



Ministry of Defence
Sudan Mine Action Programme
IMSMA Monthly Report March 2023



Abbreviations

DA	–	Dangerous area
SHA	–	Suspected Hazardous Area (result of Level 1 Survey)
MF	–	Mine Field (Result of Technical survey of DA or SHA. It has defined boundary)
CHA	–	Confirm Hazardous Area
APM	–	Anti Personnel Mines
ATM	–	Anti Tank Mines
UXO	–	Unexploded Ordinance
SAA	–	Small Arms Ammunition
EOD	–	Explosive Ordinance Disposal
BAC	–	Battle Area Clearance
GMAA	–	General Mine Action Assessment
EORE	–	Explosive Ordnance Risk Education
NMAC	–	National Mine Action Center
IMSMA	–	Information Management System for Mine Action



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1. In Marrawi conference hall, in United Nations Development Programme, the meeting of Sudan's Mine Action Support Group (MASG) was held with wide participation honored by the Secretary-General of the Ministry of Defense, the Special Representative of the Secretary-General for Sudan and Head of the United Nations Integrated Transition Assistance Mission in Sudan Mr. Volker Perthes and a large number of ambassadors and representatives of diplomatic missions and United Nations organizations in Sudan.
2. The workshop on Victims Assistance Strategic Framework was held on 15-16 March 2023 in Coral Hotel with wide participation from the relative ministries, national and international organizations and Unions of persons with disabilities.
3. The month witnessed the graduation of thirteen trainees from the National Mine Action Center (NMAC) on basic humanitarian demining and explosive ordnance disposal (EOD) level-2, dignified by a number of military attaches to Sudan.
4. Preparations to celebrate the International Mine Action Awareness and Assistance Day were continuing as the final perception of the day which will be held at the Friendship Hotel in Khartoum has been endorsed.
5. On the other hand, the field activities of mines and explosive remnant of war clearance are progressing very well in Blue Nile region and South Kordofan State, during the month of March 2023 the following have been achieved:
 - a. **During this month (8) Hazards were registered and (21) hazards were cleared. (See table 1-1).**
 - b. **Total of (161,521) sqm were cleared during this month (see table 2-1).**
 - c. **total of 3 (APM) , 41 (ATM) , 268 (UXO) and 2,186 (SAA) were destroyed during this month (See table 3-1).**
 - d. **This month, no any an accident was reported. (See table 4.1).**
 - e. **6,205 beneficiaries of EORE activity this month (see table 5.1).**
6. Since 2002 Sudan Mine Action Programme has had registered 5,071 hazard areas, where 4,676 have been cleared. In 2023 total of 21 hazardous area have been registered and 25 hazard areas have been cleared, total of 395 hazard areas remained within area of 33,916,872 sqm (see table 1-1).
7. Since the beginning of the programme the total of 138,090,359 sqm cleared and handed over to the local communities. While In 2023 a total of 326,800 sqm cleared from Mines/ ERW (see table 2-1).
8. Since 2002 total of 10,403 Anti-Personnel Mines (APM), 3,417 Anti-Tank Mines (ATM), 174,613 Unexploded Ordnance (UXO) and 5,813,549 Small Arms Ammunition (SAA) have been destroyed. While in 2023 a total of 5 Anti-Personnel Mines (APM), 68 Anti-Tank Mines (ATM and 625 (UXO) and 2,219 Small Arms Ammunition (SAA) destroyed (see table 1-3).
9. Since 2002 till March 2023(2,612) victims were reported, from the mentioned total (1,973) injured and (639) killed. In 2023 (1) victim was reported (Injured). (See table 4-1).
10. To mitigate the risk of Mines/ ERW accidents, the National Mine Action Center (NMAC) in collaboration with the National and International NGOs (FPDO, JSMAR, AAR and NADA Alazhar) Mine/ ERW risk education activities have been conducted to 5,042,309 persons from the beginning of the programme and 14,607 persons during this year . (See table 5-1).
11. Since the beginning of the programme and till today a total of 38,529 km roads have been opened and cleared (see table 6-1).

Note:

Due to ongoing data cleanup, differences in figures might be noticed in total figures of this month as compared to previous of months.



Ministry of Defence
Sudan Mine Action Programme
IMSMA Monthly Report March 2023



Summary of the contamination and progress:

Table 1.1: Contamination:

Period	Registered			Cleared						Remain		
	CHA	SHA	Total	CHA		SHA		Total		CHA	SHA	Total
				New	Old	New	Old	New	Old			
March	8	0	8	5	13	0	3	5	16	6	0	6
2023	21	0	21	9	13	0	3	9	16	12	0	12
Running Total	1,348	3,723	5,071	1,120		3,556		4,676		228	167	395

Table 2.1: Area Released:

Period	EOD	BAC Sub Surface	BAC Surface	Battle Area Released	Cancelled	Manual Mine Clearance	Mechanical Mine Clearance	Mine Detection Dogs (MDD)	Mined Area Released	Cancelled GMAA	Total Area Released
March	2,500	50,527	106,250	159,277	0	2,244	0	0	2,244	0	161,521
2023	2,500	50,527	267,663	320,690	0	6,110	0	0	6,110	0	326,800
Total	2,245,364	7,578,673	65,484,042	75,308,079	12,705,197	10,929,688	2,901,977	2,214,995	28,751,857	34,030,423	138,090,359

Table 3.1: Devices Destroyed:

Period	AP	AT	SAA	UXO
March	3	41	2,186	268
2023	5	68	2,219	625
Running Total	10,403	3,417	5,813,549	174,613

Table 4.1: Casualties:

Period	Killed						Injured						Total
	Men	Women	Boys	Girls	Not Specified	Total	Men	Women	Boys	Girls	Not Specified	Total	
2023	0	0	0	0	0	0	0	0	1	0	0	1	1
Running Total	260	33	157	35	154	639	902	100	508	116	347	1,973	2,612

Table 5.1: EORE:

Period	Boys	Girls	Men	Women	Not Specified	Total
March	1,192	3,874	286	853	0	6,205
2023	3,313	8,889	828	1,577	0	14,607
Running Total	1,441,459	1,231,280	1,087,308	1,078,451	203,812	5,042,309

Table 6.1: Road Opened:

Period	Road Assessed (Km)	Road Verified (km)	Road Opened(km)
Running Total	36,448	2,081	38,529

2. Detailed Report on Mine Action Activities in Sudan

Table 2.2: Area Released by year:

Year	EOD	BAC Sub Surface	BAC Surface	Battle Area Released	Cancelled	Manual Mine Clearance	Mechanical Mine Clearance	Mine Detection Dogs (MDD)	Mined Area Release	Cancelled GMAA	Total Area Released
2002	1,782	0	0	1,782	0	48,480	0	0	48,480	0	50,262
2003	0	0	0	0	0	465,882	0	0	465,882	0	465,882
2004	25,965	0	0	25,965	0	268,606	0	0	268,606	0	294,571
2005	37,823	0	1,050	38,873	0	140,138	0	92,400	232,538	0	271,411
2006	87,700	36,000	880,227	1,003,927	0	175,702	0	0	175,702	0	1,179,629
2007	18,381	157,760	18,260,000	18,436,141	0	666,474	0	3,812	670,286	0	19,106,427
2008	7,311	251,036	178,263	436,610	0	943,254	0	10,808	954,062	0	1,390,672
2009	37,248	478,922	1,827,405	2,343,575	1,195,514	968,567	95,354	104,229	2,363,664	0	4,707,239
2010	26,003	1,111,084	459,494	1,596,581	645,074	458,315	1,218,951	608,470	2,930,810	22,757,677	27,285,068
2011	1,523,284	1,305,956	17,762,979	20,592,219	0	369,709	894,061	222,763	1,486,533	154,224	22,232,976
2012	7,520	357,648	261,500	626,668	0	422,196	128,965	0	551,161	0	1,177,829
2013	58	361,067	584,625	945,750	1,821,301	385,770	313,734	74,770	2,595,575	7,784,366	11,325,691
2014	87	270,761	297,000	567,848	285,212	2,280,689	63,364	125,315	2,754,580	898,524	4,220,952
2015	45	65,250	1,182,024	1,247,319	0	278,401	30,104	114,653	423,158	0	1,670,477
2016	2,001	297,810	1,205,630	1,505,441	2,337,945	776,780	89,690	177,634	3,382,049	1,503,676	6,391,166
2017	15,011	311,930	2,536,057	2,862,998	259,551	575,439	67,754	64,141	966,885	74,875	3,904,758
2018	399,105	523,207	15,450,378	16,372,690	21,017	689,898	0	289,550	1,000,465	0	17,373,155
2019	25	501,100	898,725	1,399,850	6,127,357	621,718	0	254,850	7,003,925	0	8,403,775
2020	0	528,026	2,280,964	2,808,990	0	285,799	0	68,000	353,799	0	3,162,789
2021	20,082	391,789	834,875	1,246,746	0	26,555	0	3,600	30,155	838,298	2,115,199
2022	33,433	578,800	315,183	927,416	12,226	75,206	0	0	87,432	18,783	1,033,631
2023	2500	50527	267,663	320,690	0	6110	0	0	6110	0	326,800
Total	2,245,364	7,578,673	65,484,042	75,308,079	12,705,197	10,929,688	2,901,977	2,214,995	28,751,857	34,030,423	138,090,359

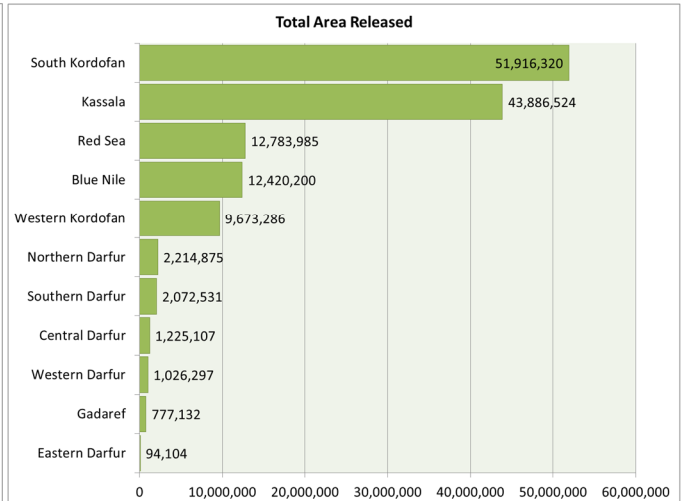
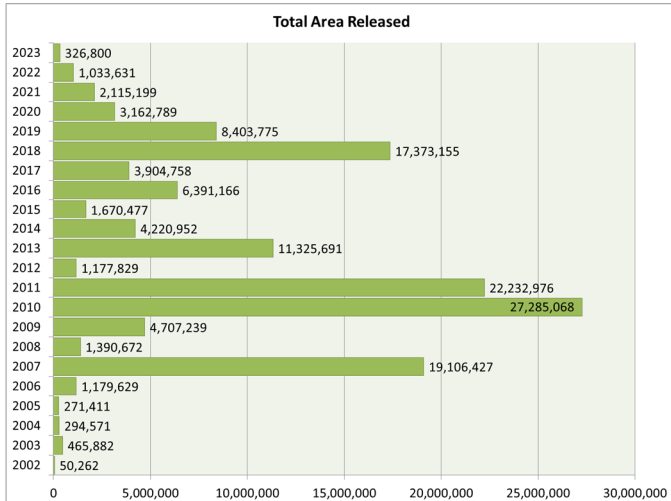
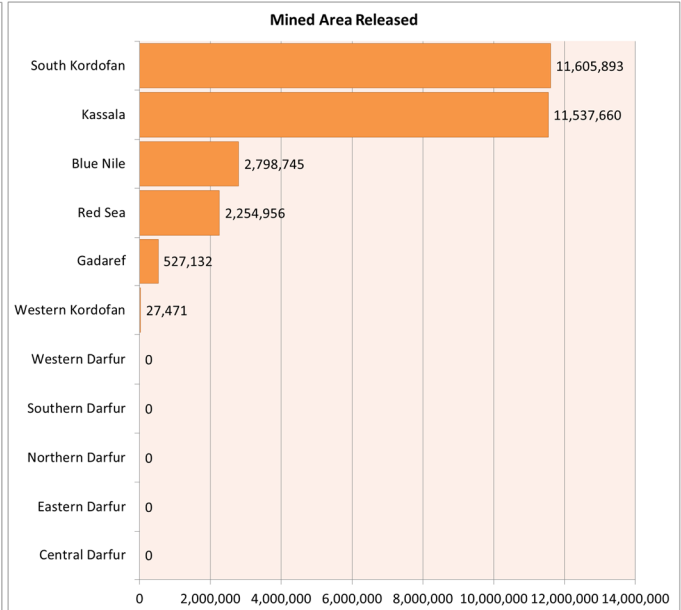
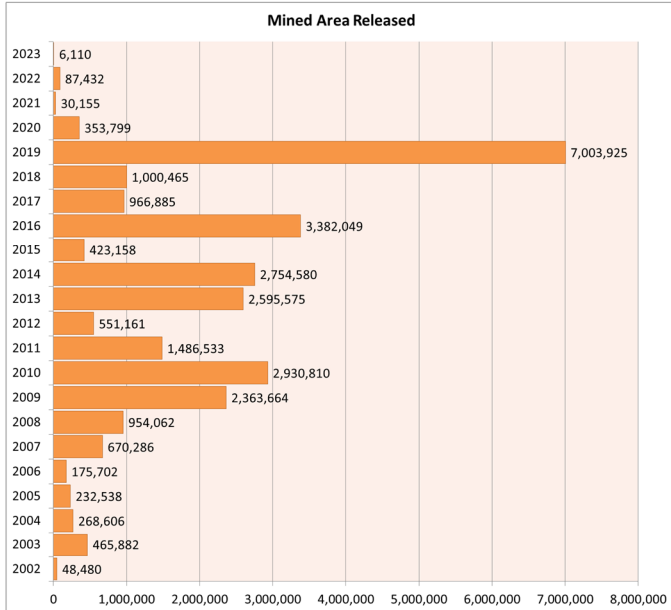
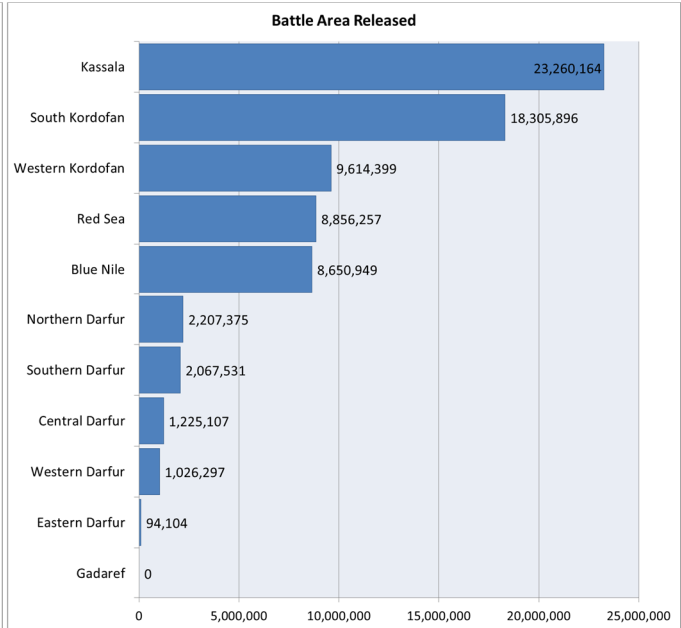
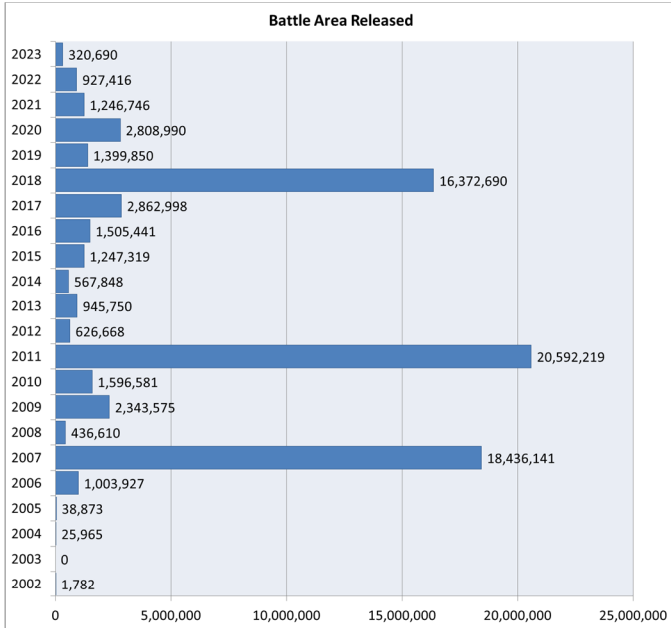
Table 2.3: Area Released by State:

Period	State	EOD	BAC Sub Surface	BAC Surface	Battle Area Released	Cancelled	Manual Mine Clearance	Mechanical Mine Clearance	Mine Detection Dogs (MDD)	Mined Area Release	Cancelled G/MAA	Total Area Released
March	Blue Nile	2,500	50,527	106,250	159,277	0	2,244	0	0	2,244	0	161,521
	Total	2,500	50,527	106,250	159,277	0	2,244	0	0	2,244	0	161,521
2023	Blue Nile	2,500	50,527	267,663	320,690	0	6,110	0	0	6,110	0	326,800
	Total	2,500	50,527	267,663	320,690	0	6,110	0	0	6,110	0	326,800
Total	Blue Nile	123,299	2,296,946	6,230,704	8,650,949	404,364	1,097,195	921,763	375,423	2,798,745	970,505	12,420,200
	Central Darfur	214,152	100	1,010,855	1,225,107	0	0	0	0	0	0	1,225,107
	Eastern Darfur	21,704	30,000	42,400	94,104	0	0	0	0	0	0	94,104
	Gadaref	0	0	0	0	182,633	233,235	0	111,264	527,132	250,000	777,132
	Kassala	522,652	2,542,239	20,195,273	23,260,164	4,286,379	4,662,981	1,672,630	915,670	11,537,660	9,088,700	43,886,524
	Northern Darfur	59,158	549,185	1,599,032	2,207,375	0	0	0	0	0	7,500	2,214,875
	Red Sea	26	176,096	8,680,135	8,856,257	1,214,413	714,413	279,930	46,200	2,254,956	1,672,772	12,783,985
	South Kordofan	269,329	1,609,502	16,427,065	18,305,896	6,617,408	4,194,393	27,654	766,438	11,605,893	22,004,530	51,916,320
	Southern Darfur	5,241	183,728	1,878,562	2,067,531	0	0	0	0	0	5,000	2,072,531
	Western Darfur	1,020,040	6,257		1,026,297	0	0	0	0	0		1,026,297
	Western Kordofan	9,763	184,620	9,420,016	9,614,399	0	27,471	0	0	27,471	31,416	9,673,286
Grand Total	2,245,364	7,578,673	65,484,042	75,308,079	12,705,197	10,929,688	2,901,977	2,214,995	28,751,857	34,030,423	138,090,359	

Note :

Since the declaration completion of the clearance of the registered dangerous areas in Eastern States, NMAC remains handling residual risk which mainly represented in the explosive remnant of war, according to the international and national standards.

Chart 2.4: Area Released:



Area Released By State



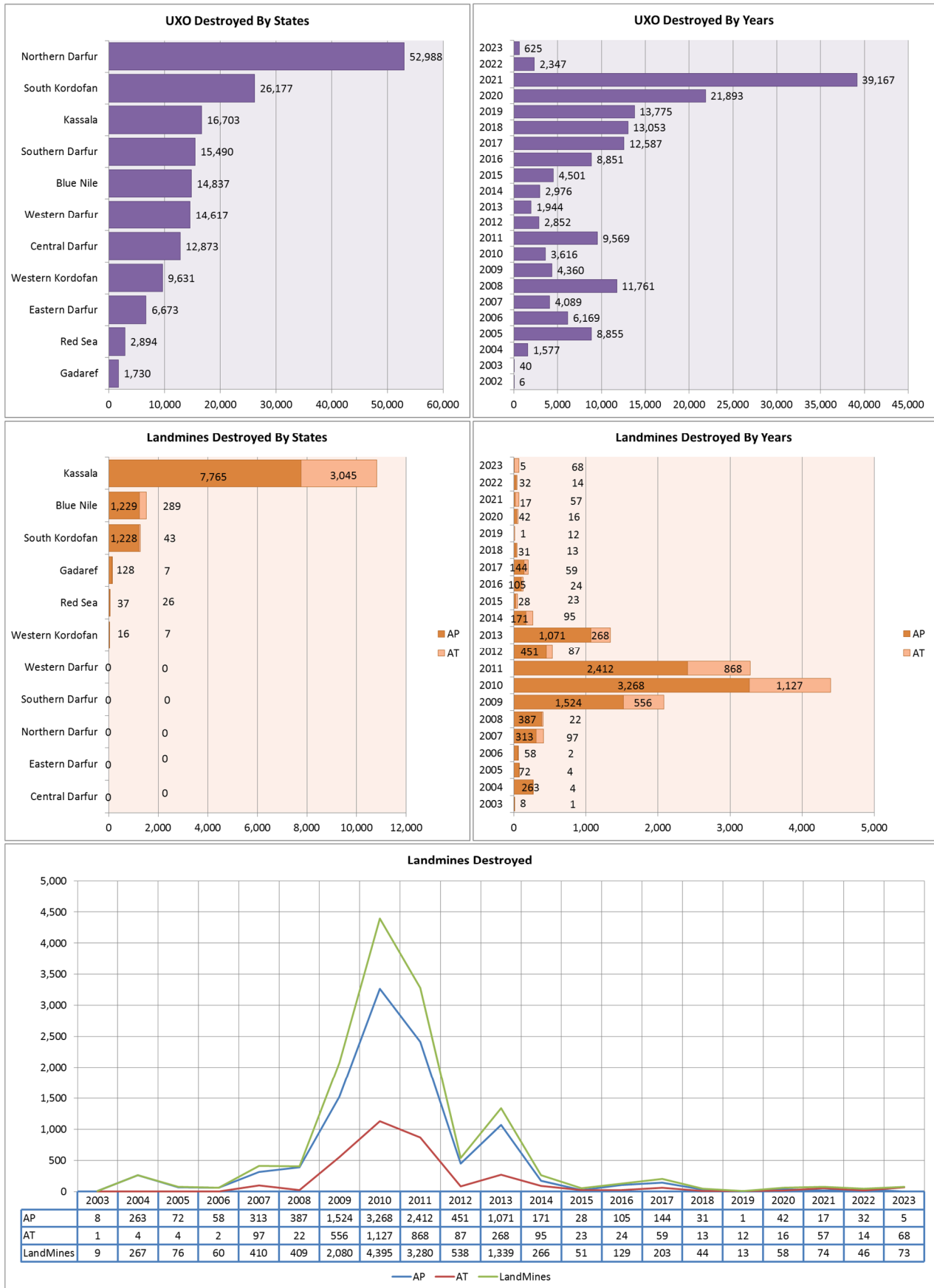
Table 3.2: Devices Destroyed by year:

Year	AP	AT	SAA	UXO
2002	0	0	345	6
2003	8	1	0	40
2004	263	4	500	1,577
2005	72	4	56,198	8,855
2006	58	2	45,727	6,169
2007	313	97	153,385	4,089
2008	387	22	82,389	11,761
2009	1,524	556	9,795	4,360
2010	3,268	1,127	20,253	3,616
2011	2,412	868	15,776	9,569
2012	451	87	8,334	2,852
2013	1,071	268	10,924	1,944
2014	171	95	14,020	2,976
2015	28	23	61,329	4,501
2016	105	24	258,255	8,851
2017	144	59	86,298	12,587
2018	31	13	696,144	13,053
2019	1	12	74,412	13,775
2020	42	16	837,147	21,893
2021	17	57	3,355,123	39,167
2022	32	14	24,976	2,347
2023	5	68	2219	625
Total	10,403	3,417	5,813,549	174,613

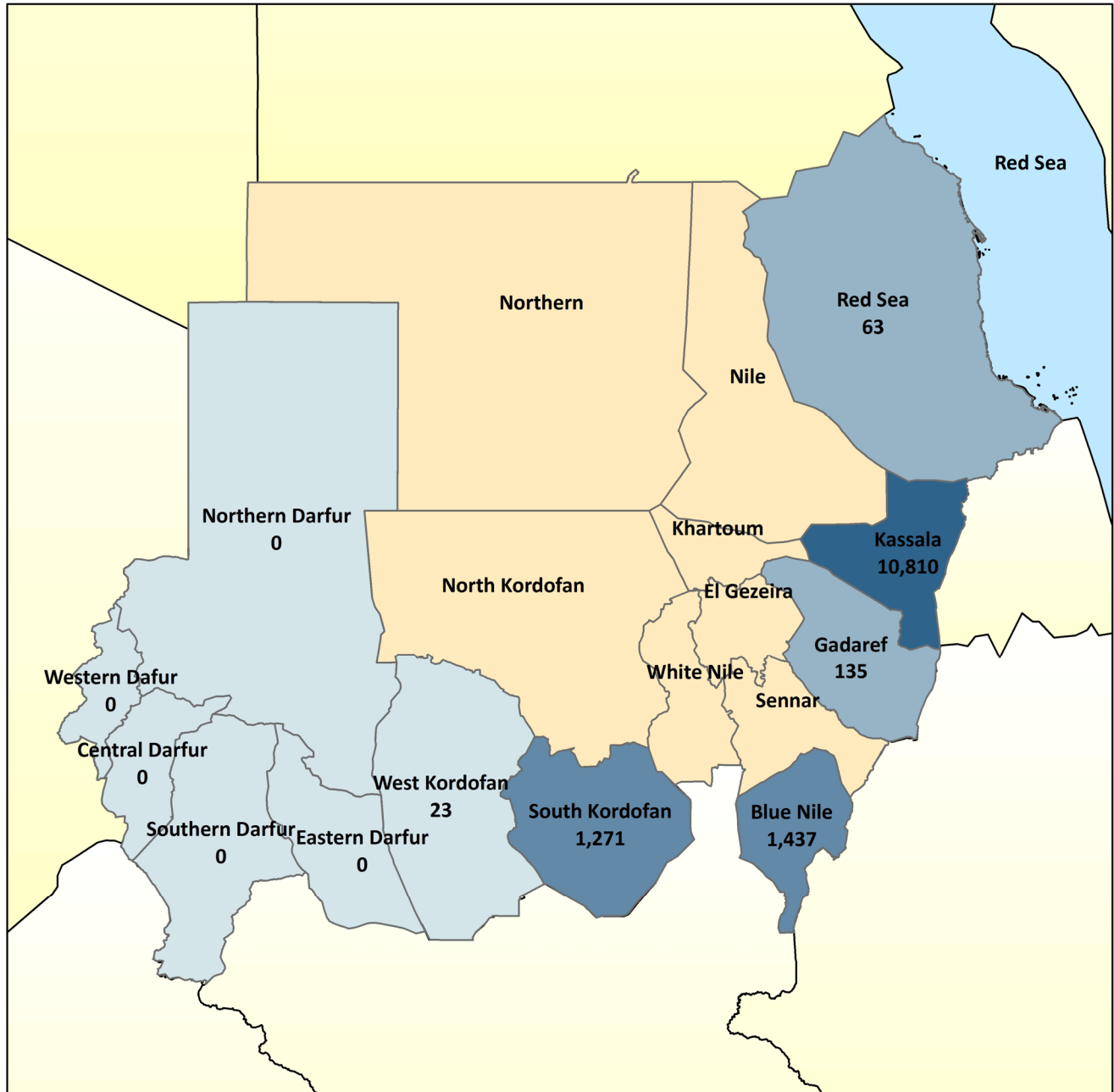
Table 3.3: Devices Destroyed by State:

Period	State	AP	AT	SAA	UXO
March	Blue Nile	3	41	2186	268
	Total	3	41	2186	268
2023	Blue Nile	5	68	2219	625
	Total	5	68	2219	625
Total	Blue Nile	1,229	289	309,177	14,837
	Central Darfur	0	0	121,940	12,873
	Eastern Darfur	0	0	94,736	6,673
	Gadaref	128	7	28,619	1,730
	Kassala	7,765	3,045	15,776	16,703
	Northern Darfur	0	0	3,762,730	52,988
	Red Sea	37	26	16,697	2,894
	South Kordofan	1,228	43	346,273	26,177
	Southern Darfur	0	0	982,239	15,490
	Western Darfur	0	0	130,307	14,617
	Western Kordofan	16	7	5,055	9,631
Total	10,403	3,417	5,813,549	174,613	

Chart 3.4: Devices Destroyed:



Landmine Destroyed By State



ERW Destroyed By State



Table 4.2: Casualties by States:

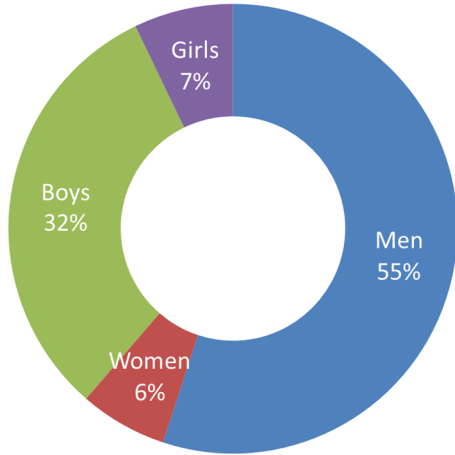
Period	State	Killed						Injured						Total
		Men	Women	Boys	Girls	Not Specified	Total	Men	Women	Boys	Girls	Not Specified	Total	
2023	Central Darfur	0	0	0	0	0	0	0	0	1	0	0	1	1
	Total	0	0	0	0	0	0	0	0	1	0	0	1	1
Total	Blue Nile	84	1	32	3	29	149	205	18	68	6	50	347	496
	Central Darfur	1	0	7	3	2	13	25	10	48	11	4	98	111
	Eastern Darfur	3	2	9	3	2	19	16	1	32	10	2	61	80
	Gadaref	1	0	1	0	1	3	3	0	1	0	1	5	8
	Kassala	79	8	20	4	10	121	268	16	63	9	41	397	518
	North Kordofan	1	0	0	0	0	1	0	0	0	0	0	0	1
	Northern Darfur	5	3	29	3	7	47	29	9	75	16	23	152	199
	Red Sea	15	3	6	1	2	27	28	0	3	1	3	35	62
	South Kordofan	60	10	26	12	92	200	253	30	103	29	173	588	788
	Southern Darfur	2	2	9	4	3	20	34	13	79	14	3	143	163
	Western Darfur	2	1	16	2	0	21	24	1	34	20	6	85	106
Western Kordofan	7	3	2	0	6	18	17	2	2	0	41	62	80	
Total	260	33	157	35	154	639	902	100	508	116	347	1,973	2,612	

Table 4.3: Casualties by Year:

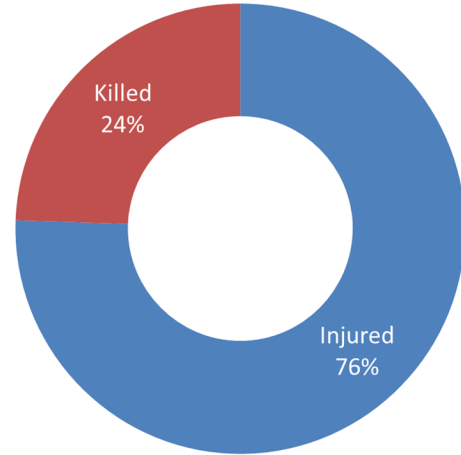
Year	Killed						Injured						Total
	Men	Women	Boys	Girls	Not	Total	Men	Women	Boys	Girls	Not	Total	
Before 2012	241	28	108	23	131	531	731	54	273	65	297	1,420	1,951
2012	7	2	15	2	9	35	33	5	27	4	35	104	139
2013	1	0	0	0	1	2	17	8	22	6	0	53	55
2014	1	2	0	0	0	3	32	7	16	3	0	58	61
2015	5	0	5	0	9	19	14	4	23	3	9	53	72
2016	0	0	2	1	0	3	10	5	12	4	3	34	37
2017	1	0	6	3	2	12	14	5	28	3	0	50	62
2018	0	1	12	3	2	18	20	3	26	10	3	62	80
2019	1	0	3	2	0	6	10	2	17	6	0	35	41
2020	1	0	2	1	0	4	8	5	23	5	0	41	45
2021	1	0	1	0	0	2	11	1	27	2	0	41	43
2022	1	0	3	0	0	4	2	1	13	5	0	21	25
2023	0	0	0	0	0	0	0	0	1	0	0	1	1
Grand Total	260	33	157	35	154	639	902	100	508	116	347	1,973	2,612

Chart 4.4: Casualties:

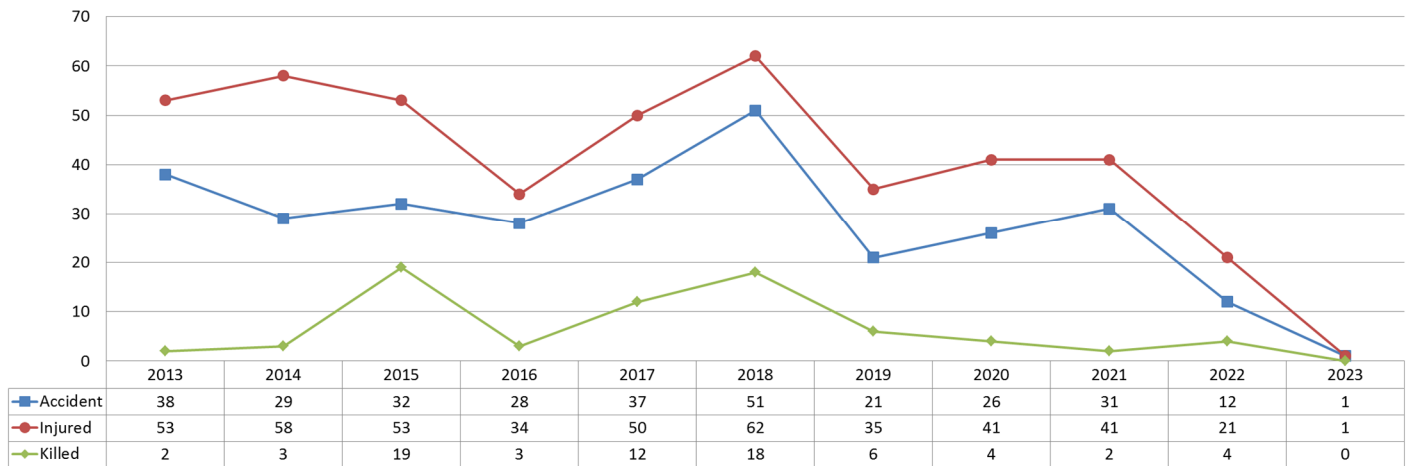
Victims Disaggregation Boys, Girls, Men and Women



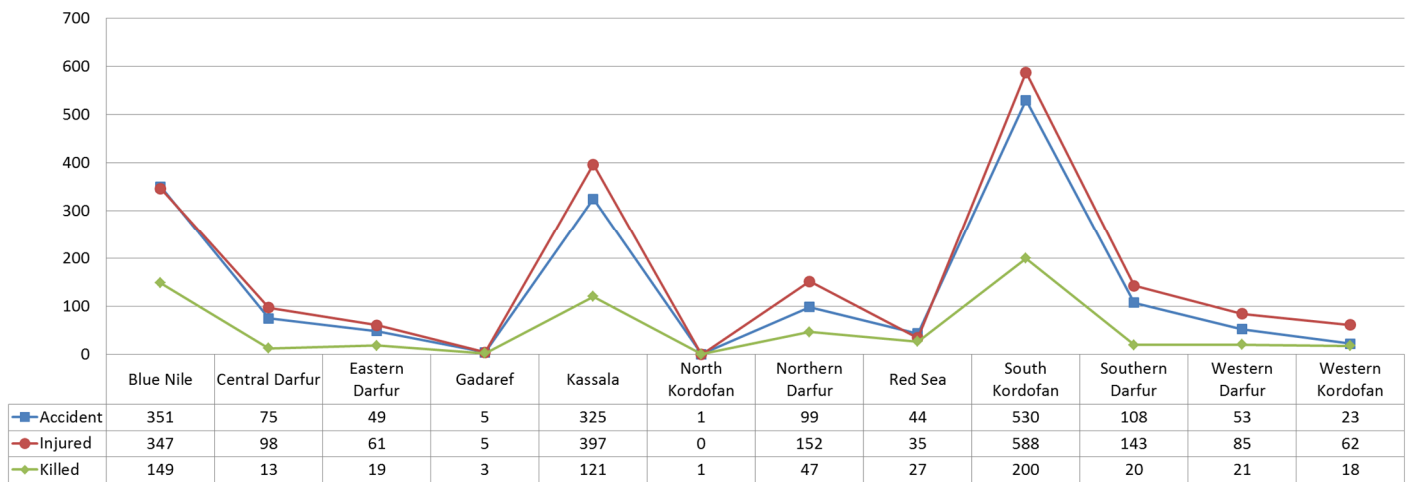
Victims Disaggregation Killed and Injured



Landmine / ERW Accidents by Years



Landmine / ERW Accidents States



Casualties Distributed By State

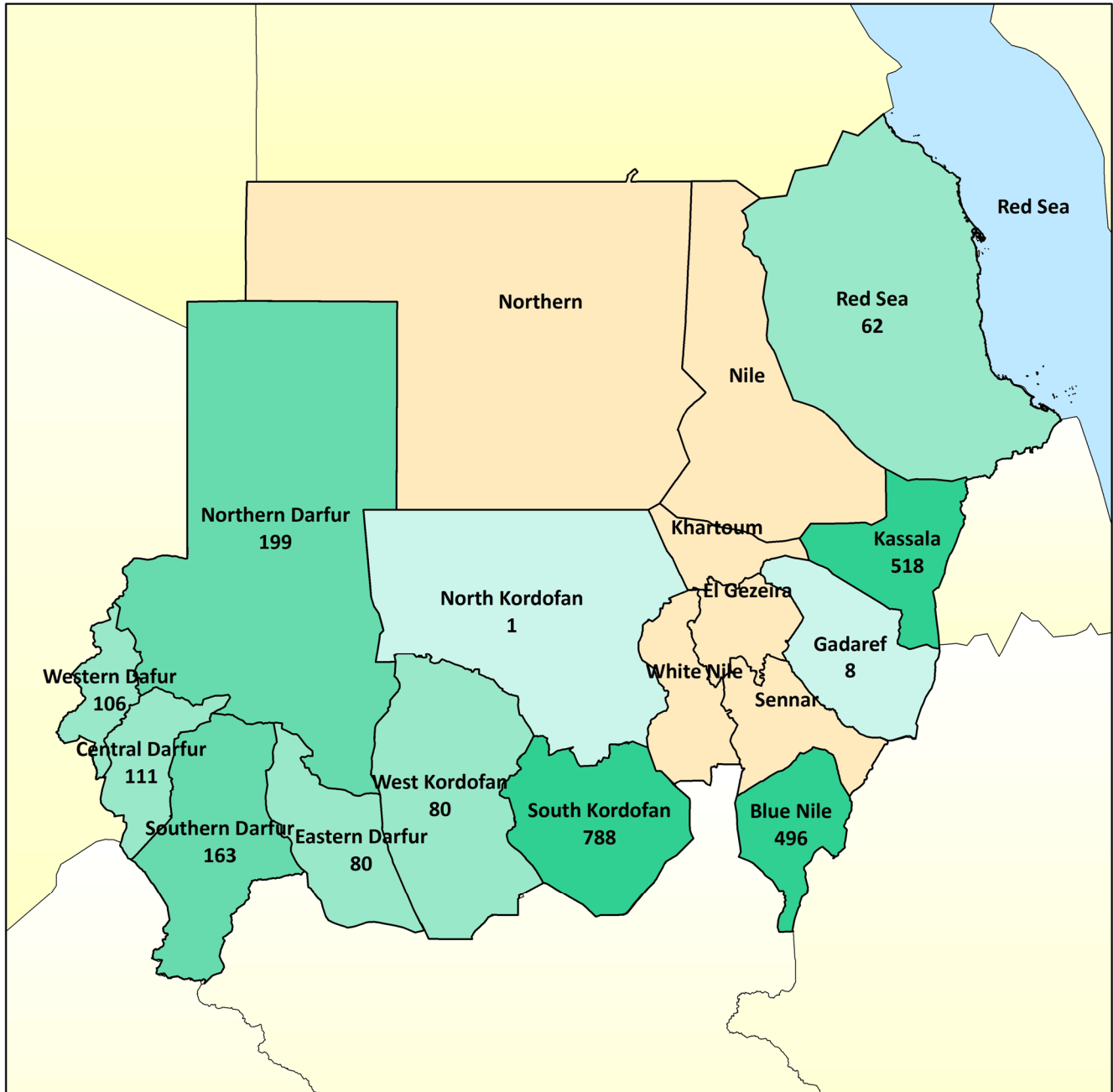


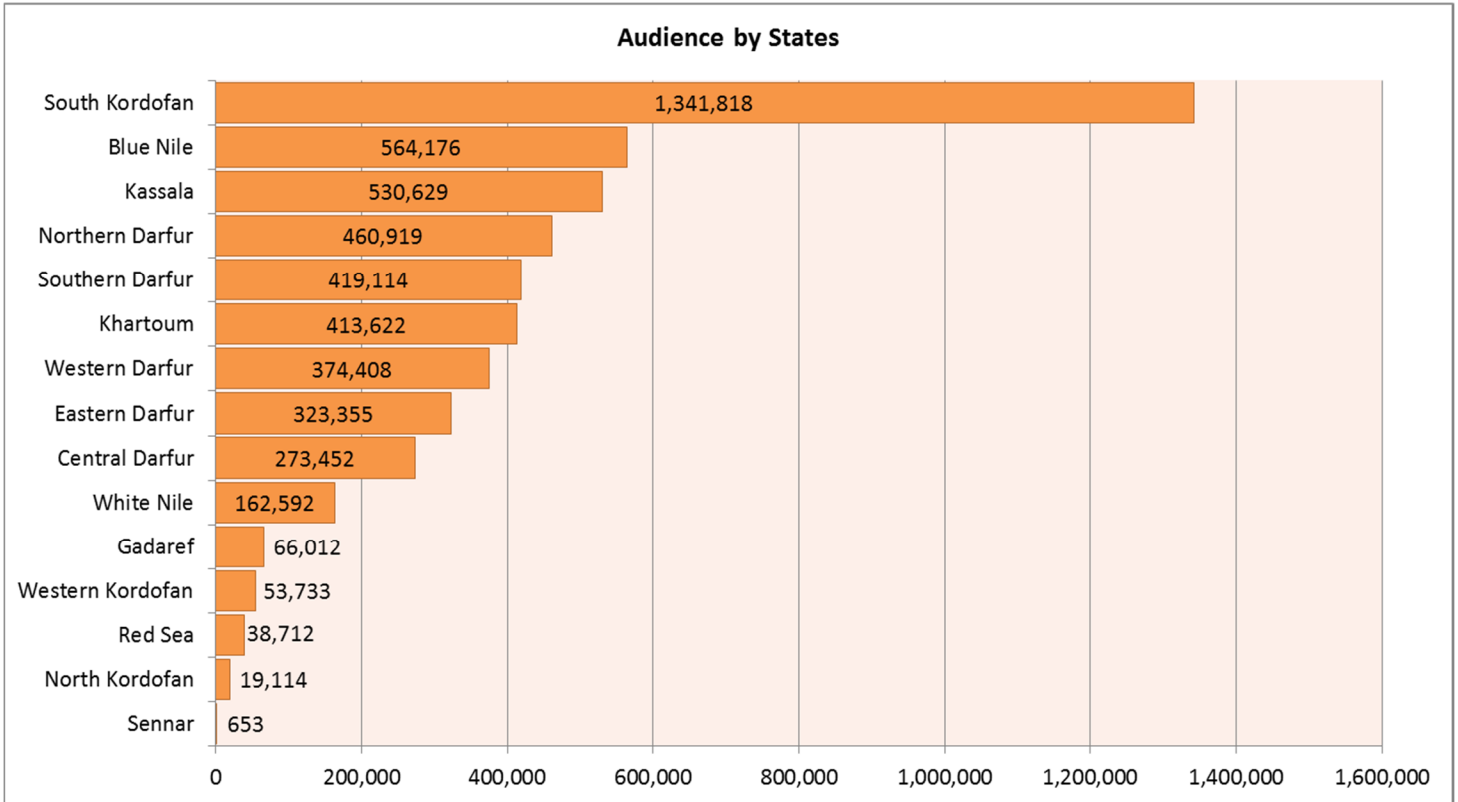
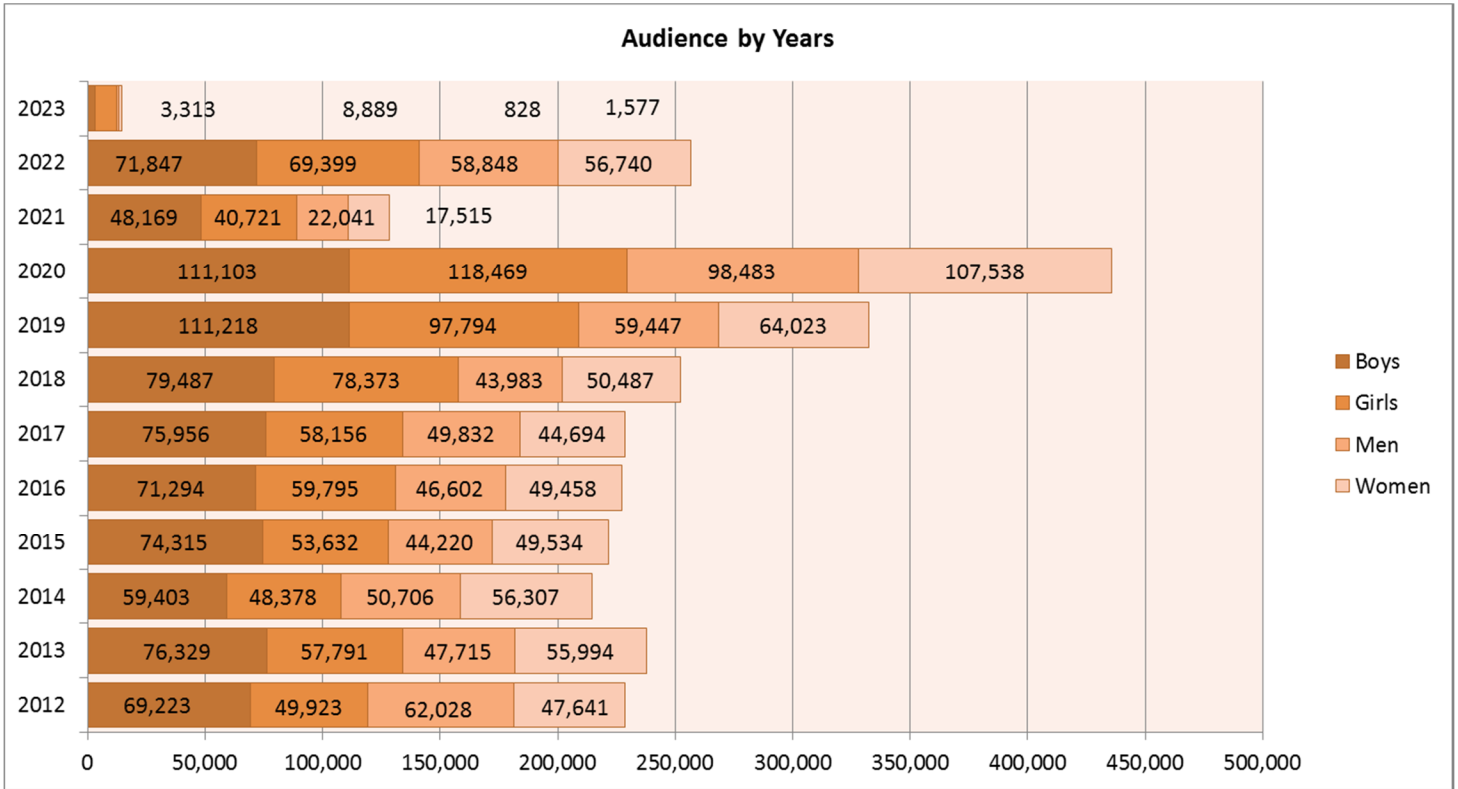
Table 5.2: EORE by State:

Period	State	Boys	Girls	Men	Women	Not Specified	Total
March	South Kordofan	1,192	3,874	286	853	0	6,205
	Total	1,192	3,874	286	853	0	6,205
2023	South Kordofan	3,313	8,889	828	1577	0	14,607
	Total	3,313	8,889	828	1577	0	14,607
Total	Blue Nile	145,956	137,471	138,188	141,558	1,004	564,176
	Central Darfur	97,724	82,489	39,546	53,694	0	273,452
	Eastern Darfur	94,170	77,739	78,186	72,690	571	323,355
	Gadaref	15,282	13,440	19,921	17,371	0	66,012
	Kassala	151,997	93,611	169,716	113,452	1,854	530,629
	Khartoum	100,665	83,569	86,725	79,242	63,421	413,622
	North Kordofan	6,802	6,754	2,512	3,046	0	19,114
	Northern Darfur	156,827	133,631	70,657	99,804	0	460,919
	Red Sea	13,111	8,164	8,862	8,494	81	38,712
	Sennar	145	112	124	272	0	653
	South Kordofan	343,397	335,860	276,053	265,173	121,335	1,341,818
	Southern Darfur	142,165	111,598	72,957	92,395	0	419,114
	Western Darfur	121,909	99,919	76,271	76,310	0	374,408
	Western Kordofan	12,756	11,841	11,600	12,544	4,992	53,733
	White Nile	38,555	35,084	35,992	42,408	10,554	162,592
Total	1,441,459	1,231,280	1,087,308	1,078,451	203,812	5,042,309	

Table 5.3: EORE by Year:

Year	Boys	Girls	Men	Women	Not Specified	Total
Before 2012	589,802	489,960	502,575	476,943	203,695	2,262,976
2012	69,223	49,923	62,028	47,641	117	228,932
2013	76,329	57,791	47,715	55,994	0	237,829
2014	59,403	48,378	50,706	56,307	0	214,794
2015	74,315	53,632	44,220	49,534	0	221,701
2016	71,294	59,795	46,602	49,458	0	227,149
2017	75,956	58,156	49,832	44,694	0	228,638
2018	79,487	78,373	43,983	50,487	0	252,328
2019	111,218	97,794	59,447	64,023	0	332,482
2020	111,103	118,469	98,483	107,538	0	435,593
2021	48,169	40,721	22,041	17,515	0	128,446
2022	71,847	69,399	58,848	56,740	0	256,834
2023	3,313	8,889	828	1577	0	14,607
Total	1,441,459	1,231,280	1,087,308	1,078,451	203,812	5,042,309

Chart 5.4: EORE Audience:



EORE Distributed By State



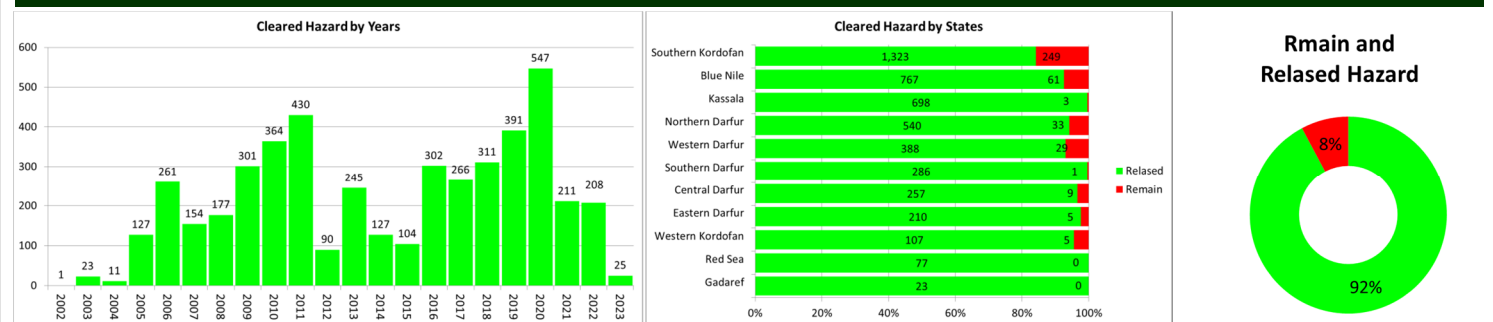
Table 1.2: Hazard Registered, Cleared and Active by State:

State	Registered			Cleared			Remain		
	CHA	SHA	Total	CHA	SHA	Total	CHA	SHA	Total
Blue Nile	343	485	828	301	466	767	42	19	61
Central Darfur	71	195	266	71	186	257	0	9	9
Eastern Darfur	17	198	215	16	194	210	1	4	5
Gadaref	12	11	23	12	11	23	0	0	0
Kassala	178	523	701	175	523	698	3	0	3
Northern Darfur	121	452	573	103	437	540	18	15	33
Red Sea	10	67	77	10	67	77	0	0	0
Southern Darfur	57	230	287	57	229	286	0	1	1
Southern Kordofan	471	1,101	1,572	314	1,009	1,323	157	92	249
Western Darfur	67	350	417	60	328	388	7	22	29
Western Kordofan	1	111	112	1	106	107	0	5	5
Grand Total	1,348	3,723	5,071	1,120	3,556	4,676	228	167	395

Table 1.3: Hazard Registered, Cleared and Active by Year:

Year	Registered			Cleared			Remain		
	CHA	SHA	Total	CHA	SHA	Total	CHA	SHA	Total
2002	0	103	103	0	1	1	0	2	2
2003	0	31	31	0	23	23	0	1	1
2004	7	40	47	0	11	11	4	1	5
2005	33	202	235	2	125	127	6	6	12
2006	9	369	378	1	260	261	3	11	14
2007	24	230	254	23	131	154	1	3	4
2008	76	371	447	9	168	177	26	15	41
2009	34	94	128	8	293	301	2	27	29
2010	29	196	225	54	310	364	0	7	7
2011	23	280	303	77	353	430	8	18	26
2012	5	66	71	8	82	90	0	0	0
2013	23	206	229	15	230	245	0	5	5
2014	6	78	84	13	114	127	0	0	0
2015	11	100	111	6	98	104	0	2	2
2016	2	284	286	10	292	302	0	8	8
2017	6	264	270	9	257	266	0	9	9
2018	1	308	309	1	310	311	0	8	8
2019	113	287	400	95	296	391	12	17	29
2020	449	144	593	404	143	547	50	8	58
2021	235	56	291	168	43	211	49	16	65
2022	241	14	255	195	13	208	54	3	57
2023	21	0	21	22	3	25	13	0	13
Grand Total	1,348	3,723	5,071	1,120	3,556	4,676	228	167	395

Chart 1.4: Status of Hazard:



Released Hazard By State



Remain Hazard By State



All Darfur states are contaminated with ERW and free of mines.

Landmine/ERW Threat Map - Sudan

As of March 2023



Legend

- Open Hazard
- Road Category
- Verified Road
- Contamination Roads
- Road need to be surveyed



State	Kassala	Blue Nile	Southern Kordofan	Western Kordofan	Central Darfur	Eastern Darfur	Northern Darfur	Southern Darfur	Western Darfur	Grand Total
CHA	3	42	157	0	0	1	18	0	7	228
SHA	0	19	92	5	9	4	15	1	22	167
Total	3	61	249	5	9	5	33	1	29	395

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 Warning: Not all contents of this product have been field verified.
 Caution should be exercised when making measurements.
 Spelling of towns and features may conflict with local or other usages.
 Datum: WGS 84 Projection: Geographic