



មជ្ឈមណ្ឌលសកម្មភាពកំចាត់មីនកម្ពុជា
Cambodian Mine Action Centre

CMAC

Operational Achievement Report



March - 2020



CMAC Monthly Operational Achievement Report

Period: 01 – 31 March 2020





1. General Situation

In March 2020, Clearing For Results (CFR) projects of DU1, 2 &3, and 10 Baseline Survey teams of DU5_USA-23 project have finished at the end of February 2020. Another hand, 6 Technical Survey and clearance teams of DU4_Apsara project was delayed since 01 March 2020. All teams that finished and delayed projects relocated to work and were integrated with other teams in DU2_CPF and DU6_CCL-02 projects. All CMAC Demining Components and Demining Units were assigned to work for 27 working days that additional 5 days (26-31 March 2020). 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 8 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 March 2020 is represented as the following:

2. Deployment Tools (Asset)

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: March 2020

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



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Development Demining Unit (DDU)	-	-	-	-	3	3	-	-	-	-	-	-	-	-	1	-	-	5	1	-	-	-	-	-
CMAC HQ (Phnom Penh)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
CMAC Technical Institute of Mine Action (TIMA)	-	-	-	-	-	-	10	-	-	-	-	1	1	-	-	2	-	-	-	-	-	-	-	-
National Dog Center (NDC)	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Community Development Center (CDC)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-
Total Teams	5	4	4	5	29	10	10	3	3	2	1	1	2	7	2	4	2	14	5	6	1	2	8	33

Note:

a. Movement

- 2 TSC (TSC#13&24) of former DU1_CFR18 transferred to DU1_CTB project on 01 March 2020.
- 2 TSC (TSC#11&28) of former DU1_CFR18 moved to work DU4_Apsara project on 01 March 2020.
- BCT#12 of former DU2_CFR19 transferred to DU2_CPF project on 01 March 2020.
- 3 TSC (TSC#01, 07&15) moved to work at DU4_Apsara project on 01 March 2020.
- SLD#07 of former DU2_CPF project was demobilized on 01 March 2020.
- TSC#19 of former DU3_CFR20 Moved to work at DU6_CCL-02 project on 01 March 2020.
- TSC#30 of former DU3_CFR20 Moved to work at DU4_Apsara project on 01 March 2020.
- 10 BLS (#01, 02, 03, 04, 05, 06, 07, 08, 09) of former DU5_USA-23 got refresher training at TIMA from 01-15 March 2020.
- BLS#07&09 moved to work at DU6_CCL02 from 16 March 2020.

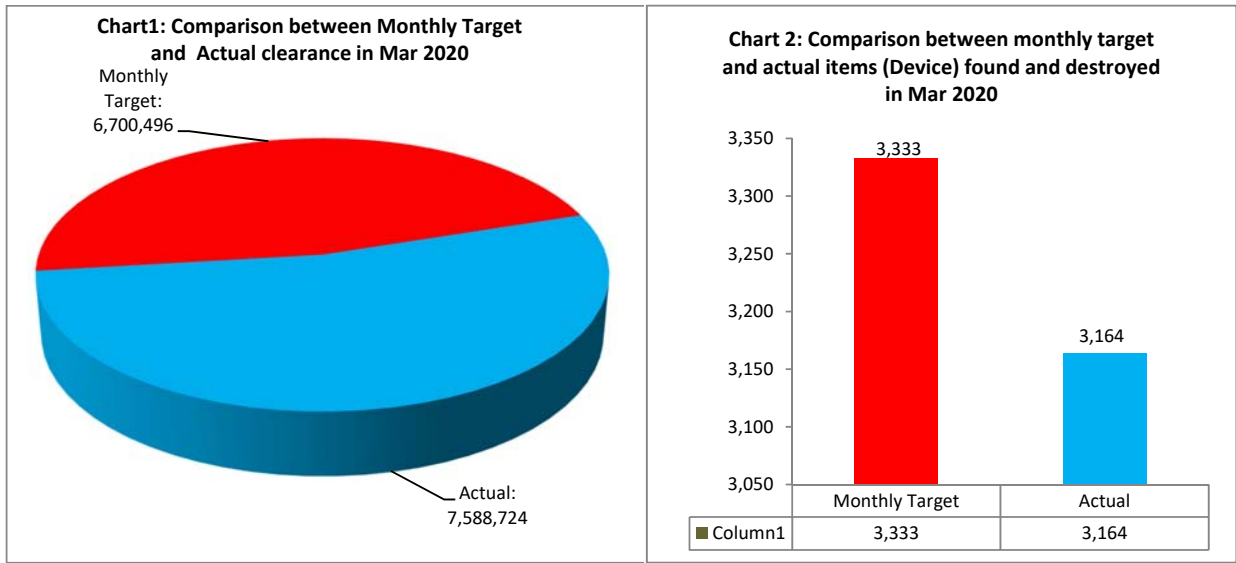
b. Integration

- 3TSC(#01,07&15) of former DU4_Apsara integrated with 3DM(#02,03&09) of DU2_CPF and 5 BLS(#01,02,03,04&05) of former DU5_USA-23 integrated with 5DM (#01,05,06,07&08) of DU2_CPF on 16 March 2020.
- 3TSC(#11,28&30) of former DU4_Apsara integrated with 3BC(#10,11&14) of DU6_CCL-02 and 3 BLS(#06,08&09) of former DU5_USA-23 integrated with 3BC(#02,05&08) of DU6_CCL-02 on 16 March 2020..

3. Summary of Progress

However, as mentioned on the results of March 2020; a total of **7,588,724m²** of land has been released throughout the country. This includes **4,162,166 m²** of minefield areas, and **3,322,572 m²** of UXO field areas and **103,986 m²** of areas cleared without sketches for safety principles, which is **113.26%** compared to the monthly target of **6,700,496 m²** in 2020. But if this is compared to the same period of March 2019 (as of 5,540,602 m²), it is **36.97%** more than the progress of March 2019. The details of CMAC accumulated operational summary progress report from 1992 up-to March 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 March 2020.

Anyway, if comparing the progress of March to February 2020 (as of **7,455,877 m²**), it is **1.78%** more than progress of February 2020.



A part of the above mentioned; at least **556** AP mine, 20 AT mines and **2,588** ERW were found and destroyed safely. If comparing these items (mines and Explosive Remnants of War) found and destroyed in March 2020 (as of **3,164** items) to the monthly target in 2020 (as of 3,333 items), it is **94.93%**. The Chart 2 above is represented the device found and destroyed by comparing to monthly target of mine/UXO in March 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	Mar-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_CTB	-	-	2TSC	This project starts 01 March to 30 April 2020.
3	DU1,-PCD-JMAS	1MP,2BC, 1DM, 1ERWI	1MP,2BC, 1DM, 1ERWI	1MP,2BC, 1DM, 1ERWI	1)-This project starts from 08 Oct 2019 to 07 Oct 2020.
4	DU1-SVC (Infrastructure),	1Buldozer, 1 Compact roller, 1 dump truck, 1 Excavator	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.
5	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).



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S/N	Project's name	Jan-20	Feb-20	Mar-20	Remarks
6	DU2-CAC (IMCC)	1TSC	1TSC	1TSC	This project is just renewed for a new agreement from 16 August 2019 to 15 August 2020.
7	DU2-CPF	4MP, 8DM, 11TSC, 3SLD, 2ERWI, 1BC, 12PC&CBM, project staff	4MP, 8DM, 11TSC, 3SLD, 2ERWI, 1BC, 12PC&CBM, project staff	4MP, 8DM, 11TSC, 2SLD, 2ERWI, 2BC, 12PC&CBM, project staff	1)- CPF project starts from 01 Jan to 30 Jun 2020 2)- SLD#07 was demobilized on 01 March 2020.
8	DU2-MAG	3SLD	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)
9	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).
10	DU3-CPF	2TSC	2TSC	2TSC	1)- CPF project starts from 01 Jan to 30 Jun 2020.
11	DU3-CMA-19	2CBM-PC, DU3 some office staff	2CBM-PC, DU3 some office staff	3CBM-PC, DU3 some office staff	
12	DU3, NTS.BLS	2NTS.BLS	-	-	This project starts from 01 Oct 2019 to 31 Jan. 2020.
13	DU4-MDR-APOPO	1BC, 1TSC,1MDR	1BC, 1TSC,1MDR	1BC, 1TSC,1MDR	1)-This project starts on 01 Jan to 31 Dec 2020 (MRD#01, TSC#22 , BC#25).
14	DU4, CMD_JMAS	1CDM, 1BC, 1DM, 1ERWI, CBURR	1CDM, 1BC, 1DM, 1ERWI, CBURR	1CDM, 1BC, 1DM, 1ERWI, CBURR	This project starts on 01 March 2019 to 29 March 2020.
15	DU4-CCL2	2PC&CBM& 18 office staff	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.
16	DU5& HQ –USA23	9BAC-S, 4BAC-L, 4BAC-MTT, 2EDD, 1BC	9BAC-S, 4BAC-L, 4BAC-MTT, 2EDD, 1BC		This project starts on 01 March 2019 to 29 February 2020.
17	DU5& HQ –USA24	-	-	9BAC-S, 4BAC-L, 4BAC-MTT, 2EDD, 1BC	This project starts on 01 March 2020 to 28 February 2021.
18	DU5_USA-23 (BLS)	10 BLS	10 BLS	-	1)-This project starts on 05 August 2019 to 29 March 2020.
19	DU6_CCL2	2ERW, 5TSC, 6BCT, 6CBM& 18 office staff	2ERW, 5TSC, 6BCT, 6CBM& 18 office staff	1SLD, 2ERW, 10TSC, 6BCT, 6CBM& 18 office staff	This project starts from 01 Jan to 31 Dec 2020.
20	DU6-APOPO	1MDR, 2TSC, 1BC, 1TSD	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).
21	DDU-EDC-7-8	2TSC, 1ERWI	2TSC, 1ERWI	2TSC, 1ERWI	-This project starts on 16 Mar 2019.
22	DDU-NR5-4(RGC16)	2BC	2BC	2BC	This project have been renewed from 1 Jan to 30 Jun 2020.
23	DDU-NR5-4(RGC17)	3BC,1TSC	3BC,1TSC	3BC,1TSC	This project have been renewed from 1 Jan to 30 Jun 2020.
24	DDU-NR5-4(RGC18)	1BC,3TSC	1BC,3TSC	1BC,3TSC	This project have been renewed from 1 Jan to 30 Jun 2020.
25	HQ_CCL-02	2EOD	2EOD	2EOD	This project starts on 01 March 2020.

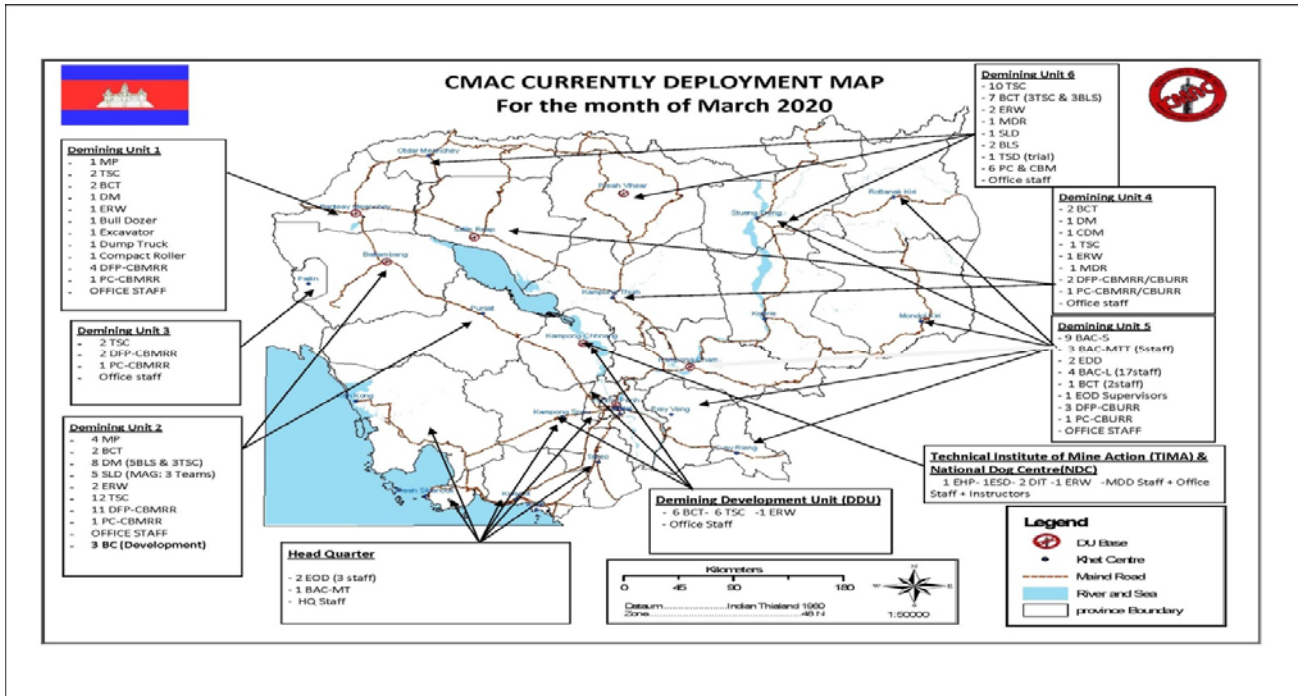


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CAMBODIAN MINE ACTION CENTRE

S/N	Project's name	Jan-20	Feb-20	Mar-20	Remarks
26	TIMA-CCL2	2DIT, 1ERW& 25 office staff & instructors	2DIT, 1ERW& 25 office staff & instructors	2DIT, 1ERW& 25 office staff & instructors	This project starts from 01 Jan to 31 Dec 2020.
27	NDC_CMA-19	1ESD, 38staff	1ESD, 38staff	1ESD, 38staff	This project starts from 01 Jan to 31 Dec 2020.
28	TC- Golden West foundation	1Explosive Harvesting team (8persons)	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.
29	Community Development Center (CDC)	2BC	2BC	2BC	

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

Figure:1



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

Table 3:

Demining Tool/Asset	No. of Teams	No. of Staff per Team	Total staff in Mar 2020	Actual Staff		Different	Remarks
				Male	Female		
MPL-27staff	5	27	135	120	13	2	
BC-15staff	6	15	90	60	6	24	
BC-9staff	5	9	45	45			
BC-2staff	14	2	28	28			
DM-15staff	8	15	120	110	10		
DM-3staff	2	4	4	4			
CDM-(9staff)	1	9	9	9			
SLD	3	10	30	28		2	Not including SLD#03, SLD#05 and SLD#12 hired to MAG.



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EDD	2	6	12	11	1		
TSD	1	5	5	5			
TSC-7staff	10	7	70	70			
TSC-5staff	29	5	145	131	6	8	
				0			
BLS	10	5	50	50			
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-MIT	4	5	20	20			
EOD-3staff	2	3	6	6			
ERW	8	4	35	35			
MDR	2	10	20	12	8		
CBMRR+PC	33	1	32	26	6	4	
ESD	1	5	5	3	2		
DIT	2	5	10	10	-		
Total	161		994	891	63	40	

Note:

- Base on the different figure between teams deployed and staff, it shows that at least **0.25%** was lost during the reporting period.

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

Table 4:

Tools/Assets	No. of Tools	Operational team days in Mar 2020		Different	Remarks
		Planned	Actual		
MPL	5	110	95	-23	- In average, one MPL 4.60 team.day a month. 4MPL of DU2_CPF didn't have fuel for 6 days from 24-31 Mar. 2020.
BC	25	550	615	+45	- In average, one BC 1.80 team.day a month. All BC of DUs worked additional 5 days.
DM	10	220	176	-44	- In average, one DM 34.40team.day a month. All DM teams of DUs have no fuel (DU2) and fixed (DU1&4) for whole month .
CDM	1	22	11	-11	- In average, one CDM 11 team.day a month. CDM#01 teams of DU4_JMAS got refresher training and cleaning .
SLD	3	66	63	-7	- In average, one SLD 2.33 team.day a month. 2SLD of DU2_CPF had no fuel for 6 days.
EDD	2	44	34	-10	- In average, one SLD 5 team.day a month. 2EDD of DU5_USA24 got refresher training from 2nd to 13th March 2020.
TSD	1	22	27	+5	-In average, one STD 5 team.day a month. TSD#01 of DU6_APOPO worked additional 5 days.
TSC	39	726	774	+24	- In average, one TSC 0.62 team.day a month. All TSC of DUs worked 5 more 5 days.
BLS	10	44	12	-32	In average, one BLS 3.20 team.day a month. 2 BLS of DU6_CCL-02 have started working on 16 March 2020.
BAC-S	9	198	153	-45	- In average, one BAC-S 5 team.day a month. 9 BAC-S of DU5_USA24 got refresher training from 2nd to 13th March 2020.
BAC-L	4	88	68	-20	- In average, one BAC-L 5 team.day a month. 4 BAC-L of DU5_USA24 got refresher training from 2nd to 13th March 2020.
BAC-MIT	4	88	78	-10	- In average, one BAC-MIT 2.50 team.day a month. 4 BAC-MIT of DU5_USA24 got refresher training from 2nd to 13th March 2020.
EOD	2	44	54	+10	



ERW	8	176	180	+4	- In average, one ERW 0.50 team.day a month. 8 ERW of DUs worked 5 more days.
MDR	2	44	48	+4	-In average, one MDR 2 team.day a month.2 MDR of DU4&6_APOPO worked 5 more days.
CBMRR	33	638	628	-10	
ESD	1	22	27		
DIT	2	44	54	+10	In average, one DIT 5 team.day a month.2 DIT of TIMA worked 5 more days.
Total	161	3,146	3,097	-110	

Note:

- In average, each mobile platoon and mobile team loses at least **0.68%** 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 **51** 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 March 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 March 2020 provided at least **134** families as direct beneficiaries and **1,761** families as indirect beneficiaries. The Table 5 below is showing us the number of minefields completed and beneficiaries by each DU:

Table 5:

DU	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	3	139,595	7	-	-	5	-	3
DU2	26	3,162,265	64	1,329	-	18	-	26
DU3	2	197,950	3	-	-	2	-	2
DU4	3	183,916	8	34	-	4	-	3
DU5	1	84,867	7	-	-	16	-	1



DU6	15	2,732,759	42	167	-	7	-	15
TIMA	1	113,454	3	231	-	2	-	1
Total	51	6,614,806	134	1,761	-	54	-	51

c) Land Released Productivities as of March 2020

The overall progress achievement for the month of March 2020 was **7,588,724 m²**, which was **1,519,494 m²** was released as C2, and **5,965,244 m²** was released as C3 and **103,986 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 **1,400** items of Mine/ERW (401 AP, 16 AT and **983** 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 March 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	1,519,494	16	-	120	-	7,977	-
C3 area released	5,965,244	385	16	861	-	121,960	-
Other Clearance	103,986	-	-	2	-	2,129	-
Total	7,588,724	401	16	983	-	132,066	-

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

d) BLS operational progress report

2 Battle Areas Clearance-Small teams (BAC-S) of DU5 and 2 Baseline Survey teams (BLS) of DU6 have been deployed to conduct the Baseline Survey services at Prey Veng and Preah Vihear provinces respectively. Regarding this activity, those teams achieved the following results:

Table 7:

Description	DU5	DU6	Total
Number of villages visited	22	3	25
Number of new BLS polygons discovered	30	115	145
BLS size (m ²)	4,337,395	35,970,945	40,308,340

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, ERW, 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 **310** requests (EOD calls) in March 2020, it is **74.34%** 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	March 2020	Accumulative Progress (Jan–Mar 2020)
Areas Cleared (Spot check) in m ²	11,913	28,490
# EOD tasks conducted (Responded)	310	846
# APM destroyed	155	816
# ATM destroyed	4	17
# ERW destroyed	1,605	4,808
# Improvised mines destroyed	-	-
# Small Arms Ammunition (kg)	31	157
# Fragment (pieces)	588	2,545

Note: -During the reporting period, at least **282** requests with **155** AP, 1 AT mines and **1,537** were collected and destroyed by 8ERW, 4BAC-MTT and DU5 OPS section, ERW#16, (DU1), ERW#13,18 (DU2), ERW#01(DU4), ERW#02,08(DU6), ERW#22(DDU), 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 **1,341** MRE sessions to **143,479** audiences, and visited **71,355** households and collected **290** 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 March 2020.

Table 9: Overview of outputs

Types of Progresses	Demining teams	CBMRR (DFP)	Total
Village visited	309	338	647
Course of MRE session	426	915	1,341
Household and field visited	4,529	66,826	71,355
Total audience group attended in MRE Course	27,911	115,568	143,479
➤ Men	10,285	48,841	59,126
➤ Women	9,831	54,445	64,276
➤ Children in school	5,611	8,444	14,055
➤ Out of school children	2,184	3,838	6,022
Total number of requests(M/UXO) and report to EOD	236	54	290
- AP & Improvised mines	41	54	95
- AT mines	3		3
- UXO	826	174	1,000
MRE materials have been used for their activities			
- large T-shirt	-	-	-
- Small T-shirt			
- Note book	348	-	348
- Poster	163	34	197
- Flyer	5	43	48
- Leaflet	-	-	-
- Other	-	-	-

Productivity Analysis

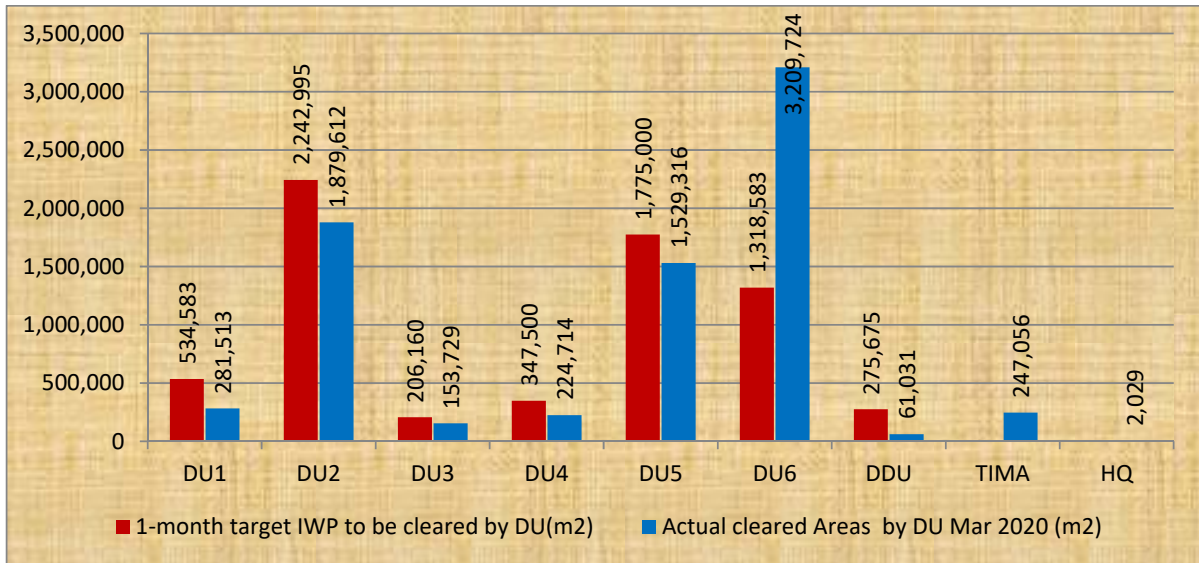
1) Progress Comparison to the Set IWP 2020 (by Month):

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

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

S/N	Demining Unit	Areas to be cleared by DU in March 2020 (m ²)	Actual Achievement in March 2020	
			Actual Progress by DU in March 2020 (m ²)	% in comparing to Monthly Work Plan by DU
1	DU1	534,583	281,513	52.66%
2	DU2	2,242,995	1,879,612	83.80%
3	DU3	206,160	153,729	74.57%
4	DU4	347,500	224,714	64.67%
5	DU5	1,775,000	1,529,316	86.16%
6	DU6	1,318,583	3,209,724	243.42%
7	DDU	275,675	61,031	22.14%
8	TIMA	-	61,031	-
9	HQ	-	2,029	-
	Total	6,700,496	7,588,724	113.26%

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



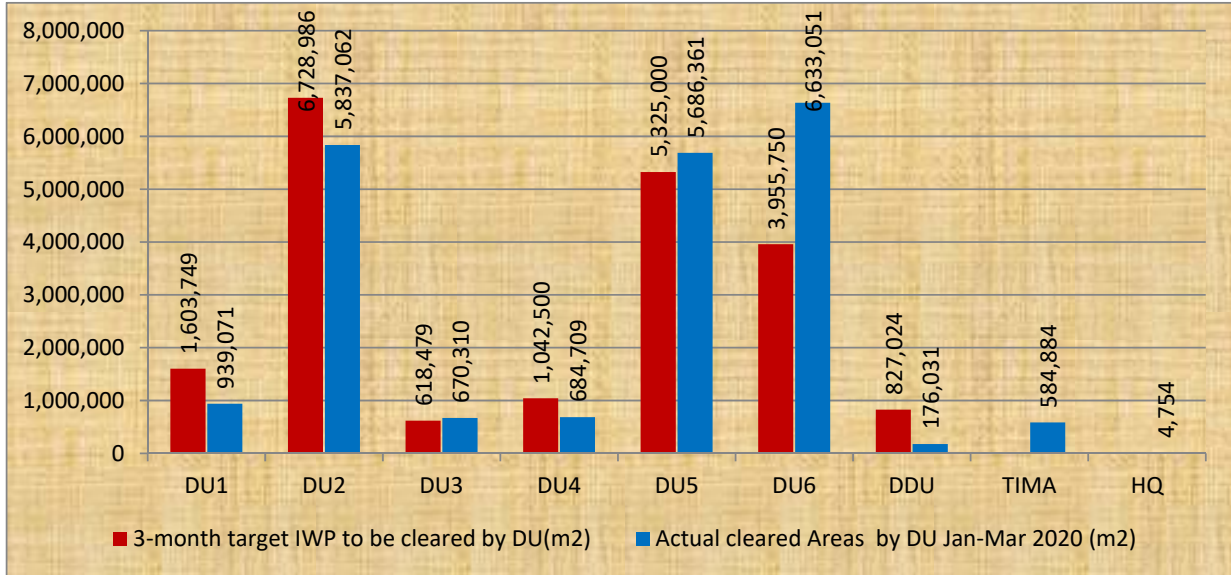
2) Progress Comparison to 2-Month Planned target VS accumulative progress

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

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

S/N	Demining Unit	3-Month Planned target by DU from January to March 2020 (m ²)	Actual Achievement in March 2020	
			Accumulative Actual Progress by DU from Jan-Mar 2020 (m ²)	% in comparing to 3-Month Work Plan by DU
1	DU1	1,603,749	939,071	58.55%
2	DU2	6,728,986	5,837,062	86.75%
3	DU3	618,479	670,310	108.38%
4	DU4	1,042,500	684,709	65.68%
5	DU5	5,325,000	5,686,361	106.79%
6	DU6	3,955,750	6,633,051	167.68%
7	DDU	827,024	176,031	21.28%
8	TIMA	-	584,884	-
9	HQ	-	4,754	-
	Total	20,101,487	21,216,233	105.55%

Chart5: Comparison of 3-Month Planned Target VS 3-Month Actual Achievement



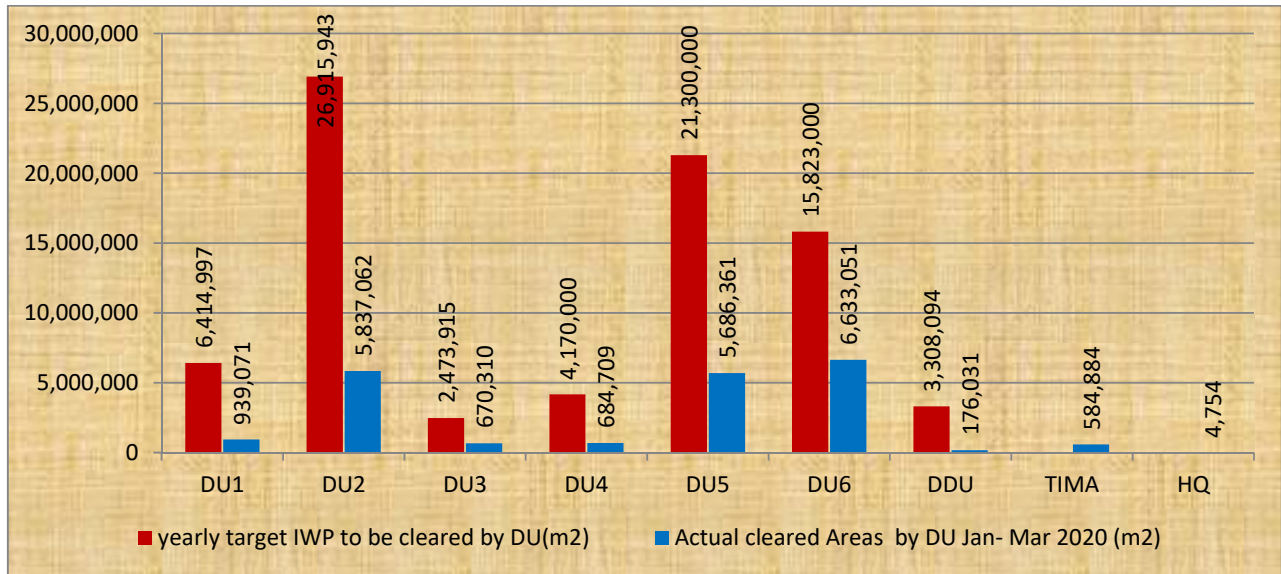
3) Progress Achievement by Demining Units

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 March 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 Mar 2020 in (m ²)	% in comparing to Annual Work Plan by DU
1	DU1	6,414,997	8.0%	939,071	14.64%
2	DU2	26,915,943	33.5%	5,837,062	21.69%
3	DU3	2,473,915	3.1%	670,310	27.10%
4	DU4	4,170,000	5.2%	684,709	16.42%
5	DU5	21,300,000	26.5%	5,686,361	26.70%
6	DU6	15,823,000	19.7%	6,633,051	41.92%
7	DDU	3,308,094	4.1%	176,031	5.32%
8	TIMA	-	-	584,884	-
9	HQ	-	-	4,754	-
	Total	80,405,949	100 %	21,216,233	26.39%

Chart6: Comparison of each DU target set in IWP 2020 VS Actual 3-month Achievement (Jan-Mar 2020)



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

a. Projects and refreshing course issues:

No.	Demining Unit	Issues	Lost productivity (m ²)
1	DU1, 2 &3	CMAC has not got the Clearing For Results (CFR) project for DU1, 2 &DU3 as expectation in March 2020.	814,115
2	DU4	Apsara project of DU4 has delayed since 01 March 2020. As planned 6 TSC teams were deployed to have operations from 01 March until 31 August 2020.	204,874
3	DU5	All teams of DU5_USA24 attended the refresher training at TIMA from 2 nd to 13 th March 2020 but additional 5 days to be worked.	403,409
4	DDU	CMAC has not got the Southwest irrigation project as expectation in March 2020.	275,675
Total			1,698,072

b. 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	7,588,724 m ²	1,698,072 m ²	9,286,796 m ²	138.60%

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-24) project of DU5 from 1 March 2020 to 28 February 2021 and 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 March 2020 are presenting as below table 11:

Table 13: Some Current Projects Executing up to March 2020

Project Name	Project Duration		Achievement			Project Target	Percentage
	Starting date	End date	Project progress up to last month in 2020 (m ²)	Project progress in Mar 2020 (m ²)	Project accumulated progress up to Mar 2020 (m ²)		
CAC (IMCCD)	16-Aug-19	15-Aug-20	175,345	34,215	209,560	200,000	104.78%
USA-NPA (USA24)	1-Mar-20	28-Feb-21		1,529,316	1,529,316	21,300,000	7.18%
Counterpart Fund	1-Jan-20	30-Jun-20	3,523,615	1,999,126	5,522,741	11,880,000	46.49%
CCL-02	1-Jan-20	31-Dec-20	3,459,118	3,077,164	6,536,282	17,610,000	37.12%

5) Operational Factor Analysis:

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

1. **Fragment Contamination (FC),** in total **132,066** pieces found over a cleared area of **7,588,724 m²**. This is **0.02** pieces per square meter. In percentage of technical terms, it is:
 - **93.18%** of land cleared had light fragment contamination, in the operational areas of all DUs,
 - **6.82%** 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 (16,562 person-days):**
 - 84.16% of total field personnel were present at work
 - 2.59% of total field personnel were assigned to attend CMAC training courses,
 - 0.46% were on mission,
 - 4.37% were on taking annual leave,
 - 0.77% were on sick leave,
 - 0.07% were on compensation leave
 - 0.32% were on maternity leave
 - 0.42% were on leave without pay
 - 0.00% were on leave without permission,
 - 4.49% were shortfall field personnel,
 - 0.07% were absent ,
 - 0.28% were on obligation leave (to work out of the project temporarily...etc),
 - 2.00% were absent for other reasons
3. **Working Hours, in total (16,069 hours-days):**
 - 69.97% of total times were working hours
 - 0.35% of total times were the raining period,
 - 11.16% of total times were the travelling hours,
 - 1.94% of total times were the maintenance periods of all BC and DM teams,
 - 0.29% of total times were the repairing hours of all BC and DM teams,
 - 0.15% of total times were waiting periods to get spare part for repairing some BC and DM teams,



- 0.02% of total times were the movement or replacing accommodation and transportation of goods; and BC or DM to the new location,
- 16.12% of total times were other reasons and or moved BC to assist other development.

4. The Mine Detectors, in total (11,417 mine detector-days):

- 59.91% of all mine detectors (MD) were actually used for the operations.
- 40.09% 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 (1,287 mine detection dog-days):

- 82.44% of all mine detection dogs (MDD/EDD) were actually used for operations.
- 13.91% of mine detection dogs were assigned to attend refresher training at the CMAC TC and
- 1.63% of mine detection dogs were sick and had to be treated at the CMAC Training Center.
- 2.02% of lack mine detection dogs.

6) Other Reasons Affecting Operational Progress:

a) Adherence to work plan

- During the reporting period as of March 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 **51** minefields have been cleared in March 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:

- Weather was hot.
- Some operational material/equipment is broken and older.

Demining Unit 2:

- Weather was hot.
- 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:



- Weather was hot.
- 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:

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

Demining Unit 5:

- Weather was hot.
- 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:

- Weather was hot.
- 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 02nd - 03rd March 2020, Planning & OPS Workshop held at DU2 office, Battambang province that presided over by H.E. Heng Ratana, Delegate of Royal Government of Cambodia as in charge of Director General of CMAC and the participants were DU Manager, Deputy managers, OPS/Plan officers and key staff from CMAC HQ. The purpose of this workshop was to select the Mine/UXO fields for clearance Plan 2020 and EOD precaution of safety.

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 March 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.

Verified by:

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 21 April 2020

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 21 April 2020

Tep Sakoeun
 Chief of statistics
 21 April 2020

Attachment:

- Annex A: CMAC Operational Progress Summary from 1992 up to March 2020
- Annex B: Monthly Progress Report by DU for March 2020
- Annex C: List of Completed Minefields and On-going as of March 2020 (all DUs)