.

91 Email from Lasha Lomidze, HALO Trust, 25 March 2022.

92 Email from Alexey Kruk, MAG, 6 May 2022.

93 Email from Ros Sophal, CMAA, 6 September 2022.

94 Email from Ros Sophal, CMAA, 26 July 2022.

95 Emails from Ros Sophal, CMAA, 17 September 2021 and 26 July 2022.

96 Operators reported to Mine Action Review that they cleared a total of 51.54km² in 2020.

97 Emails from Ros Sophal, CMAA, 26 July 2022.

98 Emails from Lasha Lomidze, HALO Trust, 25 March 2022; and Alexey Kruk, MAG, 6 May 2022.

99 Emails from Ros Sophal, CMAA, 17 September 2021 and 6 September 2022. The CMAA reported that CMAC destroyed 8,539 anti-personnel mines in the course of clearance in 2020, however, CMAC reported destroying 5,229 anti-personnel mines in 2020 (email from Oum Phumro, CMAC, 9 June 2021).

100 Email from Michael Heiman, APOPO, 1 April 2022.

Table 5: Mine clearance in 2021[101]

Province	Area cleared (m²)	AP mines destroyed	AV mines destroyed	UXO destroyed during mine clearance
Banteay Meanchey	3,838,898	496	3	544
Battambang	20,377,998	3,143	32	2,568
Kampong Chhnang	985,026	205	0	170
Kampong Thom	97,487	2	0	32
Kep	64,412	0	0	23
Oddar Meanchey	1,522,682	241	8	993
Pailin	5,054,668	545	4	564
Preah Vihear	5,094,962	458	15	638
Prey Veng	422,415	0	0	167
Pursat	2,802,612	740	46	1,281
Siem Reap	2,986,589	257	1	286
Svay Rieng	477,924	0	0	291
Total	**43,725,673**	**6,087**	**109**	**7,557**

Table 6: Anti-personnel mine clearance in 2021 by operator[102]

Operator	Area cleared	AP mines destroyed	AV mines destroyed	Other UXO destroyed
APOPO	1,100,956	260	4	307
CMAC	34,783,655	4,532	84	7,034
CSHD	351,485	63	1	27
HALO Trust	4,844,818	647	20	122
MAG	2,644,759	585	0	67
Totals	**43,725,623**	**6,087**	**109**	**7,557**

UNDP has supported Cambodian mine action through a clearance for results (CfR) programme since 2006 and in 2020 at the start of Phase IV of the programme it awarded three contracts (two to CMAC and one to HALO Trust) resulting in release of 11.42km^2: 4.67km^2 through technical survey and 6.75km^2 through clearance, destroying in the process 951 anti-personnel mines.[103] In 2021, it awarded three contracts to CMAC which resulted in more than double the area cleared to 14.86km^2 and a sharp increase in the number of anti-personnel mines reportedly destroyed.[104]

Table 7: Clearing for Results 2021[105]

Operator	Provinces	Area cleared (m^2)	AP mines destroyed	AV mines destroyed	UXO destroyed
CMAC	Battambang, Banteay Meanchey, Pailin	14,857,667	1,723	13	1,690

101 Emails from Lasha Lomidze, HALO Trust, 25 March 2022; and Alexey Kruk, MAG, 6 May 2022.

102 Emails from Ros Sophal, CMAA, 6 September 2022; Michael Heiman, APOPO, 1 April 2022; Lasha Lomidze, HALO Trust, 25 March 2022; and Alexey Kruk, MAG, 6 May 2022.

103 Email from Tong Try, UNDP, 28 July 2021.

104 Email from Naomi Konza, UNDP, 18 April 2022.

105 Ibid.

ARTICLE 5 DEADLINE AND COMPLIANCE

APMBC ENTRY INTO FORCE FOR CAMBODIA: 1 JANUARY 2000

↓

ORIGINAL ARTICLE 5 DEADLINE: 1 JANUARY 2010

↓

FIRST EXTENSION REQUEST DEADLINE (10-YEARS): 1 JANUARY 2020

↓

SECOND EXTENSION REQUEST DEADLINE (5 YEARS 11 MONTHS): 31 DECEMBER 2025

ON TRACK TO MEET ARTICLE 5 DEADLINE: NO
LIKELIHOOD OF COMPLETING CLEARANCE BY 2025 (OSLO ACTION PLAN COMMITMENT): LOW

Under Article 5 of the APMBC (and in accordance with the second extension, of 5 years and 11 months, granted by States Parties in 2019), Cambodia is required to destroy all anti-personnel mines in areas under its jurisdiction or control as soon as possible, but not later than 31 December 2025. At the current pace of land release, Cambodia will not meet this deadline.

Cambodia's 2019 extension request and subsequent updates set out steadily rising land release targets but rates of clearance have remained under 50km^2 and the gap between results and targets has widened (see Table 7). At the start of the Article 5 extension period in 2019, the plan called for clearance of 110km^2 a year in 2020 and 2021 rising to 146km^2 a year from 2022 to the end of the extension period in order to release contamination estimated at that time to total 890km^2.[106] Since then, as a result of survey and clearance, the total needing to be released has fallen to an end-2021 estimate of 715km^2 but in its latest update for APMBC States Parties, Cambodia said the total amount of land released each year needed to rise to 179km^2 a year from 2022 to 2025, well over double its achievement in the last two years.[107]

The deficit has highlighted financial and capacity constraints and the need to make Cambodia's land release process more efficient. The CMAA calculated in 2020 that with the existing capacity of the mine action sector it would need until 2031 to complete clearance.[108] The extension request's 2025 completion target relied on receiving additional funding, nearly doubling Cambodia's clearance capacity by adding 2,000 deminers from the Royal Cambodian Armed Forces (RCAF) and no additional mined areas being added to the national database. Although Cambodia added a hefty 75km^2 to the database in 2020 it appears to have largely met the last condition in 2021, but it has made no headway on the others. No military deminers have become active in the mine action sector since 2019 or have yet undergone training to humanitarian mine action standards. The CMAA says that the cost of equipping 2,000 army deminers poses a major obstacle.[109]

The CMAA has launched a number of initiatives to inject momentum into the land release process: it has set a timeline for declaring provinces mine free; launched a ground data verification project to confirm the real extent of mined areas in survey polygons and has reportedly started more desk analysis of surveyed areas to prevent uncontaminated areas being added to the database.[110] However, plans to strengthen the CMAA's quality management capacity and processes to ensure more accurate, evidence-based non-technical survey have also been held back reportedly by budgetary pressures resulting from the COVID-19 pandemic.[111]

Access to minefields on the Cambodian-Thailand border also assumes growing importance as the 2025 clearance deadline approaches and the ban on operations by international demining organisations in a 7km-wide border zone only adds to uncertainty about how this key dimension of the remaining mine challenge will be addressed. CMAA data shows minefields within the 7km border zone represent 43% of mined area[112] and operators have no shortage of tasks outside the border zone, but border contamination also includes Cambodia's most densely mined areas and the ban is therefore holding back progress on minefields where the level of contamination and tricky terrain will slow the pace of land release.

Cambodia and Thailand have yet to determine the extent of contamination in un-demarcated areas of the border or a timeline for survey and clearance. Each side says the other has intervened to stop deminers from working on tasks in border areas.[113] The CMAA reports that CMAC is in constant

106 2019 Article 5 Deadline Extension Request, p. 43.

107 Statement of Cambodia, APMBC Intersessional Meetings, Geneva, 20 June 2022.

108 Interview with Prum Sophakmonkol, CMAA, in Geneva, 11 February 2020.

109 Interview with Prum Sophakmonkol, CMAA, in Geneva, 21 June 2022.

110 Email from Matthew Hovell, HALO Trust, 9 April 2021.

111 Email from Portia Stratton, NPA, 20 April 2021.

112 Statement of Cambodia, APMBC Intersessional Meetings, Geneva, 20 June 2022.

113 See, e.g., Thailand's report that as of March 2022 Cambodia had requested it to stop work in 34 operational areas covering 14.31km^2 in six provinces. Thailand Article 5 deadline Extension Request, March 2022, p. 4.

communication with RCAF on the issue.[114] CMAC is in contact with Thailand's Mine Action Centre (TMAC) on resuming cooperation on the border but progress has been slow. They have carried out one project in March–April 2020 that resulted in release of 95,000m^2 by Thailand and destruction of two items of UXO but no mines. The COVID-19 pandemic halted any immediate follow-up but the two sides have yet to identify the location for further demining.

Table 8: Five-year summary of anti-personnel mine clearance

Year	Area cleared (km^2)
2021	43.73
2020	49.99
2019	*45.62
2018	41.00
2017	27.68
Total	**208.02**

*May include significant AV mine clearance

PLANNING FOR MANAGEMENT OF RESIDUAL CONTAMINATION

Goal seven of Cambodia's National Mine Action Strategy 2018–2025 is to establish a sustainable national capacity to address residual threats after 2025. Cambodia's 2019 Article 5 deadline extension request, said it is likely that the Royal Cambodian Army will be tasked with addressing explosive threats after 2025.[115] The Strategy called for a review of the legal, institutional, and operational framework of mine action and the strategy and capacity needed to address the residual threats.[116] The review had not taken place by the end of 2021 but was planned for 2022 under the current Strategy's three-year implementation plan 2021–2023.[117] In February 2021, however, the CMAA and the GICHD began interviewing national and international operators and other relevant stakeholders to discuss the topic of institutional and operational frameworks and the capacity needed for addressing any residual threat.

114 Interview with Prum Sophakmonkol, CMAA, in Geneva, 21 June 2022.

115 2019 Article 5 deadline Extension Request, Additional Information (August 2019), p. 5.

116 CMAA, National Mine Action Strategy 2018–2025, p. 14.

117 Email from Tong Try, UNDP, 27 July 2021.