

The Republic of Sudan



REQUEST FOR AN EXTENSION OF THE DEADLINE
FOR COMPLETING THE DESTRUCTION OF ANTI-
PERSONNEL MINES IN MINED AREAS IN
ACCORDANCE WITH ARTICLE 5 PARAGRAPH 1 OF
THE CONVENTION OF THE PROHIBITION OF THE
USE, STOCKPILING, PRODUCTION AND TRANSFER
OF ANTI- PERSONNEL MINES AND ON THEIR
DESTRUCTION.

**An Extension Request for Four Years
(April 2019 to April 2023)**

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CONTACT INFORMATION:

Organization: National Mine Action Center – Sudan
Director: Col. Amir Abdelsadiq
E-mail: aamira@su-mac.org
Telephone: +249116299944 / +249912969105

Organization: National Mine Action Center – Sudan
Director: Mohammed Abdelmajeed
E-mail: mohamedmajeed@su-mac.org
Telephone: +249123989380

Organization: United Nations Mine Action Service – Sudan
Director: Habibulhaq Javed
E-mail: habibulhaqi@unops.org
Telephone: +249990099030

Table of Contents

1. EXECUTIVE SUMMARY	1
1.1 Introduction	1
1.2 Origin of Sudan's Article 5 Implementation Challenge	2
1.3 Remaining challenge at the beginning of previous request.....	2
1.4 Nature and extent of progress	3
1.5 Resources Made Available to Support Progress	4
1.6 Circumstances that Impeded Compliance:	5
1.7 Humanitarian, economic, social and environmental implications of the remaining challenge.....	5
1.8 Sudan's Remaining Article 5 Challenge	6
1.9 Requested Period of Extension: Rationale:	8
1.10 Summary Work plan (2018-2023)	8
1.11 Current Capacities, remaining challenge and gaps	9
1.12 Financial Resources (National and International).....	10
1.13 Assumptions / Risks.....	10
2 DETAILED NARRATIVE	13
2.1 Introduction	13
2.2 Origin of Sudan's Article 5 challenge	13
2.3 Nature and Extent of the Article 5 Challenge at the beginning of the previous extension request 15	15
2.4 Nature and Extent of Progress made: Quantitative Aspects	16
2.5 Nature and Extent of Progress Made: Qualitative Aspects.....	21
2.5.1 National Demining Structure	21
2.5.2 Sudan Mine Action Strategy.....	23
2.5.3 National Capacity Building Achievements:	24
2.5.1 Resources made available to support progress.....	31
2.5.2 The Government's Annual Fund to National Mine Action Program	32
2.5.3 Other Resource Mobilization (External Fund):.....	32
2.6 Methods used to identify areas containing/suspected to contain AP mines	32
2.7 Methods and standards used to release known/ suspected mine areas	33
2.7.1 Methodology	34
2.7.2 Asset Deployment Decision Making Tool	34
2.7.3 Land Release Process	34
2.7.4 Information gathering.....	34
2.8 Methods and standards of controlling and assuring quality	35
2.9 Efforts to ensure the effective inclusion of civilians from mined areas	37
2.10 Marking and Fencing.....	37
2.10.1 Mine Risk Education (MRE)	37
2.11 Circumstances that impeded compliance during the extension period.....	37
2.12 Humanitarian, economic, social and environmental implications	38

2.13	Nature and extent of remaining challenge: quantitative aspects	41
2.14	Nature and extent of remaining article 5 challenge: qualitative aspects.....	43
2.15	Amount of time requested and a rationale for this amount of time	43
2.16	Detailed work plan for the period of the requested extension	43
2.17	Goals of the MYWP 2017-2019 & 2019-2023.....	44
2.18	Demining Capacity: Operational distribution	45
2.19	Work Plan for the Extension Period (2019-2023).....	46
2.20	Operation plan by State:	47
2.21	Resource Mobilization Strategy	56
2.22	Public Relations and Communication.....	57
2.23	Sudan Mine Action multiyear budget forecast	57
2.24	Assumptions / Risks.....	58
Figure 1:	Sudan geopolitical map within the African continent	v
Figure 2:	Sudan Mine/ERW Contaminated Areas.....	7
Figure 3:	National Mine Action Structure.....	23
Figure 4:	Percentage of people who received MRE disaggregated by sex and gender	26
Figure 5:	No of people received MRE by State	26
Figure 6:	Socio-Economic blockage by type	41
Figure 7:	Remaining hazards, Blue Nile, Source: LIS Data	48
Figure 8:	Remaining hazards, South Kordofan, Source: LIS DATA.....	50
Figure 9:	Remaining hazards, West Kordofan State, Source: LIS Data	51
Table 1:	Level of anti-personnel mine contamination, 2013	2
Table 2:	Areas released and devices destroyed by State, 1 January 2013 – 28 February 2018	3
Table 3:	Areas released and APM / ATM devices destroyed by Year, 1 January 2013 – 28 February 2018.	4
Table 4:	Funding forecast to the end of the current extension period, (2013-2019).....	4
Table 5:	Remaining level of contamination: Anti-Personnel Mines, 28 February 2018.....	6
Table 6:	Contamination by State, All Contamination types28 February 2018	6
Table 7:	Annual clearance plan for the extension period (2018-2023)	8
Table 8:	Land release milestones by year, (2019-2023)	9
Table 9:	Operator deployment by location and year.....	10
Table 10:	Annual funding obtained to support mine action activities, (USD).....	10
Table 11:	Anti-personnel mine contamination, January 2013.....	15

Table 12: Land release progress by State, 1 January 2013 – 28 February 2018	16
Table 13: Areas released, APM/ATM devices destroyed by year, 1 January 2013 – 28 February 2018.....	17
Table 14: Clearance statistics of completed States, May 2017	18
Table 15: Landmine victims disaggregated by gender and age.....	27
Table 16: Registered hazards from 2002 - 28 February 2018.....	28
Table 17: Registered hazards from 2002 - 28 February 2018.....	30
Table 18: Summary of data clean up	31
Table 19: Annual funding obtained to support mine action activities (USD).....	32
Table 20: Socio-economic blockages caused by anti-personnel mines.....	41
Table 21: AP Contamination.....	42
Table 22: AT Contamination.....	42
Table 23: ERW remaining Level of Contamination, 28 February 2018	42
Table 24: Annual clearance during the extension period (2018-2023)	44
Table 25: Operator deployment by location and year	45
Table 26: Land release milestones by year.....	46
Table 27: WORK PLAN BLUE NILE, BY LOCALITY AND YEARLocality	49
Table 28: Work Plan South Kordofan, by locality and year	51
Table 29: Work Plan West Kordofan, by locality and year	52
Table 30: Sudan Funding Requirements For Completion by Year	57
 Annex 1: Abbreviations	 60
Annex 2: Glossary of terms	61
Annex 3: SUDAN_Ops_MYWP_2018-23_BNS	Error! Bookmark not defined.
Annex 4: SUDAN_OPS_MYWP_2018-23_WKS.....	Error! Bookmark not defined.
Annex 5: SUDAN_OPS_MYWP_2018-23_SKS.....	Error! Bookmark not defined.
Annex 6: SUDAN_OPS_MYWP_2018-23_DS	Error! Bookmark not defined.
Annex 7: SUDAN_List_of_Remaining_AP_Mined_Areas	Error! Bookmark not defined.
Annex 8: SUDAN_List_of_Remaining_AT_Mined_Areas.....	Error! Bookmark not defined.
Annex 9: SUDAN_List_of_Remaining_ERW_Contaminated_Areas	Error! Bookmark not defined.
Annex 10: SUDAN_General_Threat_Map.....	Error! Bookmark not defined.



Figure 1: Sudan geopolitical map within the African continent

1. EXECUTIVE SUMMARY

1.1 Introduction

The Republic of Sudan has been plagued by a devastating civil war continued for nearly sixty two years a matter that engendered seismic consequences exhibited clearly in the chronic political, economic, social and security crises collectively contributed to the destabilization of the country. For the last a half century, Sudan's geopolitical image has been termed with turbulent decades of internal turmoil and protracted domestic contest. The geographical context of Sudan characterized by extensive and spacious terrains coupled with relatively rigid centralized system of govern has in fact worked to undermine the influence of the centre on the remote peripheries a situation that has been further exacerbated by the lack of minimal communication means and poor transportation infrastructures. Its demographic setting admittedly peculiarized with considerable deal of diversities in the fabric of its societies, which essentially attributed to the wide-range of ethnic and dialect heterogeneity that intuitively led to cultural disparities among its people.

The Government of Sudan (GoS) signed the Mine Ban Treaty of Ottawa on 4 December 1997 and ratified it on 13 October 2003. On 23 March 2013 Sudan submitted a request to extend its Article 5 mine action deadline to 1 April 2019. This was unanimously agreed by the Thirteenth Meeting of States Parties, (13MSP).

Despite the great interest and sustained support awarded to the humanitarian mine action program by the state and appreciative effort and supportive role being played by UNMAS in close collaboration with NMAC during the past term of the existing extension period, the upshot of the field visits and reports, studious evaluation and uncompromising analysis of the magnitude of the problem with fully consideration to the multiple challenges beset it, have quoted us to the inescapable conclusion that Sudan by all measures will not be able to complete the clearance of all registered contaminated areas within the frame time of the ongoing extension period a matter that requiring an extended period of four years (until 1 April 2023) in order to accomplish the job and adequately conform to the stipulations stated in the Convention.

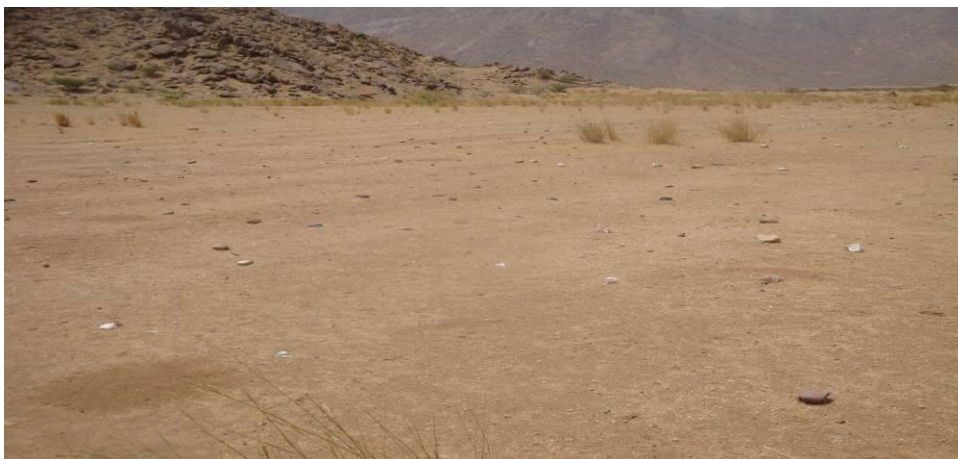


PHOTO 1: Shalalob minefield in Eastern Sudan

1.2 Origin of Sudan's Article 5 Implementation Challenge

The inevitable result of the prolonged series of conflicts jolted Sudan since 1955 was the wide-scale contamination of anti-personnel (AP), anti-tank (AT) mines and other Explosive Remnants of War (ERW). In this context, it worthwhile to recall that during the course of the conflicts, landmines was extensively and disproportionally used by all parties to the conflicts. The first civil war took place in period 1955 to 1972 and the second civil war began in 1983 and officially ended on 9 January 2005 with the signing of the Comprehensive Peace Agreement (CPA). During these conflicts span inestimable quantities of mines have been laid. However, an exceptional result in the clearance of mines/ERW was achieved as a result of national and international tireless efforts aimed to eradicate mines/ERW in the period from 2005 up to 2011.

Regrettably, in the aftermath of Southern Sudan disintegration in July 2011, the awakening conflict in South and West Kordofan and Blue Nile States eventuated in additional contamination of anti-personnel and other ERW. Unluckily, landmines are once again being utilized in Sudan since the violence reiterated in May/June 2011 in Abyei and then after in South Kordofan and Blue Nile states. SPLA planted landmines throughout the region, which not only bring about death and casualties to civilians but also prevents humanitarian organizations from providing aid. Landmines and explosive ordnances have contaminated more than a third of the state capital of Kadugli town and its vicinity¹. The risk of landmines has also fettered commercial companies from shipping food and other basic supplies into South Kordofan. The use of landmines has furthered prevented from accessing many of the villages most critically affected by fighting since reportedly the main roads have been mined.

1.3 Remaining challenge at the beginning of previous request

The contaminated areas with mines and ERW at the start of this extension period, 2013, were mainly located in the eastern states of Kassala, Gadaref and Red Sea and in Blue Nile and South Kordofan, western Kordofan, (Abyei), and Darfur region, noting that the later does not fall under Ottawa Treaty.

TABLE 1: Level of anti-personnel mine contamination, 2013

State	Number of areas known to contain anti-personnel mines	Amount of area known to contain anti-personnel mines (square metres)	Number of areas suspected to contain anti-personnel mines	Total amount of area suspected to contain anti-personnel mines	Total number of areas known or suspected to contain anti-personnel mines	Total amount of area known or suspected to contain anti-personnel mines (square metres)
Blue Nile	6	272,456	5	905,583	11	1,178,039
S. Kordofan	48	2,183,800	36	15,615,710	84	17,799,510
Kassala	4	481,008	19	5,240,753	23	5,721,761
Red Sea	0	0	1	7,200	1	7,200
Gadaref	0	0	1	10,000	1	10,000
Total	58	2,937,264	62	21,779,246	120	24,716,510

1. Report for the Fourteenth Meeting of State Parties to the Anti-personnel Mine Ban Convention, by NPA on November 2015.



Photo 2: A local lady pointing to the suspected mined area of Lufo Gharib, South Kordofan

1.4 Nature and extent of progress

In spite of the formidable challenges represented in the flagrant deficit of fund allocated for Sudan mine action program in the 2nd period of extension and the continuation of war in Blue Nile and South Kordofan, the Sudan mine action program has succeeded in reducing the total number of already known hazards, (registered in the database) by 93%. Since the beginning of the program, 2002, more than 10,158 anti-personnel mines have been destroyed. An area of 106,000,000 square metres has been cleared.

Completion of Article 5 Challenge in Gadaref and Red Sea States

Clearance of Gadaref and Red Sea states has been completed as one of the most prominent achievements of the current extension period and accordingly both States have been declared free from mines and ERW. Kassala State is also expected to be declared mine free from mines and explosive remnant of war in March 2018.

TABLE 2: Areas released and devices destroyed by State, 1 January 2013 – 28 February 2018

State	Cancelled area (square metres)	Reduced area (square metres)	Cleared area (square metres)	Total area released (square metres)	Number of anti-personnel mines destroyed	Number of other explosive items destroyed	Number of areas released
Blue Nile	0	0	100,989	100,989	0	53,088	106
Subtotal	0	0	100,989	100,989	0	53,088	106
Kassala	8,555,382	3,385,363	4,739,438	16,680,183	1,391	8,398	300
Gadaref	250,000	182,633	344,499	777,132	128	30,356	18
Red Sea	1,382,246	1,116,013	208,202	2,706,461	0	111	19
Subtotal	10,187,628	4,684,009	5,292,139	20,163,776	1,519	38,865	337
Kordofan							
S. Kordofan	73,813	20,000	47,354	141,167	0	1,086	61
Western Kordofan	0	0	0	0	0	0	0
Subtotal	73,813	20,000	47,354	141,167	0	1,086	61
Darfur							
Central Darfur	0	0	0	0	0	61,375	81
Eastern Darfur	0	0	0	0	0	1,677	55

Northern Darfur	0	0	0	0	0	271,776	147
Southern Darfur	0	0	0	0	0	32,997	67
Western Darfur	0	0	0	0	0	63,934	206
Subtotal	0	0	0	0	0	431,759	556
Total	10,261,441	4,704,009	5,440,482	20,405,932	1,519	524,798	1,060

TABLE 3: Areas released and APM / ATM devices destroyed by Year, 1 January 2013 – 28 February 2018

Year	Cancelled area (square metres)	Reduced area (square metres)	Cleared area (square metres)	Total area released (square metres)	Number of anti-personnel mines destroyed	Number of other explosive items destroyed	Number of areas released
2013	7,784,366	1,821,301	774,274	10,379,941	1,071	13,136	245
2014	898,524	285,212	2,469,368	3,653,104	171	17,091	127
2015	0	0	423,158	423,158	28	65,853	104
2016	1,503,676	2,337,945	1,044,104	4,885,725	105	267,130	302
2017	74,875	259,551	707,334	1,041,760	144	98,944	246
2018	0	0	22,244	22,244	0	62,644	36
Total	10,261,441	4,704,009	5,440,482	20,405,932	1,519	524,798	1,060

1.5 Resources Made Available to Support Progress

I. The Government's Annual Fund to National Mine Action Program

The Sudan government funded mine action activities over the past years covering the operational expenses including the clearance of mines and UXO from the contaminated lands besides the wages of the workers. The total government fund in the subsequent years; 2014 and 2015 was \$500, 000 and \$1,500,000 USD respectively.

In 2016, a sum of 2,000,000 USD was spent by Sudan government to undertake clearance expenses that eventually led to the declaration of Gadaref and Red Sea states free from landmines and ERW besides the disposal of the UXO contamination in some parts of Abu Karshola locality of South Kordofan state. In 2017, the total government investment in mine action activities amount to \$2,000,000 USD. Government support to the mine action program is expected to continue and increase especially with the positive signs lifting of sanction and general improvement in economic performance of the country.

TABLE 4: Funding forecast to the end of the current extension period, (2014-2018)

Fund Resource	2014	2015	2016	2017	2018	Total
GoS	500,000	1,500,000	2,000,000	2,000,000	2,000,000	8,000,000
UNMAS	198,609	300,000	2,700,000	2,059,530	1,367,470	6,625,609
Grand Total	698,609	1,800,000	4,700,000	4,059,530	3,367,470	14,625,609

II. Other Resources Mobilization (External Fund):

UNMAS-Sudan has fully engaged undertaking its vital role in external resources mobilization for Sudan mine action program by availing the following resources; SHF, Italy, Japan, USA, and UK during the ongoing extension period (April 2014 – April 2019). What have been achieved up to date could not have been achieved unless these external resources were availed.



PHOTO 3: UK demonstrates keenness in funding mine action activities in South Kordofan State

1.6 Circumstances that Impeded Compliance:

There are number of practical obstacles that have impeded Sudan from meeting its obligations under Article 5 of Ottawa Treaty during the current extension period. The impeding challenges are itemized below as follow:

- a) Inadequate Funding for Demining Operations:
- b) Renewed and On-going Conflicts:
- c) New Level of Contamination:
- d) Information Gathering:
- e) Lack and Insufficient Demining Equipment:
- f) Deep Buried Mines/ERW and Metallic Contents of the Soil:
- g) Climatic factors and atmospheric conditions

Learned Lessons Conflict and additional insecurity will jeopardise all planning and preparations. Lack of funding is another concern that has to be taken into consideration. Population movements, high metallic contents of the soil in hazardous areas and heavy rainy season will cause to delay the overall clearance process.

1.7 Humanitarian, economic, social and environmental implications of the remaining challenge:

Landmines bring about death and causality to civilians especially the children as well as wilds. Beside the direct effects on life, it imposes a heavy economic burden on the accident survivors and their relatives. Comparably, the cost of mine clearance in an average is less than to provide an artificial limb to a survivor from mine or ERW accident. The existence of landmines and ERW caused extreme socio-economic and environmental hardships to the affected population. Anti-personnel landmines are considered one of the most significant factors to an ailing economy and barrier to social development in Sudan throughout the decades Sudan was in war. The economic impact of landmines can be seen as one of the determinant factors of economic security as it prevents people in the affected areas from working, and victims with disabilities face difficulties in finding employment and remain dependent. Thus it prevents sustainable development, poses threat to human security are major obstacles to peace.

1.8 Sudan's Remaining Article 5 Challenge

Unfortunately, with exception of some limited parts in Blue Nile and South Kordofan states, the rest of the state of Blue Nile and South Kordofan is not accessible because of the continuation of war rekindled in 2011. Nonetheless, plans have been prepared to tackle the problem of mines in the high threat areas in the two southern states once condition permit. The total remaining contamination of the AP mines includes a total of 98 confirmed and suspect hazardous areas, measuring 19,285,410 square metres. This includes a total of 53 CHA measuring 2,418,930 square metres and 45 SHA measuring 16,866,480 square metres, as given in the table below.

TABLE 5: Remaining level of contamination: Anti-Personnel Mines, 28 February 2018

State	Number of areas known to contain anti-personnel mines	Amount of area known to contain anti-personnel mines (square metres)	Number of areas suspected to contain anti-personnel mines	Total amount of area suspected to contain anti-personnel mines	Total number of areas known or suspected to contain anti-personnel mines	Total amount of area known or suspected to contain anti-personnel mines (square metres)
Blue Nile	4	219,663	4	835,400	8	1,055,063
S. Kordofan	49	2,199,267	35	15,998,689	84	18,197,956
W. Kordofan	0	0	3	21,991	3	21,991
Kassala	0	0	3	10,400	3	10,400
Red Sea	0	0	0	0	0	0
Gadaref	0	0	0	0	0	0
Total	53	2,418,930	45	16,866,480	98	19,285,410

A summary of total contamination by State is given in the table below.

TABLE 6: Contamination by State, All Contamination types 28 February 2018

S/N	State	Number of Hazardous Areas	Size of contamination in metres squared
1	Blue Nile	17	1,166,621
2	South Kordofan	127	23,340,261
3	Western Kordofan	5	21,993
4	Kassala	10	10,400
5	Central Darfur	6	17,010
6	Eastern Darfur	17	1,906,142
7	Northern Darfur	12	4
8	Southern Darfur	7	1
9	Western Darfur	23	4
Total		224	26,462,436

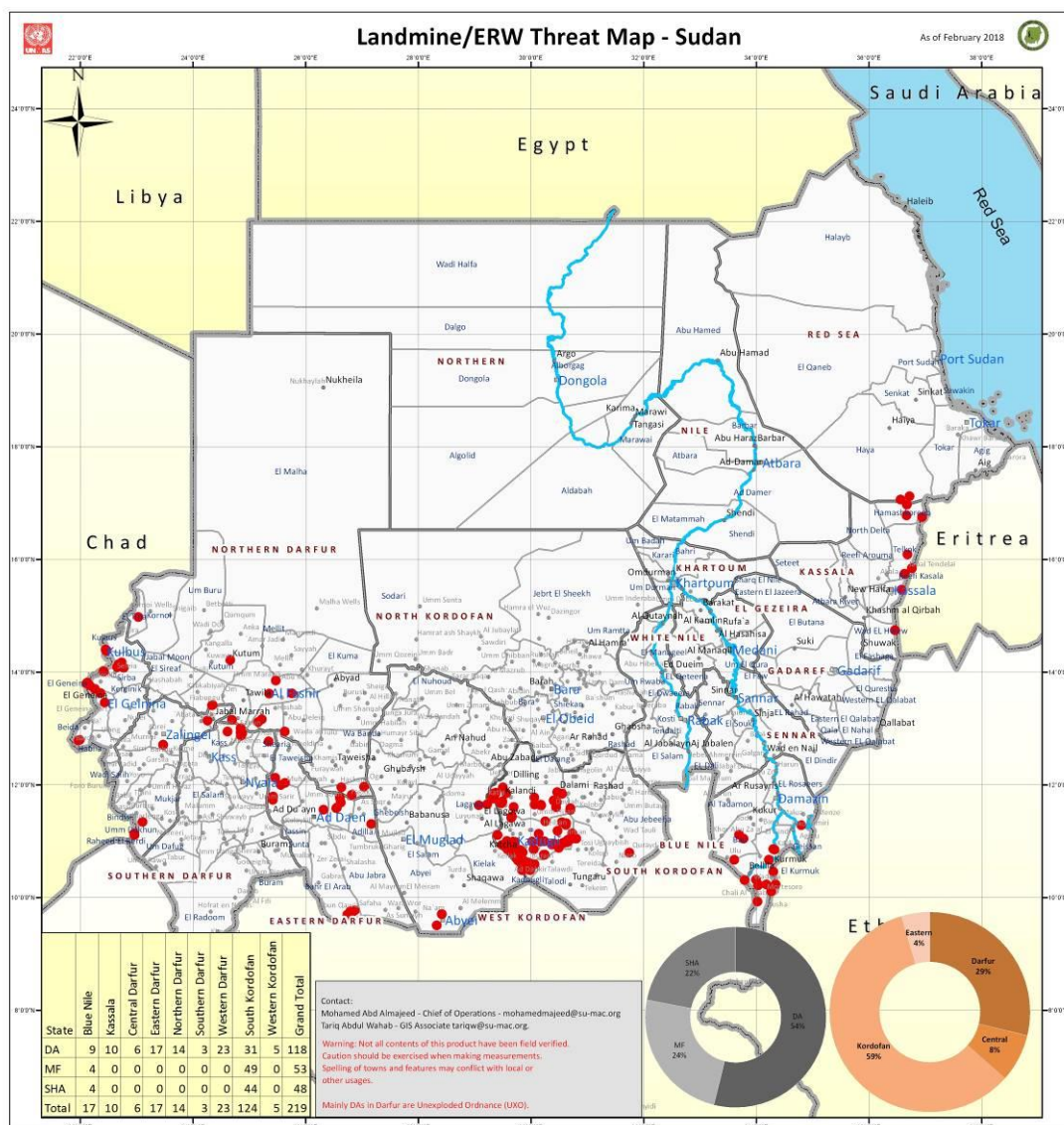


FIGURE 2: Sudan Mine/ERW Contaminated Areas

1.9 Requested Period of Extension: Rationale:

Based on the situation elucidated above, Sudan has comprehensively become conscious of the level of contamination and the remaining hazardous areas under its jurisdiction or control - which equal 224 locations, measuring 26,462,436 square meters, including 19,285,410 square metres of anti-personnel contamination as of February.

Accordingly, as Sudan now pursuing another four (4) year extension; from 1 April 2019-1 April 2023, during which Sudan confidently believes it can address all registered mines and ERW contaminated areas, provided the continuity of fund flow, technical and logistical support and security stability. These factors are part of the challenge that operational planning for the extension period has been considered.

While the extension period focuses on the clearance of the already registered hazardous areas we ought not to lose the sight of the additional survey will be required in Blue Nile and South Kordofan states, Darfur and Abyei as security situation in those places is unpredictable and within likelihood of war continuation. In this regard, Sudan has developed the work plan given below.







1.10 Summary Work plan (2018-2023)







Sudan has developed a 2 phase work plan to address its remaining Article 5 challenge. Phase 1 covers the remaining period of its current extension request, 2018-2019, Phase 2 the period of the extension request (2019-2023).

It is important to note that the work plan has been developed based on LIS surveys undertaken during 2007-2009. It is expected that access to remaining areas will result in new hazardous areas also being identified. In this way, Sudan will keep States Parties informed annually, of changes in access and progress in survey implementation. Once survey has been completed Sudan will inform States Parties of the impact of newly identified hazardous areas as well as the results of any re-survey on the milestones and resources as given in this work plan. Based on these impacts, Sudan will provide an updated work plan for the remaining period of the extension, and may be required to request additional time and resources, as necessary.

Article 5 Implementation Timeline

TABLE 7: Annual clearance plan for the extension period (2018-2023)

No.	State	Multi Year Work Plan 2017-2023						
		2018	2019	2019	2020	2021	2022	2023
Blue Nile State		Current Extension Request, (Phase 1)		Phase 2				
1	Al Roseires							
2	Bau							
3	Kurmuk							
South Kordofan State		Phase 1		Phase 2				
1	Abu Jeebeha							
2	Dalang							

3	Kadugli		
4	Rashad		
5	Talodi		
	Western Kordofan	Phase 1	Phase 2
	Abeyi		

The table below includes a summary of projections for the number of areas and the amount of area (square metres) known or suspected to contain anti-personnel mines to be released during the extension period, 2019-2023.

Table 8: Land release milestones by year, (2019-2023)

	Hazards			Area to be addressed		
	SHA	CHA	Total	Area Cancelled though NTS	Area Cleared	Total Area addressed
2017-18	80	3	83	3783116	420346.2	4203462
2018-19	54	3	57	11944390	1327154	13271544
2019-20	16	2	18	4943930	549325.6	5493256
2020-21	4	16	20	1045828	116203.1	1162031
2021-22	13	7	20	1054315	117146.1	1171461
2022-23	4	22	26	1044614	116068.2	1160682
Total	171	53	224	23816192	2646244	26,462,436

1.11 Current Capacities, remaining challenge and gaps

In 2013, the three national entities, FPDO, JASMAR and NUMAD had a fair ground for competition to build national NGOs to deliver quality results and focus of continues improvement. To ensure quality outputs, NMAC conducted frequent QA visits to the field monitored by UNMAS Sudan technical advisor.

At the time of writing this report, there are only two international contractors, AAR Japan which is implementing MRE & VA in Kassala State and Dynasafe which is deployed and focused on ordnance disposal operation activities in Darfur.

Since June 2011 the Sudan Mine Action programme was facing challenges in accessing most Mines/ERW contaminated areas in South Kordofan and Blue Nile states. However, in the year 2013 limit survey and clearance operations started in parts of South Kordofan and Blue Nile states.

As mentioned above, Dynasafe is currently operating in Darfur where their main task is to support UNAMID and to conduct EOD tasks in Darfur. The Mine Action organization assets distributed is reflected in the following table:

TABLE 9: Operator deployment by location and year

Operators/Years	2017	2018	2019	2019 – 2023
NUMAD	Blue Nile Kassala	South Kordofan West Kordofan Blue Nile	South Kordofan Blue Nile	South Kordofan Blue Nile
JASMAR	Kassala Blue Nile	South Kordofan Blue Nile	South Kordofan Blue Nile	South Kordofan Blue Nile
FPDO	South Kordofan	South Kordofan West Kordofan	South Kordofan	South Kordofan
DYNASAFE	Darfur	Darfur	Darfur	Darfur

This distribution based on the required demining capacities to be fully operating and funded during the extension period. In total following assets will be deployed:

- Two mechanical teams (MECH).
- Seven manual clearance teams (MCT, 8 deminers each).
- Six multi-tasking teams (MTT, 4 deminers each).
- Three mine detection dog teams (MDD, 3 dogs each).

International Request for support

Presently, there is no international entity work in Sudan, if Darfur region exempted. It is hoped that with increased accessibility to its remaining contaminated areas the results of new survey as well as re-survey of existing areas Sudan will possess a clear and accurate measure of its capacities and needs. In this way, international NGOs and commercial companies are encouraged to engage wit Sudan to begin how they can have a positive contribution to the overall efforts aim to clear the lands from mines/ERW.

1.12 Financial Resources (National and International)

TABLE 10: Annual funding obtained to support mine action activities, (USD)

Funding Resources	2018	2019	2020	2021	2022	2023
GoS	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000
UNMAS	1,367,470	0	0	0	0	0
Required Fund	13,110,647	17,984,432	14,627,664	4,931,661	4,931,661	4,252,541
Funding Gap	9,743,177	15,984,432	12,627,664	2,931,661	2,931,661	2,252,541

1.13 Assumptions / Risks

Assumptions

Sudan's plan for the clearance of the contaminated areas is based on the assumption that the security situations in the all troubled regions contaminated with mines and ERW will improve. Presently, all the eastern states are accessible from the security point of view and it hoped that Blue Nile and South Kordofan states will become secure as well for the demining teams to reach the hazardous areas. In this regard Sudan will provide annual updates to States Parties on any changes in accessibility to the remaining hazardous areas. Once survey has been completed Sudan will inform States Parties on the impact of newly identified hazardous areas as well as the results of re-survey on the milestones and

resources as given in the work plan. Based on these impacts, Sudan will provide an updated work plan for the remaining period of the extension and may request additional time and resources, as required

Funding again is another major concern and all plans base on the assumption of adequate funding to the programme.

Presently, there is no international entity work in Sudan, if Darfur region exempted. It is hoped that with increased accessibility to its remaining contaminated areas the results of new survey as well as re-survey of existing areas Sudan will possess a clear and accurate measure of its capacities and needs. In this way, international NGOs and commercial companies are encouraged to engage wit Sudan to begin how they can have a positive contribution to the overall efforts aim to clear the lands from mines/ERW.

Though the predominant optimistic atmosphere mainly emanated from the lift of sanction and Sudan welcoming of the entry of international organizations, if the similar conditions delineated in the precedent paragraphs persist during the remaining period of the current extension and the new extension period, sadly that we should prepare for the similar result.

The prospect of mine action in Sudan in forthcoming few years

There is a very real humanitarian urgency for mine action activities to take place in South Kordofan and Blue Nile States, which is currently not being met. Not only because of the significant difficulties represent in accessing mine affected areas due to the ongoing armed conflict in many of the mine affected areas, but also due to the fact that new mines are still being laid by the SPLA. The UN and INGO entities based in Kadugli and El-Damazin e.g. OCHA has limited, direct access to the mine-affected areas due to the security uncertainties. In addition, organizations working cross-border from neighbouring countries have experienced a decrease in reachable areas over the last few years. While this gloomy picture may suggest that the prospects of mine action will be at a very low point especially after the imminent declaration of Kassala state as devoid of landmines and explosive remnant of war by the advent of December 2017. However, there is a general prevailing optimism that sanction will be lifted, a matter that would positively reflect on the ongoing national political dialogue as well regarding two areas, (Blue Nile and South Kordofan). These developments actually furnished conducive atmosphere for the country to identify several possible openings in the two states; Blue Nile and South Kordofan, which may substantially increase the possibility of mine action activities to take place in the forthcoming few years.

Risk Factors:

During the current extension period there was a realm of possibilities that have resistively affected the completion of planned demining activities and the likened will be expected to have the same influences on the operations progress in the forthcoming extension period. The risks that are likely to be encountered are as follow:

- a. **The Overall Political and Economic Situation:** The plan assumes that the political and economic situations remain in favour of the clearance operations.
- b. **Security Situation in the Operational Areas:** Ongoing conflict in some parts of South Kordofan and Blue Nile may affect the operations plan.
- c. **Funding:** The plan for clearance of the mined areas in Sudan largely depends on the continuation of funding from the international community as well as the Government of Sudan.
- d. **Weather:** Generally, Sudan experienced heavy rains from June to October. During this time of the year operations activities may shut-down or conducted in limited areas which may result in failure to meet the stated deadlines of the extension period. There is great possibility that the floods resulted from the heavy rains move or deeply bury mines and ERW resulting in miss mines or ERW which may also delay the process.
- e. **Terrains:** Minefields in the southern part of Sudan are located in thick vegetation and mountainous areas. The vegetation drills and demining of hard surface of an even ground surface (sharp slopes) both are time consuming.

2 DETAILED NARRATIVE

2.1 Introduction

The Government of Sudan (GoS) signed the Mine Ban Treaty of Ottawa on 4 December 1997 and ratified it on 13 October 2003. On 23 March 2013 Sudan submitted a request to extend its Article 5 mine action deadline to 1 April 2019. This was unanimously agreed by the Thirteenth Meeting of States Parties, (13MSP).

Over the past period the Government of Sudan worked hand in hand with the state members of the Ottawa Treaty, donors and experts within daunting mix political, economic, security and climatic circumstances towards achieving the goal of; ‘Sudan free from mines’, the goal that we sincerely believe with its fully attainment we could realize the security and welfare of our people. What have been achieved up-to-date is so tremendous, however there much still remained to be achieved in the direction of perfect-manner compliance with Ottawa’s stipulations.

The sighted and objective observer to what have been achieved during the last five years of the extended period will realize that despite of an uneasy job that has been wielded, these achievements substantially dwindled and withered in the sense of what suppose and remain to be achieved. An exigency that necessitate to go for another extension period for another four years duration in order to clear all the remained hazardous areas to alleviate the suffer of the affected communities and ultimately to comply with the commitments.

Despite the great interest and sustained support awarded to the humanitarian mine action program by the state and appreciative effort and supportive role being played by UNMAS in close collaboration with NMAC during the past term of the existing extension period, the upshot of the field visits and reports, studious evaluation and uncompromising analysis of the magnitude of the problem with fully consideration to the multiple challenges beset it, have quoted us to the Inescapable conclusion that Sudan by all measures will not be able to complete the clearance of all registered contaminated areas within the frame time of the ongoing extension period a matter that requiring an extended period of four years (until 2023) in order to accomplish the job and adequately conform to the stipulations stated in the Convention.

2.2 Origin of Sudan’s Article 5 challenge

The Republic of Sudan has been plagued by a devastating civil war continued for nearly sixty two years a matter that engendered seismic consequences exhibited clearly in the chronic political, economic, social and security crises collectively contributed to the destabilization of the country. For the last a half century, Sudan’s geopolitical image has been termed with turbulent decades of internal turmoil and protracted domestic contest. The geographical context of Sudan characterized by extensive and spacious terrains coupled with relatively rigid centralized system of govern has in fact worked to undermine the influence of the center on the remote peripheries a situation that has been further exacerbated by the lack of minimal communication means and poor transportation infrastructures. Its demographic setting admittedly peculiarized with considerable deal of diversities in the fabric of its societies, which essentially attributed to the wide-range of ethnic and dialect heterogeneity that intuitively led to cultural disparities among its people.

Needless to say that Sudan’s conflict has cost the country dearly in lost lives and millions of displaced civilians.



PHOTO 3: Walking nearby Lufo Gharib Minefield in South Kordofan State



Photo 4: ERW contamination in Eastern Sudan

Sudan's progress in addressing its Article 5 obligations during the period, 2004-2014, is well documented in detail in its first extension request. What is given below is part of the key actions undertaken by Sudan during this period.

Based on cooperation between GoS and SPLM/A, a tripartite Memorandum of Understanding (MOU) was signed among the GoS, SPLM and UNMAS on 19 September 2002, in Geneva. This agreement provided a framework for mine action activities to be undertaken throughout Sudan. In addition, the Comprehensive Peace Agreement (CPA) and UN Security Council Resolution 1590 further enhanced the role and mandate of the UN in Sudan in general and in the field of mine action in particular. After the tripartite agreement was inked mine clearance operations started in cross-lines/conflicts areas. The preliminary estimations at the time indicated that mines and other ERW affected approximately 800,000 square kilometres equivalent to 32% of the country.

Records of landmine use in Sudan were rarely kept and records that do exist are often inaccurate or out of date. At this time, the true extent and impact of Sudan's landmines problem remained largely unknown, there was a need for a comprehensive assessment of mine affected communities.

During the period 2002 – 2007, several surveys, including, non-technical survey/General Mine Action Assessment (GMAA) and Technical Survey (TA) methods, were carried out by the Swiss Demining Federation (FSD) to identify Suspected Hazardous Areas (SHA).

In 2002, The Danish Church Aid (DCA) in coordination with UNMAS conducted a Landmine Impact Survey (LIS) using mixed survey teams in GoS and SPLM/A areas of the region. These surveys presented sufficient evidence to launch further humanitarian work.

In 2004, a joint series of socio-economic impact surveys were carried out by Landmines Action/SLIRI in collaboration with UNMAS in 75 villages throughout Nuba Mountains.

Lastly, the Survey Action Centre (SAC) conducted LIS in South Kordofan and Blue Nile States.

The LIS was conducted in Sudan during the period July 2007 – Feb 2009 and covered the states of Blue Nile, South Kordofan, Red Sea, Kassala and Gadaref.

The LIS resulted in the identification of a total of 221 locations suspected to be contaminated with mines and/or ERW. Following the LIS the national mine action data-base included a total of 1,125 Dangerous Areas (DA) measuring 1,965,054,889 square meters, 150 minefields (MF) measuring 20,761,022 square meters and 221 suspected hazardous areas (SHA).

The actual baseline was established only when the Landmines Impact Survey (LIS) was carried out through which the results of all previous surveys as well as the other available information were reviewed and re-considered.

2.3 Nature and Extent of the Article 5 Challenge at the beginning of the previous extension request

By 2014, the estimated remaining Mine/ERW contamination affected ten out of Sudan's eighteen States; Gadaref, Red Sea, Kassala, South Kordofan, Blue Nile with mines and ERW, in addition to the five Darfur region states; North, East, South, West and central are contaminated with ERW. As set out in the Table below contamination is largely concentrated in South Kordofan, Kassala, and Blue Nile. While Gadaref and Red Sea States each has less anti-personnel landmine contamination. No mine contamination has been reported in Darfur where the major threat is ERW.

TABLE 11: Anti-personnel mine contamination, January 2013

State	Number of areas known to contain anti-personnel mines	Amount of area known to contain anti-personnel mines (square metres)	Number of areas suspected to contain anti-personnel mines	Total amount of area suspected to contain anti-personnel mines	Total number of areas known or suspected to contain anti-personnel mines	Total amount of area known or suspected to contain anti-personnel mines (square metres)
Blue Nile	6	272,456	5	905,583	11	1,178,039
S. Kordofan	48	2,183,800	36	15,615,710	84	17,799,510
Kassala	4	481,008	19	5,240,753	23	5,721,761
Red Sea	0	0	1	7,200	1	7,200
Gadaref	0	0	1	10,000	1	10,000
Total	58	2,937,264	62	21,779,246	120	24,716,510

However, the remaining 7% of known hazard area comprises 21% of the total contamination in terms of square meters, due to difference in sizes of each hazard areas. Moreover, in the past fifteen years a period that spanned the duration of the 1st and 2nd extension, more than 10,158 anti-personnel mines have been destroyed, and an area of 106 square km has been cleared. Unfortunately, based on new findings greater contamination has occurred due to the escalation of war in Blue Nile and South Kordofan states.

2.4 Nature and Extent of Progress made: Quantitative Aspects

In spite of vast growing challenges, the Sudan mine action program has succeeded in reducing the total number of known hazards by 93%. However the remaining 7% of known hazard areas comprises 21% of total contamination in terms of square meters, due to difference in sizes of each hazard areas. Moreover, in the past ten years more than 10,275 anti-personnel mines have been destroyed. An area of 106 square km has been cleared. It should be noted that if the original LIS baseline had remained the same, it would be safe to say that Sudan has fulfilled its obligations under Article 5. Unfortunately, based on new findings, the baseline, as mentioned in section I, has expanded significantly due to the escalation of war in Blue Nile and South Kordofan States.

During the operational period, (2013 to 2017) the Sudan mine action programme cleared a total of 26,847,790 square metres of land and handed over to the local communities in the states, Red Sea, Kassala, Gadaref, Southern Kordofan ,Blue Nile and Darfur. As shown in the table below.

TABLE 12: Land release progress by State, 1 January 2013 – 28 February 2018

State	Cancelled area (square metres)	Reduced area (square metres)	Cleared area (square metres)	Total area released (square metres)	Number of anti-personnel mines destroyed	Number of other explosive items destroyed	Number of areas released
Blue Nile	0	0	100,989	100,989	0	53,088	106
Subtotal	0	0	100,989	100,989	0	53,088	106
Kassala	8,555,382	3,385,363	4,739,438	16,680,183	1,391	8,398	300
Gadaref	250,000	182,633	344,499	777,132	128	30,356	18
Red Sea	1,382,246	1,116,013	208,202	2,706,461	0	111	19
Subtotal	10,187,628	4,684,009	5,292,139	20,163,776	1,519	38,865	337
Kordofan							
S. Kordofan	73,813	20,000	47,354	141,167	0	1,086	61
Western Kordofan	0	0	0	0	0	0	0
Subtotal	73,813	20,000	47,354	141,167	0	1,086	61
Darfur							
Central Darfur	0	0	0	0	0	61,375	81
Eastern Darfur	0	0	0	0	0	1,677	55
Northern Darfur	0	0	0	0	0	271,776	147
Southern Darfur	0	0	0	0	0	32,997	67
Western Darfur	0	0	0	0	0	63,934	206
Subtotal	0	0	0	0	0	431,759	556
Total	10,261,441	4,704,009	5,440,482	20,405,932	1,519	524,798	1,060

TABLE 13: Areas released, APM/ATM devices destroyed by year, 1 January 2013 – 28 February 2018

Year	Cancelled area (square metres)	Reduced area (square metres)	Cleared area (square metres)	Total area released (square metres)	Number of anti-personnel mines destroyed	Number of other explosive items destroyed	Number of areas released
2013	7,784,366	1,821,301	774,274	10,379,941	1,071	13,136	245
2014	898,524	285,212	2,469,368	3,653,104	171	17,091	127
2015	0	0	423,158	423,158	28	65,853	104
2016	1,503,676	2,337,945	1,044,104	4,885,725	105	267,130	302
2017	74,875	259,551	707,334	1,041,760	144	98,944	246
2018	0	0	22,244	22,244	0	62,644	36
Total	10,261,441	4,704,009	5,440,482	20,405,932	1,519	524,798	1,060

During the operational period from 2013 to 2017 the Sudan Mine Action Programme destroyed a total of **1,519** Anti-Personnel Mines (APM), **470** Anti-Tank Mines (ATM), **32,397** Unexploded Ordnance (UXO) and **491,931** Small Arms Ammunition (SAA) in the States (Red Sea, Kassala, Gadaref, Southern Kordofan ,Blue Nile and Darfur), as given in table above.

During the operational period from 2002 to 2017 the Sudan Mine Action Programme destroyed a total of 10,275 Anti-Personnel Mines (APM), 3,238 Anti-Tank Mines (ATM), 85,312 items of Unexploded Ordnance (UXO) and 884,633 Small Arms Ammunition (SAA) in the States Red Sea, Kassala, Gadaref, Southern Kordofan ,Blue Nile and Darfur, as the table below shows.



Photo 4: Official celebration of Gadaref state free from landmines and ERW

Clearance Completion of Gadaref and Red Sea States: All registered Confirmed Hazardous Areas (CHA) reported in two states were completely cleared in 2016, Gadaref and 2017, the Red Sea, respectively. As a result, the two states were officially declared by NMAC as free from mines and ERW in big ceremonies held especially for this purpose. The below table illustrates the details of sizes of the cleared registered contaminated areas and number of destroyed explosive ordnances/items in the two states;

Red Sea State

The May 2017 has witnessed the clearance completion and declaration of the Red Sea state free from landmines and explosive remnant of war. In the Red Sea state a total of 55 registered hazardous areas measured 12, 783,985 square metres was cleared. Total of 37 anti-personnel landmines, 26 anti-tank landmines, 2,855 UXO and 16,697 small arm ammunitions were destroyed as well.



PHOTO 5 CELEBRATING THE RED SEA STATE FREE FROM LANDMINES AND ERW

TABLE 14: Clearance statistics of completed States, May 2017

State	Registered Contaminated Area	Area Size (m2)	AP	AT	UXO	SAA
Gadaref	18	777,132	128	7	1,730	28,619
Red Sea	55	12,783,985	37	26	2,855	16,697
Total	73	13,561,117	165	33	4,585	45,316

Numerous examples can be cited on how local communities benefited of the land released from mines/ERW, several case studies highlighting the positive impact of humanitarian demining are given below.

Case Study 1:

Allugdi village of Gadaref state is an obvious example of land released to the usage of the local communities. *Allugdi* located in highly fertile ground of vast agricultural area in Gadaref state bordering Ethiopia. The village has been blocked by landmines at the beginning of the war in the East of Sudan in 2002. The situation negatively impacted on the local communities and deprived them to utilize the lands for agricultural and grazing purposes and consequently affect their livelihood and reduce chances for employment opportunities. A total of 72, 692 square metres of *Allugdi*, area equivalents to 5 minefields have been finally released for agricultural activities in April 2015 simultaneously with the official declaration of Gadaref free from landmines and ERW.



Photo 6: *Allugdi* agricultural area is being cultivated by local community after clearance

The result was positively impacted the socio-economic aspect of the local communities and enabled them to utilize their lands; replanting and grazing the area for the subsequent three years; 2015, 2016 and 2017 as well as building houses on their properties which were left unused for long years because of landmines and ERW contamination.

Clearance Completion of Kassala State: Operations are smoothly progressing in Kassala State and it is expected Kassala state will be declared free from landmines and ERW in March 2018. By the clearance completion of Kassala state, all Sudan's Eastern States will become free from mines and ERW then efforts will be shifted to Blue Nile, South Kordofan, Abyei and Darfur.

CASE STUDY 2: OPENING KASSALA- PORT SUDAN WATER PIPE LINE

In the Red Sea state, the clearance of 460 km water pipe way started from *Aroma-Um Odam (town)* in Kassala state to coastal city of Port Sudan has considerably contributed to solution of drinking water crisis in the Red Sea State, perpetuated for long years because of the mines contamination.





Case Study 3:

The clearance of Girgir-Kassala road has expedited the delivery of medical services to Girgir village from Kassala hospital. In the past, tragic mortality cases were recorded among the pregnant during delivery in Girgir due to the long detour it took them to reach Kassala hospital (from 64 km to 17 km).

In Darfur work will continue in support of the UNAMID focusing on spot clearance tasks around Jebel Marra areas. In Darfur the problem is mainly ERW.



In preliminary preparations to declare the whole Darfur states free from explosive remnant of war within the framework of the National Mine Action Centre (NMAC) strategy, "Sudan Free from Landmines and Explosive Remnant of War", NMAC memorialized the announcement of *Foro Boranga* locality of western Darfur region free from explosive remnant of war in 24th April 2017. Midst rejoicing popular masses honoured by his Excellency Field Marshal Ali Mohamed Salem – State Minister of the Ministry of Defence, Western Darfur State's Governor, Head of UNAMID-Sector West and UNAMID-ODO, official, popular and society leaderships, the local authority of the Western Darfur handed over the freed area.

Clearance Completion of ERW in Foro Boranga: In 24th April, 2017, the locality of Foro Boranga of Western Darfur state has been announced free from explosive remnants of war (ERW). The announcement considered a wide-stride on the way to declare all Darfur's states devoid of unexploded explosive ordnance as a part of the country's broad strategy that aims to declare Sudan free from landmines and ERW. The function was celebrated by masses of Western Darfur population and witnessed

by the Head of UNAMID, Director of UNAMID Ordnance Disposal Office (ODO) and the Governor of West Darfur State.

Survey in Blue Nile and South Kordofan:

In the course of the current operational season; 2017 – 2018, survey and clearance operations have been taken place in both South Kordofan and Blue Nile states. These operations resulted in the registration of 01 x CHA measuring 16,670 square meters and 37 x SHA measuring 2,830,824 square meters coequal to overall total of 38 hazardous areas with 2,847,494 square meters. A total of 284,182 out of 2,847,494 were cleared.

It worthwhile to mention that the road network of South Kordofan State has been gravely affected by the sewed landmines that came as a natural consequence of the late war erupted in the mid of 2011. And in the walk of the recurrent road accidents that followed, large stretches of roads fear to be littered with landmines. Eventually, this situation has reversely impacted humanitarian outreach and impeded aid delivery to the needy population. Consequently, humanitarian work was completely stalemated and organizations capacity to lend helping hand considerably shackled.

The clearance of Habila – Dalami, Dalami – Dari and Dari – Abri roads has just come as an immediate response to the overriding priority once being signalled by OCHA in a joint meeting with NMAC.

The humanitarian returns from the demining of these routes are estimated to be high in general, let alone when kept in mind that there are additional non-quantifiable benefits for individuals, communities and societies. The benefits from the clearing of these routes are calculated as cost and time savings for passengers now travelling with vehicles on the safe road link as compared to the longer alternative routes.

2.5 Nature and Extent of Progress Made: Qualitative Aspects

2.5.1 National Demining Structure

The National Mine Action Centre (NMAC) came into being in 2005 to work in partnership with United Nations Mine Action Office in Sudan (UNMAO) with the objective to recreate an environment in which people can live safely, in which economic, social and health development can occur free from the constraints imposed by landmine contamination, and in which the victims' needs are addressed. NMAC, up to present day, has been following on the implementation of the obligations of the Government of the Sudan under Ottawa and other relevant treaties on mine action. Also as part of its mandate, NMAC approves mine action strategies and plans at national level through its sub-offices in the country. NMAC has seven sub-offices in the regions affected by mines and ERW with its headquarters being located in Khartoum- Acting as the focal point and coordination mechanism for all mine action activities;

- Ensuring that all stakeholders are represented and heard.
- Developing a national mine action plan which fully incorporates the socio-development of the country and integrates all stakeholders.
- Information management, including the collection and dissemination of data and the implementation of Information Management System for Mine Action (IMSMA).

- Integrating the sectors of mine action (mine risk education, victim assistance, clearance, advocacy and stockpile reduction) into a coherent holistic programme.
- Assisting and coordinating organizations to mobilize resources; and
- Developing and implementing technical and safety standards, quality assurance, and quality management procedures.

In July 2007, the NMAC established three sub offices each in Kassala, Kassala State, Kadugli, South Kordofan, and Damazin, Blue Nile. With the development of these three sub offices the NMAC involved in managing mine action operations jointly with UNMAO. The main role of planning, tasking and Quality Management was consolidated and all documentation checked, reviewed and signed by NMAC and UNMAO representatives at the sub office level. This arrangement continued until the departure of UNMAO in June 2011. In Darfur NMAC established four sub offices in North, South, West and Central states to work in collaboration with UNAMID Ordnance Disposal Office.

National Mine Action Authority (NMAA):

Another supreme national body is The National Mine Action Authority (NMAA) established by Presidential Decree No. 299, dated 24 December 2005, followed by its official launch in a high level ceremony attended by the President of the country on 7 March, 2006 in Khartoum. Based on the issuance of the Presidential Decree, the National Mine Action Policy Framework was developed, approved by the High National Mine Action Committee and passed by the Council of Ministers of the Government of National Unity (GoNU) of the time on 6 August, 2006. The National Mine Action Authority under the chairmanship of the Minister of Defense with other line ministries as members meets annually to review the progress of mine action in the country and to make specific recommendations regarding mine action operation to NMAC if needed. The responsibility of the national authorities with the full support of the UN to ensure that mine action is coordinated, established in accordance with international standards and undertaken within the context of national development. This is best achieved by creating policies, establishing standards and passing legislation governing all aspects of mine action as early as possible.

A transition Plan to fully transfer the role of managing mine action operations from the UN to the NMAC was developed in a joint workshop between NMAC and UNMAO held in Nairobi on 18 Nov 2008. Based on the transitional plan UNMAO started building the capacity of the NMAC staff through a peer to peer approach and on the job training. The function of planning, tasking and quality management continued to be carried out jointly by NMAC and UNMAO until June 2011 when transition from UNMAO to NMAC was completed.

Today all these tasks are carried out by NMAC with limited support from UN. In 2010, as a result of the Transition Plan the GoS passed the Sudan Mine Action Law to fulfil its obligations under the Ottawa Treaty and, to enable NMAC to face the transition challenges more effectively. Based on the law the perpetrators violating the articles in the Ottawa Convention will be penalized for their actions.

Following is the existing structure of the National Mine Action Authority and its relationship with NMAC and other concerned bodies:



FIGURE 3: National Mine Action Structure

Sudan has long been sought to re-engage the United Nations Mine Action Service (UNMAS) in Sudan following its mandate expiration and departure of the country in December 2013. Within the absence of UNMAS during the year 2014, UNDP filled the gap and led the UN support role to Mine Action program in Sudan. In late 2014, UNDP re-oriented its activities away from mine action. In this vein, Sudanese government's exercised exertion on high levels has yielded in UNMAS resumed activities in Sudan by April 2015, to assist NMAC in building institutional capacity, meeting obligations under Article 5 of the Anti-personnel Mine Ban Convention ('Ottawa Treaty') and other relevant international treaties, in addition to mobilizing resources for land release, risk education (MRE) and victim assistance (VA). Also to provide technical consultations to enhance the capacity of National Mine Action Centre in management and coordination of Mine Action operations in Sudan and strengthen national capacity to deal with current contamination and residual risk and facilitate the flow of financial support from donors to enable and qualify Sudan to meet Ottawa's obligations.

In reaffirming the high consideration Sudan's officials being given to mine action program, is the on regular-basis field sessions convened in Mine Action Centre by the Ministerial Council – the supreme executive power in the country - to give contemplating pause and cast lights on mine action projects and activities, get acquainted with progress as well as challenges encountered and work to find solution to persistent problems and smoothen the rough edges confronted by the program in the course to realize the announced goal 'Sudan free from mines'.

2.6 Sudan Mine Action Strategy

Reviewing of National Mine Action Strategy during the Extension Period:

The National Mine Action Strategy is currently in the process of being reviewed, with a specific focus on resource mobilisation strategy for key programming areas of land release, MRE and Victims Assistance. Sudan will make the strategy available to States Parties once it has been approved.

National Technical Standard and Guidelines (NTSGs)

The review of Sudan's National Technical Standard & Guidelines (NTSGs) is still being finalized. Once approved Sudan will make the NTSGs available for States Parties. Critical safety, control and quality elements of the International Mine Action Standards (IMAS) have been retained in the Sudan Mine Action Standards, to ensure that Sudan NTSGs maintains the principles and spirit agreed in IMAS. The work of preparing, reviewing and revising of the NTSGs was conducted by a technical committee formed from NMAC, UNMAS, and National Units for Mine Action and Development (NUMAD), TDI, JASMAR, FPDO and with the support of an international expertise from UNAMID-ODO. The latest version of the NTSGs will be

uploaded at NMAC website. Accordingly, the SOPs of all mine action operators in Sudan will be in compliance with the NTSGs. Talk the Process of approving.

In the past decade, land release has significantly improved the lives of the people of Sudan. It has facilitated free and safe movement for local populations, IDPs, refugees, and aid workers in 1,135 communities previously affected by mines/ERW as of June 2011. In addition, it has opened land for agricultural usage and animal grazing. Furthermore, it has opened up over 37,898 kilometres of roads connecting different villages, towns and port cities and allowed commerce to flourish and has decreased the chances of mine/ERW contamination of waterways. It has also opened land for the development of homes, schools, hospitals, and businesses. According to data gathered in a lot of the areas where clearance had happened, the numbers of indirect beneficiaries were many folds more than the direct beneficiaries especially if the hazard was located geographically in places which connected different districts and villages.

In spite of fund limitation, the continuation of war in Blue Nile and South Kordofan states and the precarious security situation in Darfur, undeniable achievement in land released to the local communities has been realized during the current extension period (April 2014 – April 2019). During the current extension period Sudan has completed clearance of 13,561,117 square metres in Gadaref and Red Sea States.

2.7 National Capacity Building Achievements:

NMAC with its headquarters in Khartoum and seven sub-offices, one in each region affected by mines and ERW, is well positioned to plan and execute demining operation in the country. NMAC and its sub-offices are mainly working as coordinators but the actual mine action implementation is carried out by NUMAD, JASMAR and FPDO, all national organizations.

In the year 2013 the staff from NUMAD, JASMAR and FPDO underwent trainings for leadership and EOD capacity and also for Mine Wolf machine operation. In general, the staff of the three organizations has sufficient demining experience since they have been involved in a partnership role with international NGOs and commercial companies throughout the past years.

As for the international demining NGOs and commercial companies, Dynasafe is the only one working presently in the Sudan, in addition to AAR Japan working in Mine Risk Education and Victim Assistance. Potentially there is a good chance that more will come if funding is available.

Introduction of IMSMA-NG: The government's persistent efforts and strong supports to the national mine action program came to the prominence of international community through Sudan's regular presence and systematic participation in international mine action forums and conferences. Finally, these efforts yielded a fruition represented in the uplift of sanction on information sophisticated technology as a part of economic penalties imposed on Sudan for the last twenty years, a matter that bring about upheaval in Information Management System for Mine Action (IMSMA), as IMSMA New Generation (NG) being introduced for the first time in Sudan mine action program. Required apparatuses, devices and equipment were supplied to enable immediate and full application of IMSMA-NG; Sudanese national operators were also trained on the new program. Such information revolution was reflected positively enabling Sudan mine action program up to international standards and catch up with its counterparts.

External training courses attended by NMAC personnel during the current extension period:

- **Coordination, Monitoring and Reporting:**
- **Cooperation and Assistance/Resource Mobilization:** UNMAS in Sudan mobilizes resources for targeted assistance that will have an immediate impact on the lives of mine and ERW survivors.

The noticeable drop in the number of landmines and ERW victims registered in 2016 up to the mid of 2017, compares to the last ten years was chiefly attributed to the coordinated efforts in clearance of the mined areas and risk education.

Mine Detection Dogs (MDDs) Achievements:

Sudan's Mine Detection Dogs (MDDs) Training Center stands as an evidence for the fruitful cooperation between Sudan and the Japanese government in the domain of mine action. In addition to manual and mechanical mine clearance methods in possession of Sudan, now a third demining tool of MDD being added. In the first quarter of 2017, the MDD Training Center was provided with 10 MDDs donated by Afghanistan Programme. Total of 15 national MDD handlers were trained and accredited by an international expert from Afghanistan and they are now gearing for immediate deployment in Blue Nile and South Kordofan States.

Progress Made in Mine Risk Education:

The national progress achieved in Mine Risks Education (MRE) and Risk Education (RE) represented in the following areas;

- An estimation of 630,000 citizens were received and benefited of mines and ERW risk awareness presented to them through various means of messages dissemination.
- A total of 525 individuals were trained on Community Risk Awareness and on the use of the Guidance in Community-Base Risk Awareness for the five Darfur States.
- Smart partnership with NGOs/ INGOs to provide MRE and RE services to the affected communities Sudan-wide was establishment by NMAC.
- Access to official audio and visual mass-media; radio and TV was made available by NMAC to be used as awareness forums through which national organizations and Ministry of Education can air risk messages to the affected communities as well as other dissemination methods such as lectures, posters dispensing and campaigns under the direct supervision of NMAC.
- In collaboration with National Council for Motherhood and Childhood Welfares, UNICEF and Ministry of Education (MoE), NMAC integrated the Mine Risks Education into the school curriculum for basic and high secondary schools in the affected areas to ensure the sustainability of the safety messages. Training workshops for school teachers and seminars were also held and organized by NMAC to ensure smooth and harmony integration of MRE in school syllabuses.
- 6,100 copies of explosive risk education curriculum for high secondary school and 12,000 copies of explosive risk education curriculum for basic school were printed and distributed in Darfur states.
- Re-print and distribution of 6,400 copies for basic school and 4,000 copies for high secondary school of the school MRE associated curriculum in Kassala, Blue Nile and South Kordofan States.
- A total of 10,000 copies of posters were distributed in the affected states.
- A total of 4000 school wall-board newspapers re-printed and distribution in school of the affected states.
- In collaboration with the UNICEF, the Social Awareness Guide for the use of volunteers was printed by NMAC to guide them to voluntary provides MRE to the affected communities.
- NMAC maintained close coordination with the Union of Disabilities, as a result considerable numbers of persons with disabilities were trained on MRE whether in Khartoum or affected states.

FIGURE 4: Percentage of people who received MRE disaggregated by sex and gender

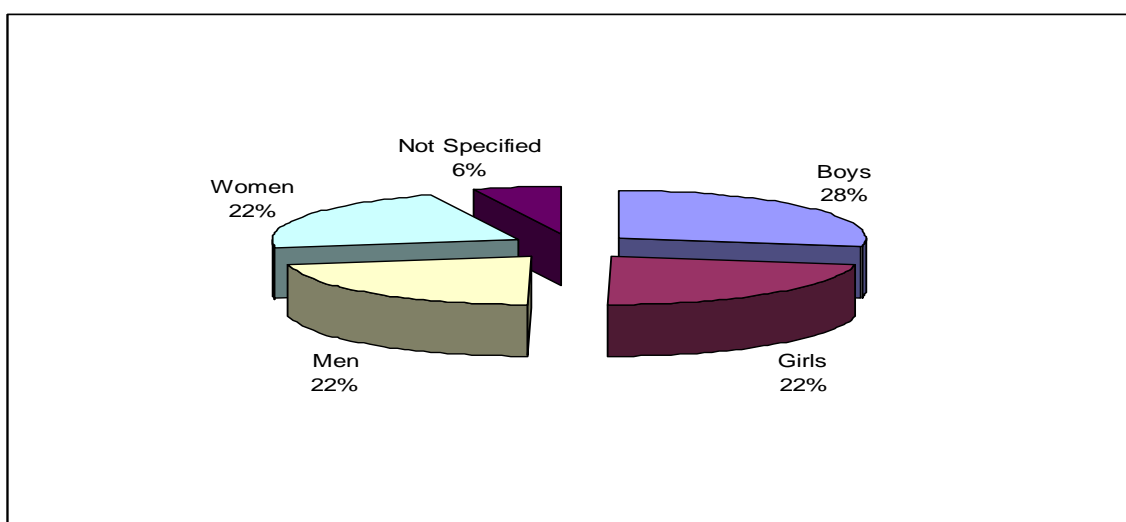
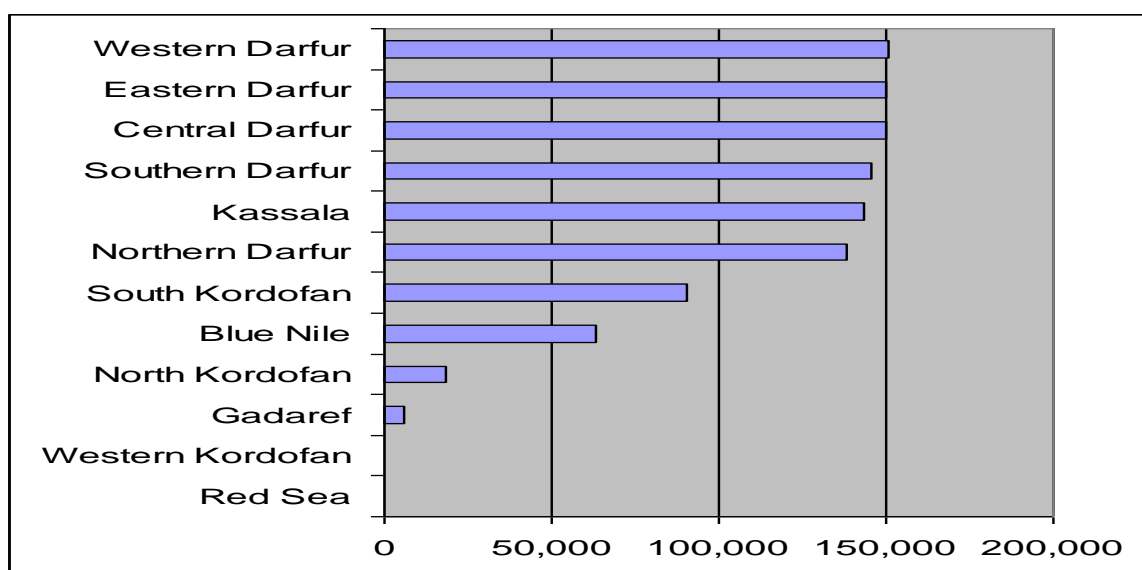


FIGURE 5: No of people received MRE by State



Vi

ctims Assistance Achievements:

The Sudan's Victims Assistance Strategic Plan which is set-up and approved by NMAC, aims to avail a consistent approach to comprehensive, adequate and appropriate age and gender-sensitive assistance to the victims of landmines and explosive remnants of war. The work plan was guided by Anti-Personnel Mine Ban Convention and Convention on the Rights of Persons with Disabilities and it generally revolves around the following principled pivotal:

- **Data Collection & Need Assessment of the Victims:** systematic information gathering mechanism was internally adapted by NMAC information management system to specifically provide timely and accurate consensual information on the victims and maintain records. Registration record for victims, flow of information on accidents and victims involved was also established in all affected states through NMAC sub-offices to cannel organizations reporting on new accidents and victims. The initial assessment and reporting task mainly shouldered by the implementing national or international organizations whether they are operating in VA or MRE or clearance. Accordingly, all new reports on victims will be captured recorded, reviewed, processed and compiled on annual basis for reporting purposes. Sometimes comprehensive

reporting remains a challenging due to limit access and capacities to gather information on the ground.

- **Access to Services & Opportunities:** NMAC worked in the promotion and reinforcement of a consistent provision of medical care services, psychological support, social and economic reintegration and education of the victims. Facilities of rehabilitation services were built and equipped with necessary equipment. Medical facility of Hope City was established by the Ministry of Defence to look after the war disabled persons and victims of landmines and ERW and other disabilities regardless of victims being military personnel or civilians. The National Prosthetic Corporation was supported and equipped with necessary aids by the government and other donors in order to fill the gap in provision and rehabilitation of prosthetic limbs and other mobility aids to the needy victims.
- **Plan, Policies and Legal Framework:** Guided by the Convention on the Rights of Persons with Disabilities, Sudan laws and regulations that ensure the rights of persons with disabilities were further promoted and stressed through enlightening workshops and activation of the pertinent laws. NMAC follow-up to ensure that all victims received free educational services in government educational facilities and that every disabled child is exempted from school fees.
- **Economic Inclusion & Social Integration:** Several income generating micro-projects for victims' assistance were oversaw by NMAC and implemented by national organizations e.g. Friends of Peace and Development Organization (FPDO) within the framework of socio-economic inclusion and poverty elimination. The limited fund availed to the victims assistance projects still restricts the benefit of these project within a very few beneficiaries e.g. in July 2017, AAR-Japan donated 12,920 \$ for 2 months project duration in income generating in Kassala state implemented by FPDO. 10 of the victims were benefited of the project.
- **Awareness-Raising:** NMAC in collaboration with NGOs occasionally organized workshops related to activities undertaken to raise awareness on the rights of survivors, other persons with disabilities and indirect victims, their needs, and available services among all relevant stockholders and the general public.
- **Coordination, Monitoring and Reporting:**
- **Cooperation and Assistance/Resource Mobilization:** UNMAS in Sudan mobilizes resources for targeted assistance that will have an immediate impact on the lives of mine and ERW survivors.

TABLE 15: Landmine victims disaggregated by gender and age

Year	Killed						Injured						Total
	Men	Women	Boys	Girls	Not Specified	Total	Men	Women	Boys	Girls	Not Specified	Total	
2013	1	0	0	0	1	2	7	6	16	4	0	33	35
2014	1	0	0	0	0	1	25	7	7	1	0	40	41
2015	5	0	5	0	9	19	6	2	19	3	8	38	57
2016	0	0	2	1	0	3	3	3	9	2	3	20	23
2017	1	0	5	3	2	11	9	0	21	2	0	32	43
2018	0	0	2	0	0	2	0	0	3	0	1	4	6
Total	60	10	80	12	36	198	211	30	203	40	131	615	813

The noticeable drop in the number of landmines and ERW victims registered in 2016 up to the mid of 2017, compares to the last ten years was chiefly attributed to the coordinated efforts in clearance of the mined areas and risk education.

Data-base clean up

Sudan has continued to undertake re-survey of areas suspected to contain landmines/ERW as well as undertaking new survey in areas once a strong level of security has been achieved.

The process of the data clean-up is being conducted with the aim to better utilize and improve the quality of data and statistical information on hazardous areas. The initial data clean-up process started in January 2013; it comes in part due to preparations in migrating data from IMSMA Legacy to IMSMA New Generation (NG). The clean-up includes going through LIS and other hazards recorded in the archive as well as undertaking field verification.

Since the initiation of mine action activities in Sudan in 2002, a total of **3,223** hazardous areas, 288 CHA and **2,935** SHA, have been addressed, measuring **2,751,746,728** square metres. However, the calculated size of the addressed hazardous is 106,336,854 square metres.

This represents a significant difference in area. This is due to the areas addressed by organizations in the past and cancelled as no evidence of mine or ERW haven't been captured in the database as land released. It is estimated to be **2,618,279,348** square meters.

TABLE 16: Registered hazards from 2002 - 28 February 2018

Report Year	Registered Hazard					
	CHA		SHA		Total	Area
	No	Area	No	Area	No	
2002	0	0	103	815,636,378	103	815,636,378
2003	0	0	31	83,785,180	31	83,785,180
2004	7	980,890	40	71,810,086	47	72,790,976
2005	33	9,988,993	202	9,127,958	235	19,116,951
2006	9	1,712,389	369	974,160,832	378	975,873,221
2007	24	2,461,254	230	705,554,237	254	708,015,491
2008	76	5,575,929	371	22,104,207	447	27,680,136
2009	34	201,764	94	2,197,917	128	2,399,681
2010	29	1,070,609	196	26,220,388	225	27,290,997
2011	23	1,101,759	280	8,734,431	303	9,836,190
2012	5	55,748	66	1,255,804	71	1,311,552
2013	22	337,995	206	443,539	228	781,534
2014	6	268,199	78	1,635,535	84	1,903,734
2015	11	210,691	100	176,405	111	387,096
2016	2	87,186	284	1,400,567	286	1,487,753
2017	6	157,006	244	2,741,031	250	2,898,037
2018	1	16670	41	535151	42	551,821
Total	288	24,227,082	2,935	2,727,519,646	3,223	2,751,746,728

It is expected that the result of the data clean-up process will have no effect on the area cleared but will have effect on the cancelled area which will be incorporated into the database and this in turn will minimize the difference reflected between areas cleared and size of total hazards closed.

In the past, progress was reported based on tasks which included as many hazards as possible. But in order to avoid such confusion in the future the programme has introduced a hazard based daily reporting mechanism which will have positive impact on the accuracy of data.

In total Sudan has released 106,336,854 square meters of land through non-technical survey, technical survey and full clearance over a period of 10 years (2009 - 2019). A total of 1,699,314,251 square metres

has been cancelled during survey operations, as there was no evidence of mines/ERW being found. The cancelled hazards were closed in IMSMA but it did not reflect in the IMSMA as land released. A number of other issues were also found, including:

1. Areas converted from SHAs into minefields through technical survey are counted twice. Total size of these areas sums up to 590,793,571 square metres.
2. Roads are recorded as polygons in the database since IMSMA legacy doesn't support a line feature. But the cleared roads are recorded in an add-on database and it sums up to 328,110,182 square metres.

TABLE 17: Registered hazards from 2002 - 28 February 2018

Year	Cleared Hazard						Area cleared	Area Reduced	Area Cancelled	Battle Area Released	Total Area Addressed
	CHA		SHA		Total						
	NO	Area	NO	Area	NO	Area					
2002	0	0	1	6,792,907	1	6,792,907	48,480	0	0	1,782	50,262
2003	0	0	23	71,364,000	23	71,364,000	465,882	0	0	0	465,882
2004	0	0	11	31,742,333	11	31,742,333	268,606	0	0	25,965	294,571
2005	2	9,002,664	125	123,387,957	127	132,390,621	232,538	0	0	38,873	271,411
2006	1	10,466	260	217,336,998	261	217,347,464	175,702	0	0	1,003,927	1,179,629
2007	23	298,481	131	187,426,841	154	187,725,322	670,286	0	0	18,436,141	19,106,427
2008	9	424,319	168	30,147,868	177	30,572,187	952,997	0	0	436,610	1,389,607
2009	8	716,404	293	442,182,164	301	442,898,568	1,169,215	1,195,514	0	2,343,575	4,708,304
2010	54	6,176,910	310	1,389,114,760	364	1,395,291,670	2,285,736	645,074	22,757,677	1,596,581	27,285,068
2011	77	3,477,709	353	146,659,026	430	150,136,735	1,486,533	0	154,224	20,592,219	22,232,976
2012	8	106,321	82	33,742,153	90	33,848,474	551,161	0	0	626,668	1,177,829
2013	15	517,055	230	8,749,546	245	9,266,601	774,274	1,821,301	7,784,366	945,750	11,325,691
2014	13	135,971	114	4,580,165	127	4,716,136	2,469,368	285,212	898,524	567,848	4,220,952
2015	6	300,817	98	322,785	104	623,602	423,158	0	0	1,247,319	1,670,477
2016	10	282,052	292	5,837,759	302	6,119,811	1,044,104	2,337,945	1,503,676	1,520,441	6,406,166
2017	9	358,983	237	3,949,571	246	4,308,554	707,334	259,551	74,875	2,847,998	3,889,758
2018	0	0	36	139,308	36	139,308	22,244	0	0	639,600	661,844
Total	235	21,808,152	2,764	2,703,476,140	2,999	2,725,284,292	13,747,618	6,544,597	33,173,342	52,871,297	106,336,854

A summary of the work undertaken during data clean-up is given below:

TABLE 18: Summary of data clean up

Area size	Description
1,385,709,374	Area of DAs or SHAs Cancelled not recorded in database as released
328,110,182	Hazardous Roads Surveyed, Verified or Cleared - since IMSMA legacy doesn't support line feature, km of roads are stored in an Add-on database
273,857,822	SHA (MA) and DAs converted to MF counted twice
1,987,677,378	Total area cancelled, but it is not recorded in database as land released.
84,719,031	Total areas cleared
2,072,396,409	Total area cleared plus released
2,029,368,132	Total size of area linked closed hazards in the database.
43,028,277	Difference in figures recorded in IMSMA data base – this will be rectified during data clean-up process.

2.8 Resources made available to support progress

The Sudanese Government has made significant contribution to mine action, as given in Section 2.6 of the narrative extension request. This includes covering all operational expenses and wages of demining staff. The total government funds allocated in years; 2014 and 2015 was US \$500,000 and US \$1,500,000, respectively. In 2016, US \$2,000,000 was spent by the Sudanese government to undertake clearance activities. This directly led to the declaration of Gadaref and Red Sea States free from landmines and ERWs, in addition to the disposal of UXO in some parts of Abu Karshola locality.

Mine action in Sudan has been well resourced from 2005 -2011 particularly since the CPA. The biggest portion of funding had come via the UN Department of Peacekeeping Operations (DPKO) which was used for mine action in support of the UNMIS peacekeeping forces. Significant amounts also were channelled by donor countries through the UN Voluntary Trust Fund for Mine Action (VTF), which covers other UNMIS/UNMAS priorities.

At the beginning of the current extension period in 2014, UNDP had the lead on UN support role to mine action program in Sudan however, UNDP re-oriented its activities away from mine action in late 2014. In December 2014 UNDP and the Sudanese Government requested the re-engagement of UNMAS in Sudan.

- In April 2016 UNMAS became the lead mine action UN actor following an assessment mission in March 2016.
- UNMAS now supports the NMAC in building institutional capacity, meeting obligations under Article 5 of the Anti-personnel Mine Ban Convention and other relevant international treaties, in addition to mobilizing resources for land release, mine risk education (MRE) and victim assistance (VA).
- The period between 2014 -2017 witnessed generous fund from government of Sudan and UNMAS to Mine Action Program Sudan. Total fund received by mine action program during the said period was 46,853,218 USD.

In addition to these international contributions, the government has significantly increased its funding for mine action. The government support is paying for the staff of the NMAC and the costs of the activities implemented by the department of projects.

In fact, there are uncountable examples which could be cited stand for the Sudan government strengthening of National Mine Action Capacity; e.g. area allocated by the government of Sudan for the

MDD Training Center and Sudan ambition that the MDD Center to become a central to serve East and Central of Africa is striking achievement besides, NMAC buildings, dramatically expanding of the clearance/demining capacity of manual teams, introducing of mechanical and MDD assets, also the support in the areas of Mine Risk Education and Victims Assistance which were further elaborated in progress section of this document, all are achievements which could not have been materialized without the continual support of the government of Sudan.

The on regular-basis presence of Sudan in the international mine action forums, observation of its commitment to Ottawa Treaty and the serious steps taken by the government through NMAC to take lead of humanitarian mine action in Sudan have shown Sudan's seriousness and simultaneously led to the refutation of the falsified and groundless accusations labelled Sudan with the use of anti-personnel landmines and cluster-munitions in the course of the ongoing war.

2.9 The Government's Annual Fund to National Mine Action Program

The Sudan government funded mine action activities over the past years, covering the operational expenses includes the physical clearance of mines and UXO from the contaminated lands besides the wages of the workers. The total government fund in the subsequent years; 2014 and 2015 was 500, 000 and 1,500,000 USD respectively. In 2016, a sum of 2, 000, 000 USD was spent by Sudan government to undertake clearance activities eventually led to the declaration of Gadaref and Red Sea States free from landmines and ERWs, in addition to the disposal of UXO in some parts of Abu Karshola locality. In 2017, the total government spends/investment in mine action activities reached 2,000,000 USD. The government support to the national mine action program is expected to continue and increase especially with lifting of sanctions and general improvement in economic performance of the country.

TABLE 19: Annual funding obtained to support mine action activities (USD)

Funding Resources	2014	2015	2016	2017	2018	Total
GoS	500,000	1,500,000	2,000,000	2,000,000	2, 000,000	8,000,000
UNMAS	198,609	300,000	2,700,000	2,059,530	1,367,470	6,625,879
Grand Total	698,609	1,800,000	4,700,000	4,059,530	3,367,470	14,625,879

2.10 Other Resource Mobilization (External Fund):

UNMAS-Sudan has fully undertakes its vital role in resources mobilization for Sudan mine action programme by availing the following resources; SHF, Italy, Japan, USA, UK during the current extension period (April 2014 – April 2019).

Together with UNMAS and its Mine action partners Sudan has undertaken significant efforts to attract external financing in support of its program, expanding its donors from Japan, United Kingdom, Italy, United States of America and Switzerland . For the period of the previous extension, (2013 -2017), the total funding received by the Sudan mine action program was USD \$46,853,218.

2.11 Methods used to identify areas containing/suspected to contain AP mines

As it was earlier indicated in this document, the nature of conflict in Sudan was such that records on hazardous areas were rarely kept and those records that do exist are often inaccurate or outdated. Furthermore, the information may come from different sources, with of course different level of capacities to properly describe the exact zone of the hazardous area. However, information on the level of anti-personnel mines and ERW contamination in Sudan has been collected through one of the following key methods:

- Accident caused by APM or ATM or UXO.
- Local population reports.
- Military records.
- Information collected by MRE teams and clearance organizations.

In addition to the detailed minefield information received from military engineers, the local communities were consulted on a case by case basis during survey operation to identify any other areas that were mined but not registered. Although a wealth of information was collected from the local community, the local communities had very limited information regarding the type and quantity of mines in each location. Nonetheless, the types of mines in some locations were identified through mine accident reports and discussions between LIS teams and local communities.

It should be noted that, unfortunately, due to security concerns, survey could not be completed in all five states suspected to be contaminated with mines. During the period that the LIS was conducted, nonetheless, the survey was completed in Blue Nile and South Kordofan but unfortunately the recent re-contamination has utterly devalued if not invalid whatever survey result that has been conducted before 2011, specifically in Blue Nile and South Kordofan States and Abyei area, where may strongly suggest the re-survey of all those new contaminated areas to establish a new concrete datum/baseline for any prospective clearance operations that may propose to be conducted in the future.

2.12 Methods and standards used to release known/ suspected mine areas

In mine action, in order to process vast confirmed suspected mined areas, many of which have been identified by initial surveys that established the scope of the mine/ERW contamination challenge, a more efficient clearance method namely Land Release Process is introduced and endorsed by demining bodies to tackle the issue large suspected mined area(s).

Land Release is the process of applying all reasonable effort to identify or better define the Confirmed Hazardous Areas (CHA) and remove all suspicion of mines/ERW through non-technical survey; technical survey and clearance using evidence based and documented approach. Since the released land return back to communities as an overall goal of any mine action activity which is achieved through defining, re-defining and clearing of contaminated land, the land release process adopted by NMAC as part of Sudan NTSG's set standards and methodology to be applied when using available demining assets to release land back to communities for its intended use as efficiently and effectively as possible.

The methodology used to release land relies on practitioner and NMAC to grade the minefield, Suspected Hazardous Area (SHA), and even potential hazard area which is not recorded in IMSMA data base into High Threat Area (HTA) and Low Threat Area (LTA) and subjected these areas to the same probing process of confirming the presence and or absence of hazard, clearing it and or releasing the areas based on actual threat rather than perceived threat.

The process of releasing land from actual threat involving the use of all demining assets available to achieve the desired level of confidence that the land is free of mines/ ERW, which the Sudan mine action programme referred to as "all reasonable effort". All reasonable effort may, at one extreme, only be the conduct of a non-technical survey which finds absolutely no evidence of mines/ERW. The commitment of additional resources in this case is unlikely to justify the expected additional information about the area. However, if the non-technical survey confirms some evidence of mines/ERW, it would be reasonable to expend more effort to gain more confidence about which areas are free of mines/ERW and which are not. In this case, "all reasonable effort" may mean that a technical survey or clearance should be conducted. "All reasonable effort" for the release of previously suspected land Suspected Hazardous Area (SHA), Confirmed Hazardous Area (CHA), Defined Hazardous Area (DHA) is reached at a point where sufficient and reliable information has been obtained to conclude, with confidence, that there is no evidence of mines/ERW. Varying levels of clearance and survey shall be conducted to reach this point.

The Sudan mine action programme's guidance on the Land release process is carried out in accordance with IMAS 08.20, the "Land Release Process" and "Asset Deployment " decision making tools to help

visualize the land release process and to give practitioners in the field a ready reference for deploying clearance assets.

2.13 Methodology

The Land Release methodology adopted by Sudan NTSGs is based on the application of IMAS. The application of land release assumes a level of risk based on verification of threat. It recognizes that just because a hazard is reflected on the IMSMA database, the details are not necessarily accurate and that all hazards benefit from thorough application of the Land Release Process at all levels of intervention. Land release in Sudan has been based on three process; Survey; (Non-technical or Technical), clearance and cancellation.

2.14 Asset Deployment Decision Making Tool

The Asset Deployment Decision Making Tool is a guide on how to deploy clearance assets in high threat and low threat areas to release the land. This is the minimum requirement which should be observed and implemented on each land release site. On site where mechanical assets are deployed calibration tests or ground condition may dictate that further passes of the flail or tiller are required to achieve the required depth. Area (s) processed by mechanical asset would not consider as cleared unless further confirmation processed by manual or MDD assets.

2.15 Land Release Process

In the Sudan Land release process has been carried out in three methods

1. **Non-technical Survey (NTS):-** is previously known as General Mine Action Assessment (GMAA) where the surveyors went to the communities and asked people on the problem of mines and ERW they faced in specific SHA/CHA. If the surveyors received a response of no mines and ERW, they filled the form and got the people's signature and along with their own signature they submitted the forms to the office for further verification and registration into the database. The whole purpose of NTS was to make an in depth investigation of a new or previously recorded mine and ERW contaminated area in the database.
2. **Technical Survey (TS):-** is the intervention into a mined area with manual demining teams, machines and Mine Detection Dogs (MDDs) to confirm the presence of landmines, identify the level of contamination and type of hazard and limit the boundaries of the hazard for further clearance if required. The extent and type of technical survey depends on the information gathered during non-technical survey (NTS) in order to make sure that the information gathered is reliable enough in terms of an area being mined or mine-free.
3. **Demining/Clearance:-** is a process to release land by applying the necessary assets to rid an area from mines or ERW. The type of the applied clearance assets based on the area topography and size of the hazard for the purpose of getting the desired outcome in the quickest time and safely with the lowest cost possible. Clearance occurs in a ground confirmed to have landmines classified as high threat area (HTA). Quality of clearance is of utmost importance. Missed mines can bring a lot of problems for the mine action programme.

2.16 Information gathering

Information gathered during the Land Release Process (LRP) will dictate the amount of work to be carried out to release the land from the actual threat or threat suspicion based on quality and sources of the information. Hazardous areas classified as the High Threat Area (HTA) full clearance of the defined mined areas would be carried out. While as Medium Threat Area (MTA), 20 – 60% of the area will be facilitated by Technical Survey. Those hazardous areas identified as Low Threat Area (LTA), 10 – 20% of the area will be processed by technical survey.

Areas proved to be free from mines / ERW will be released only through the application of Non-Technical Survey based on information available and the technical opinions of technical staff, NMAC and communities' representatives.

All documentation related to the application of the LRP will be compiled as per the Sudan Mine Action Standards and Guidelines (NTSG's) and submitted to NMAC as part of the Land Release site documentation.

2.17 Methods and standards of controlling and assuring quality

The Sudan Quality Management System (SQUARE METRESS) for mine action became fully operational in 2006. It has been basically charted to serve two key objectives; Firstly, to ensure that an appropriate, suitable and sufficient Quality Assurance (QA) monitoring process, that consists of regular monitoring visits and auditable processes at all stages of operations is implemented. Secondly, to confirm that mine action organizations are applying their accredited management processes and operational procedures in a manner that will result in the safe, effective and efficient clearance of land. Other measures are to provide confidence that quality requirements have been met and that cleared land, whether fully cleared or not, is safe to use. The productivity and quality of mine action operations at organizational level; improve mine action performance; continually improve the efficiency and effectiveness of the mine action activities.

In order to realize the overall goal of NMAC Mine Action Quality Management System and these set of objectives, NMAC quality management department shoulder the implementation of the following three basic tasks:

1. Operational Accreditation.
2. Quality Assurance Monitoring.
3. Post-Clearance Monitoring (Quality Control) inspections and (Handover of the site) Procedures.

Operational Accreditation: NMAC Operational Accreditation procedures are designed to ensure that a mine action organization is appropriately established, staffed, equipped, and has the required systems, procedures and support structures in place before it is permitted to do any work. Control of activity in mine action in Sudan is achieved through the Operational Accreditation, license and monitoring of mine action organizations whether they are national or international before and during their work. It also involves the inspection of organization's documentations (Desk Accreditation), qualifications of proposed staff, Standard Operations Procedures (SOPs), List of equipment, financial status statement. After Operational Accreditation is granted (see Sudan SOP Chapter 21), monitoring is conducted by Quality Assurance staff.

Quality Assurance Monitoring: Quality Assurance monitoring is the observation, inspection or assessment of worksites, facilities, equipment, activities, processes, procedures and documentation to confirm that a mine action organization is working in accordance with its Operational Accreditation. Quality Assurance monitors may visit worksites at any time. In some circumstances, they may be based at the worksite and provide continuous monitoring. The purpose of Quality Assurance monitoring is to confirm that demining organizations are applying their approved management processes and operating procedures in a way that results in the safe, effective and efficient release of land. Quality Assurance monitoring serves the interests of the mine action organizations because it helps them to identify problems and to achieve the required results efficiently. The QA monitors are not policemen, they are there actually to help the mine action organization fulfil its aims.

Post-clearance Inspection: Post-clearance inspection occurs after a demining organization has completed the demining of the ground in question. The processed ground may have been cleared, or may have been processed in a manner that gives confidence that full clearance procedures are not necessary. The post-clearance inspection is intended to determine whether the land has been processed in the way that was intended, and to confirm whether the selected procedures were appropriate. Inspection of the cleared land will be carried out before it released and handed over to the national authority or local community.

Post-handover Impact Assessment: After a cleared land handed over to the use of local community, jointly NMAC and the demining organization carry out post-handover impact assessment with the aim to verify whether the clearance met the intended purposes and stand on how the land being usefully utilized by the locals and whether there any suspicious hazard that could be left behind.

NMAC Quality Management Structure: The Sudan Quality Management System has been structured with three regionally based QM teams based in Kassala, Damazin, and Kadugli in addition to the HQ team based in Khartoum. Each regional QM team made up of (1-2 persons). Regional QA teams have been delegated the responsibility of monitoring the quality of all humanitarian demining operations in their areas of responsibility. The QM monitoring task in Darfur is mostly being undertaken by UNAMID-Ordnance Disposal Office but NMAC QA individuals participate in teams' accreditation.

Challenges and Gaps in NMAC Quality Management Capacity: It sounds technical and managerial skills are required to maintain a robust QMS for NMAC. Data collection, retrieval and analyses systems need to be upgraded and running. Policies, objectives and processes have to be defined and continually improved. Organizations and programmes have to commit financial resources to keep up a QMS effectively and efficiency functioning. Further, institutional experience and memory are helpful in the long-term. Plan for Promotion and Improvement of NMAC QMS suggests the following actions:

- Enhance and keep updated of quality management capacity through participation in international training workshops.
- Enhance Quality management capacity through participation in cross-border events will strengthen the local capacity and add confidence.
- Stress will be placed in external Quality Assurance / Quality Control of Land Release activities to ensure the overall quality and safety of mine action work.
- Strengthen the Non-technical and Technical survey capacities of NMAC QA staff to ensure safe, proper, and timely implementation of demining operations, QA and QC activities in the field.
- **More Field Exposure:** Schedule regular field monitoring plan by NMAC QA staff to ensure the quality observation in the implementation of mine action related activities.
- Regular QA and QC operations will enable implementation of control and monitoring of humanitarian demining operations in line with SOP with further acceptance and handover of the release areas.

2.18 Efforts to ensure the effective inclusion of civilians from mined areas

2.19 Marking and Fencing

Initially, warning signs (markings) were placed by people in a community affected by mines and ERW at the moment the threat was detected to warn people to avoid the contaminated areas. Sometimes it is done jointly with the usher of MRE team operating in the area. But in most hazardous areas official markings have been undertaken by the demining team(s) either during the non-technical survey or technical survey. In non-vegetation areas stones have been painted red to show the contaminated area and in places where clearance has been done red and white coloured stones have been used to show the cleared areas and the sites which is still contaminated. In areas with vegetation red materials on sticks or red metallic triangles have been used to indicate the dangerous sites. MRE teams when visit areas with suspected hazards also mark areas so people to be aware of the danger and avoid it.

2.20 Mine Risk Education (MRE)

Solid steps towards MRE Program sustainability solidified as MRE curriculum has been integrated into the Ministry of Education's syllabus. Total of 5,000,000 MRE School Books were produced as part of School materials in basic and secondary schools. Moreover, Training of Trainers (ToTs) has been carried out for 261 school teacher. Those trainers will be the core for delivering training for 2,400 school teacher during December 2012.

2.21 Circumstances that impeded compliance during the extension period

The major challenges encountered Sudan's mine action program in the past period and greatly slacken its progression could be highlighted in the following areas:

- A. Inadequate funding for mine action program has featured of the current extension period. It rendered Sudan powerless of being unable to access funds from multilateral momentary institutions while Sudan has numerous pressing commitments to meet with the little or insufficient resources. The scarcity of funding has also affected training and rehabilitation programs pre-considered to enhance the capacity of the national staff to catch up with evolution in mine action and effectively respond to the mine action challenging environment. Such instable financial situation creates critical deficit in its budget allocated to meet its mine action obligations with regard to Ottawa Treaty in the current period of extension. However, Sudan has limited financial support received from the international community through UNMAS. But short funding cycles have actually destabilizing and challenging its ability to plan for long term clearance efforts both in terms of its work plan setting or estimation of period required for extension.
- B. The renewal of armed conflict in Blue Nile and South Kordofan States in the mid of 2011 imposed a new reality of security uncertainty that overshadowed the security situation in some parts of those two states and has furtherance complicated the scene for any proposed mine action response and intervention in the fore-mentioned states. This situation has predominately limited space of intervention possibilities.
- C. The periodic maintenance and expansive rehabilitation to the frequently break down old mine sweepers, creaky mechanicals and vehicles cannot be maintained primarily due to budget unavailability. In addition to inadequate tools and equipment Sudan's demining capacity cannot be fully utilized towards achieving the set of goals. It worthwhile to mention that Sudan's currently use vehicles and equipment received from the UNMAO in July 2011 while quitting Sudan. All detectors (mine lab F3), vehicles and clearance machines are now outdated and need to be replaced. These reverse factors implicitly dictate that the national demining capacity did not able to operate at their full capacity due to the above mentioned shortage of equipment and logistical resources.

D. Climatic factors and atmospheric conditions such as heavy rains and hot temperature cannot be ignored as a decisive factor determining the pace of progress in the field. Three months out of the year mine action comes to a halt because of heavy rains in most parts of Sudan. Lack of paved roads and other infrastructures make it impossible for the teams to safely carry out their field operations and reach hazardous areas during the rainy season. The soaring temperature in some other parts to unbearable extend also contribute to the climatic challenges and affect the productivity rate of both human, machines and Mine Detection Dogs. From the fore-mentioned, wordless, it is not only about the availability of fund but also and most importantly the timing this fund made available.

Changes in the security situation and how these changes positively or negatively affect implementation;

Politically, Sudan has achieved wide-strides in terms of domestic political reconciliation through the mechanism of the National Dialogue Conference (NDC) which sought an open and equitable platform for ideas and encourages debate, bringing the argument of all sides to the fore. The NDC finally sought a peaceful and diplomatic-based approach settlement to the contentious issues and various incompatible political views. The government has entered and engaged into no preconditioned dialogue with the major political powers including the participation of armed opposition groups and movements. The potential shift creates opportunities for new political arrangements, possibly including drafting of a new constitution. There's an imperative to end the conflicts in Sudan's west and south. By virtue of these continued dialogues, a national reconciliation government was formed and currently assumes the office in Sudan for the first time since its independence. In spite of thorny political issues that lie ahead, our country is now aspiring to new term with ultimate goal to achieve sustainable peace, institute basic rights and to undertake its important role on neighbouring, regional and international levels.

Security and access to the some of the contaminated areas are major concerns especially in Blue Nile and South Kordofan States. For Darfur it is ERW which is of major concern. In most part of 2012, it was not possible to visit all the hazard areas in Blue Nile and South Kordofan states. In Blue Nile only areas under government control was possible to visit and carry out mine clearance. Having said that, MRE and VA projects were carried out in the mentioned states since the people involved in those activities came from the same area.

In the Eastern States in Kassala, Gadaref and Red Sea, the situation from access and security points of view was different compared to the south. Mine clearance was possible to be carried out but remoteness of the areas, metallic nature of the soil in some areas and three months of rainy season added with shortage of fund for deploying more demining teams in more areas, slowed down the clearance process

2.22 Humanitarian, economic, social and environmental implications

Worldwide, the issue of landmines and Explosive Remnants of War (ERW) contamination stands with very few doubts in the row of the most serious problems as it becomes a principal concern preoccupying almost every war-torn country. Evidences and experiences generated from armed conflicts substantiate the long-term effects of these weapons on human being. It becomes clear that Sudan's lands contamination with mines and explosive remnants of war was basically stemmed from decades-long conflict since 1955. More than twenty years of civil war, during which mines and other explosive weapons were excessively used by all parties of the conflicts, bring about wide-spread contamination that has since claimed thousands of victims.

The situation was further exacerbated by the break out of conflict once again in South Kordofan and Blue Nile states and Abyei region, which have caused unknown amount of new contamination. The problem perceived as grievous threat against human life and one of the most damaging factor of economy. Sudan was not an exemption, as the negative effects of landmines and Explosive Remnants of War in Sudan is immense to the extent that it nearly touches every walk of life of every Sudanese in a way or another.

Post-war recovery phase effected by the presence of Landmines and ERW in Sudan threaten civilians and impede economic development and recovery. Contaminated land reduces agricultural activity and productivity and thereby the sustainable livelihoods of rural communities. Landmines on key logistical routes continues to hamper safe and free movement, trade and humanitarian interventions, and

endanger the lives of local communities, internally displaced persons (IDP's), refugees, and staff of aid community. The presence and/or perceived threat of landmines/ERW prevents and delay IDPs and refugees from returning to their hometowns, and as a result, constrain recovery, reconstruction and development efforts in mine/ERW and war affected areas.

Construction works hampered by mines and ERW which remain as obstacles to safe movement for local populations, aid workers, and investors. Without free and safe movement, it becomes difficult to make roads, hospitals, schools and businesses that would have otherwise benefited the growth and development of Sudan.

The increasing number of casualties, most of whom are men, has left many families without the head of household and main source of income for these families. Moreover, due to the critical gap in funding for victim assistance, many survivors are unable to develop the skills and tools necessary for their re-integration into society and their subsequent generation of income for themselves and their families. As a result, many communities have to face the detrimental economic and psychosocial consequences of mine or ERW related accidents without the capacity to address these needs.

Humanitarian, Political and Economic Impact of Landmines and ERW Contamination:

Landmines bring about death and causality to civilians especially the children as well as wilds. Beside the direct effects on life, it imposes a heavy economic burden on the accident survivors and their relatives. Comparably, the cost of mine clearance in an average is less than to provide an artificial limb to a survivor from mine or ERW accident. The existence of landmines and ERW caused extreme socio-economic and environmental hardships to the affected population. Anti-personnel landmines are considered one of the most significant factors to an ailing economy and barrier to social development in Sudan throughout the decades Sudan was in war. The economic impact of landmines can be seen as one of the determinant factors of economic security as it prevents people in the affected areas from working, and victims with disabilities face difficulties in finding employment and remain dependent. Thus it prevents sustainable development, poses threat to human security are major obstacles to peace.

Socio-economic Impact of Landmines/ERW Contamination:

Landmines in Sudan prevent access to the lands for agriculture, movement of people, and sets blockages to forests and water resources essential for productive purposes. The affected lands become virtually unusable for agriculture, transportation and socio-economic development. Though the war itself was the main contributor to the internal displacement of people, landmines added more fuel to the problem and worsen their situation even further. Mines also cause the lack or low level of basic development infrastructure in those affected areas namely Blue Nile and South Kordofan States.

Environmental Implications of Landmines and ERW Contamination:

While focusing on socio-economic impact caused by the contamination of anti-personnel landmines, we ought not to lose the sight of its environmental implications. It caused land and soil degradation, loss of biodiversity, and decreased agricultural patches and then affected the overall net productivity. Landmines caused severe poverty and underdevelopment as it blocked access to and limited most of the socio-economic activities and sustainable livelihoods of the rural communities. Developmentally, they impede the ability of local communities to recover fully from conflicts after the end of war.



PHOTO 7: Cultivating in the vicinity of AP Minefield, South Kordofan State

The environmental impact of mine clearance/mine destruction may include erosion of soil due to the use of mine clearance machines/mechanical equipment to cut vegetation/trees or pollution of water and soil due to lubricants/fuel used for operating these machines, burning of vegetation to pave the way for mine clearance and destruction of stockpiled mines by open detonation techniques. Another potential environmental impact/risk of mine clearance could be unintentional damage to unknown archaeological, heritage and cultural sites due to use of mechanical equipment for mine clearance/verification.

The mine/UXO clearance/verification operations normally do not pose any serious damage or risk to the environment. However, to mitigate all these environmental impacts/risk, all mine clearance/verification operations and MRE activities are undertaken in compliance with the approved International Mine Action Standards (IMAS). In addition, specialized Standing operating Procedures (SOPs) are developed for specific circumstance and are followed by demining personnel to preserve the environment.

AP Contamination Impact on Population:

Other significant medical, psychosocial, political and economic impacts of landmines are many. For example, mines typically maim or kill the most productive members of a community's workforce, and prevent refugees and internally displaced persons from returning to their homes of origin after the cessation of hostilities. As such, anti-personnel landmines prevent return of normal and productive life to rural areas and it also maintained economic, social and political pressures on urban areas. As the anti-personnel landmines disproportionately affect the poor and undeveloped countries, poor rural inhabitants are often trying to grow crops on lands that are known or suspected to be landmine affected.



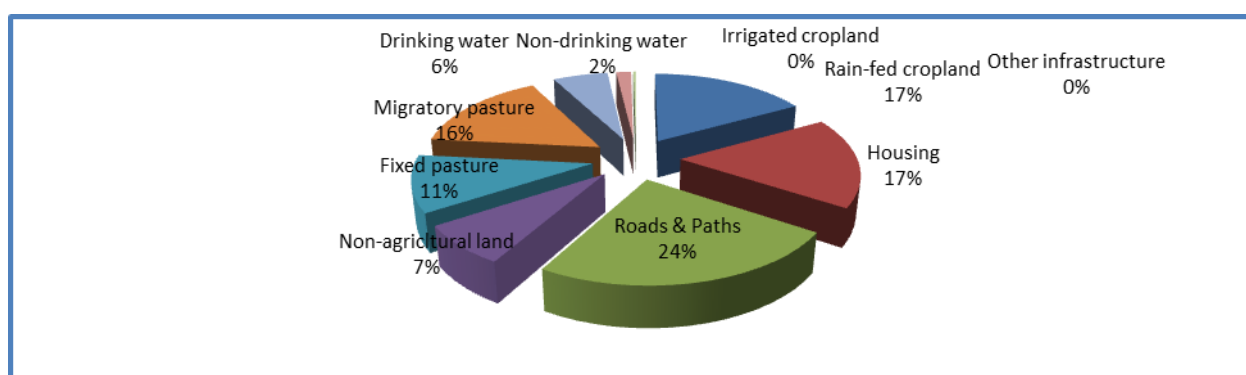
PHOTO 8: Animals grazing exactly at the edge of anti-personnel minefield, South Kordofan State

The socio-economic impact of mines was clearly represented by the blockages faced by approximately 4,000,000 refugees and IDPs returning to their pre-war homes. Safely returning these refugees to their homes is a national priority of the government. The LIS found that landmines block people's access to socio-economic resources in different ways in each different state. However, four different types of blockages are the leading blockage among affected states including roads, rain-fed land, housing and fixed pasture land as indicated in the table and figure below.

TABLE 20: Socio-economic blockages caused by anti-personnel mines

State	Total SHAs	Rain-fed cropland	Housing	Roads & Paths	Non-agricultural land	Fixed pasture	Migratory pasture	Drinking water	Non-drinking water	Other infrastructure	Irrigated cropland
Kassala	56	8	6	23	8	25	20	4	3	0	0
South Kordofan	98	38	48	30	12	2	37	12	1	1	0
Blue Nile	61	14	9	34	8	11	0	6	2	0	0
Gadaref	4	1	1	3	0	0	1	0	0	0	0
Red Sea	2	2	0	0	0	2	0	0	0	0	0
Sennar	0	0	0	0	0	0	0	0	0	0	0

FIGURE 6: Socio-Economic blockage by type



2.23 Nature and extent of remaining challenge: quantitative aspects

Although significant progress has been made in the past years, the following contamination with AP mines remains to be addressed. This challenge consists of a total of 98 hazardous areas, including 53 CHA measuring 2,418,930 square metres and 45 SHAs measuring 16,866,480 square metres. For an area measuring 19,285,410 square metres.

The remaining AP contamination is distributed as follows:

TABLE 21: AP Contamination

State	Number of areas known to contain anti-personnel mines	Amount of area known to contain anti-personnel mines (square metres)	Number of areas suspected to contain anti-personnel mines	Total number of areas known or suspected to contain anti-personnel mines	Total number of areas known or suspected to contain anti-personnel mines	Total amount of area known or suspected to contain anti-personnel mines (square metres)
Blue Nile	4	219,663	4	835,400	8	1,055,063
S. Kordofan	49	2,199,267	35	15,998,689	84	18,197,956
W. Kordofan	0	0	3	21,991	3	21,991
Kassala	0	0	3	10,400	3	10,400
Red Sea	0	0	0	0	0	0
Gadaref	0	0	0	0	0	0
Total	53	2,418,930	45	16,866,480	98	19,285,410

In spite of the formidable challenges represented during the 2nd period of extension and the continuation of war in Blue Nile and South Kordofan, the Sudan mine action programme succeeded in reducing the total number of already known hazards, as registered in the national database, by 88%.

TABLE 22: AT Contamination

State	Number of areas known to contain anti-Tank mines	Amount of area known to contain anti-Tank mines (square metres)	Number of areas suspected to contain anti-Tank mines	Total number of areas known or suspected to contain anti-Tank mines	Total number of areas known or suspected to contain anti-Tank mines	Total amount of area known or suspected to contain anti-Tank mines (square metres)
Blue Nile	1	3	3	106,000	4	106,003
S. Kordofan	3	3,303,295	20	1,580,753	23	4,884,048
Total	4	3,303,298	23	1,686,753	27	4,990,051

TABLE 23: ERW remaining Level of Contamination, 28 February 2018

State	Number of areas known to contain UXO	Amount of area known to contain UXO (square metres)	Number of areas suspected to contain UXO	Total number of areas known or suspected to contain UXO	Total number of areas known or suspected to contain UXO	Total amount of area known or suspected to contain UXO (square metres)
Blue Nile	5	5,555	0	0	5	5,555
South Kordofan	17	117,857	3	140,400	20	258,257
West Kordofan	2	2	0	0	2	2
Kassala	7	0	0	0	7	0
Central Darfur	0	17,010	0	0	6	17,010
Eastern Darfur	17	1,906,142	0	0	17	1,906,142

Northern Darfur	12	4	0	0	12	4
Southern Darfur	7	1	0	0	7	1
Western Darfur	23	4	0	0	23	4
Total	96	2,046,575	3	140,400	99	2,186,975

2.24 Nature and extent of remaining article 5 challenge: qualitative aspects

Security and access to some of the contaminated areas are major concerns especially in Blue Nile and South Kordofan States. For Darfur it is ERW which is of major concern. In most part of 2012, it was not possible to visit all the hazard areas in Blue Nile and South Kordofan states. In Blue Nile only areas under government control was possible to visit and carry out mine clearance. Having said that, MRE and VA projects were carried out in the mentioned states since the people involved in those activities came from the same area.

In the Eastern States in Kassala, Gadaref and Red Sea, the situation from access and security points of view was different compared to the south. Mine clearance was possible to be carried out but remoteness of the areas, metallic nature of the soil in some areas and three months of rainy season added with shortage of fund for deploying more demining teams in more areas, slowed down the clearance process.

According to IMSMA database there is more than 27 million square metres of land contaminated with AP mines, 7 million square metres with AT and some 4.5 million square metres contaminated with ERW. These hazards not only pose as huge threats to people in the area, but also stop them from using their land productively and limit their freedom of movement. South Kordofan is registered with the highest number of hazards and most victims as result of mines/ERW contaminations.

An ambitious plan has been envisioned and worked out for the next requested four years extension period in the course of Sudan to fulfil its obligations towards Ottawa Treaty. In the next extension period Sudan intends to double efforts aiming to clear all hazards registered in the data-base, conduct surveys of the suspected hazardous areas to determine the hazardous areas and clear the confirmed ones. Sudan will also mass and mobilize more domestic resources and reinforce coordination with donors to facilitate the required fiscal and technical back up. In the same vein, Sudan will work to create an incentive environment for mine action in Sudan.

We all converge on acknowledging the fact that the predominant work circumstance cannot be termed an optimal one as we have been beset with challenges an affair that require us to orchestrate our efforts to overcome the hurdles and difficulties lie ahead for the sake to build better and a prosperous life to our people and enabling them to make their way across the future.

2.25 Amount of time requested and a rationale for this amount of time

The Government of Sudan is requesting a four year extension (until 1 April, 2023) beyond of its Article 5 deadline to address all known and suspected areas contaminated not only by AP but also AT mines and UXO in the States of Kassala, Blue Nile, South Kordofan states and Darfur.

With the passage of time and positive change in security and access for the mine clearance teams in South Kordofan and Blue Nile, the humanitarian demining operations will resume fully, based on availability of sufficient fund. Nonetheless, a plan is already in place to carry out necessary survey and mine clearance activities in those states should the security permit. The National Mine Action Centre of Sudan is insuring that this capacity is in place.

2.26 Detailed work plan for the period of the requested extension

The main challenge Sudan faces in order to comply with its Article 5 obligations is the survey and clearance of the known 210 remaining areas (54 CHAs & 156 SHAs) contain mines and ERW measuring a total of 26,462,436 square metres.

South Kordofan State with total area of **18,197,956** square metres
 Blue Nile State with total area of **1,055,063** square metres

Article 5 Implementation Timeline

TABLE 24: Annual clearance during the extension period (2018-2023)

Year	SHA	CHA	SHA	CHA	Total
2018	80	3	3990879	16865	4203462
2019	54	3	13241088	30456	13271544
2020	16	2	5480554	12702	5493256
2021	4	16	757040	404991	1162031
2022	13	7	382007	789454	1171461
2023	4	22	191938	968744	1160682
Total	171	53	24043506	2223212	26462436

As described above, 99% of the known affected areas are located in South Kordofan and Blue Nile states which is considered as partially insecure areas for humanitarian demining operations due to the conflict which has been ongoing since June 2011. Nevertheless, Sudan has designed and approved a National Mine Action Plan 2013-2019 (1 March 2013 – 31 March 2019) in order to tackle the problem as the access situation permit. With the capacity of 4xMTTs in areas need to be surveyed or resurveyed and intends to complete the survey operation in South Kordofan and Blue Nile within six months from the time survey operation can be commenced. According to the situation on the ground Sudan will provide updates on work plan every year to Committee on Article 5. Since the work plan is flexible Sudan will deal with residual contamination accordingly.

A contingency plan based on lack of access, re-deployment of assets, for the period 2018-2019 and general work plan for the period 2019-2023. If full access granted to South Kordofan and Blue Nile, then a detailed work plan for 2019-2023 based on results of land release activities. Based on access to South Kordofan and Blue Nile, Sudan will provide updated work plan 2019-2023, with annual updates provided to Committee on Article 5.

2.27 Goals of the MYWP 2017-2019 & 2019-2023

The National Mine Action Operations Multi-year Work Plan (MYWP) is designed for a period of four years (March 2019 – March 2023). The operational plan is designed in consideration to the overall security situation in Sudan, number of Mine Action Agencies with survey/clearance capacity, number and type of Mine Action assets available to implement cancellation and land release and expected funding.

The plan includes more detail in regards to operations implementation in all the regions contaminated by mines and ERW. More focus will be put on Kassala state intending to declare the whole eastern states free of registered mines and ERW. As the situation permits the work will continue on other parts South Kordofan and of Blue Nile as well.

In General, in the next four years, non-technical survey, technical survey and clearance operations will be conducted mostly in of Blue Nile, West Kordofan and South Kordofan states. As the security permit technical survey and clearance will be considered for South Kordofan and the rest of Blue Nile as well. There is a need to conduct General survey operation and Landmine Impact Assessment on the previously recorded hazards in IMSMA data base in Blue Nile and South Kordofan states.

The following includes further details in regards to each planned activities in each state and is complemented by the annexed grant charts highlighting the activities that will take place.

- Ensure coordination of the demining programme through monitoring, quality control and quality assurance, and information management, advocacy and resource mobilization.

- Conduct survey to determine more clearly the extent of the remaining challenge in SHAs and carry out subsequent necessary clearance.
- Clear all known CHAs, conduct survey and clear all new SHAs.
- Consolidate mechanisms to conduct effectively all activities aimed at prevention of mine and ERW accidents in the affected communities, and update the country's data base on mine/ERW victims.
- Consolidate the mainstreaming of mine action in the social and economic plan (PES) and ensure the effectiveness of budgeting by all key sectors of development from the provincial to district level.
- Ensure sustainability of the national capacity to deal with residual issue of landmines and ERW.

Sudan Mine Action programme conducted Landmine Impact Survey (LIS) during the period 2007 – 2009, however since after the completion of LIS, additional information regarding Mines and ERW contamination is collected through General Mine Action Assessment (GMAA). Sudan Mine Action programme plans to continue implementing GMAA in areas need to be surveyed or resurveyed and will complete GMAA operation in South Kordofan and Blue Nile within six months from the time survey operation can be commenced.

2.28 Demining Capacity: Operational distribution

In the year 2013 the three national entities, FPDO, JASMAR and NUMAD had a fair ground for competition to build national NGOs to deliver quality results and focus of continues improvement. To ensure quality outputs, NMAC conducted frequent QA visits to the field monitored by UNMAS Sudan technical advisor.

With all above efforts and plans, it is expected that the gap created due to the departure of INGOs will be filled and level of quality and productivity will be maintained. In addition to this Sudan welcomes any interested International Mine Action NGOs to deploy its assets to Sudan and assist Sudan in meeting its Article 5 obligations.

At the time of writing this report, there are only two international contractors, AAR Japan which is implementing MRE & VA in Kassala State and Dynasafe which is deployed and focused on ordnance disposal operation activities in Darfur.

Since June 2011 the Sudan Mine Action programme was facing challenges in accessing most Mines/ERW contaminated areas in South Kordofan and Blue Nile states. However, in the year 2013 limit survey and clearance operations started in parts of South Kordofan and Blue Nile states.

As mentioned above, Dynasafe is currently operating in Darfur where their main task is to support UNAMID and to conduct EOD tasks in Darfur. The Mine Action organization assets distributed is reflected in the following table:

TABLE 25: Operator deployment by location and year

Operators/Years	2017	2018	2019	2019 - 2023
NUMAD	Blue Nile Kassala	South Kordofan West Kordofan Blue Nile	South Kordofan Blue Nile	South Kordofan Blue Nile
JASMAR	Kassala Blue Nile	South Kordofan Blue Nile	South Kordofan Blue Nile	South Kordofan Blue Nile
FPDO	South Kordofan	South Kordofan West Kordofan	South Kordofan	South Kordofan
DYNASAFE	Darfur	Darfur	Darfur	Darfur

This distribution based on the required demining capacities to be fully operating and funded during the extension period. In total following assets will be deployed:

- Two mechanical teams (MECH).
- Seven manual clearance teams (MCT, 8 deminers each).
- Six multi-tasking teams (MTT, 4 deminers each).
- Three mine detection dog teams (MDD, 3 dogs each).

2.29 Work Plan for the Extension Period (2019-2023)

The Sudan Mine Action Programme plans to conduct non-technical survey in areas requiring new survey or re-surveyed. SMAP intends to complete the survey operation in South Kordofan and Blue Nile within six months from the time survey operation can be commenced, given a moderate amount of newly identified hazards and improved security situation.

In this way, Sudan will inform States parties of its progress in survey. Once survey has been completed Sudan will submit to States Parties an updated list of suspect and hazardous areas as well as a detailed work plan to address these.

TABLE 26: Land release milestones by year

	Hazards		Area to be addressed	
	SHA	CHA	Cancelled through non-technical survey (Sq Km)	Released through technical survey/clearance (Sq Km)
2017-18	80	3	3.8	4.2
2018-19	54	3	10.2	13.2
2019-20	16	2	5	5.4
2020-21	4	16	1.0	1.2
2021-22	13	7	1.0	1.2
2022-23	4	22	1.0	1.2
Total	171	53	22	26.4

2018: Operations will focus on the remaining hazards within the Blue Nile state where 10 areas will be cleared and released for the local communities, infrastructure and development projects.

- JASMAR and NUMAD will continue operations in Blue Nile state to clear 10 areas.

FPDO and NUMAD will continue operations in South Kordofan state.

2019: The three operators will continue their demining operations in Blue Nile and South Kordofan states.

- Mine clearance tasks will be conducted in Blue Nile and South Kordofan. In addition, all new identified hazard areas are updated into the MYWP.
- All hazards in Kassala state will be addressed.
- Parts of Blue Nile and South Kordofan States where security situation allows clearance activities

- will be cleared along with any new areas reported during the implementation of the MYWP.
- Meanwhile, Emergence demining operations will be carried out to open secure access for the humanitarian assistance for the affected communities.

2019-2023: At this stage it is hoped that the situation in Southern Kordofan and Blue Nile states get better and all contaminated areas are identified. This will allow Sudan to prepare its work plan and time frame to address the remaining threat in South Kordofan and Blue Nile states and meet the deadline of Article 5 obligations under Ottawa Treaty.

2.30 Operation plan by State:

Operations multiyear work plan 2019 – 2023 (Annex 1) includes the type of assets and required duration to address the total remaining hazards in Kassala, Blue Nile and South Kordofan states.

Based on historical information recorded in IMSMA, 50% – 90% of suspect hazard areas are expected to be cancelled. While technical survey/clearance is considered for remaining confirmed hazardous areas. In addition, the plan includes relevant approach for SHAs depending on whether the hazard is a suspected minefield, BAC or spot task. If the hazard is suspected Minefield, technical survey and full clearance methodology is applied, BAC operation for battle areas and EOD operation for spot task is considered.

Survey and clearance rates used in the operational planning are based on historical averages of previous demining seasons statistics/clearance rates and the percentage of cancellation applied on SHAs. In addition to this, consideration has been given to the type of land and metal contamination as well as other specific qualitative aspects in each location while considering these clearance rates. In this regard, what follows are specific operational plans for land release in the following States; Blue Nile, South Kordofan, and West Kordofan.

Blue Nile State



Landmine/ERW Threat Map - Blue Nile

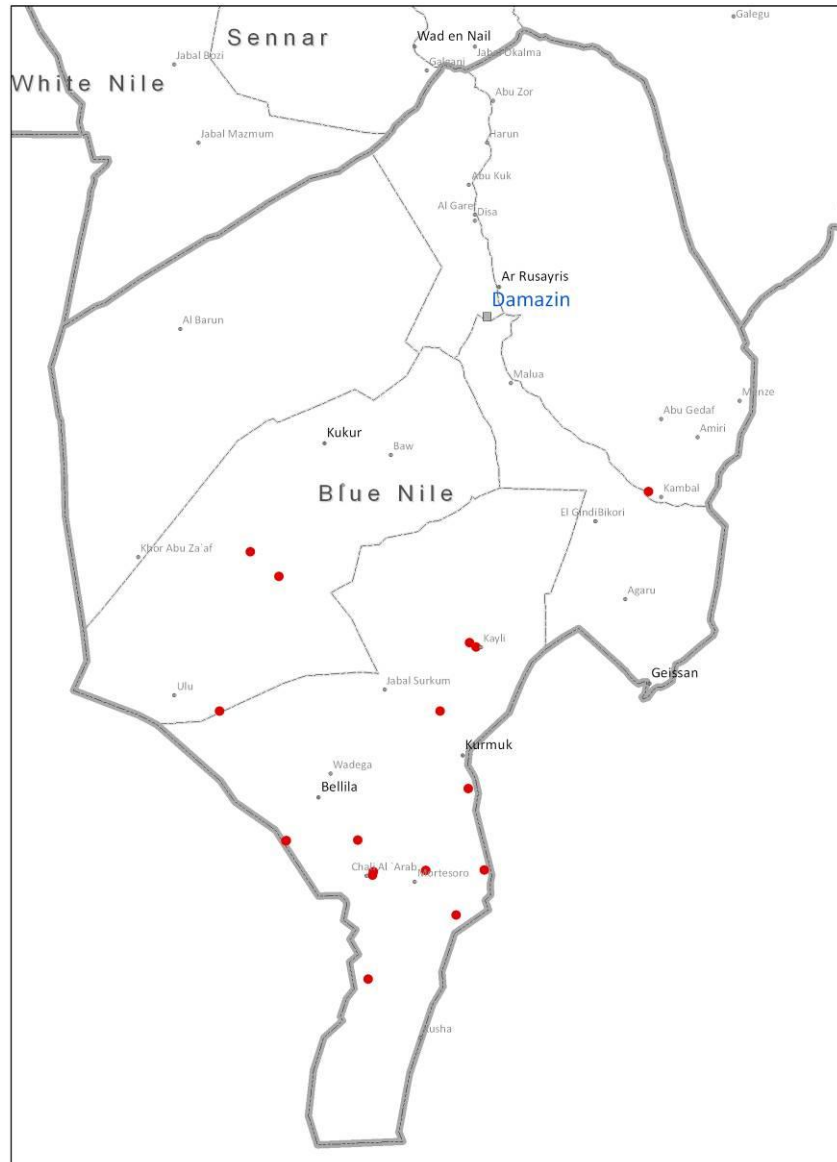


FIGURE 7: Remaining hazards, Blue Nile, Source: LIS Data



Photo 9: Manual clearance activity in Bule Nile

In Blue Nile state in total there are three localities Al Roseires, Bau, and Kurmuk, affected by Mines and ERW. This includes a total of 4 CHA and 4 SHA suspected mined areas, measuring a total of 1,055,063 square metres, as well as 1 CHA and 3 SHA AT suspect areas, measuring 106,003 square metres, and 5 CHA UXO confirmed hazardous areas, measuring 5,552 square metres, as given in the table below.

Table 27: WORK PLAN BLUE NILE, BY LOCALITY AND YEAR

Locality	No of SHA	No of CHA	Total No of SHA / CHA	Size of SHA	Size of CHA	Total Size	Organisation deployed	Assets Deployed	Total Area to be addressed	Year
Bau	2	1	3	785,400	1,374	786,774	JASMAR/ NUMAD	1 MCT, 2 MTT	786,774	2017- 2018
Al Roseires	0	1	1	0	8,394	8,394	JASMAR	1 MCT	8,394	2017- 2018
Kurmuk	2	2	4	50,000	209,895	259,895	JASMAR/ NUMAD	5 teams	259,895	2018- 2020
Total	4	4	8	835,400	219,663	1,055,063			1,005,063	

In Bau locality there are **2** suspected hazardous areas and 1 confirmed hazardous area, measuring a total area of 786,774 square metres.

- 1 x MCT and 2 x MTTs of JASMAR are deployed to Bau locality to deal with the hazards during the period 15st October – 15th March 2018.

In Al Roseires locality there is **1** confirmed hazardous area measuring 8,394 square metres.

- 1 x MCT of JASMAR will be deployed to Al Roseires locality to deal with the hazard during the period 15st October – 15th March 2018.

In Kurmuk locality there are **13** hazard areas that includes **4** hazardous areas, including **2** SHA and **2** CHA, measuring 259,895. Operations in Kurmuk are limited to the Government controlled areas. However, the operations in Kurmuk locality will require five teams per year to address the remaining contamination.

- Once the security situation calms down, 2 x survey teams will be deployed to Kurmuk to conduct General survey operations and determine the level of accurate contamination. Based on the result of General survey operations, a detailed operations plan will be amended and implemented accordingly. This will form the basis of a revised survey plan that will be shared with States Parties.

South Kordofan State

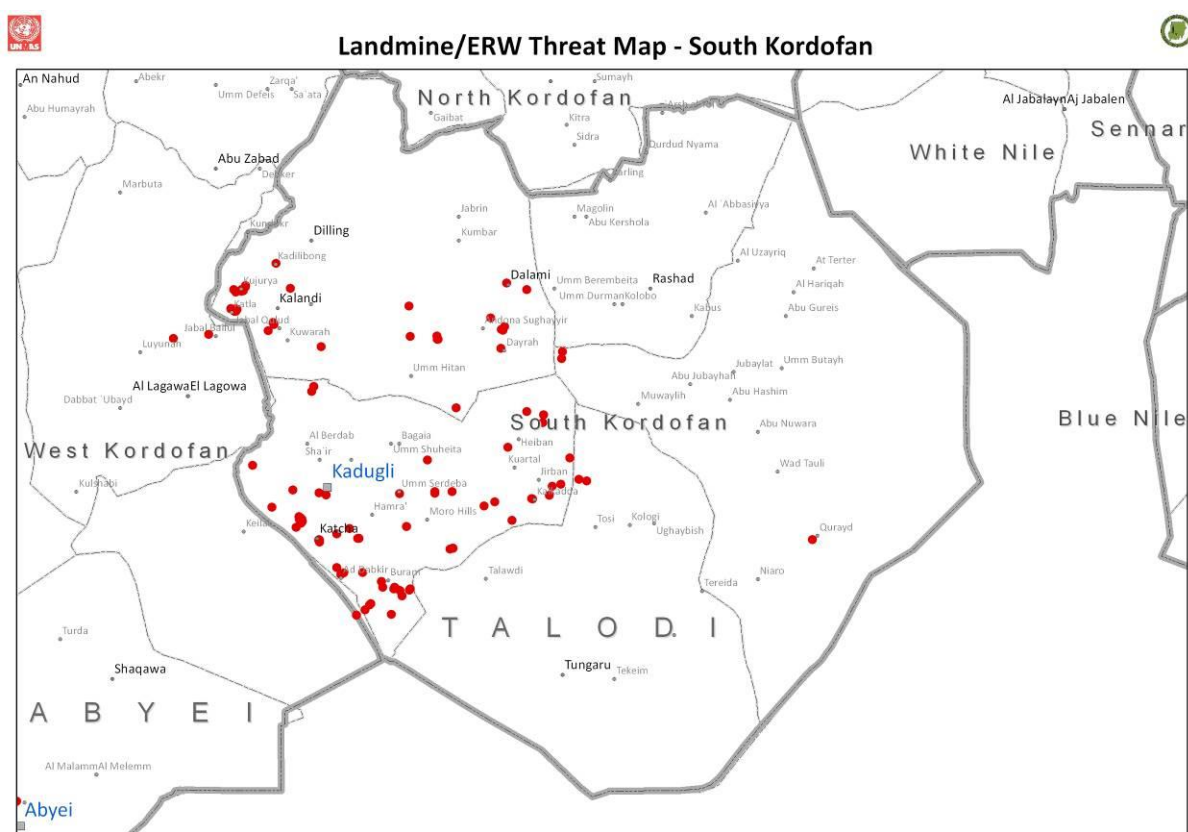


FIGURE 8: Remaining hazards, South Kordofan, Source: LIS DATA



Photo 10: MDD team in action in South Kordofan

South Kordofan state which is the highest Mines/ERW contaminated state, with the 124 hazard areas remaining for clearance operations. During the period June 2011- October 2013 there were no demining operations conducted in this state. Additionally, it is expected that new hazard areas might be discovered as a result of the fighting that has been ongoing since 2011. Therefore, re-assessment activities shall be conducted to provide sufficient information regarding the real contamination. This will support the planning for the clearance operations on the future.

TABLE 28: Work Plan South Kordofan, by locality and year

Locality	SHA	CHA	Total No of SHA / CHA	Size of SHA	Size of CHA	Total Size	Organisation deployed	Assets Deployed	Total Area to be addressed	Year
Abu Jebeeha	2	0	2	80,001	0	80,001	JASMAR/NUM AD	MCT/MTT	80,001	2017-2018
Dalang	24	22	46	4,038,583	968,744	5,007,327	JASMAR/NUM AD/FPDO	MCT/MTT /MECH/M DD	5,007,327	2018-2023
Kadugli	27	48	75	16,926,609	1,230,523	18,157,132	JASMAR/NUM AD/FPDO	MCT/MTT /MECH/M DD	18,157,132	2018-2023
Rashad	2	0	2	800	0	800	JASMAR/NUM AD/FPDO	MCT/MTT	800	2017-2018
Talodi	2	0	2	95,000	0	95,000	JASMAR/NUM AD/FPDO	MCT/MTT	95,000	2018-2023
Total	57	70	127	21,140,993	2,199,267	23,340,260			23,340,260	

West Kordofan State

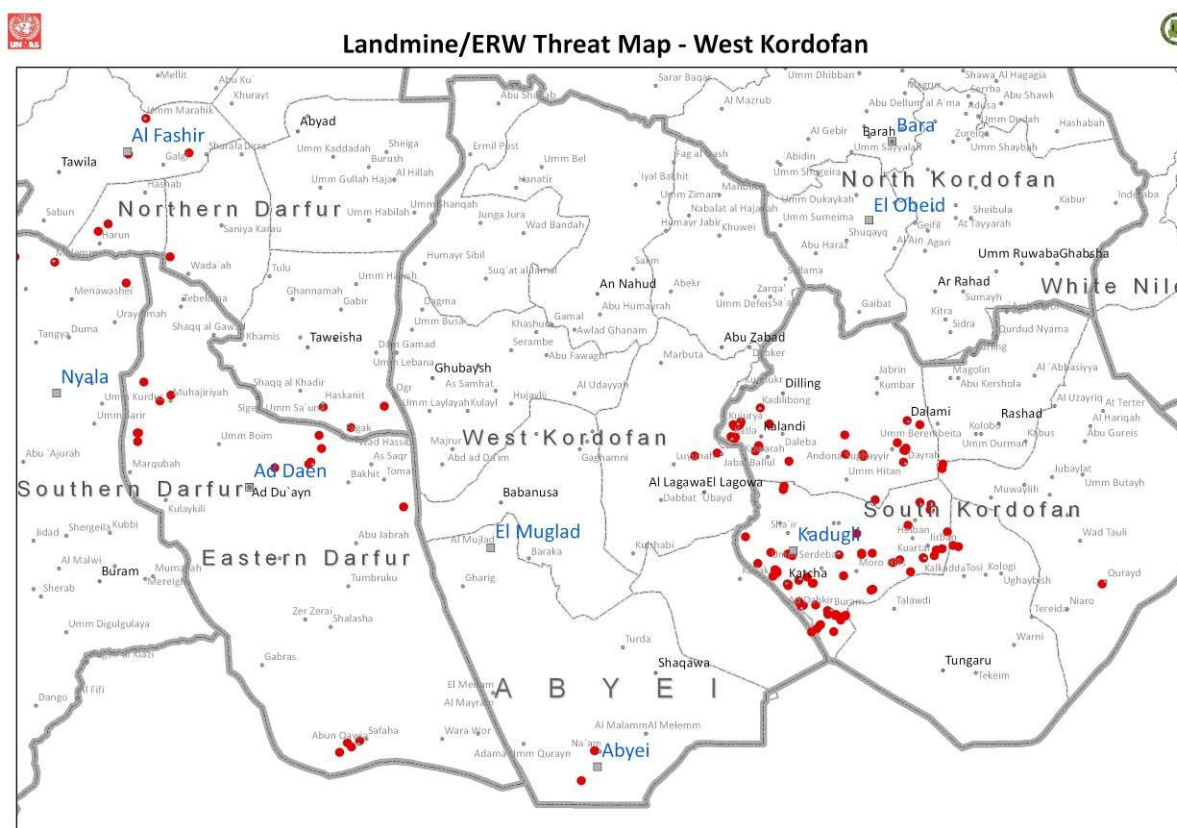


Figure 9: Remaining hazards, West Kordofan State, Source: LIS Data

In West Kordofan state, there are 3 AP hazard areas remaining for clearance operations. Deployment of assets to Abyei locality will wait till the security situation is allowed when further survey will be undertaken.

TABLE 29: Work Plan West Kordofan, by locality and year

Locality	SHA	CHA	Total No of SHA / CHA	Size of SHA	Size of CHA	Total Size	Organisation deployed	Assets Deployed	Total Area to be addressed	Year
Abyei	3	0	3	21,991	0	21,991	To be determined	To be determined	21,991	To be determined
Total	3	0	3	21,991	0	21,991			21,991	

Priority-Setting for Land Release:

Priority-setting aims to ensure that national mine action delivers the most value for money. Given that Sudan mines/ERW contamination problem will take time to the final resettlement. Priority setting involves:

- Deciding what task should receive priority.
- Ensure that adequate resources are allocated to the selected priorities.

When deciding which piece of land should be surveyed and/or cleared first, priority setting in mine action is important developmental implications. Sudan priority-setting system includes whether:

- Land will be used by community for community development.
- Land ownership is already sorted out.
- Targeted beneficiaries are clearly identified based on needs.
- A developmental agency will assist the land beneficiaries in making productive use of the released land.
- Potential for land conflict is low.

National prioritization is concerned with low resources will be allocated among geographical areas, programme components, operators, etc. Whereas local prioritization is the determinant of which specific tasks to complete first, once the resources are allocated at the national level. If a national mine action programme deliver value-for-money, the process and procedures put in place for national and local prioritization must be interlinked and coordinated. Therefore, prioritization must be viewed as a system of inter-connected decisions across different levels.

For a more detailed and comprehensive understanding of prioritization in Sudan we have an exercise, in which a priority form is distributed to stakeholders i.e. (Government's ministries, authorities and institutions, local and international organizations, and UN agencies). Then a workshop on how these forms to be filled is held at NMAC sub-office levels, the time is given to complete and submit these forms and sent to NMAC HQ for data analysis and then locations are identified and rated according to what received from stakeholders.

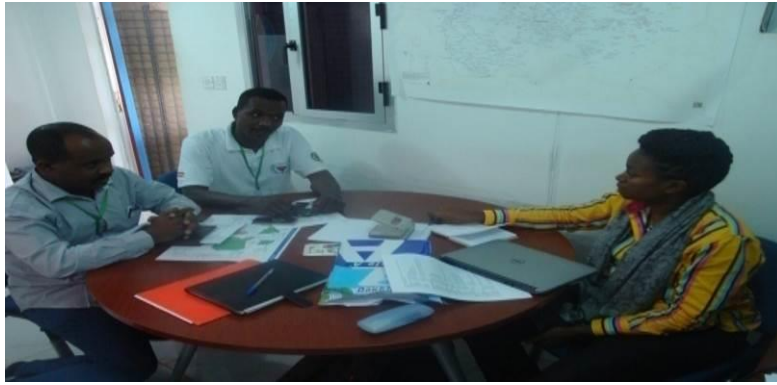


PHOTO 11: NMAC personnel discuss with OCHA humanitarian priorities for Mine/ERW clearance in South Kordofan at OCHA office

The National priority-setting system invariable includes actors, resources, information, a structure, process (i.e., where, when, by whom, and how policies and decisions are made). A good priority-setting system must be informed by the following:

- 1- Considerations for the interests of relevant actors to make the right decisions.
- 2- High quality relevant and complete data.
- 3- Regular analysis of the data to guide decision-makers.

Strategic, operational and task requirements are the three necessary levels of prioritization. Strategic priorities should be established at the headquarters of the national mine action programme and should take into account the preferences of all stakeholders; however, allocations must also be in line with national development priorities. Therefore, strategic priorities should be set according to broader political, economic and social priorities in the country as a whole. Operational priorities should be determined by the relevant programme manager, who should identify priorities using relevant data from analysis of non-technical or technical surveys and the expressed appreciations of at-risk communities and landmine victims.

Mine action officials need to be aware that a country's mine action programme will encounter significant changes as it transitions from conflict to post-conflict; reconstruction phase and eventually development. As the political, economic and social environment evolves people's needs change and priorities need to be modified accordingly.

All suspected hazardous areas are surveyed through non-technical survey and/or technical survey and either cancelled or prioritized;

All high priority hazardous areas are released through technical survey and/or clearance in accordance with national and international standards by 2023.

Small-scale mine clearance activity may also be conducted where there is an immediate threat of injury or loss of life in support of humanitarian aid work.

Mine Risk Education Plan:

During open conflict as the case now in Blue Nile and South Kordofan states and Darfur, landmines and other explosive remnants of war constitute major threat to the communities in vulnerability and substantial impediment of their capacity. It may significantly constrain the flow of humanitarian assistances by restricting freedom of movement of humanitarian personnel and their activities. MRE can be conducted to raise awareness of the endangered population by promoting safe behaviour among the affected communities particularly those refugees and internally displaced persons (IDPs) who are on move. By 2023, the number of new landmine and ERW victims in Sudan will substantially reduced

through provision of MRE services. Special focus will be paid to Blue Nile and south Kordofan states and Darfur. The plan can be achieved through implementation of the following specific activities;

- MRE services are provided to all landmine and ERW affected communities and populations at risk or potential risk based on an age and gender sensitive way to promote the reduction of number of accidents caused by mine/ERW explosions.
- MRE activities are mainstreamed in school curriculum for the benefit of all school children and their families.
- Conduct ToT for teachers and community members of mine risk areas located in Blue Nile and South Kordofan States on MRE for further dissemination of knowledge among population residing close to contaminated areas.
- Continue improve MRE information dissemination through materials development and printing of posters, leaflets ... et cetera.
- The capacity of national organizations and partners to deliver MRE to the affected communities will be strengthened through the provision of resources, training and capacity development.
- The community liaison component of the MRE programme will be reinforced to strengthen the integration of the various mine action components.
- Promote Mine Risk Education within population residing in or close to mine/UXO contaminated areas and supporting Victim Assistance activities which is one of the areas of intervention NMAC needs to further strengthen which a sort of an integrated and systematic approach to realize.

Victims Assistance Plan:

A total of 1, 866 mine/ERW victims have been registered by the Information Management System for Mine Action (IMSMA) for the Republic of Sudan since the running of the system in 2002 coincidentally with the inception of the UN mine action programme in the country. It is importantly to observe that while the accidents occurrence rate overall has substantially decreased since 2005, the years 2011 and 2012 have recorded the highest number of accidents ever registered. This increase in accidents rate was chiefly attributed to the renewal of conflict in Blue Nile and South Kordofan States. During war time, the increased movement of population coerced by war being displaced from their homes of origin seeking safe refuges in other places was exacerbated by accessing unknown areas.

The main feature of Sudan's Victims Assistance Plan outlined in the following:

Goal: The Republic of Sudan ensures that all landmine and ERW victims have equal and full access to the following:

- Adequate, affordable, gender and age-sensitive emergency and continued medical care.
- Physical rehabilitation.
- Psychosocial support.
- Social and economic inclusion services providing 100 micro-scale income generating projects and legal assistance.

Specific Victim Assistance objectives include:-

Improve knowledge and experience of landmine survivors' rehabilitation workshops. The Ministry of Social Welfare, in collaboration with victim assistance and disability partners, will establish an information system for persons with disabilities to provide reliable, systematic and comprehensive information on persons with disabilities, including landmine and ERW victims. Available information is consistent with IMSMA, and is disseminated and shared with relevant national authorities during regular coordination meetings with VA and rehabilitation partners;

- Sudan accedes to the CRPD by the end of 2019 and adopts the necessary national legislations to protect the rights of landmine/ERW survivors and persons with disabilities;
- the SMAA , the UNMACC and relevant mine action and disability partners effectively cooperate with Sudan and donors, to ensure equal access to rehabilitation, psycho-social (including peer support) and socio-economic inclusion services for all landmine and ERW victims, as well as women, girls, boys and men with disabilities.

National Capacity Building Plan

Building reliable and sustainable local capacity remains the obsession of National Mine Action Centre (NMAC). Though it is extremely difficult task especially within fund limitation, it is uncompromised objective. Capacity building is an evidence-driven process of strengthening the abilities of national individuals and systems to perform core functions sustainably, and to continue to improve and develop over time. With this concept in mind, NMAC pursues to enhance the ability of its individuals to perform functions effectively, efficiently and sustainably by every means in its disposal. The plan's ultimate goal is to build on the already existing capacities of NMAC through strengthening knowledge, skills and efficiency of NMAC key staff in order to meet the requirements of international standards. In order to achieve these targets, NMAC undertakes the following steps:

Keep supporting day-to-day administrative, logistical and operation works for timely response and reporting related to mine action overall activities Sudan-wide.

Capacity building for NMAC staff to improve existing skills and knowledge of relevant specialists to meet international standards and requirements in coordination and land release operations through participation of the national NMAC staff in international events, workshops and trainings devoted to coordination and land Release operations.

Appeal to the international expertise by hiring specialist in advisory services of a Capacity Development Advisor to lay down an institutional, organizational and robust capacity development program including coaching and mentoring of NMAC individuals' progress.

Enhance the efficiency of information management, Land Release/Operational activities.

Work Plan Conclusions and Recommendations:

Sudan National Mine Action Strategic Work Plan (SNMASWP) for the new extension (2019 – 2023) was draw to the following broad conclusions:

- Mobilize and mass mine action efforts to curb mortality rate and causality liability stemmed from landmines and ERW among the affected communities Sudan-wide through the means clearance, risk awareness and propagation of the victims' rights stipulated in the Anti-Personnel Mine Ban Convention and other conventions on the rights of persons with disabilities in its a broader sense.
- To ensure the flow and sustainability of the parallel fund represented in the national contribution share besides the external funds and the continuity of government support to the programme is to be emphasized and recommended in order to fill gaps that may leave by the limitation of the external fund.
- Continue coordinating with Sudan's delegations in Geneva and New York to resurrect coordination with potential donors as well as to project and mirror the efforts of Sudan government in humanitarian mine action to the international community.
- Special attention to be paid to the activation and condensation of the training and rehabilitation programs which aim to upgrade the capacity of the national staff in humanitarian mine action. Work out long-term and short-term plans on the national level to combat mines and ERW. Work on strengthening and promoting of its existing capacities of NMAC key staff, improving access to knowledge and skills through training opportunities. Train specialists of NMAC via international and local training events ensure improved and up-to-date work progress.

- Develop, rehabilitate and equip local mine action Training Centres e.g. *Al-Alafoon* Demining Training Centre and MDD Training Centre in accordance to the international standards in order to continue qualifying and equip Sudanese national staff in humanitarian mine action.
- Sensitize the role of mass-media to undertake its duties to towards enlightenment in mine action.
- Maintain and tight coordination channels with all stakeholders.

2.31 Resource Mobilization Strategy

During the extension period, clearing all mines and ERW will require other Member States in the Convention to assist Sudan technically and financially. Currently Sudan is reviewing the Mine Action Strategy with coordination with GICHD. Mine Action Strategy includes Resource Mobilization Strategy; Sudan will update State Party Members of the review process.

Sudan Resource mobilization strategy is geared to meet the overall objectives of Sudan Mine Action's national and international obligations in terms of Humanitarian Mine Action to:

1. Increase donations from existing donors
2. Increase number, sources and modalities of donations
3. Increase the amount of the assessed budget (Government Contribution)

To collect the resources necessary for achieving Sudan's programmatic and operational goals in the field of Humanitarian Mine Action; the following activities are planned for implementation:

- Respond to donor needs: To sustain budgetary and extra-budgetary contributions from existing donors Sudan Mine Action Programme will continue to respond to the needs and priorities of its current donor base through regular liaison, timely reporting and visibility initiatives.
- Identify and make new partners: To expand its donor base, sources and modalities of extra-budgetary contributions, the Sudan Mine Action Programme will identify potential new and consolidate relationships with existing donors, including the Gulf States, emerging economies receptive to becoming 'donor governments' and identify new "non-conventional" partners, such as philanthropists and private individuals, foundations and commercial entities and corresponding aid modalities or mechanisms.
- Balance interests and workload: While Sudan Mine Action Programme in cooperation with UNMAS has had considerable success in engaging new donor concerted efforts need to be placed on learning about cooperation mechanisms with the private sector and philanthropies. Sudan Mine Action needs to be mindful of private sector entities' policies and practices that may stand in direct contrast to the vision of the Sudan Mine Action. From a leadership standpoint, the positioning of the Sudan Mine Action to attract and utilize multi-year venture capital could prove significant returns and sustainable funding. This does, however, require the matching of donor priorities with realistic projects.
- Encourage national support: The Sudan Mine Action Programme will continue to encourage support for the mine action program in Sudan through in-kind and financial contributions and advocate for the various benefits of doing so, such as: ensuring national ownership, empowerment, sustainability and sending the political messages to the international community of prioritizing mine action on the national agenda, which may in turn evoke additional international support. To encourage further support, the SUDAN MINE ACTION PROGRAMME will need to explore ways of recording such contributions and publishing them on their website.

2.32 Public Relations and Communication

To enable the objectives of this Sudan Mine Action Strategy, it is important that resource mobilization activities are closely inter-linked with PR initiatives in line with an existing 'Mine Action Communications Strategy'.

Sudan Mine Action Plans to Communicate and publicize funding requirements through:

- Organizing media events and interviews in conjunction with resource mobilization initiatives and visits.
- Producing a high quality and timely Sudan Mine Action Annual Report and distributing it widely to all stakeholders and ensure the timely delivery of donor specific reports.
- Updating funding and operational information on Sudan Mine Action Programme's website.

2.33 Sudan Mine Action multiyear budget forecast

In the early years since the first extension request was submitted in 2013, clearance efforts by NMAC did not do much due to the limited funding and support with regard to equipment and training. Resource mobilisation will be an ongoing effort. Funding support from the international community is expected to increase due to the lifting of the sanctions. In addition to the government funding will continue as well, because the plans for clearance of the mined areas in Sudan are depending on the continuation of funding from the Government as well as from the international community.

Presently, there is no international entity work in Sudan if Darfur region exempted. It is hoped that with bilateral funding other international NGOs and commercial companies will be encouraged to come to Sudan to have positive contribution to the overall efforts aim to clear the lands from mines/ERW.

The budget forecast is from 2018 to 2023, it provides a summary of the expected funding for this period. To meet the target of 2023, Sudan needs fund as highlighted on table the below:

TABLE 30: SUDAN FUNDING REQUIREMENTS FOR COMPLETION BY YEAR

Year	Fund Required	Fund by Donors	Fund by Government	Fund Received	Funding Gap
2017	13,620,924	2,059,530	2,000,000	4,059,530	11,561,394
2018	13,110,647	1,367,470	2,000,000	3,367,470	9,743,177
2019	17,984,432	0	2,000,000	0	15,984,432
2020	14,627,664	0	2,000,000	0	12,627,664
2021	4,931,661	0	2,000,000	0	2,931,661
2022	4,931,661	0	2,000,000	0	2,931,661
2023	4,252,541	0	2,000,000	0	2,252,541
Total	75,495,530	3,427,000	14,000,000	7,427,000	58,032,530

2.34 Assumptions / Risks

Assumptions

Sudan's plan for the clearance of the contaminated areas is based on the assumption that the security situations in the all troubled regions contaminated with mines and ERW will improve. Presently, all the eastern states are accessible from the security point of view and it hoped that Blue Nile and South Kordofan states will become secure as well for the demining teams to reach the hazardous areas. In this regard Sudan will provide annual updates to States Parties on any changes in accessibility to the remaining hazardous areas. Once survey has been completed Sudan will inform States Parties on the impact of newly identified hazardous areas as well as the results of re-survey on the milestones and resources as given in the work plan. Based on these impacts, Sudan will provide an updated work plan for the remaining period of the extension and may request additional time and resources, as required

Funding again is another major concern and all plans base on the assumption of adequate funding to the programme.

Presently, there is no international entity work in Sudan, if Darfur region exempted. It is hoped that with increased accessibility to its remaining contaminated areas the results of new survey as well as re-survey of existing areas Sudan will possess a clear and accurate measure of its capacities and needs. In this way, international NGOs and commercial companies are encouraged to engage wit Sudan to begin how they can have a positive contribution to the overall efforts aim to clear the lands from mines/ERW.

Though the predominant optimistic atmosphere mainly emanated from the lift of sanction and Sudan welcoming of the entry of international organizations, if the similar conditions delineated in the precedent paragraphs persist during the remaining period of the current extension and the new extension period, sadly that we should prepare for the similar result.

The prospect of mine action in Sudan in forthcoming few years

There is a very real humanitarian urgency for mine action activities to take place in South Kordofan and Blue Nile States, which is currently not being met. Not only because of the significant difficulties represent in accessing mine affected areas due to the ongoing armed conflict in many of the mine affected areas, but also due to the fact that new mines are still being laid by the SPLA. The UN and INGO entities based in Kadugli and El-Damazin e.g. OCHA has limited, direct access to the mine-affected areas due to the security uncertainties. In addition, organizations working cross-border from neighbouring countries have experienced a decrease in reachable areas over the last few years. While this gloomy picture may suggest that the prospects of mine action will be at a very low point especially after the imminent declaration of Kassala state as devoid of landmines and explosive remnant of war by the advent of December 2017. However, there is a general prevailing optimism that sanction will be lifted, a matter that would positively reflect on the ongoing national political dialogue as well regarding two areas, (Blue Nile and South Kordofan). These developments actually furnished conducive atmosphere for the country to identify several possible openings in the two states; Blue Nile and South Kordofan, which may substantially increase the possibility of mine action activities to take place in the forthcoming few years.

Risk Factors:

During the current extension period there was a realm of possibilities that have resistively affected the completion of planned demining activities and the likened will be expected to have the same influences on the operations progress in the forthcoming extension period. The risks that are likely to be encountered are as follow:

- f. **The Overall Political and Economic Situation:** The plan assumes that the political and economic situations remain in favour of the clearance operations.
- g. **Security Situation in the Operational Areas:** Ongoing conflict in some parts of South Kordofan and Blue Nile may affect the operations plan.
- h. **Funding:** The plan for clearance of the mined areas in Sudan largely depends on the continuation

of funding from the international community as well as the Government of Sudan.

- i. **Weather:** Generally, Sudan experienced heavy rains from June to October. During this time of the year operations activities may shut-down or conducted in limited areas which may result in failure to meet the stated deadlines of the extension period. There is great possibility that the floods resulted from the heavy rains move or deeply bury mines and ERW resulting in miss mines or ERW which may also delay the process.
- j. **Terrains:** Minefields in the southern part of Sudan are located in thick vegetation and mountainous areas. The vegetation drills and demining of hard surface of an even ground surface (sharp slopes) both are time consuming.

Annexes:

ANNEX 1: ABBREVIATIONS

AP	Anti-Personnel
AT	Anti-tank
CPA	Comprehensive Peace Agreement
CHA	Confirmed Hazardous Area
DA	Dangerous Area
DCA	Danish Church Aid
DHA	Defined Hazardous Area
DPKO	UN Department of Peacekeeping Operations
EOD	Explosive Ordnance Disposal
ERW	Explosive Remnant of War
FPDO	Friends of Peace and Development Organization
FSD	Swiss Demining Federation
GMAA	General Mine Action Assessment
HTA	High Threat Area
IDP	Internally Displaced Persons
JASMAR	Sudanese NGO
IMSMA	Information Management System for Mine Action
GoS	Government of Sudan
GONU	Government of National Unity
GMAA	General Mine Action Assessment
LTA	Low Threat Area
LRP	Land Release process
LIS	Landmine Impact Survey
MAG	Mine Advisory Group
MECHEM	Commercial Deming Company
MDD	Mine Detection Dog
MCT	Manual Clearance Teams
MYWP	National Mine Action Multiyear Work Plan
MF	Mine Fields
NTSG	National Mine Action Standards and Guidelines
NMAS	National Mine Action Standards
NMAC	National Mine Action Centre
NDU	National Demining Units
NMAA	National Mine Action Authority
MOU	Memorandum of Understanding
NGO	Non-Governmental Organization
MRE	Mine Risk Education
QA	Quality Assurance
QC	Quality Control
SAC	Survey Action Centre
SAF	Sudanese Armed Forces
SHA	Suspected Hazardous Areas
SDG	Sudanese money
SOP	Standard Operating Procedures
SPLM/A	Sudan People's Liberation Army
UNMAS	United Nations Mine Action Service
UNMIS	United Nations Missions in Sudan
UNMAO	United Nations Mine Action Office
USD	United States Dollars
UXO	Unexploded Ordnance

Annex 2: Glossary of terms

Applicable Mine Action Acronyms and Terminologies:

Since its establishment in 2002, Sudan mine action program adapted some mine action terms such as Suspected Hazardous Area (SHA), Dangerous Area (DA), Confirmed Hazardous Area (CHA), and Minefield (MF), for defining and confirming the type of hazards in specific area. Meanwhile the terms DA & SHA reflect the **suspected** hazardous area, contrariwise MF reflect the **confirmed** hazardous area.

Suspected Hazardous Area (SHA):

Refers to an area suspected to have mines/ERW hazards. SHA can be identified by an impact survey, other form of national survey or claim of presence of explosive hazards. The best example for SHA is the Dangerous Area (DA) which refers to an area suspects to contain mines/ERW that is reported by local population or MRE teams or military personnel. DA can be mined area or battle area or UXO spot.

Confirmed Hazardous Area (CHA):

Refers to an area where the presence of mine/ERW contamination has been confirmed on the basis of direct evidence of the presence of mines/ERW. The best example for CHA is the Minefield (MF) which refers to an area contaminated with either antipersonnel or antitank mines with a clearly defined parameter/polygon. The polygon of a minefield is developed as a result of a technical survey process.

It worth mentioning that the above-mentioned terminologies were compatible with IMSMA Legacy and thus used in planning process for operations. However, these terminologies are under review and will be modified with the migration of mine action database from IMSMA Legacy to IMSMA NG that supposed to take place by the end of 2018, for now we are using IMSMA Legacy parallel with IMSMA NG as process to migrate to IMSMA NG in coordination with GICHD. On the contrary, the updated terminologies have already been adopted and accommodated in the National Technical Guidelines (NTSGs).

ANNEX 3: SUDAN_OPS_MYWP_2018-2023_BNS

ANNEX 4: SUDAN_OPS_MYWP_2018-2023_WKS

ANNEX 5: SUDAN_OPS_MYWP_2018-2023_SKS

ANNEX 6: SUDAN_OPS_MYWP_2018-2023_DS

ANNEX 7: SUDAN_LIST_OF_REMAINING_AP_MINED_AREAS

ANNEX 8: SUDAN_LIST_OF_REMAINING_AP_MINED_AREAS

ANNEX 9: SUDAN_LIST_OF_REMAINING_ERW_CONTAMINATED_AREAS

ANNEX 10: SUDAN_GENERAL_THREAT_MAP