

# CMAC Operational Achievement Report



September - 2020

## **មជ្ឈមស្នាលសកម្មភាពកំចាក់មីនកម្ពុថា** CAMBODIAN MINE ACTIONCENTRE

# CMAC Monthly Operational Achievement Report Period: 01 – 30 September 2020













## មជ្ឈមស្នាលសកម្មភាពកំចាត់មីនកម្ពុខា CAMBODIAN MINE ACTIONCENTRE

#### 1. General Situation

In September 2020, all CMAC Demining Components and Demining Units were assigned to work for 16 working with 6 day-off, 5-day for Pchum Ben Festival and compulsory leaves (14-18 September 2020) and 1-day for Constitution Day (24 September 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 September 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: September 2020

		Actual Demining Assets (Tools)																							
Demining Tool	MP (27staff)	MP (17staff)	MPB(16staf)	BAC-S(5sfatt)	BAC-S(7sfatt)	TSC(5sfatt)	TSC(7staff)	BLS(5sfatt)	SLD(2dogs)	SLD(4dogs)	EDD(2dogs)	ESD(4dogs)	TSD(4dogs)	MDR(4rats)	ERWI	EOD	BAC-MIT	DIT	BC-2saff	BC-9staff	MPC-15staff	CDM	DM-3staff	MPD-15 staff	CBM/CBU
DU#1(BMC)	1	-	-	-	1	1	8	-	-	-	-	-	-	-	1	-	1	,	1	5	1	1	1	1	5
DU#2(BTB, PST)	-	4	1	-	-	9	8	-	2	3	1	-	-	-	3		1	-	3	4	1	1	1	7	14
DU#3(PLN)	-	2	-	-	-	7	-	-	-	-	-	-	-	-	1		-	-	-	-	1	-	-	1	3
DU#4 (SRP & Kg. Thom, PVH)	-	-	-	-	1	1	1	-	1	-	-	-	-	1	1	-	-	1	1	1	-	1	1	1	3
DU#5 (Eastern provinces)	-	- 1	4	4	5	1	1	-	-	-	2	-	-	-	1	- 1	4	-	1	-	- 1	- 1	- 1	- 1	4
DU#6 (PVH, STR& OMC)	-	- 1	- 1		1	10	1	2	-	-	- 1	-	1	1	1	1	- 1	1	1	-	1	- 1	- 1	- 1	6
Development Demining Unit (DDU)	1	1	1		1	3	2	1	-	-	-	1	-	1	ı	1	1	2	5	1	1	1	1	1	-



# តស៊ីតៃស៊ីបទមុនដំបងមិនមក់ស

#### CAMBODIAN MINE ACTIONCENTRE

CMAC HQ (Phnom Penh)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-
CMAC Technical Institute of Mine Action (TIMA)	-	-	-		-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-
National Dog Center (NDC)	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Community Development. Center (CDC)	-	- 1	-		-	-	- 1	- 1	1		-	1	-	1		1	- 1	- 1	2	-	1	-	1	1	1
Total Teams	1	6	4	4	5	29	19	2	3	3	2	1	1	2	8	2	4	2	14	11	2	1	2	8	35

#### Note:

#### Movement

- ➤ 3 BLS (BLS#07,08&09) and BC#14 of former DU6\_CLL-02 reformed into 3 TSC (TSC#47, 48&49) and moved to work at DU1\_CFR-21 from 01 September to 31 December 2020.
- ➤ 3 BLS (BLS#03, 05&06) and BC#12 of former DU2\_PIMV & DU6\_CCL-02 reformed into 3 TSC(TSC#43, 44&45) and moved to work at DU2\_CFR-22 from 01 September to 31 December 2020.
- ➤ 2 BC(BC#01&04) have recreated and worked at DU1&DU2\_21&22 from 01 September to 31 December 2020.

#### Rename

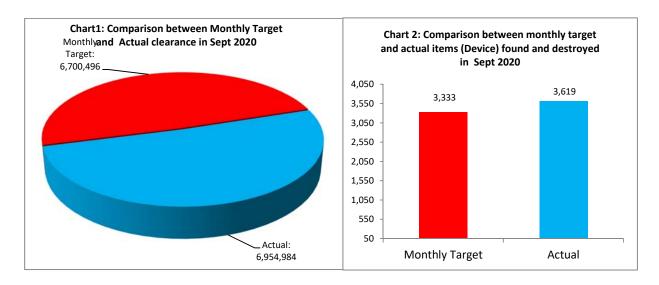
- ➤ 8 DM (DM#01, 02, 03, 05, 06, 07, 08&09) renamed into 8 MPD ((MPD#01, 02, 03, 05, 06, 07, 08&09) from 01 September 2020.
- ➤ 4 BAC-L (BAC-L#01, 02, 03&04) renamed into 4 MPB ((MPB#01, 02, 03, & 04) from 01 September 2020.
- > 2 BC-15 staff (BC#05&27) renamed into 2 MPC ((MPC#05, &27) from 01 September 2020.

#### 3. Summary of Progress

However, as mentioned on the results of September 2020; a total of **6,954,984** m² of land has been released throughout the country. This includes **3,992,855** m² of minefield areas, and **1,711,531** m² of UXO field areas and **1,250,598** m²of areas cleared without sketches for safety principles, which **is 103.80%** compared to the monthly target of **6,700,496** m² in 2020. But if this is compared to the same period of September 2019 (as of 4,483,500 m²), it is **55.12%** more than the progress of September 2019. In total from January to September 2020, all teams were able to release **62,019,984** m², while the total accumulative progress for the same period in 2019 is **50,713,782** m² that it is **22.29%** more than the progress of 9-month in 2019. The details of CMAC accumulated operational summary progress report from 1992 up-to September 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 September 2020.

Anyway, if comparing the progress of August to September 2020 (as of **5,356,094 m²**), it is **29.85**% more than progress of August 2020.

## មជ្ឈមស្នាលសកម្មភាពកំចាត់មីនកម្ពុថា CAMBODIAN MINE ACTIONCENTRE



A part of the above mentioned; at least **653** AP mine, 7 AT, 1 IMP mines, and **2,958** ERW were found and destroyed safely. If comparing these items (mines and Explosive Remnants of War) found and destroyed in September 2020 (as of **2,958** items) to the monthly target in 2020 (as of 3,333 items), it **is 108.58**%. The Chart 2 above is represented the device found and destroyed by comparing to monthly target of mine/UXO in September 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:

				T	
S/N	Project's name	July-20	Aug-20	Sep-20	Remarks
1	DU1_CFR21	5TSC,2BC	5TSC,2BC	8TSC,4BC	1)-This project starts from 01 Jun-31 Dec 2020. 2)- 2 TSC(13&24) of ex-DU1_CTB and BC#02 of ex-DU6_CCL-02 have worked for CRF-Top UP project from 01 Jul -31 Dec 2020.
2	DU1,-PCD-JMAS	1MP,2BC, 1DM, 1ERW	1MP,2BC, 1DM, 1ERW	1MP,2BC, 1DM, 1ERW	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	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 September 2020.
4	DU2_CFR22	5TSC,2BC	5TSC,2BC	8TSC,4BC	1)-This project starts from 08 Oct 2019 to 07 Oct 2020. 2)- 2 TSC(34&42) of ex-DDU_EDC-08 & DU2-CPF respectively and BC#08 of ex-DU6_CCL-02 have worked for CRF-Top UP project from 01 Jul -31 Dec 2020.
5	DU2-CAC (IMCC)	1TSC	1TSC	1TSC	This project is just renewed for a new agreement from 16 August 2019 to 15 September 2020.
6	DU2-PIMV	4MP, 7DM, 8TSC, 2SLD, 3ERW, 1BC,	4MP, 7DM, 8TSC, 2SLD, 3ERW, 1BC,	4MP, 7DM, 8TSC, 2SLD, 3ERW, 7PC&CBM, project	This project starts from 01 Jul 2020 to 31 Mar 2022



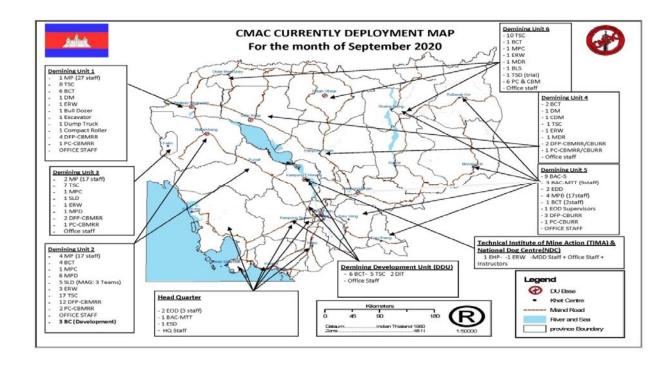
# **មឡូមស្នាលសកម្មភាពកំចាត់មីនកម្ពុថា** CAMBODIAN MINE ACTIONCENTRE

S/N	Project's name	July-20	Aug-20	Sep-20	Remarks
		7PC&CBM, project staff	7PC&CBM, project staff	staff	
7	DU2-CMA-20	5 CBM	5 CBM	5 CBM	This project starts on 01 Jul 2020.
8	DU2-MAG	3 SLD	3 SLD	3 SLD	1)- This project is renewed from 01 September 2020 to 30 Apr 2021. 2)-SLD#05 has been hired by MAG for a year (01 Jun 2019 to 31 July 2021)
9	DU3-PIMV	2MP,7TSC,1DM,1BC, 1SLD, 1ERW, 3PC&CBM	2MP,7TSC,1DM,1B C, 1SLD, 1ERW, 3PC&CBM	2MP,7TSC,1DM,1BC, 1SLD, 1ERW, 3PC&CBM	This project starts from 01 Jul 2020 to 31 Mar 2022
10	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).
11	DU4, CMD_JMAS	1CDM, 1BC, 1DM, 1ERW, CBURR	1CDM, 1BC, 1DM, 1ERW, CBURR	1CDM, 1BC, 1DM, 1ERW, CBURR	This project starts on 01 March 2019 to 29 September 2020.
12	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.
13	DU5& HQ – USA24	9BAC-S, 4BAC-L, 4BAC-MTT, 2EDD, 1BC	9BAC-S, 4BAC-L, 4BAC-MTT, 2EDD, 1BC	9BAC-S, 4BAC-L, 4BAC- MTT, 2EDD, 1BC	This project starts on 01 September 2020 to 28 February 2021.
14	DU6_CCL2	1ERW, 8TSC, 2BCT, 3BLS, 6CBM& 18 office staff	1ERW, 8TSC, 2BCT, 3BLS, 6CBM& 18 office staff	1ERW, 9TSC, 1BCT, 1BLS, 6CBM& 18 office staff	This project starts from 01 Jan to 31 Dec 2020.
15	DU6-APOPO	1MDR, 2TSC, 1BC, 1TSD	1MDR, 2TSC, 1BC, 1TSD	1MDR, 1TSC, 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).
16	DDU-EDC-7-8	1TSC	1TSC	1TSC	-This project starts on 16 Mar 2019.
17	DDU-CMA20	6BC, 2TSC, 2DIT	6BC, 2TSC, 2DIT	6BC, 2TSC, 2DIT	
18	HQ_CCL-02	2EOD, 1ESD	2EOD, 1ESD	2EOD, 1ESD	This project starts on 01 Feb 2020.
19	TIMA-CCL2	1ERW& 25 office staff & instructor	1ERW& 25 office staff & instructor	1ERW& 25 office staff & instructor	This project starts from 01 Jan to 31 Dec 2020.
20	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.
21	Community Development Center (CDC)	2BC	2BC	2BC	

The below figure is the CMAC deployment map as of September 2020  $\,$ 

# ម<mark>ព្ឈមស្ពាលសគម្មភាពគំចាត់មីនគម្ពុថា</mark> CAMBODIAN MINE ACTIONCENTRE

Figure:1



#### a. Teams Deployed Vs Staff of the month of September 2020

Table 3:

able 3:							
Demining	No. of	No. of Staff	Total staff	Actu	al Staff		
Tool/Asset	Teams	per Team	in Sep 2020	Male	Female	Different	Remarks
MPL-27staff	1	27	27	23	4	=	
MPL-17staff	6	17	102	73	16	13	
MPC-15staff	2	15	30	24	-	6	Integrated with 2 BLS, each team consists of 5 staff.
BC-9staff	11	9	99	99	-	-	
BC-2staff	14	2	28	28	-	-	
MPD-15staff	8	15	130	96	-	18	Integrated with 2BLS, each team consists of 5 staff.
DM-3staff	2	4	4	4	=	=	
CDM-(9staff)	1	9	9	9	=	-	
SLD	2	10	30	26	2	2	Not including SLD#03, SLD#05 and SLD#12 hired to MAG.
EDD	3	6	12	11	1	=	
TSD	1	5	5	5	-	-	
TSC-7staff	19	7	133	130	3	-	
TSC-5staff	29	5	140	120	6	14	
NTS				-	-	-	
BLS	1	5	5	4	-	1	



## មជ្ឈមស្នាលសគម្មភាពគំចាត់មីនគម្ពុខា CAMBODIAN MINE ACTIONCENTRE

BAC-S(7staff)	5	7	35	26	9	_	
BAC-S(5staff)	4	5	20	20	-	-	
MPB (16 Staff)	4	16	68	66	2	-	
BAC-MTT	4	5	20	20	-	=	
EOD-3staff	2	5	6	6	-	-	
ERW	8	5	34	31	-	3	
MDR	2	10	20	15	5	-	
CBMRR+PC	35	1	35	29	5	1	
ESD	1	5	5	4	1	-	
DIT	2	5	10	10	-	-	
Total	167		1,007	878	71	58	

#### Note:

- Base on the different figure between teams deployed and staff, it shows that at least **0.35%** was lost during the reporting period.
- b. Planned and actual operational team-days of the month of September 2020

Table 4:

Tools/Assets	No. of Tools		onal team Sep 2020	Different	Remarks
	10018	Planned	Actual		
MPL	7	112	112		
MPC	13	208	208		
BC	13	208	192	16	
MPD	7	112	112		
DM	2	32	32		
CDM	2	32	32		
SLD	3	48	48		
EDD	2	32	32		
TSD	1	16	16		
TSC	48	768	768		
NTS	0	0	0		
BLS	1	16	16		
BAC-S	9	144	144		
BAC-L	4	64	64		
BAC-MTT	4	64	64		
EOD	2	32	32		
ERW	9	144	144		
MDR	2	32	30	2	
CBMRR	35	560	560		
ESD	1	16	16		
DIT	2	32	32		
Total	167	2,672	2,654	18	

Note:



# ឧស្លាមស្នាលអងុខ្មុំភាពគំចាត់មីនគម្ពុថា

#### CAMBODIAN MINE ACTIONCENTRE

• In average, each mobile platoon and mobile team lost at least -0.11% 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 49 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 September 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 September 2020 provided at least 195 families as direct beneficiaries and 1,140 families as indirect beneficiaries. The Table 5 below is showing us the number of minefields completed and beneficiaries by each DU:

Table5:

DUs No. of M/Fs released				Beneficiaries	3	No. of	No. of	No. M/Fs
		Area (qsm)		(Family)		M/Fs On	M/Fs	handed
	released		Direct	Direct Indirect		going	suspended	over
DU1	13	302,443	30	-	-	10	-	13
DU2	20	2,763,818	67	541	-	29	-	20
DU3	6	406,642	8	546	-	21	-	6
DU4	1	75,173	6	28	-	5	-	-
DU5	5	1,138,531	77	-	-	16	-	5
DU6	4	594,092	7	25	-	10	-	4
Total	49	5,280,699	195	1,140	-	92	-	48

#### c) Land Released Productivities as of September 2020

The overall progress achievement for the month of September 2020 was 6,954,984 m<sup>2</sup>, which was 1,074,903m<sup>2</sup> was released as C2, and 4,629,483 m<sup>2</sup> was released as C3 and 1,250,598 m<sup>2</sup> 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 1,581 items of Mine/ERW (383 AP, 3 AT, 1 IMP and 1,197 ERW) were found in the affected landmine and UXO contamination areas to destroy safely. And it



## មជ្ឈមស្នាលសកម្មភាពកំចាក់មីនកម្ពុខា CAMBODIAN MINE ACTIONCENTRE

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 September 2020.

Table 6: Summary of productivity achieved:

Land Released Categories	Area (m²)	AP Mine destroyed	AT Mine destroyed	ERW destroyed	IP Mine destroyed	Fragment	Small Arm(kg)
C1 area released	-	-	-	-	-	-	1
C2 area released	1,074,903	49	-	74	-	5,896	ı
C3 area released	4,629,483	326	-	1,119	1	138,778	1
Other Clearance	1,250,598	8	-	4	-	5,301	-
Total	6,954,984	383	-	1,197	1	149,975	-

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

#### d) BLS operational progress report

In September 2020, two Battle Areas Clearance-Small teams (BAC-S) of DU5 have been deployed to conduct the Baseline Survey services at Prey Veng province. Regarding this activity, those teams achieved the following results:

Table 7:

Description	DU5	DU6	Total
Number of villages visited	33	-	33
Number of new BLS polygons discovered	25	-	25
BLS size (m <sup>2</sup> )	1,475,096	-	1,475,096

#### 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 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 **293** requests (EOD calls) in September 2020, it is **70.32%** lower than monthly target plan 2020 (as of **417** requests). They did this better work to



# ឧស្លាឧស្វាលសង្គមិនរាជមូលមុំត្និនងកំស

#### CAMBODIAN MINE ACTIONCENTRE

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	September 2020	Accumulative Progress (Jan-Sep 2020)
Areas Cleared (Spot check) in m <sup>2</sup>	42,003	196,780
# EOD tasks conducted (Responded)	293	2,987
# APM destroyed	262	2,576
# ATM destroyed	7	39
# ERW destroyed	1,761	15,753
#Improvised mines destroyed	-	-
# Small Arms Ammunition (kg)	34	387
# Fragment (pieces)	2,468	10,419

Note: -During the reporting period, at least 278 requests with 262 AP, 7 AT mines and 1,651 were collected and destroyed by 8ERW, 4BAC-MTT and DU5 OPS section, ERW#16, (DU1), ERW#13,18, 22 (DU2), ERW#02(DU3), ERW#01(DU4), ERW#08(DU6), ERW#06(TIMA), 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)

Mine Risk Education still plays vital role in reducing and removing threats provoked by mines and ERW. 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 1,298 MRE sessions to 70,377 audiences, and visited 40,238 households and collected 251 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 September 2020.



Table 9: Overview of outputs

Types of Progresses	Demining teams	CBMRR (DFP)	Total
Village visited	390	374	764
Course of MRE session	579	719	1,298
Household and field visited	8,265	31,973	40,238
Total audience group attended in MRE Course	23,002	47,375	70,377
➤ Men	9,000	18,873	27,873
> Women	10,260	21,364	31,624
Children in school	1,435	4,652	6,087
> Out of school children	2,307	2,486	4,793
Total number of requests(M/UXO) and report to EOD	200	51	251
- AP & Improvised mines	67	102	169
- AT mines	2		2
- UXO	809	262	1,071
MRE materials have been used for their activities			
- large T-shirt			
- Small T-shirt	-	-	-
- Note book	268		268
- Poster	143	21	164



# ម<mark>ត្តាមស្អាលសកម្មភាពកំលាត់មីលកម្ពុជា</mark> CAMBODIAN MINE ACTIONCENTRE

Types of Progresses	Demining teams	CBMRR (DFP)	Total
- Flyer	6	8	14
- Leaflet	-	-	-
Other	-	-	-

#### **Productivity Analysis**

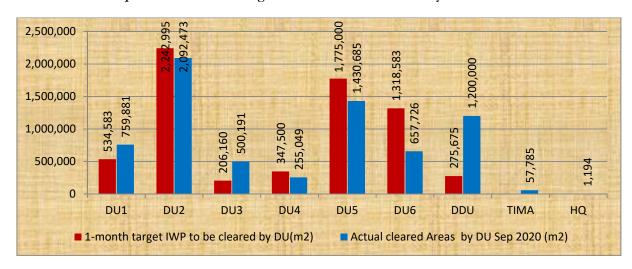
#### 1) Progress Comparison to the Set IWP 2020 (by Month):

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

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

		Areas to be cleared by	Actual Achievement in September 2020		
S/N	Danista Hati	DU in September	Actual Progress by DU	% in comparing to	
3/IN	Demining Unit	2020 (m <sup>2</sup> )	in Sep 2020 (m²)	Monthly Work Plan	
				by DU	
1	DU1	534,583	759,881	142.14%	
2	DU2	2,242,995	2,092,473	93.29%	
3	DU3	206,160	500,191	242.62%	
4	DU4	347,500	255,049	73.40%	
5	DU5	1,775,000	1,430,685	80.60%	
6	DU6	1,318,583	657,726	49.88%	
7	DDU	275,675	1,200,000	435.30%	
8	TIMA	-	57,785	-	
9	HQ	-	1,194	-	
	Total	6,700,496	6,954,984	103.80%	

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



#### 2) Progress Comparison to 8-Month Planned target VS accumulative progress

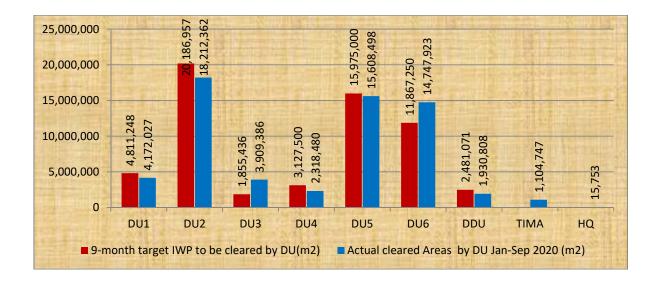
the table 11 below shows each Demining Unit accumulative progress achieved against the planned target of each DU, starting from January to September 2020.

Table 11: 9- Month Clearance Target VS Accumulative Actual Progress Achievement Jan-Sep 2020

## មជ្ឈមស្នាលសកម្មភាពកំចាក់មីនកម្ពុថា CAMBODIAN MINE ACTIONCENTRE

		by DU from January to Accumulative Actual		% in comparing to 9-
		September 2020 (m <sup>2</sup> )	Progress by DU from	Month Work Plan by
			Jan-Sep 2020 (m <sup>2</sup> )	DU
1	DU1	4,811,248	4,172,027	86.71%
2	DU2	20,186,957	18,212,362	90.22%
3	DU3	1,855,436	3,909,386	210.70%
4	DU4	3,127,500	2,318,480	74.13%
5	DU5	15,975,000	15,608,498	97.71%
6	DU6	11,867,250	14,747,923	124.27%
7	DDU	2,481,071	1,930,808	77.82%
8	TIMA	-	1,104,747	-
9	HQ	-	15,753	-
	Total	60,304,462	62,019,984	103.80%

Chart5: Comparison of 9-Month Planned Target VS 9-Month Actual 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 September 2020.

Table 12:

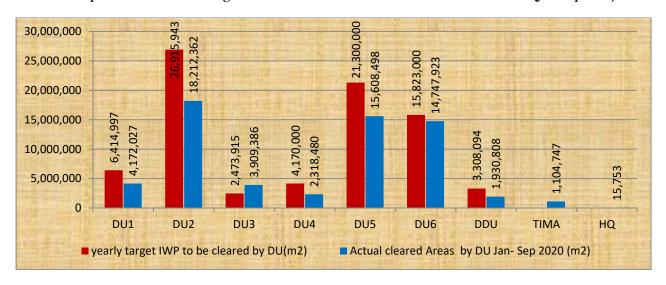
S/N	Demining Unit	Annual Work	Plan Set, 2020	Actual Achievement, 2020		
		Areas to be	Annual (%) by DU	Accumulated progress	% in comparing to Annual	
		cleared by DU in		by DU in Jan to Sep	Work Plan by DU	
		$(m^2)$		2020 in (m <sup>2</sup> )		
1	DU1	6,414,997	8.0%	4,172,027	65.04%	
2	DU2	26,915,943	33.5%	18,212,362	67.66%	
3	DU3	2,473,915	3.1%	3,909,386	158.02%	
4	DU4	4,170,000	5.2%	2,318,480	55.60%	
5	DU5	21,300,000	26.5%	15,608,498	73.28%	
6	DU6	15,823,000	19.7%	14,747,923	93.21%	

# ឧស្លាមស្នាលអងុខ្មុំភាពគំចាត់មីនគម្ពុថា

#### CAMBODIAN MINE ACTIONCENTRE

7	DDU	3,308,094	4.1%	1,930,808	58.37%
8	TIMA	=	=	1,104,747	1
9	HQ	-	-	15,753	-
	Total	80,405,949	100 %	62,019,984	77.13%

Chart6: Comparison of each DU target set in IWP 2020 VS Actual 9-month Achievement (Jan-Sep 2020)



In September 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	Issues	Lost productivity (m <sup>2</sup> )
	Unit		
1	DU3	CMAC has not got the Clearing For Results (CFR)	206,160
		project for DU3 as expectation in September 2020.	
2	DU4	Apsara project of DU4 has delayed since 01	204,874
		September 2020. As planned 6 TSC teams were	
		deployed to have operations from 01 March until	
		31 September 2020.	
3	DDU	CMAC has not got the Southwest irrigation project	275,675
		as expectation in September 2020.	
		Total	686,708

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

1-Month target	Actual productivity	Lost productivity	Total (m²)	Compared to 1-month target (%)
6,700,496 m <sup>2</sup>	6,954,984 m <sup>2</sup>	686,708 m <sup>2</sup>	7,641,692 m <sup>2</sup>	114.05%

#### 3) 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 September 2020 to 28 February 2021 and two projects have started an implementation so called Integrated Mine Clearance Landmine Victim Assistance (IMV) of DU2 from 01 September 2020 to 31 March 2022, CCL02 project of DU6 from 01 January to 31 December 2020 and Clearing For Results so called (CFR) from 01 June to 31 December 2020. However, the accumulative progress of all projects' achievement from the starts up to September 2020 are presenting as below table 11:



# មស្លាមស្នាលសកម្មភាពកំចាត់មីនកម្ពុខា

#### CAMBODIAN MINE ACTIONCENTRE

**Table 13:** Some Current Projects Executing up to September 2020

	Project	: Duration	Achievement		rget	age	
Project Name	Starting date	End date	Project progress up to last month	Project progress in Sep 2020 (m²)	Project accumulated progress up to Sep	Project Target	Percentage
			in 2020 (m <sup>2</sup> )		2020 (m²)		
CAC (IMCCD)	16-Aug-20	15-Aug-21	18,900	17,330	36,230	200,000	18.12%
USA-NPA (USA24)	1-Mar-20	28-Feb-21	10,042,735	1,430,685	11,473,420	21,300,000	53.87%
PIMV	1-Jul-20	31-Mar-22	4,172,994	1,870,751	6,043,745	44,940,000	13.45%
CCL-02	1-Jan-20	31-Dec-20	13,289,194	648,225	13,937,419	15,823,000	88.08%
DU1-CFR21	1-Jun-20	31-Dec-20	1,321,413	633,213	1,954,626	4,742,671	41.21%
DU2-CFR22	1-Jun-20	31-Dec-20	1,320,726	704,583	2,025,309	4,874,313	41.55%

#### 4) Operational Factor Analysis:

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

- 1. Fragment Contamination (FC), in total 149,975 pieces found over a cleared area of 6,954,984 m<sup>2</sup>. This is 0.15 pieces per square meter. In percentage of technical terms, it is:
  - > 91.52% of land cleared had light fragment contamination, in the operational areas of all DUs,
  - > 8.48% 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 (13,776 person-days):

- ➤ 85.69% of total field personnel were present at work
- ➤ 4.42% of total field personnel were assigned to attend CMAC training courses,
- > 0.24% were on mission,
- ➤ 1.87% were on taking annual leave,
- > 0.41% were on sick leave,
- > 0.49% were on compensation leave
- > 0.28% were on maternity leave
- > 0.23% were on leave without pay
- > 0.00% were on leave without permission,
- > 5.14% were shortfall field personnel,
- > 0.42% were absent,
- > 0.09% were on obligation leave (to work out of the project temporarily...etc),
- > 0.71% were absent for other reasons

#### 3. Working Hours, in total (14,826 hours-days):

- > 77.29% of total times were working hours
- > 0.75\% of total times were the raining period,
- ➤ 12.30% of total times were the travelling hours,
- > 1.43% of total times were the maintenance periods of all BC and DM teams,
- ➤ 1.11% of total times were the repairing hours of all BC and DM teams,
- 0.00% of total times were waiting periods to get spare part for repairing some BC and DM teams,



## មជ្ឈមស្នាលសកម្មភាពកំចាក់មីនកម្ពុខា CAMBODIAN MINE ACTIONCENTRE

- ➤ 0.00% of total times were the movement or replacing accommodation and transportation of goods; and BC or DM to the new location,
- > 7.12% of total times were other reasons and or moved BC to assist other development.

#### 4. The Mine Detectors, in total (10,557 mine detector-days):

- ➤ 62.89% of all mine detectors (MD) were actually used for the operations.
- ➤ 37.11% 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 (632 mine detection dog-days):

- ➤ 68.83% of all mine detection dogs (MDD/EDD) were actually used for operations.
- > 9.65% of mine detection dogs were assigned to attend refresher training at the CMAC TC and
- ➤ 15.19% of mine detection dogs were sick and had to be treated at the CMAC Training Center.
- ➤ 6.33% of lack mine detection dogs.

#### 5) Other Reasons Affecting Operational Progress:

#### a) Adherence to work plan

• During the reporting period as of September 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 49 minefields have been cleared in September 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 time, it rained.
- Some operational material/equipment is broken and older.

#### Demining Unit 2:

- Weather was hot, some time, it rained.
- There was dense vegetation in some areas.
- 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, some time, it rained.

# ឧស្លានស្វាលទាងតិបាងក្នុងបង្កស

#### CAMBODIAN MINE ACTIONCENTRE

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

#### Demining Unit 4:

- Weather was hot, some time, it rained.
- There was dense vegetation.
- Some areas were mineralized soils.
- Some fields are the plateaus.

#### Demining Unit 5:

- Weather was hot, some time, it rained.
- 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 always take measure to prevent the spread of COVID-19:
  - Clean hands often with soap and water or an alcohol-based hand rub.
  - Checks the temperature before operations.
  - Wear facial mask.
  - Maintain the social distancing guidelines.
  - Work at home for some office staff.
  - Cover nose and mouth with bent elbow or a tissue/scarf when coughing or sneeze.

#### 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.
- 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: None
- 7. Suggestion/Conclusion:



## មជ្ឈមស្នាលសកម្មភាពកំចាត់មីនកម្ពុខា CAMBODIAN MINE ACTIONCENTRE

- 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 September 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: Prepared by:

Chhin Bunran
Permanent Deputy Director of Planning
& Operations
22 October 2020

**Tep Sakoeun** Chief of statistics

22 October 2020

#### Attachment:

- Annex A: CMAC Operational Progress Summary from 1992 up to September 2020

- Annex B: Monthly Progress Report by DU for September 2020

- Annex C: List of Completed Minefields and On-going as of September 2020 (all DUs)

- Annex D: Summary of Baseline Survey Report for September 2020.

Annex E: Summary of CBMRR Report for September 2020.