



មជ្ឈមណ្ឌលសកម្មភាពកំចាត់មីនកម្ពុជា
Cambodian Mine Action Centre

CMAC

Operational Achievement Report



February - 2020



CMAC Monthly Operational Achievement Report Period: 01 – 29 February 2020





1. General Situation

In February 2020, all CMAC Demining Components and Demining Units were assigned to work for 20 working days. But each Demining Unit was still permitted to perform demining tasks based on the proposed working calendar approved by the CMAC top management the same as last year. Anyway, a lot of requests for small scale clearances were requested by the local authority to CMAC for emergency response and escape them from the target area for safe manner and better environment to our people to avoid from having high risk of mine incident and future affection. However, during this reporting period, CMAC deployed its demining resources in each Demining Unit (DU) to clear the contaminated landmine and battlefield areas; and handed over them to those whom requested in purposes of using land in according to their requests for agriculture; developing and also for the risk reduction activity in their communities. In addition, CMAC also deployed at least 7 Intervention Teams, called Explosive Remnants of War Intervention (ERW) at DU1, DU2, DU4, DU6 and TIMA and as well as the 4 Battle Area Clearance–Multi Task Teams (BAC-MTT) to respond the emergency call/tasks by collecting and destroying safely those mines and UXO reported by local authorities, NGOs and community population in terms of providing them the safe environment of daily living condition and doing agricultural activities in their communities without any fear feeling and the threats from mine and ERW. The detail tasks and progress achieved for the month of February 2020 is represented as the following:

2. Deployment Tools (Asset)

In regard to 20 working days, CMAC still deployed its demining resources to each Demining Unit, Head Quarters, Development Demining Unit (DDU) and CMAC Technical Institute of Mine Action (TIMA) as the month before. However, all CMAC demining teams are still working to support many landmine/ERW high priority clearance tasks selected through the National Planning Mechanism, often refers to as MAPU process, as participatory and bottom up approach methods to mine action planning; and urgent humanitarian and development supported tasks requested by local authorities and mine/ERW affected communities. The following table 1 shows us the demining tools (asset), which were deployed for each Demining Unit.



Table 1: February 2020

Demining Tool	Actual Demining Assets (Tools)																							
	MP (27 staff)	BAC-I(16staff)	BAC-S(5staff)	BAC-S7(7staff)	TSC(5staff)	TSC(7staff)	BLS(5staff)	SLD(2dogs)	SLD(4dogs)	EDD(2dogs)	ESD(4dogs)	TSD(4dogs)	MDR(4rats)	ERWI	EOD	BAC-MTT	DIT	BC-2staff	BC-9staff	BC-15staff	CDM	DM-3staff	DM-15	CBM/CBU
DU#1(BMC)	1	-	-	-	-	4	-	-	-	-	-	-	-	1	-	-	-	1	1	-	-	1	-	5
DU#2(BTB, PST)	4	-	-	-	13	2	-	4	3	-	-	-	-	2	-	-	-	3	2	-	-	-	8	12
DU#3(PLN)	-	-	-	-	3	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3
DU#4 (SRP & Kg. Thom, PVH)	-	-	-	-	-	1	-	-	-	-	-	-	1	1	-	-	-	1	1	-	1	1	-	3
DU#5 (Eastern provinces)	-	4	4	5	-	-	10	-	-	2	-	-	-	-	-	4	-	1	-	-	-	-	-	4
DU#6 (PVH, STR& OMC)	-	-	-	-	9	-	-	-	-	-	-	1	1	2	1	-	-	1	-	6	-	-	-	6
Development Demining Unit (DDU)	-	-	-	-	3	3	-	-	-	-	-	-	-	-	1	-	-	5	1	-	-	-	-	-
CMAC HQ (Phnom Penh)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-



CMAC Technical Institute of Mine Action (TIMA)	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	2	-	-	-	-	-	-	-	
National Dog Center (NDC)	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	
Community Development Center (CDC)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	
Total Teams	5	4	4	5	28	11	10	4	3	2	1	1	2	7	2	4	2	14	5	6	1	2	8	33

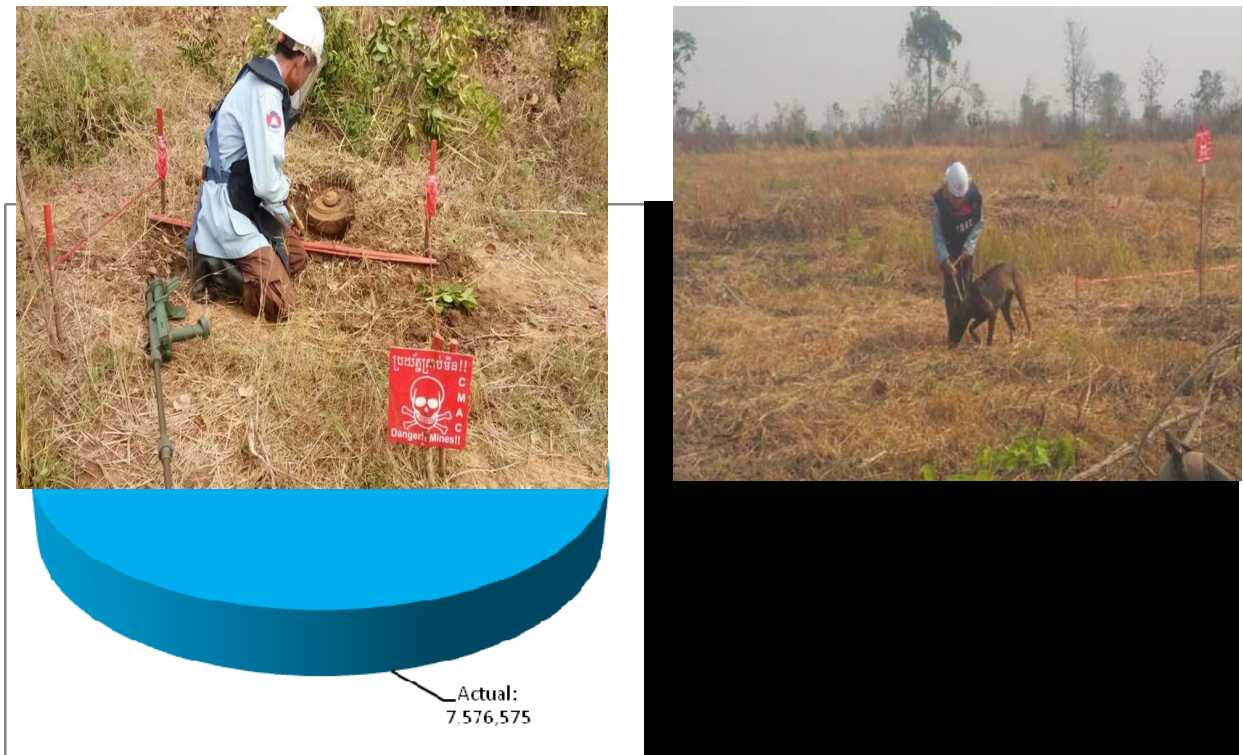
Note:

- BCT#08, 3 TSC (TSC#08, 12&06) of former DU1, 2&3_CFR18,19&20 and TSC#16 of former DU4_PB projects moved to work at DU6_CCL-02 on February 1, 2020.
- 2 NTS (02&03) of former DU3_NTS and BCT04 of former DU6_CCL-02 were demobilized because project was completed and did not have enough operational equipment such as Brush Cutter machine and vehicle respectively.

3. Summary of Progress

However, as mentioned on the results of February 2020; a total of **7,576,575 m²** of land has been released throughout the country. This includes **4,295,613 m²** of minefield areas, and **3,056,016 m²** of UXO field areas and **224,946 m²** of areas cleared without sketches for safety principles, which is **113.07%** compared to the monthly target of **6,700,496 m²** in 2020. But if this is compared to the same period of February 2019 (as of 7,083,775 m²), it is **6.96%** more than the progress of February 2019. The details of CMAC accumulated operational summary report from 1992 up-to February 2020 is showing in **ANNEX-A**, and the monthly progress by each DU is represented in **ANNEX-B**. The below Chart.1 is demonstrating the monthly target Vs progress achievement accomplished in February 2020.

Anyway, if comparing the progress of February to January 2020 (as of **6,187,239 m²**), it is **22.45%** more than progress of January 2020.





A part of the above mentioned; at least **753** AP mine, 21 AT mines and **2,805** ERW were found and destroyed safely. If comparing these items (mines and Explosive Remnants of War) found and destroyed in February 2020 (as of **3,579** items) to the monthly target in 2020 (as of 3,333 items), it is **107.38%**. The Chart 2 above is represented the device found and destroyed by comparing to monthly target of mine/UXO in February 2020.

4. Allocation of Demining Tools (Assets) by Project:

In addition to the deployment by each Demining Units (DU) and progress achieved during the month, CMAC also deployed its demining resources (assets) to support each project so that they may respond to the project's target as said within the project agreement and also to meet the project's requirement as the following resources in Table 2:

Overview of the Committed Assets by Project

Table 2:

S/N	Project's name	Jan-20	Feb-20	Remarks
1	DU1-CRF18 (3 rd Top Up)	4TSC&1BCT	4TSC	1)-This project starts 01 Jan to 31 Dec 2019. 2) 4TSC(# 11, 13,24, &28) 1BC start 01 Jan to 29 Feb 2020 (3 rd Top up).
2	DU1,-PCD-JMAS	1MP,2BC, 1DM, 1ERWI	1MP,2BC, 1DM, 1ERWI	1)-This project starts from 08 Oct 2019 to 07 Oct 2020.
3	DU1-SVC (Infrastructure),	1Buldozer, 1 Compact roller, 1 dump truck, 1 Excavator	1Buldozer, 1 Compact roller, 1 dump truck, 1 Excavator	1)-This project is just renewed for a new agreement from 01 April 2019 to 31 March 2020.
4	DU2-CFR19(3 rd Top Up)	1BC, 3TSC, 1SLD,	1BC, 3TSC, 1SLD,	1)-This project starts 01 Jan to 31 Dec 2019. 2) 5TSC(# 01, 07,08, 12 &15), 1BC, 1CBM &1SLD start 01 Jan to 29 Feb 2020 (3 rd Top up).
5	DU2-CAC (IMCC)	1TSC	1TSC	This project is just renewed for a new agreement from 16 August 2019 to 15 August 2020.
6	DU2-CPF	4MP, 8DM, 11TSC, 3SLD, 2ERWI, 1BC, 12PC&CBM, project staff	4MP, 8DM, 11TSC, 3SLD, 2ERWI, 1BC, 12PC&CBM, project staff	1)- CPF project starts from 01 Jan to 30 Jun 2020.
7	DU2-MAG	3SLD	3SLD	1)- This project is renewed from 01 May 2019 to 30 Apr 2020. 2)-SLD#05 has been hired by MAG for a year (01 Jun 2019 to 31 May 2020)
8	DU3-CFR20 (3 rd Top Up)	3TSC, 1PC-CBM	3TSC, 1PC-CBM	1)-This project starts from 01 Jan 2019 to 31 Dec 2019. 2)- 3TSC(# 09, 19 &30) & 1CBM start 01 Jan to 29 Feb 2020 (3 rd Top up).
9	DU3-CPF	2TSC	2TSC	1)- CPF project starts from 01 Jan to 30 Jun 2020.
10	DU3-CMA-19	2CBM-PC, DU3 some office staff	2CBM-PC, DU3 some office staff	
11	DU3, NTS.BLS	2NTS.BLS	-	This project starts from 01 Oct 2019 to 31 Jan. 2020.
12	DU4-MDR-APOPO	1BC, 1TSC,1MDR	1BC, 1TSC,1MDR	1)-This project starts on 01 Jan to 31 Dec 2020 (MRD#01, TSC#22 , BC#25).
13	DU4, CMD_JMAS	1CDM, 1BC, 1DM, 1ERWI, CBURR	1CDM, 1BC, 1DM, 1ERWI, CBURR	This project starts on 01 March 2019 to 28 February 2020.
14	DU4-CCL2	2PC&CBM& 18 office staff	2PC&CBM& 18 office staff	1)-This project starts from 01 Jan to n31 Dec 2020. 2)-ERWI#02 supported by DU6, its workbase at DU4.

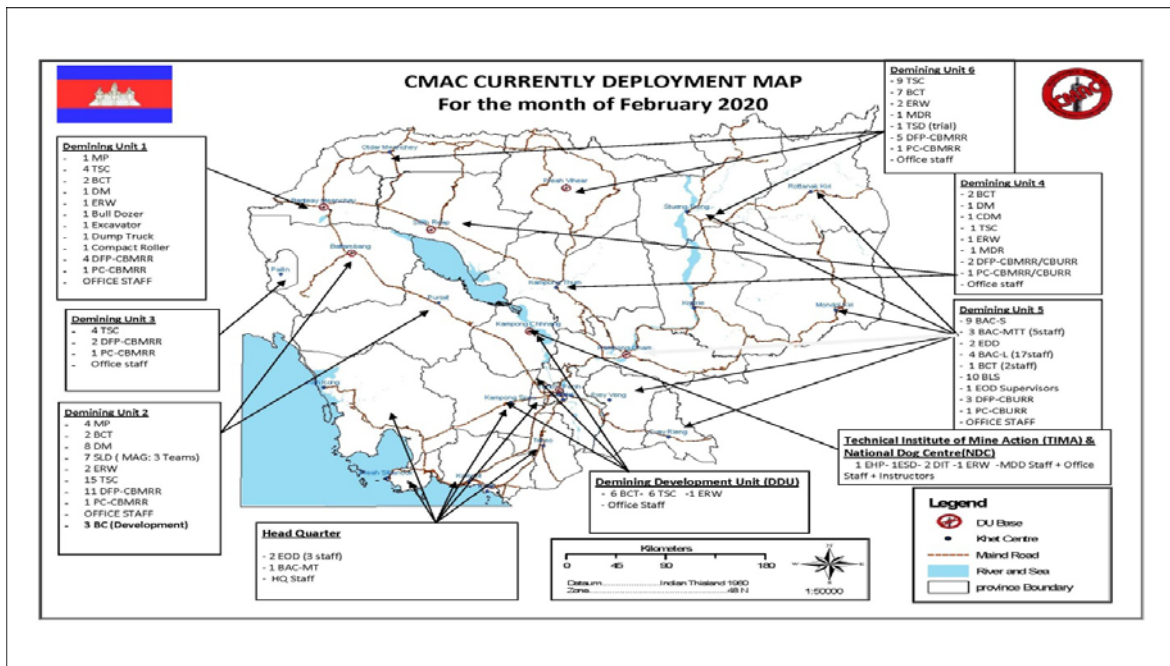


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S/N	Project's name	Jan-20	Feb-20	Remarks
15	DU5& HQ –USA23	9BAC-S, 4BAC-L, 4BAC-MTT, 2EDD, 1BC	9BAC-S, 4BAC-L, 4BAC-MTT, 2EDD, 1BC	1)-This project starts on 01 March 2019 to 28 February 2020.
16	DU5_USA-23 (BLS)	10 BLS	10 BLS	1)-This project starts on 05 August 2019 to 29 February 2020.
17	DU6_CCL2	2ERW, 5TSC, 6BCT, 6CBM& 18 office staff	2ERW, 5TSC, 6BCT, 6CBM& 18 office staff	This project starts from 01 Jan to 31 Dec 2020.
18	DU6-APOPO	1MDR, 2TSC, 1BC, 1TSD	1MDR, 2TSC, 1BC, 1TSD	1)-This project starts on 01 Nov 2019 to 31 Jul 2020 (TSC#20&TSD#01). 2)- This project starts on 01 Jan to 31 Dec 2020 (TSC#05, BCT#22&MDR#02).
19	DDU-EDC-7-8	2TSC, 1ERWI	2TSC, 1ERWI	-This project starts on 16 Mar 2019.
20	DDU-NR5-4(RGC16)	2BC	2BC	This project have been renewed from 1 Jan to 30 Jun 2020.
21	DDU-NR5-4(RGC17)	3BC,1TSC	3BC,1TSC	This project have been renewed from 1 Jan to 30 Jun 2020.
22	DDU-NR5-4(RGC18)	1BC,3TSC	1BC,3TSC	This project have been renewed from 1 Jan to 30 Jun 2020.
23	HQ_CCL-02	2EOD	2EOD	This project starts on 01 February 2020.
24	TIMA-CCL2	2DIT, 1ERW& 25 office staff &instructors	2DIT, 1ERW& 25 office staff &instructors	This project starts from 01 Jan to 31 Dec 2020.
25	NDC_CMA-19	1ESD, 38staff	1ESD, 38staff	This project starts from 01 Jan to 31 Dec 2020.
26	TC- Golden West foundation	1Explosive Harvesting team (8persons)	1Explosive Harvesting team (8persons)	Reference to MOU- dated: 27-DEC-2017, This MOU entered force on 01 Jan 2018. This project starts 01 Jan 2018 to 31 Dec 2020.
27	Community Development Center (CDC)	2BC	2BC	

The below figure is the CMAC deployment map as of February 2020

Figure:1





a. Teams Deployed Vs Staff of the month of February 2020

Table 3:

Demining Tool/Asset	No. of Teams	No. of Staff per Team	Total staff in Feb 2020	Actual Staff		Different	Remarks
				Male	Female		
MPL-27staff	5	27	135	100	11	24	
BC-15staff	6	15	90	56	3	28	
BC-9staff	5	9	45	44		1	
BC-2staff	14	2	28	28			
DM-15staff	8	15	120	105	10	5	
DM-3staff	2	4	4	4			
CDM-(9staff)	1	9	9	9			
SLD	4	10	40	28	9	3	Not including SLD#03, SLD#05 and SLD#12 hired to MAG.
EDD	2	6	12	11	1		
TSD	1	5	5	5			
TSC-7staff	11	7	77	68		2	
TSC-5staff	28	5	140	130	5	9	
BLS	10	5	50	49	1		
BAC-S(7staff)	5	7	35	26	9		
BAC-S(5staff)	4	5	20	20			
BAC-L (16 Staff)	4	16	68	66	2		
BAC-MTT	4	5	20	20			
EOD-3staff	2	3	6	6			
ERW	8	4	35	34		1	
MDR	2	10	20	14	6		
CBMRR	33	1	32	22	6	4	
ESD	1	5	5	3	2		
DIT	2	5	10	6		4	
Total	162		1,004	852	71	81	

Note:

- Base on the different figure between teams deployed and staff, it shows that at least **0.50%** was lost during the reporting period.

b. Planned and actual operational team-days of the month of February 2020

Table 4:

Tools/Assets	No. of Tools	Operational team days in Feb 2020		Different	Remarks
		Planned	Actual		
MPL	5	100	100		
BC	25	500	483	17	- In average, one BC 0.68 team.day a month. 2 BC of DU4_JMAS and DU6_CCL2 got refresher training from 3 rd to 7 th Feb. 2020.
DM	10	200	170	30	- In average, one DM 3 team.day a month. 2 DM teams of DU1_JMAS fixed and DU4_JMAS got refresher training .
CDM	1	20	10	10	- In average, one CDM 10 team.day a month. CDM#01 teams of



					DU4_JMAS got refresher training and cleaning .
SLD	4	80	80		- In average, one SLD 8.25 team.day a month. 3SLD of DU2_CPF got refresher training from 2nd to 10th February 2020 and SLD#06 . It's car was fixed whole month.
EDD	2	40	40		
TSD	1	20	17	3	-In average, one STD 3 team.day a month. TSD#01 of DU6_APOPO got refresher training .
TSC	39	780	752	28	- In average, one TSC 0.72 team.day a month. 4 TSC of DU6_CCL2 got refresher training from 3 rd to 7 th February 2020.
BLS	10	200	200		
BAC-S	9	180	180		
BAC-L	4	80	80		
BAC-MIT	4	80	80		
EOD	3	60	60		
ERW	6	120	103	17	- In average, one ERW 2.82 team.day a month. ERW#01 of DU4_JMAS got refresher training and cleaning equipment.
MDR	3	60	54	6	-In average, one MDR 2 team.day a month. MDR#01 of DU4&6_APOPO got refresher training .
CBMRR	33	660	580	80	
ESD	1	20	20		
DIT	2	40	40		
Total	162	3,240	3,049	191	

Note:

- In average, each mobile platoon and mobile team loses at least **1.18%** working days (team.day) due to :Especially, the movement of teams to new minefields and meeting; receptions of delegations and/or guests who visited the minefields and public holiday as mentioned in page 2, that are the cases of losing working days and progress during the reporting period.

5. Activities Output

a) Completion Minefield:

As part of above description, at least **67** mine/ERW fields have been cleared completely by the Demining Units, DDU and Head Quarters during the reporting period. All completed mine/ERW fields have been handed over to the local authorities and communities for productive purposes in accordance with their requests. The **Annex-C** attached shows the detail list of completed mine/ERW fields and some of them are on-going. Among those minefields cleared, it shows the number of beneficiaries as shown in table 5:



b) Number of Minefield and Socio Beneficiaries as of February 2020

With this regard, CMAC mine action activities contribute significantly to the country in terms of mine/UXO casualty reduction. They also contribute to the enhancement of livelihood, settlement, socio-economic and infrastructure activities for individual and also for the affected community development so as to meet the National Strategy of poverty reduction. Without demining, most development activities may not be taken place caused by landmine and UXO contamination. Therefore, the CMAC's mine action activity is still at the top important issue and requirement of the Royal Government of Cambodia to assist Cambodians' people and develop its country as well without the threats of landmine/ERW.



Anyway, during this reporting period, landmine and ERW clearance as of February 2020 provided at least **295** families as direct beneficiaries and **3,400** families as indirect beneficiaries. The Table 5 below is showing us the number of minefields completed and beneficiaries by each DU:

Table 5:

DUs	No. of M/Fs released	Area (qsm)	Beneficiaries			No. of M/Fs On going	No. of M/Fs suspended	No. M/Fs handed over
			(Family)					
			Direct	Indirect	Student			
DU1	12	458,597	80	-	-	1	-	12
DU2	19	1,562,966	41	3,055	-	24	-	19
DU3	3	302,527	6	-	-	3	-	3
DU4	4	271,821	23	94	-	10	-	4
DU5	18	2,904,526	95	-	-	18	-	18
DU6	8	1,061,608	24	123	-	18	-	8
TIMA	3	335,976	26	128	-	-	-	3
Total	67	6,898,021	295	3,400	-	74	-	67

c) Land Released Productivities as of February 2020

The overall progress achievement for the month of February 2020 was **7,576,575 m²**, which was **1,321,181 m²** was released as C2, and **6,030,448 m²** was released as C3 and **224,946 m²** was released by spot check to move ERW out from the small pits and prepare administration and safety areas for operations respectively. In addition, at least **1,707** items of Mine/ERW (561 AP, 9 AT and **1,137** ERW) were found in the affected landmine and UXO contamination areas to destroy safely. And it should be noted that these figures (mine/UXO found) as mentioned above are not included with the number of devices found and destroyed by EOD teams during the reporting period.

The below table 6 provides a summary of productivity achieved during the reporting period implemented by all Demining Units for the month of February 2020.

Table 6: Summary of productivity achieved:

Land Released Categories	Area (m ²)	AP Mine destroyed	AT Mine destroyed	ERW destroyed	IP Mine destroyed	Fragment	Small Arm(kg)
C1 area released	-	-	-	-	-	-	-
C2 area released	1,321,181	29	-	112	-	6,064	-
C3 area released	6,030,448	532	9	1,023	-	129,014	-
Other Clearance	224,946	-	-	2	-	919	-
Total	7,576,575	561	9	1,137	-	135,997	-

Note: - Above number of mines and ERW is not included EOD teams' ones.

d) BLS operational progress report

11 Baseline Survey teams (BLS) have been deployed to conduct the Baseline Survey services at the Eastern provinces of Cambodia as said above and they are under command and control of CMAC DU5 under the additional budget of USA (addendum), called USA-23 project. This project starts from August 5, 2019 to February 29, 2020. The Project Plan is to do survey in 744 villages responded by 11 BLS teams for 7-month period. In



results, **103** villages were visited in February 2020, and it is **96.26%** more than monthly target plan 2020 (as of **107** villages per month). In total from August 2019 to February 2020, all teams visited **654** villages; it is **87.90%** by comparing to the project target (as of 744 villages). Regarding this activity, those teams achieved the following results:

Table 7:

Description	February 2020	Accumulative (Aug 2019 – Feb 2020)
Number of villages visited	88	742
Number of new BLS polygons discovered	196	1,304
BLS size (m ²)	25,791,262	184,255,948

e) EOD Team Operational Achievement

In addition to the deployment of demining platoons and mobile teams, during the reporting period CMAC deployed at least 2 EOD teams, and other demining tools such as, BAC-MTT, ERWI, BAC etc throughout the country to collect and destroy mines and ERW reported by local authorities, local people, policemen and NGOs. Anyway, some of EOD teams were deployed at various Demining Unit, CMAC Technical Institute of Mine Action (TIMA), Development Demining Unit (DDU) and Headquarter. This includes 2 EOD and 1 BAC-MTT teams were deployed in CMAC headquarters to respond the urgent requests around Phnom Penh municipality, Kandal, Kampong Speu, Takeo, Kampot, Preah Sihanouk and Koh Kong provinces and others else were fully deployed to respond at the northwestern provinces of Cambodia such as in Battambang, Pursat, Pailin under DU2. By the way, in results to compare the number of **280** requests (EOD calls) in February 2020, it is **67.15%** lower than monthly target plan 2020 (as of **417** requests). They did this better work to provide a safe environment from the threat and fear of mines and ERW in the country. Regarding this activity, those teams achieved the following results:



Table 8:

Description	February 2020	Accumulative Progress (Jan–Feb 2020)
Areas Cleared (Spot check) in m ²	8,368	16,577
# EOD tasks conducted (Responded)	280	536
# APM destroyed	191	661
# ATM destroyed	12	13
# ERW destroyed	1,722	3,203
# Improvised mines destroyed	-	-
# Small Arms Ammunition (kg)	35	126
# Fragment (pieces)	785	1,957

Note: -During the reporting period, at least **261** requests with **191** AP, 12 AT mines and **1,681** were collected and destroyed by 7ERW, 4BAC-MTT and DU5 OPS section, ERWI#16, (DU1), ERWI#13,18 (DU2), ERW#01(DU4), ERW#02,08(DU6) ERW#06(TIMI), BAC-MTT#10,14,28, OPS-section (DU5) and also BAC-MTT#23 at CMAC HQ in Phnom Penh.

f) Mine Risk Education and Reduction (MRE)



A part from landmine and UXO clearance as called land release, MRE approaches and methods are also combined into the expert teams and platoons to do MRE activities in the working target areas. These teams and platoons had conducted households and field visits and also concentration of MRE messages to individual and small group of audiences. In addition to this, CMAC also deployed 32 CBMRR District Focal Point (DFP) throughout the country to conduct mine risk education and reduction (MRE) activities directly to local and vulnerable people who are living in mine/UXO affected areas to understand as well the mine and UXO incident, threatening and stay away for individual and family safety, especially to avoid from any tampering on unknown items. This includes MRE and collecting requests from local communities and authorities and NGOs. However, the remaining CBMRR are still doing their tasks as well. Regarding this, at least **1,651** MRE sessions to **150,213** audiences, and visited **11,063** households and collected **536** community's requests, were carried out by all CBMRR and demining platoons and mobile teams during the reporting period. The below Table 8 provides an overview of details MRE outputs as of February 2020.



Table 9: Overview of outputs

Types of Progresses	Demining teams	CBMRR (DFP)	Total
Village visited	423	381	804
Course of MRE session	664	987	1,651
Household and field visited	5,046	6,017	11,063
Total audience group attended in MRE Course	39,219	110,994	150,213
➤ Men	11,650	41,720	53,370
➤ Women	12,171	57,241	69,412
➤ Children in school	11,706	9,234	20,940
➤ Out of school children	3,692	2,799	6,491
Total number of requests(M/UXO) and report to EOD	475	61	536
AP & Improvised mines	41	32	73
AT mines	6	5	11
UXO	1,128	109	1,237
MRE materials have been used for their activities			
- large T-shirt	-	-	-
- Small T-shirt			
- Note book	403	70	473
- Poster	233	90	323
- Flyer	11	70	81
- Leaflet	-	60	60
- Other	-	-	-

Productivity Analysis

1) Progress Comparison to the Set IWP 2020 (by Month):

The table below is demonstrated the Set of Monthly Clearance Target in IWP 2020 by comparing to Progress Achievement accomplished in February 2020.

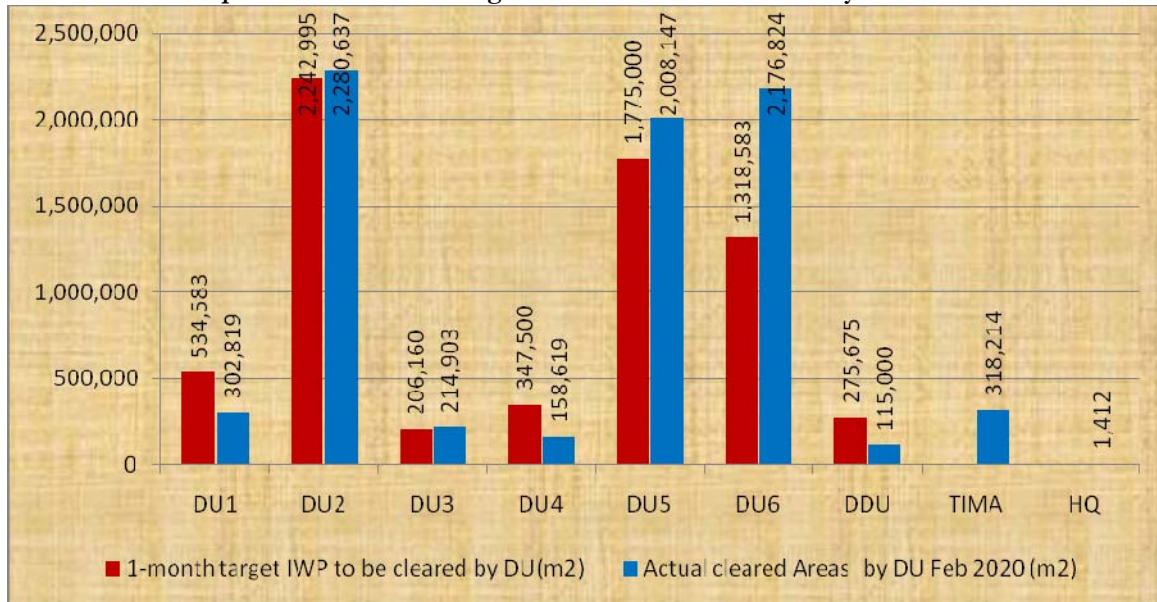
Table 10: Monthly Clearance Target VS Actual Progress Achievement February 2020

S/N	Demining Unit	Areas to be cleared by DU in February 2020 (m ²)	Actual Achievement in February 2020	
			Actual Progress by DU in February 2020 (m ²)	% in comparing to Monthly Work Plan by DU
1	DU1	534,583	302,819	56.65%



2	DU2	2,242,995	2,280,637	101.68%
3	DU3	206,160	214,903	104.24%
4	DU4	347,500	158,619	45.65%
5	DU5	1,775,000	2,008,147	113.14%
6	DU6	1,318,583	2,176,824	165.09%
7	DDU	275,675	115,000	41.72%
8	TIMA	-	318,214	-
9	HQ	-	1,412	-
	Total	6,700,496	7,576,575	113.07

Chart4: Comparison of each DU target set in IWP 2020 VS Monthly Actual Achievement



2) Progress Comparison to 2-Month Planned target VS accumulative progress

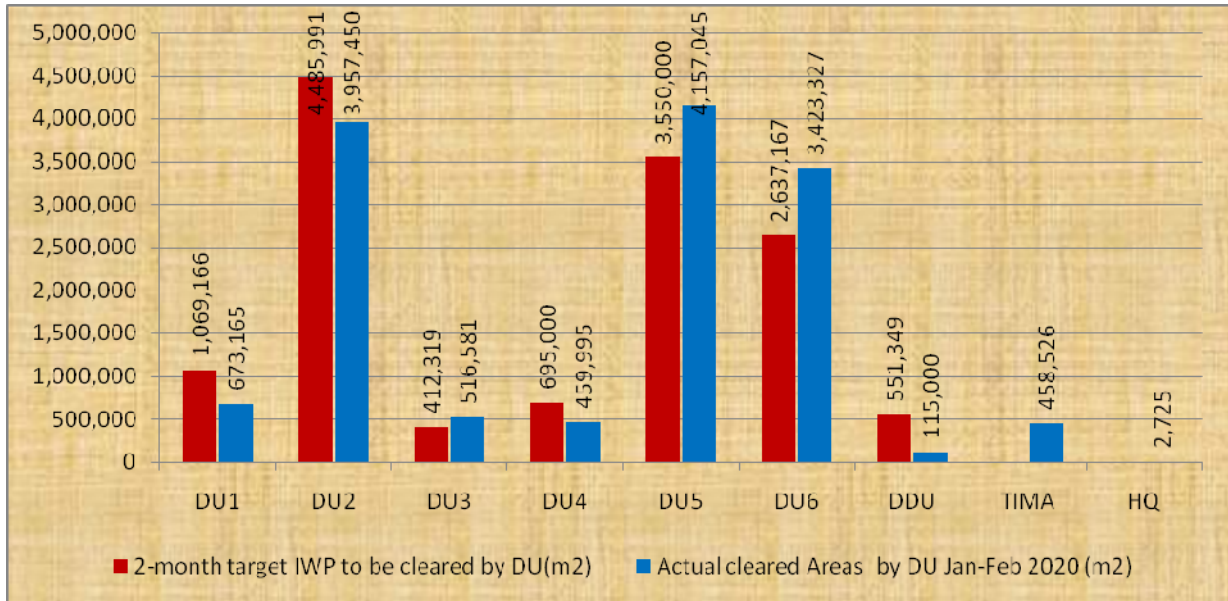
the table 11 below shows each Demining Unit accumulative progress achieved against the planned target of each DU, starting from January to February 2020.

Table 11: 1- Month Clearance Target VS Accumulative Actual Progress Achievement Jan-Feb 2020

S/N	Demining Unit	2-Month Planned target by DU from January to February 2020 (m ²)	Actual Achievement in February 2020	
			Accumulative Actual Progress by DU from Jan-Feb 2020 (m ²)	% in comparing to 2-Month Work Plan by DU
1	DU1	1,069,166	673,165	62.96%
2	DU2	4,485,991	3,957,450	88.22%
3	DU3	412,319	516,581	125.29%
4	DU4	695,000	459,995	66.19%
5	DU5	3,550,000	4,157,045	117.10%
6	DU6	2,637,167	3,423,327	129.81%
7	DDU	551,349	115,000	20.86%
8	TIMA	-	458,526	-
9	HQ	-	2,725	-
	Total	13,400,992	13,763,814	102.71%



Chart5: Comparison of 2-Month Planned Target VS 2-Month Actual Achievement



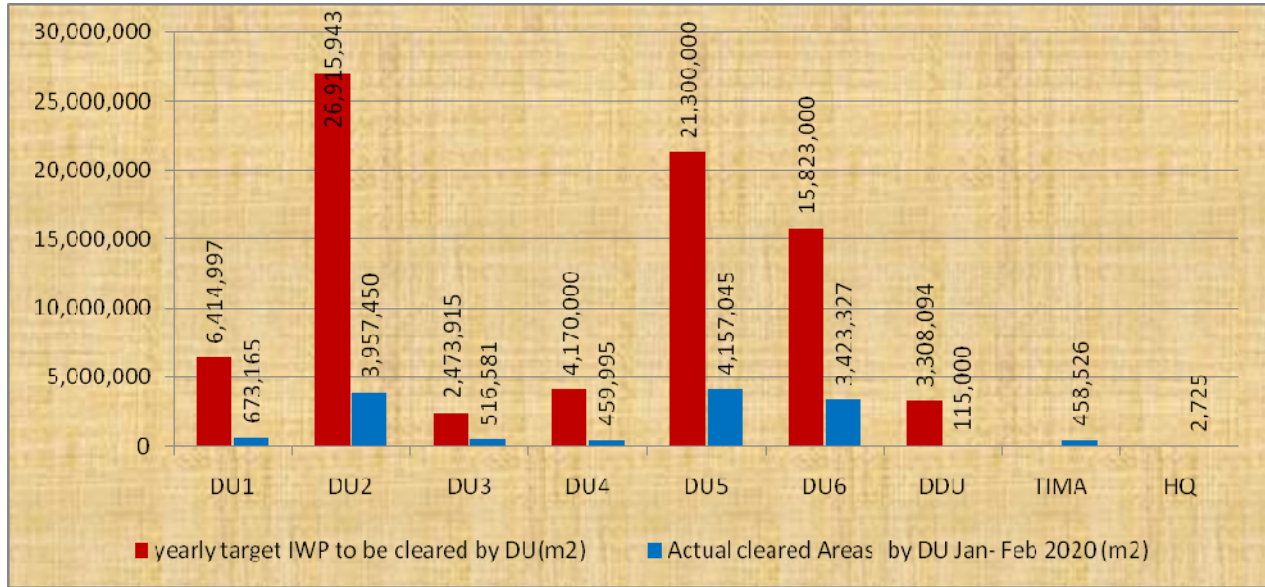
3) Progress Achievement by Demining Units

The purpose of setting out the planned target to all Demining Units is for CMAC Internal Monitoring activity at CMAC Senior Level and also to reflect progress achievement against the annual work plan based on existing projects, project target, demining resources, clearances techniques and methodologies of CMAC. Regarding this, each Demining Unit was not set out the same standardized figures of Planning Target to perform the tasks. This due each Demining Unit consists of different projects, resources, timeframe and budgeting to implement the project at different terrain and locations. However, the table 11 below shows us each Demining Unit progress achieved against the planned target of each DU, starting from January to February 2020.

Table 12:

S/N	Demining Unit	Annual Work Plan Set, 2020		Actual Achievement, 2020	
		Areas to be cleared by DU in (m ²)	Annual (%) by DU	Accumulated progress by DU in Jan to Feb 2020 in (m ²)	% in comparing to Annual Work Plan by DU
1	DU1	6,414,997	8.0%	673,165	10.49%
2	DU2	26,915,943	33.5%	3,957,450	14.70%
3	DU3	2,473,915	3.1%	516,581	20.88%
4	DU4	4,170,000	5.2%	459,995	11.03%
5	DU5	21,300,000	26.5%	4,157,045	19.52%
6	DU6	15,823,000	19.7%	3,423,327	21.64%
7	DDU	3,308,094	4.1%	115,000	3.48%
8	TIMA	-	-	458,526	
9	HQ			2,725	
	Total	80,405,949	100 %	13,763,814	17.12%

Chart6: Comparison of each DU target set in IWP 2020 VS Actual 2-month Achievement (Jan-Feb 2020)



In February 2020, almost DUs achieved productivities against the monthly IWP target 2020 but it was still encountered issues as the following points:

No.	Demining Unit	Issues	Lost productivity (m ²)
1	DU6& TIMA	1 BC and 4 TSC were former of DU1, 2 & Du3_CFR project moved to work DU6 of CCL-02 project got refresher training course at TIMA from 3 rd -7 th February 2020.	125,000
2	DDU	CMAC has not got the Southwest irrigation project as expectation in February 2020.	275,675
Total			400,675

If we add the lost productivity with actual one as table showing:

1-Month target	Actual productivity	Lost productivity	Total (m ²)	Compared to 1-month target (%)
6,700,496 m ²	7,576,575 m ²	400,675 m ²	7,977,250 m ²	119.05%

4) Progress Analysis by Project:

In addition to the progress by each DU and by demining tools, CMAC is still implementing and recording the progress by each project including the bilateral and earmark projects. During the reporting period, some projects have been being continuing an implementation so called USA-NPA(USA-23) project of DU5 from 1 March 2019 to 28 February 2020 and CFR18 at DU1 and CFR19 at DU2 and DU3 start 01 January to 28 February 2020. Two projects have started an implementation so called Counter Part Fund (CPF) of DU2 from 01 January to 30 June 2020 and CCL02 project of DU6 from 01 January to 31 December 2020. However, the accumulative progress of all projects' achievement from the starts up to February 2020 are presenting as below table 11:

Table 13: Some Current Projects Executing up to February 2020

Project Name	Project Duration		Achievement			Project Target	Percentage
	Starting date	End date	Project progress up to last month	Project progress in Feb 2020 (m ²)	Project accumulated progress up to Feb		



			in 2020 (m ²)		2020 (m ²)		
CAC (IMCCD)	16-Aug-19	15-Aug-20	155,120	20,225	175,345	200,000	87.67%
USA-NPA (USA22)	1-Mar-19	28-Feb-20	22,961,876	2,008,147	24,970,023	23,128,858	107.96%
Counterpart Fund	1-Jan-20	30-Jun-20	1,384,386	2,139,229	3,523,615	11,880,000	29.66%
CCL-02	1-Jan-20	31-Dec-20	1,222,203	2,236,915	3,459,118	17,610,000	19.64%
CFR-BMC-18	1-Jan-19	28-Feb-20	4,206,021	145,042	4,351,063	2,263,015	192.27%
CFR-BTB-19	1-Jan-19	28-Feb-20	2,873,071	245,085	3,118,156	2,255,968	138.22%
CFR-PLN-20	1-Jan-19	28-Feb-20	2,395,603	91,001	2,486,604	1,724,027	144.23%

5) Operational Factor Analysis:

Regarding the above demonstrated progress, some relevant reasons for the productivity achieved during the reporting period (by focusing on February 2020) areas below:

1. **Fragment Contamination (FC)**, in total **135,997** pieces found over a cleared area of **7,576,575 m²**. This is **0.02** pieces per square meter. In percentage of technical terms, it is:
 - **92.96%** of land cleared had only light fragment contamination, in the operational areas of all DUs,
 - **7.04%** of land cleared had medium fragment contamination, in the operational areas at all DUs,

*Note: * Fragment Contamination Factor (FC) Light=1(0.25 to 2 pieces per m²); medium=0.8 (2 to 3.50 pieces per m²); heavy=0.6 (3.50 to 4 and/ or over 4 pieces per m²)*

2. **The presence of personnel at work, in total (16,392 person-days):**
 - 86.60% of total field personnel were present at work
 - 1.56% of total field personnel were assigned to attend CMAC training courses,
 - 0.15% were on mission,
 - 3.93% were on taking annual leave,
 - 1.17% were on sick leave,
 - 0.01% were on compensation leave
 - 0.13% were on maternity leave
 - 0.38% were on leave without pay
 - 0.00% were on leave without permission,
 - 5.26% were shortfall field personnel,
 - 0.04% were absent ,
 - 0.11% were on obligation leave (to work out of the project temporarily...etc),
 - 0.65% were absent for other reasons
3. **Working Hours, in total (16,852 hours-days):**
 - 75.60% of total times were working hours
 - 0.24% of total times were the raining period,
 - 12.65% of total times were the travelling hours,
 - 1.39% of total times were the maintenance periods of all BC and DM teams,
 - 0.15% of total times were the repairing hours of all BC and DM teams,
 - 0.27% of total times were waiting periods to get spare part for repairing some BC and DM teams,
 - 0.05% of total times were the movement or replacing accommodation and transportation of goods; and BC or DM to the new location,
 - 9.64% of total times were other reasons and or moved BC to assist other development.
4. **The Mine Detectors, in total (11,823 mine detector-days):**
 - 63.18% of all mine detectors (MD) were actually used for the operations.
 - 36.82% of mine detectors were not used due to deminers being absent or on leave, or detectors broken and being sent for repairs at the CMAC Central Workshop in Battambang province,



- 5. The mine detection dogs (MDD), in total (524 mine detection dog-days):**
- 95.25% of all mine detection dogs (MDD/EDD) were actually used for operations.
 - 0.95% of mine detection dogs were assigned to attend refresher training at the CMAC TC and
 - 0.00% of mine detection dogs were sick and had to be treated at the CMAC Training Center.
 - 3.82% of lack mine detection dogs.

6) Other Reasons Affecting Operational Progress:

a) Adherence to work plan

- During the reporting period as of February 2020, DU5 are still improving and urging the use of the Land Release Techniques, BLS, Process and methodology to eliminate the mistakes to their demining teams in terms of correction and prevention action of any misunderstanding and technical aspects so that to work as well, speed up operations and increasing progress to meet the planned target of CMAC Annual Work Plan as set out of the year 2020. However, some mistakes of technical aspects in doing BLS and Survey are still complicated issues at frontline level that needs experts from CMAC HQ to assist them for correction action in a timely.

b) Collaboration with others

- At least **67** minefields have been cleared in February 2020 handed over to the land owners and local communities for productive purposes at Banteay Meanchey, Battambang, Pailin, Siem Reap, Preah Vihear, Kampong Cham, Kratie and various provinces in collaboration with the local authorities, MAPU and CMAA in doing the QA/QC activities before releasing land safely.
- In addition to the above mentioned, during the reporting period all DUs have also cooperated with MAPU, local authorities, NGOs, stakeholders and other development partners in Banteay Meanchey, Battambang, Pailin, Siem Reap, Oddar Meanchey, Preah Vihear, Kampong Cham, Kratie and southeastern provinces of Cambodia to collect the mine/UXO clearance requests for their next clearance planning.

c) Challenges and actions taken

Demining Unit 1:

- Some operational material/equipment is broken and older.

Demining Unit 2:

- There was dense vegetation in some areas.
- Some areas were mineralized soils.
- There was a lot of fragmentation.
- Some operational material/equipment such as grass cutters and hand cutting tools are broken.

Demining Unit 3:

- There was dense vegetation in some areas.
- Some fields are slope areas.
- Some areas were mineralized soils.
- There was a lot of fragmentation.
- Some grass cutters and hand cutting tools could not sharpen anymore.

Demining Unit 4:

- There was dense vegetation.
- Some areas were mineralized soils.
- Some fields are the plateaus.



Demining Unit 5:

- There were dense vegetation, soil as solid as rock and mineralized soils in some areas.
- There were insects in some UXO fields to disturb operational clearance.
- The ERW requests from local authorities were not taken place on time due because of remote places.

Demining Unit 6:

- There was dense vegetation.

Safety and Occupational Health

- There were neither critical issues nor accidents at all DUs for this reporting period, especially the safety principle and staff healthy were strengthened and suffused to all mobile platoons and teams about SOP, sanitation, epidemic diseases and food prevention.
- All DUs, there were no critical issues concerning to a safety principle and staff healthy happened during the reporting period.

d) The Next Month Planning

- All DUs are going to continue strengthening and urge all demining teams to implement and follow on all existing SOPs to avoid mine/ERW incident during operations and as well as to provide them for safe manner and professionalism in demining.
- The department of Planning/Operation is going to urge all DUs to continue conducting the refresher courses on the gap point on technical issues and NTS/BLS found by QA/QC teams and make corrective and preventive action in a timely, and also to eliminate the re-occurrence of mistakes as much as possible.
- All DUs will continue to follow up and work closely to monitor and conduct QA/QC independently with their own resources and also to cooperate with CMAA QA/QC teams as much as possible, to eliminate all mistakes of all demining teams' performance as well and also to increase productivity to achieve their set target in 2020.
- All DUs will continue to maintain, follow up and implement the existing projects at their own DUs. Taking responsibility for coordinating and cooperating with CMAC Headquarters and the donors, to accomplish the project goals and objectives and the planned targets for 2020 as well.
- All DUs will continue to perform and apply the land release process and techniques to all demining teams in order to increase productivity and to achieve the set target in 2020.

6. Major Events:

1. On 05th February 2020, delegates of Canada accompanied by CMAA officials visited DU1 to look at operational activity at Mine filed-BL/CMAA/20056 in Kouk Samraong Lech village, Banteay Chhmar commune, Thma Puok district, Banteay Meanchey province. Their purpose of visit was to evaluate the project in 2019.
2. On 20th February 2020, H.E Heng Ratana, Delegate of Royal Government of Cambodia as in charge of Director General of CMAC accompanied by some directors of department presided over the closing and opening ceremony of USA project at DU5.
3. On 25th February 2020, H.E Heng Ratana, Delegate of Royal Government of Cambodia as in charge of Director General of CMAC led Australian ambassador to Cambodia visited DU2, at Doun Tret village, Ta Sanh commune, Samlout district, Battambang province. The purpose of visit was to see the beneficiaries of post-clearance mine-fields and see demining experts.



7. Suggestion/Conclusion:

- All demining activities and safety principle at ground levels are still continuing to respect and follow on them and existing SOPs so that everyone (deminers) gets safe during their performing the demining activities without any accident from explosion of landmine and UXO, in February 2020.
- The Department of Support/HR should strengthen performing its processes of resupply, repairs for operational equipment, vehicles, brush cutters, demining machines and materials smoothly for all DUs.
- Without the equipment support/resupply in time for all Demining teams, it will make decreasing of massive progresses of the performing will not meet the annual target plan of 2020.