

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

KEY DATA

ANTI-PERSONNEL (AP)
MINE CONTAMINATION:

**MASSIVE,
AT LEAST 400 KM²**

(MINE ACTION REVIEW ESTIMATE)

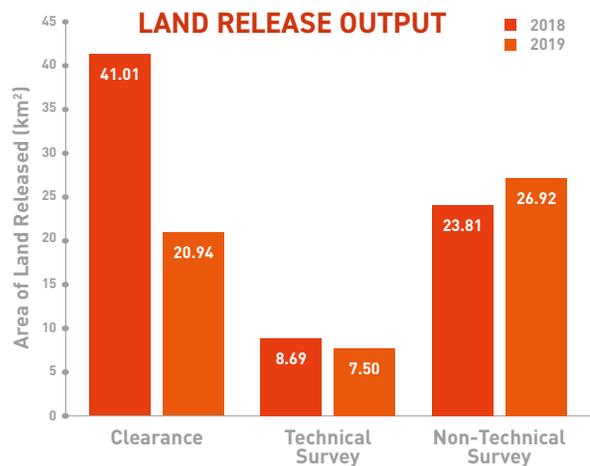
AP MINE
CLEARANCE IN 2019

20.94 KM²

AP MINES
DESTROYED IN 2019

8,476

(INCLUDING 4,365 IN
SPOT TASKS)



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

KEY DEVELOPMENTS

In November 2019, at the Fourth Review Conference of the States Parties, Cambodia was granted a second request to extend its Anti-Personnel Mine Ban Convention (APMBC) clearance deadline, with a new end date set of 31 December 2025. While progress is being made in planning, prioritisation, and land release, the target of completing anti-personnel mine clearance by 2025 is highly ambitious and could only be achieved with significantly increased funding and capacity.

Cambodia continued to make good progress during 2019 in its ongoing baseline re-survey to more accurately determine the extent of remaining contamination and expected to complete the survey in the course 2020. However, while release through survey in 2019 remained broadly the same as in 2018, clearance output fell significantly compared to previous year. Although not entirely clear, multiple factors are thought to account for the decrease in clearance, including tasking of a larger proportion of difficult-to-access mined areas with more challenging terrain, compared to previous years; clearance of more mixed contamination; and decreased funding to some operators.

RECOMMENDATIONS FOR ACTION

- The Cambodian Mine Action and Victim Assistance Authority (CMAA) should increase the number of quality assurance (QA) teams and train them to monitor survey activities of operators across the sector, including 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 establish a clear timeframe and resource mobilisation strategy for equipping, training, and deployment of the proposed 2,000 additional deminers from the Cambodian Armed Forces. The CMAA could also consider upscaling the number of deminers through other national entities, such as Cambodian Mine Action Centre (CMAC).
- Cambodia should ensure that the pilot border clearance project with Thailand runs to schedule and should seek to conclude a bilateral cooperation mechanism that would enable both countries to survey and clear all mined areas along the shared border.
- Cambodia should continue to improve its information management systems by eliminating discrepancies with operator data and ensuring synchronisation of reporting.

- Cambodia should provide regular progress updates on the implementation of its Gender Mainstreaming in Mine Action Plan for 2018–22.

ASSESSMENT OF NATIONAL PROGRAMME PERFORMANCE

Criterion	Score (2019)	Score (2018)	Performance Commentary
UNDERSTANDING OF CONTAMINATION (20% of overall score)	7	6	The ongoing baseline re-survey (BLS), which has resulted in significant cancellation of uncontaminated land and release of reclaimed land, was planned to be completed by the end of 2020. However, some polygons identified through the BLS require further investigation to confirm that mines are actually present. Furthermore, along with the type of mine contamination (e.g. anti-personnel or anti-vehicle) based on Cambodia's classification system, the BLS only classifies mined areas as suspected hazardous area (SHA) instead of disaggregating into confirmed hazardous area (CHA) and SHA 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. The Cambodian government contributes to mine action and is seeking additional international assistance to help fund deployment of additional deminers from the Cambodian Army.
GENDER AND DIVERSITY (10% of overall score)	8	7	Cambodia has in place a Gender Mainstreaming in Mine Action Plan (GMAP) 2018–22, which is embedded in both its national mine action strategy and implementation plan. Guidelines for gender mainstreaming in mine action were approved in December 2019 and trainings were provided to Mine Action Planning Units (MAPU) and quality management team (QMT) staff on the new guidelines, as well as on implementation of the GMAP 2018–22. The CMAA also has a Gender Mainstreaming Team (GMT) that was established to coordinate with the technical reference group on gender (TRGG), one of five TRGs ensuring coordination of the sector.
INFORMATION MANAGEMENT AND REPORTING (10% of overall score)	7	6	Strengthening information management is one of the goals of Cambodia's national mine action strategy and the CMAA has made continued improvements in recent years, setting up a virtual private network to allow operators to input directly into the database. Cambodia's Article 5 deadline extension request, granted in 2019, was detailed, but data inconsistencies remain.
PLANNING AND TASKING (10% of overall score)	7	7	Cambodia has a comprehensive National Mine Action Strategy 2018–25 and a detailed three-year implementation plan 2018–20. The CMAA detailed updated annual clearance targets in its 2019 extension request, but only achieved two-thirds of its annual land release target for 2019, calling into question how realistic the annual targets are. Cambodia has clear criteria and processes for the prioritisation of tasks, involving consultation with key stakeholders.
LAND RELEASE SYSTEM (20% of overall score)	7	7	Cambodia's mine action standards are consistent with the International Mine Action Standards (IMAS). New standards on animal detection, mechanical demining, information management, and the environment were elaborated in 2019, in collaboration with clearance operators. The CMAA is looking to strengthen its quality management to help ensure mined areas entered into the Information Management System for Mine Action (IMSMA) database contain mines, and that areas with no evidence of mines are cancelled or reclaimed. Cambodia has estimated an additional 2,000 deminers will be needed to meet its land release targets.
LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE (20% of overall score)	6	7	Clearance output in Cambodia fell significantly in 2019 compared to the previous year, while the amount of land released through technical survey and non-technical survey remained broadly the same. Cambodia's annual land release targets are extremely ambitious and will only be possible with significant additional funding and demining capacity, and successful coordination with Thailand to address all mined areas along the border, including those in areas with unclear border demarcation.
Average Score	7.0	6.8	Overall Programme Performance: GOOD

DEMINING CAPACITY

MANAGEMENT CAPACITY

- Cambodian Mine Action and Victim Assistance Authority (CMAA)

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)

OTHER ACTORS

- United Nations Development Programme (UNDP)
- Geneva International Centre for Humanitarian Demining (GICHD)
- Norwegian People's Aid (NPA)

UNDERSTANDING OF AP MINE CONTAMINATION

As at December 2019, Cambodia estimated remaining anti-personnel mine contamination as over 817km² across 9,539 suspected hazardous areas (SHAs) (see Table 1).¹ This compared to December 2018, when contamination stood at over 890km² across 9,804 suspected SHAs.²

The Cambodian Mine Action and Victim Assistance Authority (CMAA), which oversees the mine action database, operates its own classification system for anti-personnel (AP) mined area that disaggregates and categorises land as containing: A1 (dense concentration of AP mines); A2-1 (mixed dense AP + AV [anti-vehicle] mines); A2-2 (mixed scattered AP + AV mines); A3 (AV mines); and A4 (scattered or nuisance AP mines).³ Since the start of the BLS in 2009, the CMAA has only recorded mined areas as SHAs, and not disaggregated between confirmed hazardous areas (CHAs) and SHAs in line with best practice.⁴ CHAs are only stored in the databases of some clearance operators.⁵

The CMAA planned to migrate CHA data resulting from the cluster munition remnant survey (CMRS) process into its national database,⁶ but had no plans to reclassify landmine data into CHAs and SHAs.⁷ In its decision on Cambodia's 2019 Extension Request, the APMBC Committee on Article 5 Implementation highlighted "the importance of Cambodia reporting on its remaining challenge in a manner consistent with IMAS, namely disaggregating by suspect and confirmed hazardous area in order to ensure clarity regarding its remaining challenge."⁸

The baseline survey (BLS) was originally conducted between 2009 and 2012 across 124 districts. The CMAA and demining operators acknowledge that the BLS data are imprecise, with contamination being found outside BLS polygons and substantial areas identified by the BLS now under cultivation.⁹ The CMAA analysed land release data and found that, on average, 32% of land classified as A1 and 51% of land classified as A4 had been reclaimed.¹⁰ In 2015, the CMAA introduced the land reclamation non-technical survey and baseline survey (LRNTS+BLS) methodology, a stand-alone process to re-survey or re-verify SHAs identified during the BLS. The re-survey/re-verification efforts, which are nearly complete, have helped more accurately define the extent of remaining mine contamination and cancel those areas currently on the database that are found to have no evidence of mine contamination and/or which meet the CMAA criteria for reclamation. In 2015–18, the LRNTS+BLS led to release of more than 44.4km² of anti-personnel mined area across 1,076 SHAs.¹¹

The current baseline of anti-personnel mine contamination has been established through inclusive consultation with women, girls, boys, and men, including, where relevant, from minority groups.¹³

Fifty-three districts were surveyed in 2019 and as at June 2020 only nine districts remained to be surveyed.¹⁴ The re-survey was expected to be concluded by the end of the year.¹⁵ The majority of the remaining districts are in the eastern and southern parts of the country, where no significant anti-personnel mine contamination is expected.¹⁶ Therefore, the vast majority of Cambodia's anti-personnel mined areas are now known and surveyed.

However, while completion of the re-survey by the end of 2020 looked realistic, some of the hazardous areas added to the database are thought to be overestimated or lack evidence of mines. These will require further investigation, through desktop survey and field data verification, but also in many cases through physical survey to confirm or disregard the existence and size of contamination.¹⁷ The CMAA could also consider using updated satellite images to check which BLS polygons are already in use by communities, facilitating the CMAA to assign operators to investigate and cancel areas where there is no evidence of mines and helping gain a better picture of the remaining areas to be technically surveyed/cleared.¹⁸

Table 1: Anti-personnel mined area by province (at end 2019)¹²

Province	Districts	SHAs	Area (m ²)
Banteay Meanchey	9	2,288	151,127,504
Battambang	13	1,683	166,166,139
Kampong Cham	4	11	979,586
Kampong Chhnang	6	54	4,179,772
Kampong Speu	7	417	47,280,072
Kampong Thom	7	503	49,837,143
Kampot	7	139	12,591,606
Kandal	3	3	64,543
Kep	2	6	641,691
Koh Kong	6	362	24,077,517
Kratie	5	266	33,849,541
Mondul Kiri	3	59	8,687,343
Oddar Meanchey	5	1,064	110,125,909
Pailin	2	476	26,650,537
Phnom Penh	2	14	1,252,348
Preah Sihanouk	1	23	1,737,010
Preah Vihear	8	522	36,100,878
Prey Veng	1	1	5,900
Pursat	5	503	43,312,999
Ratanak Kiri	3	20	2,690,487
Siemreap	12	737	69,644,116
Svay Rieng	6	138	12,384,525
Takeo	1	56	3,770,625
Tboung Khmum	2	194	9,929,596
Totals	120	9,539	817,087,387

Duplication in records of contaminated areas resulted in an extra 144km² being recorded in the database, which had largely been removed as at May 2020.¹⁹ In addition, a data backlog of non-technical survey and land release forms pending quality control (QC) and approval by the CMAA, and also in part because of delayed handover and submission of forms by the operators, impacts how up to date contamination figures are.

Cambodia has extensive contamination from mines and explosive remnants of war (ERW) left by 30 years of conflict that ended in the 1990s. It is estimated that four million anti-personnel mines were laid after the fall of the Khmer Rouge in 1979 until the end of the armed conflict in 1998. Cambodia's anti-personnel mine problem is concentrated in, but not limited to, 21 north-western districts along the border with Thailand, which account 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.²⁰

Cambodia also has significant contamination from cluster munition remnants (CMR) and other ERW (see Mine Action Review's *Clearing Cluster Munition Remnants* report on Cambodia for further information).

NEW CONTAMINATION

The LRNTS+BLS has also led to the identification of 1,363 SHAs of previously unrecorded anti-personnel mine contamination, covering a total area of 117.9km².²¹ In 2019, the LRNTS+BLS captured a total of 7.2km² over 117 SHAs of additional contamination, see Table 2.²² This is a decrease on the 39.4km² over 499 SHAs of additional contamination identified the previous year.²³ The CMAA's Database Unit (DBU) is working with operators to investigate all newly added mine contamination.²⁴ The CMAA's Department of Regulation and Monitoring and its quality management teams (QMTs) have been tasked with an increased focus on BLS operations to ensure that previously unrecorded mined areas added to the national database are supported by strong and clear evidence and are of an appropriate size. In addition, the DBU will review newly captured mined areas and verification will be conducted by the QMTs on any questionable polygons.²⁵ International non-governmental organisation (NGO) operators fully support the CMAA deploying survey QA teams to verify hazardous areas before they are accepted onto the database.²⁶

Table 2: Newly added anti-personnel mined area in 2019²⁷

Province	Districts	SHAs	Area (m ²)
Banteay Meanchey	3	4	230,783
Battambang	8	56	4,062,149
Kampong Cham	1	1	64,834
Kampong Chhnang	1	2	21,034
Kratie	1	1	58,066
Mondul Kiri	1	7	488,138
Oddar Meanchey	5	13	688,003
Pailin	1	1	39,645
Preak Vihear	1	20	1,114,964
Pursat	1	9	294,765
Siemreap	2	3	154,485
Totals	25	117	7,216,866

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.²⁸ It has been reported that the CMAA has strengthened over the recent years, with roles and responsibilities more clearly defined.²⁹ The Cambodian Mine Action Centre (CMAC) was established in 1992. Before the existence of the CMAA, CMAC had the responsibilities to regulate and coordinate the sector as well as undertake clearance. Since 2000, CMAC's activities have been limited to conducting demining, risk education, and training.³⁰ CMAC conducts both humanitarian and commercial demining within Cambodia and is the country's largest operator.³¹

Provincial Mine Action Committees (PMACs) and Mine Action Planning Units (MAPUs) were established in 2004, tasked with establishing clearance priorities in consultation with affected communities to ensure that clearance addresses their housing, agricultural, and infrastructure needs.³² MAPU planning and prioritisation units meet regularly with all mine action operators to plan annual mine action activities.³³

The Cambodian government established the Technical Working Group on Mine Action (TWG-MA) as a consultative mechanism between the government and implementing partners.³⁴ It meets on a bi-annual basis and is attended by the CMAA, relevant ministries, operators, and donors.³⁵ The Mine Action Coordination Committee (MACC) and several Technical Reference Groups (TRGs) have been established by the CMAA to facilitate coordination and feedback at a strategic and technical level in areas such as survey and clearance, risk education, victim assistance, information management, gender, and capacity development.³⁶ The TRG on survey and clearance meets on a quarterly basis.³⁷

The operating environment in Cambodia is permissive, with the Cambodian 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), and importation procedures. The CMAA is open to the trialling and use of innovative clearance methods and tools to improve efficiency.³⁸

The UN Development Programme (UNDP), Norwegian People's Aid (NPA), and the Geneva International Centre for Humanitarian Demining (GICHD) all support capacity development of the CMAA. NPA, as part of a United Kingdom Department for International Development (DFID)-funded partnership that includes Mines Advisory Group (MAG) and The HALO Trust, focuses on information management, planning and prioritisation, gender mainstreaming, quality management, and strategic planning.³⁹

Since 2006, UNDP has been implementing its "Clearing for Results" (CfR) programme in Cambodia. Aspects of the project relating to capacity development include supporting the establishment of a Performance Monitoring System (PMS) that links human development to mine action and strengthening the CMAA's international and national participation in relevant fora.⁴⁰ The third phase of the CfR programme was completed at the end of March 2020. Under Phase Three, capacity development needs assessments of the CMAA and MAPUs were concluded and a management response to the recommendations was developed. The fourth phase (CfRIV), covering 2020–25, is underway, during which the management response from Phase Three will be presented to the CfRIV project board for endorsement. The CMAA, with UNDP support, will then address capacity issues from 2021.⁴¹

The GICHD provides information management and risk management support to the CMAA. In 2019, GICHD support to capacity development included stakeholder workshops on the IMSMA Core migration; initial development of the new database; support on developing residual capacity in line with Cambodia's mine action strategy; and workshops on risk management and NMAS development.⁴²

The Cambodian government contributes funding towards clearance and the management of the sector,⁴³ which includes covering all expenses of the CMAA in 2019 and providing funds to support planning and prioritisation, QA/QC, database management, Cambodia mine victim information service (CMVIS), and risk education activities.⁴⁴ From 2010 to 2018, 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).⁴⁵ This includes US\$110 million for mine clearance operations in support of public infrastructure projects such as hydropower plants, irrigation system, roads, and bridges. Cambodia has also provided funding to the institutions responsible for managing and delivering mine action in the country. Indirectly, tax exemptions on mine action equipment have contributed to humanitarian demining.⁴⁶

From 2020 to 2025, Cambodia has estimated it will require \$372 million for mine action, of which \$38 million is for sector management and \$165 million for release of anti-personnel mined area. It is expected that the Cambodian government will continue to contribute towards clearance and the management of the sector. It will also settle the importation taxes for mine clearance equipment and provide a 10% in-kind contribution to any new donor funding, and a 10% in-cash contribution to the UNDP CfR programme.⁴⁷ Cambodia funds mine and ERW clearance by CMAC and the National Centre for Peacekeeping Forces Management, Mines and Explosive Remnants of War Clearance (NPMEC) in support of infrastructure development.⁴⁸ Cambodia has a resource mobilisation strategy and intends to secure additional funding from the government, existing and emerging donors, and the private sector.⁴⁹

GENDER AND DIVERSITY

The CMAA has developed a Gender Mainstreaming in Mine Action Plan (GMAP 2018–2022), an objective of the National Mine Action Strategy 2018–2025, which consists of six goals. These include:

- Preparation of guidelines to aid gender mainstreaming across all mine action
- Capacity building of relevant stakeholders to implement the GMAP 2018–2022
- Female representation and participation in planning and prioritisation, risk education, and in mine action and advocacy at all levels.

The Three-Year Implementation Plan 2018–2020 sets out activities in support of these goals.⁵⁰ NPA, as part of its capacity development, will support the CMAA with training on gender mainstreaming in mine action, on implementation of the GMAP 2018–22 and the development of associated guidelines, and on how to use gender- and age-disaggregated data in planning and prioritisation processes.⁵¹ Guidelines for gender mainstreaming in mine action were approved in December 2019. Trainings were provided to MAPU and QMT staff on the new guidelines, as well as on implementation of the GMAP 2018–22.⁵² Sex and age disaggregated data (SADD) has been integrated in all reporting forms, which can help inform planning, prioritisation, risk education, and advocacy.⁵³ Furthermore, the GICHD conducted a gender and diversity baseline assessment of the CMAA in 2019 and has a joint action plan to support gender and diversity mainstreaming efforts for the remainder of the GMMAP strategy period.⁵⁴

A CMAA Gender Mainstreaming Team (GMT) was established to coordinate with the TRG on Gender (TRGG), one of five TRGs ensuring coordination of the sector. The TRGG is active and is composed of representatives from UNDP, Ministry of Women's Affairs (MoWA), Ministry of Social Affairs, Veterans and Youth Rehabilitation (MoSVY), MAPU, operators, and international and national organisations working in mine risk education (MRE) and victim assistance (VA).⁵⁵ Of CMAA's employees, 23% are female, but only 5% of managerial/supervisory level positions are held by women. Overall in the mine action sector in Cambodia, 876 (25%) of the 3,446 staff are female, an increase from the 15% of female staff in 2015.⁵⁶

Survey and community liaison teams (CL) are inclusive and mixed gender. Women are given access to job announcements and female candidates are given priority during the recruitment process. Women and children in affected communities are consulted during village meetings and community liaison activities, including regarding prioritisation. This commitment is reinforced by the demand for all reporting forms to have SADD and by the provision of training to MAPU and QMT staff.⁵⁷

Of APOPO's staff in Cambodia 40% are women and 10% of CMAC personnel working with APOPO are female. Two of eight (25%) of APOPO's managerial/supervisory-level positions are held by women. APOPO disaggregates relevant mine action data by gender and age.⁵⁸

CMAC provides equal employment opportunities to both men and women. As at May 2020, women made up 12.5% of CMAC's workforce. CMAC operates in accordance with Cambodian Labour Law and is actively recruiting women to reach 15% female employment. Women currently work across all levels of the organisation, including in managerial level/supervisory positions. Two of the six directors were women.⁵⁹

According to CMAA data, as at March 2019, Cambodian Self-help Demining (CSHD) had a total of 26 employees, of whom five of the nine office based staff were women as were four of the seventeen operations staff.⁶⁰

The HALO Trust provides equal job opportunities and some 42% of operational staff in its Cambodia programme are female. While five of HALO's ten senior managers in Cambodia are female, only 9% of HALO Trust's staff in managerial level/supervisory positions across the programme were held by women. Due to low historical levels of women employed until recently, relatively few women have yet acquired the required experience and expertise to take up managerial/supervisory roles in HALO's view. However, the proportion of women employed in senior roles is expected

to increase considerably in the coming years as women gain more experience and rise up the junior ranks from deminer upwards. HALO deploys gender-balanced survey and clearance teams to help ensure access it consults all groups of the local community.⁶¹

During non-technical survey and pre-clearance impact assessments, MAG deploys mixed-gender community liaison teams to gather information on the suspected location of mines and the impact on the community. In its survey and clearance teams, 42% of staff are women as are 24% of their managerial level/supervisory positions.⁶² MAG planned to conduct a detailed gender analysis in 2020, at both the programming and organisational level, in order to promote meaningful gender equity and mainstreaming, and ensure an increased proportion of women in operational supervisory and management roles within the programme.⁶³

According to CMAA data, as at March 2019, NPMEC had a total of 294 employees (290 operational), all of whom were men.⁶⁴

All international operators in Cambodia disaggregate relevant mine action data by gender and age.

INFORMATION MANAGEMENT AND REPORTING

The CMAA upgraded to the Information Management System for Mine Action (IMSMA) New Generation in 2014. As at June 2020, the CMAA was in the process of upgrading its information management system to IMSMA Core.⁶⁵ As part of this process, a significant backlog of data was resolved in 2019/20, before migration of existing data to IMSMA Core could begin in earnest. IMAS minimum data requirements will be incorporated as Cambodia migrates to IMSMA Core.⁶⁶

The CMAA's DBU is responsible for collecting, storing, analysing and disseminating data in support of planning and prioritisation.⁶⁷ Data relating to anti-personnel mine contamination, survey, and clearance in IMSMA are considered relatively accurate and up-to-date.⁶⁸ Improvements to information management are ongoing in Cambodia,⁶⁹ and include the development of tools to allow for mobile data collection in the field and which allow MAPU and QMTs to make online data entries and verify data submitted by operators.⁷⁰

Strengthening the national information management system for mine action is an objective of the National Mine Action Strategy 2018–25.⁷¹ NPA has been conducting capacity development activities with the CMAA under a DFID consortium project.⁷² This included introduction of a web-based application for MAPUs to enable better prioritisation of the tasks for operators' annual work-plans, which is expected to increase the effectiveness of mine clearance across the sector in Cambodia.⁷³ It also included the development of a national mine action standard on Information Management. Regular TRG meetings are held with operators to share progress and challenges.⁷⁴ As part of an information management capacity assessment of the CMAA's DBU, operators (CMAC, HALO, and MAG) agreed that data collection forms are consistent and enable collection of the necessary AP mine data.⁷⁵

The CMAA shares all available data with operators on a monthly basis. In 2018, the DBU set up a virtual private network (VPN), which allows operators to send their daily data input directly into the DBU IMSMA database. The DBU controls the quality of all submitted reports and approves them via this online network.⁷⁶ According to NGO operators, the CMAA has issued clear directives on the submission of data via VPN into the CMAA IMSMA system.⁷⁷

Cambodia submits timely Article 7 transparency reports and gives regular statements on progress at the meetings of States Parties to the APMBC. There have, though, been issues with the accuracy of information in Cambodia's reporting in the past, evidenced by discrepancies between data submitted by operators and that offered by the CMAA. To reduce further discrepancies, as at September 2019, the CMAA has officially declared that all relevant mine action stakeholders should only report official mine action data from CMAA.⁷⁸ The CMAA also reportedly still faces some issues with the late submission of reports by some operators, and also some technical challenges with the mapping of polygons, which it is working with operators to address.⁷⁹

In 2019, Cambodia submitted a detailed and well prepared six-year Article 5 deadline extension request from 1 January 2020 to 31 December 2025, which was granted by States Parties in November 2019.

PLANNING AND TASKING

Cambodia's National Mine Action Strategy 2018–2025 was officially launched in May 2018 with eight goals for clearance of mines, CMR, and other ERW. The accompanying Three-Year Implementation Plan 2018–20 sets out the activities and indicators that will need to be completed in order to meet these goals and objectives. The first goal is to release all known mined areas by 2025 through planned land release of 110km² a year in 2020.⁸⁰

In 2019, Cambodia submitted its Article 5 extension request with revised land release targets for 2019–25, as set out in Table 3, with predicted annual land release targets increasing over time as additional deminers are projected to come on board and become operational.⁸¹ The targets assume that significant additional international funding will be secured allowing for deployment of 2,000 additional Royal Cambodian Army (RCA) deminers. The annual targets also assume that no new contamination will be added to the database, a highly questionable supposition. In 2019, Cambodia released a total of nearly 55.5km² through survey and clearance, well short of its target of nearly 84.25km². As at February 2020, no additional RCA deminers had yet been deployed, suggesting there will be a significant gap between the predicted and actual land release output for 2020. Furthermore, many of the remaining mined areas are harder to reach minefields or mined areas which were not fully released previously.

CMAC planned to release 62km² of mined area in 2019.⁸²

Table 3: Annual targets for release of mined area in 2019–25⁸³

Year	Targets (m ²)
2019	84,250,000
2020	110,000,000
2021	110,000,000
2022	146,546,809
2023	146,546,809
2024	146,546,809
2025	146,546,809
Total	890,437,236

The CMAA maintains the annual national clearance work plan made up of all the provincial clearance work plans. MAPUs are responsible for developing their own work plans in accordance with the planning and prioritisation guidelines. The PMACs approve the MAPU's work plans, which are then endorsed by the CMAA. The MAPUs use the provincial work plan to monitor clearance performance and report progress to the PMAC and the CMAA.⁸⁴

The current planning and prioritisation practices in Cambodia follow a combination of top-down and bottom-up approaches. The top-down approach involves CMAA establishing a list of priority villages based on agreed criteria. The bottom-up approach involves MAPUs coordinating at the provincial level to develop a clearance list, again, using agreed criteria.⁸⁵

In accordance with objective three of goal one of Cambodia's National Mine Action Strategy 2018–25, the CMAA is adopting a mine-free village policy, and has identified 500 priority villages from the most anti-personnel mine contaminated provinces, totalling a mined area of 220km² that will be released by 2021, and the remainder by 2025.⁸⁶ The defined criteria to determine the 500 priority villages was based on the size of the mine contamination in the village, the number of casualties in the village, the number of people in the village, and the levels of poverty of the village in accordance with the revised planning and prioritisation guidelines.⁸⁷ At least 75% of funding and resources are allocated to these priority villages, leaving a maximum of 25% of resources to address clearance needs outside of the priority villages through the MAPU process.⁸⁸ In addition, to maintain government and donor support to mine action by generating publicity and awareness, CMAA will also implement a complementary policy that will prioritise working to declare villages with very low contamination (defined as SHAs with less than 50,000m²) as mine-free.⁸⁹

Within this bottom-up element of Cambodia's approach, the MAPUs, in consultation with operators, then develop a list of priority minefields within the priority villages identified by the CMAA. The following criteria are used by MAPUs for prioritising minefields: BLS land classification; casualty data; intended beneficiaries; level of threat; development needs; and post-clearance land use.⁹⁰ It is hoped that this process will be facilitated by the introduction of the web-based application for MAPUs.

Operators have expressed some reservations about the "mine-free village" approach, with MAG advocating a province-by-province approach and The HALO Trust prioritising clearance of the highest impact, highest density minefields on the border between Cambodia and Thailand. The HALO Trust has expressed concern that the mine-free village approach will lead to clearance of low-impact, low-density minefields in order to declare the village mine-free, diverting resources from high impact areas.⁹¹ MAG's concerns that impact should be taken into account in the prioritisation criteria have been noted by CMAA, which has stated there will be some flexibility in the planning and prioritisation process.⁹² The CMAA has stated it does not believe that high-density minefields should be the deciding factor for prioritisation as they believe prioritisation should be based on addressing the needs of the affected communities.⁹³

While following the CMAA prioritisation processes, HALO also includes the following in its planning and prioritisation matrix with MAPUs: proximity of mined areas to population; nature of threat (grade of type of mines); density of mine laying; accessibility (seasonal); accident history; poverty level of beneficiaries and surrounding area; and compatibility with development projects.⁹⁴

According to NGO operators, the criteria and prioritisation processes in Cambodia are well established and survey and clearance task dossiers are issued in a timely and effective manner.⁹⁵ There was, however, a suggestion that Cambodia should consider categorising infrastructural projects that require formal clearance prior to construction as stand-alone projects agreed between the implementer, mine action operator, and the donor (if applicable), rather than including such projects together with humanitarian mine action.⁹⁶

LAND RELEASE SYSTEM

STANDARDS AND LAND RELEASE EFFICIENCY

Mine action is conducted according to Cambodian Mine Action Standards (CMAS), which are broadly consistent with the International Mine Action Standards (IMAS). HALO Trust believes the sector would benefit from a review of the CMAS on non-technical survey.⁹⁷ In addition, NPA believes that quality management (QM) still needs to be strengthened and QM capacity developed.⁹⁸

In 2019–21, the CMAA, with support from NPA with DFID funding and in consultation with other mine clearance operators, is in the process of developing new standards.⁹⁹ New standards on animal detection, mechanical demining, information management, and the environment were elaborated in 2019,¹⁰⁰ although final copies had not yet been shared with operators as at April 2020.¹⁰¹ National standards on explosive ordnance risk education, accreditation of demining organisations and licensing of operations and on the monitoring of demining organisations were still in progress as at June 2020,¹⁰² as well as planned review of the BLS and land release chapters in 2021–22.¹⁰³

National standards are reflected in operators' standing operating procedures (SOPs).¹⁰⁴ Updates to the SOPs are conducted as and when required, such as when a need is identified through the CMAA-led TRG. Reviews are conducted in consultation with all operators, and against IMAS and best practice.¹⁰⁵ A comprehensive review of CMAS in 2020 has been mooted; this is also referenced in the National Strategy.¹⁰⁶

The National Mine Action Strategy 2018–25 emphasises the need for more efficient use of demining assets. In a 2018 monitoring visit to Pailin province it was found that one in three of the mined areas could have been released by LRNTS

rather than full clearance. UNDP has now mandated that all minefields in its targeted villages will be assessed before clearance assets are deployed.¹⁰⁷

The CMAA was planning to review the CMAS on baseline survey to strengthen the criteria on the evidence needed to capture polygons with new contamination, but no review had taken place yet as at June 2020. However, the CMAA reported that criteria had been strengthened by operators in the field.¹⁰⁸ In addition, the CMAA will improve efficiency of the QMT to strengthen QA and QC of survey and clearance activities to ensure that any additional mined areas registered in the national database are supported by strong and clear evidence and are appropriately size.¹⁰⁹ The CMAA also plans to organise annual meetings to discuss baseline survey and resurvey activity to ensure that national survey standards are consistently applied by all operators. For example, a mined area reclaimed for productive use must meet certain criteria to be released through non-technical survey without undertaking technical survey.¹¹⁰

HALO Trust believes that the CMAA should conduct more QA of survey reports and that operators should conduct pre-clearance technical verification assessments of previously surveyed minefields to ensure maximum efficiency. This includes releasing land reclaimed through cultivation or incorrectly recorded initially.¹¹¹

The CMAA recognises that for Cambodia to complete clearance by 2025 the full toolbox of land release methodologies must be properly applied and encourages operational efficiency amongst operators.¹¹²

OPERATORS AND OPERATIONAL TOOLS

Mine clearance is undertaken mainly by the national operator, CMAC, and two international mine action NGOs, MAG and The HALO Trust. To a lesser extent, mine clearance is also conducted by national operator the NPMEC, and by national NGO, CSHD. International operator APOPO also conducts clearance in partnership with CMAC.¹¹³

The HALO Trust deployed nine non-technical survey teams in 2019, totalling 27 survey personnel. It planned to increase its non-technical survey and clearance capacity in 2020.¹¹⁴ HALO Trust considers technical survey equivalent to clearance so does not deploy separate personnel. MAG deployed five non-technical survey teams in 2019, totalling ten survey personnel, although these teams were also deployed to undertake other activities.¹¹⁵

In 2018, CMAC deployed 25 non-technical survey personnel across five teams, but there had been no plans to deploy non-technical survey teams in 2019. CMAC also deployed a total of 202 technical survey personnel across 30 teams of between five and seven staff each. In 2019, the number of technical survey personnel was due to increase to 231 across 37 teams.¹¹⁶ Data on CMAC's capacity in 2019 was not provided upon request. APOPO provides CMAC with mine detection rats (MDR).

MAG uses mine detection dogs (MDDs) subcontracted from CMAC to conduct survey and clearance. MAG also continues to trial advanced detection systems, provided by the United States Humanitarian Demining Research and Development programme, and uses drones to conduct non-technical survey, task planning, and post-impact monitoring.¹¹⁷

APOPO, in its partnership with CMAC, deployed a SMART technical Survey Dog (TSD) team for the first time in March 2019 and is currently working under the GICHD Evaluation Project that was expected to end in July 2020. The methodology combines high-quality search dogs with the SMART system, GIS Online, and use of Drones. By the end of April 2020, more than 1km² had already been surveyed by APOPO SMART TSD.¹¹⁸

NPA Cambodia deployed two MDDs in neighbouring Thailand as part of technical survey in 2019 and 2020, as the long-lead MDD methodology has proven to be effective and efficient. In 2019, a total of 56,021m² was covered by the NPA Cambodia MDDs within a two-month period. NPA, in partnership with CMAC, planned to deploy MDDs in 2020 for technical survey on the Cambodia-Thai border, as well as for NPA's own operations at the Cambodian border with Vietnam and Lao PDR.¹¹⁹

UNDP has supported the CMAA through the Clearing for Results (CfR) programme since 2006, awarding contracts funded by international donors through a process of competitive bidding. In 2018, the CFR programme issued four contracts worth a total of \$1.5 million: three going to CMAC and the other to The HALO Trust. CMAC was also awarded land reclamation non-technical survey and baseline survey contracts worth about US\$173,000. In 2019, CMAC was awarded three clearance contracts totalling \$1.7 million dollars with clearance targeted in high-priority villages in Battambang, Banteay Meanchey, and Pailin provinces. Phase three of the CfR exceeded the land release target of 47km², and upon completion Phase Three had released nearly 59km² of mined area from March 2016 to February 2020.¹²⁰ For 2020, CfRIV aimed to release 7.9km² with a total contract value of \$1.13 million. Two clearance contracts were awarded to CMAC and one to HALO Trust, all for the seven-month period from June to December 2020.¹²¹

The CMAA has calculated that in order to meet its 2025 land release targets for anti-personnel mined area, an extra 2,000 deminers and 100 support personnel will be needed. The CMAA proposes that these deminers will come from the RCA and that the Cambodian government will cover the

salaries, insurance, uniforms, and operational costs, but that it will require funding from the international community for training, vehicles, and equipment.¹²² It was estimated that during the first year of deployment the deminers will be able to release 35km², rising to 57km² from the second year.¹²³ However, as at February 2020, none of the additional 2,000 RCA deminers had yet been deployed. The CMAA is seeking international financial assistance for training (to be provided by CMAC) and equipment for the planned deminers,¹²⁴ and in August 2020, the Indian government pledged \$1.5 million to help increase the demining capacities of the RCA.¹²⁵

The CMAA is responsible for quality management and since 2016 has deployed eight QMTs.¹²⁶ In 2017, with UNDP support, it developed the PMS, which will track land use and socio-economic changes after release of mined area/ERW-contaminated land as well as monitor the implementation of NMAS as a management tool for the sector.¹²⁷ The CMAA approved the PMS, which was launched in May 2018 and in late 2019 a pilot-test was conducted during which 124 completed minefields were visited and the associated beneficiaries were interviewed by MAPU staff in Banteay Meanchey province. The results of the test were expected to be made available mid-2020.¹²⁸

Table 4: Operational clearance capacities deployed in 2019¹²⁹

Operator	Manual teams	Total deminers	Animal detection capacity	Machines	Comments
APOPO (working in partnership with CMAC)	3	14	16 handlers with 24 rats and 4 dogs		Includes technical survey and clearance capacity.
Armed forces	N/K	N/K	N/K	N/K	
CMAC	N/K	*1,153	N/K	N/K	*Based on March 2019 data and includes both survey and clearance capacity for mines and ERW.
CSHD	N/K	*17	N/K	N/K	*Based on March 2019 data and includes both survey and clearance capacity for mines and ERW.
HALO Trust	73	657	0	3	Based on an average of 73 teams per month.
MAG	16	128	Three teams, totalling 12 dogs and 12 handlers, contracted from CMAC.	12 deminers/mechanical operators in two units.	Clearance teams are also deployed to conduct technical survey. Excludes MAG's roving EOD capacity.
NPMEC	N/K	290	N/K	N/K	*Based on March 2019 data and includes both survey and clearance capacity for mines and ERW.
Totals		More than 2,250 deminers			

N/K = Not known

LAND RELEASE OUTPUTS AND ARTICLE 5 COMPLIANCE

LAND RELEASE OUTPUTS IN 2019

A total of more than 55.3km² of mined area was reportedly released in 2019, of which more than 20.9km² was cleared, more than 7.5km² was reduced through technical survey, and over 26.9km² was cancelled through non-technical survey. Over the course of the year, however, 7.2km² of previously unrecorded mine contamination across 117 SHAs was added to the database.¹³⁰

Clearance output in 2019 was half the 41km² of clearance reported to Mine Action Review for 2018 (and also down massively compared to the 36.7km² reported in Cambodia's Article 7 report covering 2018). The amount of area reduced through technical survey and cancelled through non-technical survey in 2019 was broadly the same as the previous year when CMAA reported to Mine Action Review 23.8km² as cancelled and 8.6km² as reduced (Cambodia's Article 7 report covering 2018 reports 22.6km² cancelled and 6.5km² reduced).

SURVEY IN 2019

In 2019, over 34.4km² was released through survey, of which 26.9km² was cancelled through non-technical survey (see Table 5) and over 7.5km² was reduced through technical survey (see Table 6).¹³¹ Compared to the previous year, survey output in 2019 was an increase on the 23.8km² cancelled and a small decrease on the 8.7km² reduced in 2018.¹³²

Furthermore, in 2019 the LRNTS+BLS captured an additional total of 7.2km² over 117 SHAs of additional contamination (see Table 2 above).¹³³

HALO Trust reported cancelling nearly 22.84km² of previously known mined area in 2019; an increase of more than 54% increase compared to 2018, which it explained was due to more land reaching the criteria for cancellation since mines were last encountered.¹³⁴

Table 5: Cancellation through non-technical survey in 2019¹³⁵

Province	Area cancelled (m ²)
Banteay Meanchey	5,822,246
Battambang	3,334,702
Kampong Speu	679,220
Kampong Thom	4,216,406
Oddar Meanchey	7,686,263
Pailin	1,213,841
Pursat	368,326
Siem Reap	3,603,399
Total	26,924,403

Table 6: Reduction through technical survey in 2019¹³⁶

Province	Area reduced (m ²)
Banteay Meanchey	886,134
Battambang	5,949,818
Kampong Thom	289,812
Oddar Meanchey	9,160
Pailin	260,906
Pursat	105,852
Total	7,501,682

CLEARANCE IN 2019

In 2019, over 20.9km² of mined area was cleared, with the destruction of 4,111 anti-personnel mines and 4,354 other items of explosive ordnance (see Table 7).¹³⁷ This is a decrease on the 41km² of mined area and 16,019 anti-personnel mines destroyed in 2019 (including 4,301 destroyed during spot tasks).¹³⁸ However, the 4,111 anti-personnel mines reported to have been destroyed in 2019 in Cambodia's Article 7 report, appears to be under reported, as HALO and MAG alone reported clearing 5,439 anti-personnel mines in 2019, excluding EOD call-outs.

Table 7: Mine clearance in 2019¹³⁹

Province	Area cleared (m ²)	AP mines destroyed	UXO destroyed
Banteay Meanchey	4,895,519	232	1,778
Battambang	8,354,500	1,314	1,490
Kampong Thom	526,789	49	100
Koh Kong	16,769	12	0
Oddar Meanchey	1,263,747	196	103
Pailin	2,605,897	1,411	341
Preah Vihear	1,150,211	284	153
Pursat	768,044	527	112
Ratanak Kiri	4,209	0	0
Siemreap	744,253	82	192
Tboung Khmum	606,768	4	85
Totals	20,936,706	4,111	4,354

In 2019, during EOD spot tasks/call-outs, a further 4,365 anti-personnel mines were destroyed: 1,468 by CMAC; 543 by CSHD; 1,219 by HALO Trust; 1,134 by MAG; and 1 by NPA.¹⁴⁰

Of the total anti-personnel mined area cleared in 2019, 43 minefields totalling over 1.7km² were cleared in which no anti-personnel mines were found.¹⁴¹ This is an improvement on the 3.8km² that was cleared in 2018 without any anti-personnel mines being found.¹⁴²

HALO Trust cleared over 5.63km² of mined area in 2019, during which it destroyed a total of 3,562 anti-personnel mines (excluding EOD call-outs), 177 anti-vehicle mines; and 292 items of UXO; broadly comparable to the 6.82km² cleared in 2018.¹⁴³ Of the 315 minefields cleared by HALO Trust in 2019, 50 did not contain anti-personnel mines (2 SHAs classified as A1, 40 as A2 minefields, and 8 as A4). According to HALO, the A1 and A4 minefields were released through area reduction, whereas A2 minefields were primarily planned for anti-vehicle mine clearance using large-loop detectors (LLDs).¹⁴⁴

MAG cleared nearly 1.42km² of mined area in 2019, during which it destroyed a total of 1,877 anti-personnel mines, 1 anti-vehicle mine; and 116 items of UXO, excluding EOD callouts.¹⁴⁵ MAG's clearance output increased in 2019, compared to the previous year, due to scaling up of operational capacity in mid-2018 of manual teams and the addition of an MDD team and one additional mechanical operations unit in mid 2019.¹⁴⁶

APOPO's clearance and technical survey output, in partnership with CMAC, increased in 2019, compared to the previous year. While APOPO aims to conduct technical survey whenever appropriate, many of the mined areas it worked on in 2019 contained scattered mines making technical survey challenging. All of the 24 mined areas cleared by APOPO in 2019, in partnership with CMAC, contained anti-personnel mines.¹⁴⁷ In 2020, APOPO, in partnership with CMAC, commenced another technical survey/clearance project with mine detection rats and technical survey dogs.¹⁴⁸

In 2019, UNDP's CfR project released 9.67km² of mined land, during which 1,341 anti-personnel mines, 10 anti-vehicle mines, and 1,368 items of ERW were destroyed.¹⁴⁹

ARTICLE 5 DEADLINE AND COMPLIANCE



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.

While Cambodia committed to clearing all anti-personnel mine contamination by the end of 2025 in its latest extension request, this is an extremely ambitious target, which relies on Cambodia bringing on board an additional 2,000 deminers. As at February 2020, no additional RCA capacity had been deployed and based on existing capacity and funding, the CMAA expected it will take 11 years to complete clearance.¹⁵⁰

Cambodia planned to steadily increase annual land release (i.e. survey and clearance) output from 84km² in 2019 (which it did not achieve) to 110km² from 2020 to 2021, when 500 priority villages will be declared mine free, to 146.5km² from 2022 to 2025. Between the Third Review Conference in 2014 and the Fourth Review Conference in 2019, Cambodia released an average of 84km² per year, so the land release targets it has set itself require additional funding and capacity as well as exceptional performance. In 2019, Cambodia released a total of nearly 55.5km² through survey and clearance, which is well short of the nearly 84.3km² is forecasted for the year in its 2019 extension request.¹⁵¹

Cambodia has stated it will require an average of US\$62 million for sector management and clearance of mines, CMR, and other ERW.¹⁵² From 2010 to 2018, Cambodia was averaging \$42.5 million in funding from the government and donor community, which would mean a 45% annual increase in funding.¹⁵³ While Cambodia expects to increase funding from domestic and private sources in the coming years there will still be a funding shortfall without increased donor support. In addition to the increased funding Cambodia has also calculated that it will need an extra 2,000 deminers to complete anti-personnel mine clearance by 2025. It is proposed that these deminers will come from the RCA, but will require international assistance in order to train and equip them.¹⁵⁴

Clearance output in 2019, was significantly lower than the previous year. Although not entirely clear, multiple factors are thought to account for the decrease in clearance, including: tasking of a larger proportion of difficult-to-access mined areas with more challenging terrain, compared to previous years; clearance of more mixed contamination; and decreased funding to some operators.¹⁵⁵

Significant amounts of previously unrecorded contamination are still being added to the database, hampering efficient land release. It is vital that the CMAA has effective QM processes in place to ensure that only new mined areas with evidence of contamination are entered into IMSMA and that where there is no evidence of contamination, SHAs are cancelled.

PLANNING FOR RESIDUAL RISK AFTER COMPLETION

Goal seven of Cambodia's National Mine Action Strategy 2018–2025 is to establish a sustainable national capacity to address residual threats after 2025. Reference to the issue is also included in the foreword signed by the Cambodian Prime Minister and noted throughout the document. Objectives include reviewing by 2020 the legal, institutional and operational framework, strategy, and capacity needed to address the residual threats.¹⁶⁴

In Phase I (2018–22) of the national strategy Cambodia planned to “develop a comprehensive residual threats strategy; establish a residual threat legal and institutional framework; and establish residual threats regulatory and operational frameworks including coordination, planning and prioritization, and sustained information management system”. In Phase II (2023–25), Cambodia plans to “develop residual threat capacity in preparation to transition from the traditional mine action program; determine resource mobilisation schemes to support the development of residual threat capacity and its future activities; and to conduct post-programme evaluation of achievements and outcomes after the conclusion of the strategy in 2025 to evaluate performance, lessons learned, recommendations for efficiencies and improvements in any remaining mine action”.¹⁶⁵

The CMAA have stated that it is likely that the RCA will be tasked with addressing explosive threats after 2025.¹⁶⁶

In 2018, the GICHD presented a case study on the Management of Residual ERW in Cambodia, and hosted a Long Term Risk Management workshop and an exchange visit between the CMAA and the national mine action centre in Sri Lanka.¹⁶⁷

Table 8: Five-year summary of AP mine clearance

Year	Area cleared (km ²)
2019	20.94
2018	41.00
2017	27.68
2016	25.33
2015	46.47
Total	161.42

The high-density K5 minefield lies along the Cambodian-Thai border, including in areas where the border is not demarcated and where access is limited. In order to make progress towards its 2025 clearance deadline, Cambodia must ensure that it can release all contaminated land along its border with Thailand, which will require cross-border cooperation.¹⁵⁶ Improved relations between Thailand and Cambodia have opened the way for increased border cooperation. The Cambodia-Thailand General Border Committee, chaired by the Deputy Prime Minister and Minister of Defence from both countries, has agreed that CMAC and the Thailand Mine Action Centre (TMAC) can cooperate to conduct demining along the Thai-Cambodian border.¹⁵⁷ In September 2018, CMAC and TMAC met and agreed to find a task for a pilot border project: a small area that could be cleared within a month as a symbolic demonstration of two sides working together. In September 2019, CMAC and TMAC agreed the respective mined areas on a demarcated section of the Thai-Cambodia border, distanced not too far apart.¹⁵⁸ The selected area on the Cambodian side is Kilobuan village, Poipet District, Banteay Meanchey province. The selected pilot project area on the Thai side is in Sano-noi village, Aranyaprathet District, Sa Kaeo province.¹⁵⁹

TMAC and CMAC signed the agreement for the pilot site survey on 2 March 2020,¹⁶⁰ after which operations were expected to start shortly thereafter and were expected to take no more than 50 days to complete.¹⁶¹ As at June 2020, around 10 CMAC clearance tasks were ongoing along the border; having started in April 2020, clearance was expected to be completed in July.¹⁶² Cambodia has said it will provide updates on clearance along border areas at forthcoming meetings of States Parties.¹⁶³

- 1 Article 7 Report (covering 2019), Point 4.
- 2 Article 7 Report (covering 2018), Point 4.
- 3 2019 Article 5 deadline Extension Request, Annex 1.
- 4 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, p. 5.
- 5 Article 7 Report (covering 2019), Point 4; and emails from Rebecca Letven, Country Director, MAG, 7 April 2020.
- 6 Article 7 Report (covering 2019), Point 4.
- 7 Interview with Prum Sophakmonkol, Secretary General, CMAA, Geneva, 11 February 2020.
- 8 Statement by the Chair of the Committee on Article 5 Implementation on the Analysis of the Request for extension submitted by Cambodia, Oslo, 26 November 2019.
- 9 Interviews in Phnom Penh with Prum Sophakmonkol, CMAA, 24 April 2018; and Greg Crowther, MAG, and Matthew Hovell, HALO Trust, 26 April 2018; Su Yeon Yang, Conflict Prevention Officer, and Tong Try, National Mine Action Advisor, UNDP, 23 April 2019; and Heng Rattana, Director General, CMAC, 25 April 2019.
- 10 CMAA, National Mine Action Strategy 2018–2025, p. 8.
- 11 2019 Article 5 deadline Extension Request, p. 21.
- 12 APMBC Article 7 Report (covering 2019), Point 4. Remaining contamination data as at end of 2019 reported by the CMAA to Mine Action Review totalled nearly 768.31km² of anti-personnel mined area across 8,720 hazardous areas and nearly 33.32km² of anti-vehicle mined area across 613 hazardous areas. Email from Prum Sophakmonkol, CMAA, 1 July 2020.
- 13 Email from Prum Sophakmonkol, CMAA, 1 July 2020.
- 14 Email from Prum Sophakmonkol, CMAA, 1 July 2020.
- 15 Email from Rebecca Letven, MAG, 7 April 2020.
- 16 Email from Lasha Lomidze, Country Director, HALO Trust, 15 May 2020.
- 17 Email from Zlatko Vezilic, Programme Manager, NPA, 5 May 2020.
- 18 Email from Michael Heiman, Program Manager, APOPO, 4 May 2020.
- 19 Email from Lasha Lomidze, HALO Trust, 15 May 2020.
- 20 CMAA, National Mine Action Strategy 2018–2025, p. 1; and The HALO Trust, "Where we work: Cambodia", accessed 10 July 2019, at: bit.ly/313jTKs.
- 21 2019 Article 5 deadline Extension Request, p. 21.
- 22 Article 7 Report (covering 2019), Form 4.
- 23 Article 7 Report (covering 2018), Form 4.
- 24 Interview with Prum Sophakmonkol, CMAA, Phnom Penh, 24 April 2019.
- 25 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, p. 2.
- 26 Email from Lasha Lomidze, HALO Trust, 15 May 2020.
- 27 Article 7 Report (covering 2019), Form 4. HALO reported identifying almost 1.8km² of additional AP mine contaminated area in 2019. Email from Lasha Lomidze, HALO Trust, 15 May 2020. MAG identified and added two additional SHAs in 2019, totalling 162,155m². Email from Rebecca Letven, MAG, 7 April 2020. Additional contamination data in 2019 reported by the CMAA to Mine Action Review totalled nearly 11.55km² of previously unknown anti-personnel mined area across 179 hazardous areas (including 131 SHAs totalling nearly 9.59km² recorded by CMAC; 46 SHAs totalling nearly 1.80km² recorded by HALO Trust; and 2 SHAs totalling more than 0.16km² recorded by MAG. Email from Prum Sophakmonkol, CMAA, 1 July 2020.
- 28 CMAA, "Legal framework and mandate", at: bit.ly/2W7r3dJ.
- 29 Interviews with Su Yeon Yang, and Tong Try, UNDP, 23 April 2019; and Rebecca Letven, MAG, Phnom Penh, 25 April 2019.
- 30 CMAC, "20 Years' Achievement in Mine Action 1998-2018 and Path Ahead", 2018.
- 31 Interview with Heng Rattana, CMAC, Phnom Penh, 25 April 2019.
- 32 GICHD, "Landmines and Land Rights in Cambodia", December 2010, pp. 9 and 13.
- 33 Email from Zlatko Vezilic, NPA, 5 May 2020.
- 34 CMAA, National Mine Action Strategy 2018–2025, p. 24; and email from Tong Try, UNDP, 18 June 2019.
- 35 Emails from Prum Sophakmonkol, CMAA, 1 July 2020; Rebecca Letven, MAG, 7 April 2020; and Zlatko Vezilic, NPA, 5 May 2020.
- 36 CMAA, National Mine Action Strategy 2018–2025, p. 24; and email from Tong Try, UNDP, 18 June 2019.
- 37 Email from Zlatko Vezilic, NPA, 5 May 2020.
- 38 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.
- 39 Email from Zlatko Vezilic, NPA, 4 April 2019.
- 40 UNDP, "Clearing for Results Phase III project document", 17 December 2015; and interviews with Su Yeon Yang, Conflict Prevention Officer, and Tong Try, Senior National Project Officer, UNDP, 23 April 2019.
- 41 Email from Tong Try, UNDP, 19 June 2020.
- 42 Email from GICHD, 1 July 2020.
- 43 2019 Article 5 deadline Extension Request, p. 12.
- 44 Email from Prum Sophakmonkol, CMAA, 1 July 2020.
- 45 2019 Article 5 deadline Extension Request, p. 6.
- 46 Emails from Prum Sophakmonkol, CMAA, 11 September 2019; Rebecca Letven, MAG, 7 April 2020; and Lasha Lomidze, HALO Trust, 15 May 2020.
- 47 Email from Prum Sophakmonkol, CMAA, 11 September 2019; and Statement of Cambodia on Second Extension Request, APMBC Fourth Review Conference, Oslo, 27 November 2019.
- 48 Email from Prum Sophakmonkol, CMAA, 1 July 2020.
- 49 Email from Prum Sophakmonkol, CMAA, 11 September 2019.
- 50 CMAA, Three-Year Implementation Plan 2018–2020, Phnom Penh, undated but 2018, p. 14.
- 51 DFID Capacity Development Report, Activity Detail Extract, 18 September 2018.
- 52 Email from Prum Sophakmonkol, CMAA, 1 July 2020.
- 53 Ibid.
- 54 Email from Arianna Calza Bini, Head of GMAP division, GICHD, 7 September 2020.
- 55 CMAA, National Mine Action Strategy 2018–2025, p. 22.
- 56 Email from Prum Sophakmonkol, CMAA, 1 July 2020.
- 57 Ibid.
- 58 Email from Michael Heiman, APOPO, 4 May 2020.
- 59 CMAC, "20 Years' Achievement in Mine Action 1998-2018 and Path Ahead", 2018; interview with Heng Rattana, CMAC, Phnom Penh, 25 April 2019; and email from Oum Phumro, Deputy Director General, CMAC, 28 July 2020.
- 60 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, Annex 18.
- 61 Email from Lasha Lomidze, HALO Trust, 15 May 2020.
- 62 Email from Rebecca Letven, MAG, 7 April 2020.
- 63 Ibid.
- 64 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, Annex 18.
- 65 Emails from Prum Sophakmonkol, CMAA, 1 July 2020; and GICHD, 1 July 2020.
- 66 Email from GICHD, 1 July 2020.
- 67 CMAA, National Mine Action Strategy 2018–2025, p. 22.
- 68 Email from Zlatko Vezilic, NPA, 5 May 2020.
- 69 Ibid.; and email from Michael Heiman, APOPO, 4 May 2020.
- 70 Email from Prum Sophakmonkol, CMAA, 1 July 2020.
- 71 CMAA, National Mine Action Strategy 2018–2025, pp. 14–15.
- 72 Emails from Rebecca Letven, MAG, 7 April 2020; and Lasha Lomidze, HALO Trust, 15 May 2020.
- 73 Email from Lasha Lomidze, HALO Trust, 15 May 2020.
- 74 Email from Rebecca Letven, MAG, 7 April 2020.
- 75 Email from Zlatko Vezilic, NPA, 5 May 2020.
- 76 Email from Rebecca Letven, MAG, 9 May 2019; and interview with Prum Sophakmonkol, CMAA, Phnom Penh, 24 April 2019.
- 77 Email from Rebecca Letven, MAG, 7 April 2020.
- 78 Email from Prum Sophakmonkol, CMAA, 11 September 2019.
- 79 Email from Rebecca Letven, MAG, 7 April 2020.
- 80 Three-Year Implementation Plan 2018–20, p. 3.
- 81 Statement of Cambodia on Second Extension Request, APMBC Fourth Review Conference, Oslo, 27 November 2019.
- 82 CMAC, Integrated Work Plan 2019, p. 24.
- 83 2019 Article 5 deadline Extension Request, p. 8.
- 84 Ibid., p. 5.
- 85 Ibid., p. 8; and interviews with Prum Sophakmonkol, CMAA, Phnom Penh, 24 April 2018 and Geneva, 11 February 2020.
- 86 2019 Article 5 deadline Extension Request, p. 7; Statement of Cambodia on Second Extension Request, Fourth APMBC Review Conference, Oslo, 27 November 2019; and interview with Prum Sophakmonkol, CMAA, Geneva, 11 February 2020.
- 87 2019 Article 5 deadline Extension Request, p. 31; and 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, p. 3.
- 88 CMAA, National Mine Action Strategy 2018–2025, pp. 14–15.
- 89 2019 Article 5 deadline Extension Request, p. 9; and interview with Prum Sophakmonkol, CMAA, Geneva, 11 February 2020.

- 90 2019 Article 5 deadline Extension Request, pp. 30–31; and email from Damian O'Brien, HALO Trust, 10 April 2019.
- 91 Interview with Lasha Lomidze, HALO Trust, 3 May 2019.
- 92 Email from Rebecca Letven, MAG, 9 September 2019.
- 93 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, p. 4.
- 94 Email from Lasha Lomidze, HALO Trust, 15 May 2020.
- 95 Email from Rebecca Letven, MAG, 7 April 2020.
- 96 Email from Lasha Lomidze, HALO Trust, 15 May 2020.
- 97 Ibid.
- 98 Email from Zlatko Vezilic, NPA, 5 May 2020.
- 99 Email from Prum Sophakmonkol, CMAA, 11 September 2019; and Zlatko Vezilic, NPA, 4 April 2019.
- 100 Emails from Zlatko Vezilic, NPA, 5 May 2020; and Lasha Lomidze, HALO Trust, 15 May 2020.
- 101 Email from Rebecca Letven, MAG, 7 April 2020.
- 102 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, p. 1; and email from Zlatko Vezilic, NPA, 5 May 2020.
- 103 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, p. 1.
- 104 Emails from Zlatko Vezilic, NPA, 4 April 2019 and Rebecca Letven, MAG, 9 May 2019.
- 105 Emails from Rebecca Letven, MAG, 9 May 2019; and Damian O'Brien, HALO Trust, 10 April 2019.
- 106 Email from GICHD, 1 July 2020.
- 107 UNDP, "Clearing for Results Phase III Annual Report", 2018.
- 108 Email from Prum Sophakmonkol, CMAA, 1 July 2020.
- 109 Email from Prum Sophakmonkol, CMAA, 11 September 2019; and 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, p. 2.
- 110 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, p. 2.
- 111 Email from Lasha Lomidze, HALO Trust, 15 May 2020.
- 112 2019 Article 5 deadline Extension Request, p. 43.
- 113 2019 Article 5 deadline Extension Request, p.48.
- 114 Email from Lasha Lomidze, HALO Trust, 15 May 2020.
- 115 Email from Rebecca Letven, MAG, 7 April 2020.
- 116 Email from Prum Suonpraseth, CMAC, 21 June 2019.
- 117 Emails from Rebecca Letven, MAG, 28 June 2019 and 29 June 2020.
- 118 Email from Michael Heiman, APOPO, 4 May 2020.
- 119 Email from Zlatko Vezilic, NPA, 5 May 2020.
- 120 Email from Tong Try, UNDP, 19 June 2020.
- 121 Email from Tong Try, UNDP, 19 June and 21 July 2020.
- 122 2019 Article 5 deadline Extension Request, p. 9.
- 123 Ibid., p. 41.
- 124 Interview with Prum Sophakmonkol, CMAA, Geneva, 11 February 2020.
- 125 "India Provides \$1.5 million to Support Cambodia's Demining Program", Cambodianess, 10 August 2020.
- 126 Email from CMAA, 2 May 2017.
- 127 Interview with Edwin Faigmane, UNDP, Phnom Penh, 24 April 2018.
- 128 Email from Tong Try, UNDP, 19 June 2020.
- 129 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, Annex 18; emails from Rebecca Letven, MAG, 7 April 2020; Lasha Lomidze, HALO Trust, 15 May 2020; and Michael Heiman, APOPO, 4 May 2020.
- 130 APMBC Article 7 Report submitted in 2020 (covering 2019), Point 4.
- 131 Email from Prum Sophakmonkol, CMAA, 11 September 2019.
- 132 Ibid.
- 133 Article 7 Report (covering 2019), Form 4.
- 134 Email from Lasha Lomidze, HALO Trust, 15 May 2020.
- 135 APMBC Article 7 Report submitted in 2020 (covering 2019), Point 4. HALO Trust reported that it cancelled over 22.8km² of mined area. Email from Lasha Lomidze, HALO Trust, 15 May 2020. MAG reported that it cancelled over 4.58km² through non-technical survey in 2019. Email from Rebecca Letven, MAG, 7 April 2020. The amount of mined area cancelled through non-technical survey in 2019 reported by the CMAA to Mine Action Review totalled over 27.55km² (nearly 0.70km² cancelled by CMAC; nearly 22.74km² by HALO; and nearly 4.12km² by MAG. Email from Prum Sophakmonkol, CMAA, 1 July 2020.
- 136 APMBC Article 7 Report submitted in 2020 (covering 2019), Point 4. HALO Trust reported that it reduced 342,153m² in 2019, as part of its clearance process. Email from Lasha Lomidze, HALO Trust, 15 May 2020. MAG reported that it reduced over 2,151,349m² through technical survey in 2019. Email from Rebecca Letven, MAG, 7 April 2020. In partnership with CMAC, APOPO reported that it reduced 1,047,100m² in 2019 in three provinces. Email from Michael Heiman, APOPO, 4 May 2020. The amount of mined area reduced through technical survey in 2019 reported by the CMAA to Mine Action Review totalled over 7.80km² (nearly 5.86km² reduced by CMAC; more than 0.44km² by HALO; and more than 1.50km² by MAG. Email from Prum Sophakmonkol, CMAA, 1 July 2020.
- 137 Article 7 Report (covering 2019), Point 4.
- 138 Email from Prum Sophakmonkol, CMAA, 11 September 2019.
- 139 APMBC Article 7 Report (covering 2019), Point 4. The amount of mined area released through clearance in 2019 reported by the CMAA to Mine Action Review totalled over 28.26km² (more than 15.43km² cleared by CMAC; more than 0.45km² by CSHS; nearly 8.52km² by HALO Trust; nearly 1.38km² by MAG; and more than 2.48km² by NPMEC. Email from Prum Sophakmonkol, CMAA, 1 July 2020. According to data provided to Mine Action Review by the CMAA a total of 4,361 anti-personnel mines (1,394 by CMAC; 178 by CSHD; 1,075 by HALO Trust; 13 by NPMEC; and 1,701 by MAG), 102 anti-vehicle mines (27 by CMAC; 0 by CSHD; 56 by HALO Trust; 3 by NPMEC; and 16 by MAG), and 4,599 item of UXO were destroyed in 2019. HALO Trust reported that it cleared nearly 5.63km² in 2019, during which it destroyed a total of 3,562 anti-personnel mines, 177 anti-vehicle mines; and 292 items of UXO. Email from Lasha Lomidze, HALO Trust, 15 May 2020. MAG reported that it cleared nearly 1.42km² in 2019, during which it destroyed a total of 1,877 AP mines, 1 AV mine, and 116 other UXO. Email from Rebecca Letven, MAG, 7 April 2020. As part of its partnership with CMAC, APOPO reported that it cleared nearly 1.29km² in 2019, during which it destroyed a total of 331 AP mines, 1 AV mine, and 324 other UXO. Email from Michael Heiman, APOPO, 4 May 2020. UNDP reported that the CfR project released 9.67km² of mined land, during which 1,341 anti-personnel mines, 10 anti-vehicle mines, and 1,368 items of ERW were destroyed. Email from Tong Try, UNDP, 19 June 2020.
- 140 Email from Prum Sophakmonkol, CMAA, 1 July 2020. HALO Trust itself reported destroying 1,169 anti-personnel mines during EOD callouts in 2019 (email from Lasha Lomidze, HALO Trust, 15 May 2020) and MAG reported destroying 1,124 (email from Rebecca Letven, MAG, 7 April 2020).
- 141 Email from Prum Sophakmonkol, CMAA, 1 July 2020.
- 142 Email from Prum Sophakmonkol, CMAA, 11 September 2019.
- 143 Email from Lasha Lomidze, HALO Trust, 15 May 2020.
- 144 Ibid.
- 145 Email from Rebecca Letven, MAG, 7 April 2020.
- 146 Ibid.
- 147 Emails from Michael Heiman, APOPO, 4 May and 23 June 2020.
- 148 Ibid.
- 149 Email from Tong Try, UNDP, 19 June 2020.
- 150 Interview with Prum Sophakmonkol, CMAA, Geneva, 11 February 2020.
- 151 2019 Article 5 deadline Extension Request, p. 7.
- 152 Ibid., p. 55.
- 153 Ibid., p. 34.
- 154 Interview with Prum Sophakmonkol, CMAA, Phnom Penh, 24 April 2019.
- 155 Email from Eva Veble, on behalf of Samritha Sron, NPA, 9 September 2020.
- 156 2019 Article 5 deadline Extension Request, p. 38.
- 157 Emails from Shushira Chonhenchob, NPA (on behalf of Lt-Gen. Sittipol Nimnuan, TMAC), 8 April 2019; and Prum Sophakmonkol, CMAA, 1 July 2020.
- 158 'CMAC, Thais join forces to clear mines at border provinces', The Phnom Penh Post, 24 September 2019, at: bit.ly/3ejuyrW.
- 159 Email from Ft. Lt. Chotiboon Anukulvanich, on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC, on 27 February 2020.
- 160 Cambodian Mine Action Centre (CMAC), "A record of discussions signed between CMAC and TMAC", 3 March 2020, available at: bit.ly/34yiUEW.
- 161 Email from Ft. Lt. Chotiboon Anukulvanich, on behalf of Lt.-Gen. Sittipol Nimnuan, TMAC, on 27 February 2020.
- 162 Email from Prum Sophakmonkol, CMAA, 1 July 2020.
- 163 2019 Article 5 deadline Extension Request, p. 8.
- 164 CMAA, National Mine Action Strategy 2018–2025, p. 14.
- 165 Ibid., p. 16.
- 166 2019 Article 5 deadline Extension Request, Additional Information, undated but August 2019, p. 5.
- 167 Email from Rob White, Advisor, Strategic Management & Residual Contamination, GICHD, 3 July 2019.