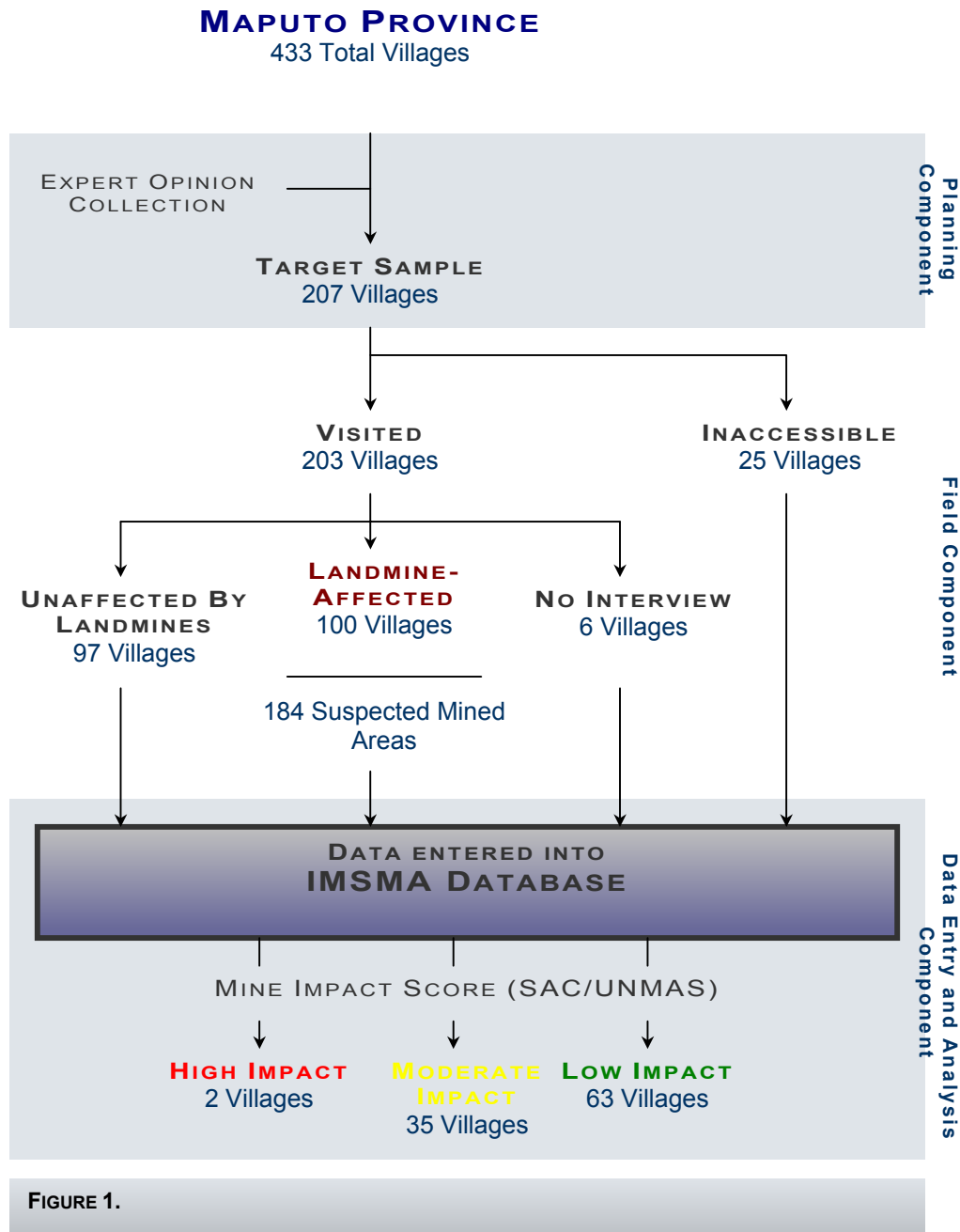


OVERVIEW FOR MAPUTO PROVINCE



The term “village” as used herein has the same meaning as the term “community” used elsewhere.

Schematic of process.



The Mozambique Landmine Impact Survey (MLIS) visited seven of eight Districts in Maputo. Cidade de Maputo, the national capital and a separate Province administratively, and Cidade de Matola were not visited, as they are considered by Mozambican authorities not to be landmine-affected. Of the 203 villages visited, 100 identified themselves as landmine-affected, reporting 184 Suspected Mined Areas (SMAs). Six villages were either unknown to local persons or uninhabited, and 25 villages were inaccessible due to fallen bridges or poor road conditions. Figure 1 provides an overview of the survey process: village selection; data collection; and data-entry into the Information Management System for Mine Action (IMSMA) database, out of which is generated the Mine Impact Score (Appendix I).

Expert Opinion Collection formed the basis for the selection of villages. Information from Official Interviews, data from organizations active in the Province (Accelerated Demining Program, Handicap International) and from the National Demining Institute (DITERS Database) served as a basis for preparing a target list of 207 villages to be visited throughout the Province.

Village Survey Questionnaires were administered in every village found to be landmine-affected to a total of 835 Interviewees. The vast majority of Interviewees (80%) had occupations in agriculture, fishing and related activities, followed by occupations in the public sector and defence (5%). All age groups were well represented. Eight per cent of Interviewees were aged from 15 to 29 years, 32% were aged from 30 to 44 years, and 39% were aged from 45 to 59 years. The remaining 21% were accounted for by Interviewees older than 59 years or of unknown age. Women participated in 86% of group interviews.

Provincial summary indicating number of CIDC village visits, population and reported Suspected Mined Areas and victims.

District	Villages		Population	Mined Areas and Victims		
	Affected Villages	Unaffected Villages	Affected Population	Number of SMAs	Victims in Last 2 Years	Total Victims
BOANE	9	9	25,599	17	0	26*
MAGUDE	16	15	15,605	33	4	30*
MANHIÇA	17	18	31,734	32	1	28
MARRACUENE	6	13	3,374	7	1	30
MATUTUINE	23	18	15,220	48	4	138
MOAMBA	16	11	17,343	27	2	94*
NAMAACHA	13	13	17,717	20	1	25*
Total	100	97	126,592	184	13	371

* Minimum value: certain communities could not report the precise number of victims

TABLE 1.

Table 1 summarises the principal findings for Maputo by District visited. A further breakdown by village in each District visited can be found at Appendix II.

Landmine-affected villages were identified in each District visited and were most numerous in the District of Matutuine (23), followed by Manhiça (17) and Magude and Moamba (each with 16). Each of these Districts also reported a high number of SMAs, combined accounting for 76% of the Province's total of reported SMAs. The District of Matutuine also reported the highest number of victims (138), followed by the District of Moamba (94). Victims within the two years preceding the MLIS were reported in every District visited except Boane, with the highest occurrence in Magude and Matutuine Districts, with four recent victims each.

VICTIMS AND IMPACTS

VICTIMS

In total, 76 of 100 (76%) landmine-affected villages reported a total of at least 371 victims since the beginning of the Independence Struggle. Eight villages could not specify the number of victims; however, five of these villages reported having had many victims. Victims from nine villages, each with at least ten reported victims, accounted for 165 (44%) of the total victim tally for the Province. The village of Mubobo (Moamba District) reported 28 victims, and the village of Mahau (Matutuíne District) reported 49 victims.

Thirteen landmine victims were reported in 11 villages during the two-year period preceding the MLIS, of whom six were killed and six injured. Information on the type of wound was not available for one victim. The village of Manjangué (Magude District) reported three victims during that period. Of the 12 victims reported during the two years preceding the MLIS on whom data on gender were available, nine (75%) were civilian men of varying ages. Victims reported for this period for whom information was available were most commonly engaged in travel (four of 12, or 33%) and food and water collection (also four of 12, or 33%) at the time of the accident.

IMPACTS ON RESOURCES AND INFRASTRUCTURE

Figure 2 displays the number of villages in Maputo with blocked access to roads, infrastructure (bridges, airstrips, railroads, and powerlines), services (educational, cultural, and health facilities) and a variety of resources (water, agricultural land, pasture land and non-agricultural land).

Blockage impacts on resources were reported as follows, in descending order of frequency: agricultural land (59 of 100 mine-affected villages, or 59%); pasture land (32 of 100 villages, or 32%); and non-agricultural land (used for hunting, gathering fruit and medicinal plants, and collecting firewood and building materials) (26 of 100 villages, or 26%).

Blockage to roads was reported by 55 of 100 villages (55%), followed by blockage to infrastructure points (13%).

Fifteen villages (15%) reported seasonal variation in the severity of impacts: nine reported greater severity during the rainy season; four reported greater severity during the dry season; one reported greater severity during winter; and one indicated that the impacts are more severe during the farming season. The majority of villages (79 of 100, or 79%) reported that there was no particular season during which landmines had a greater impact on their village.

Number of villages reporting blockage impacts by type.

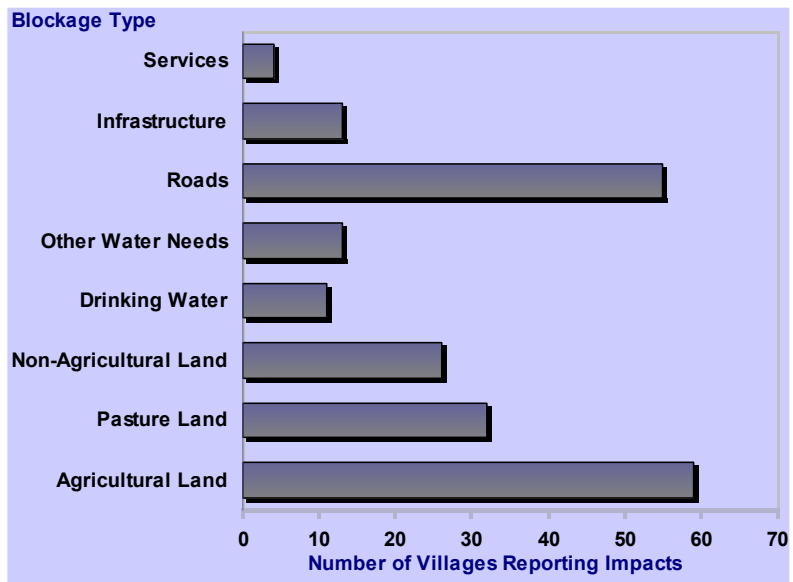


FIGURE 2.

For 79 of 100 (79%) villages, at least one half of Interviewees reported that they worry a great deal about the presence of landmines, while for the remainder of villages (21%), the majority of Interviewees worry moderately or not at all. In total, 728 of 835 (87%) Interviewees reported that they worry about landmines in their village, with 630 (75%) who reported that they worry a great deal. Overall, 710 Interviewees

(85%) reported that the presence of landmines changes their behaviour.

MINE IMPACT SCORE

The Mine Impact Score developed by the Survey Action Centre and the United Nations Mine Action Service distils a number of important variables (presence of landmines/UXO, blockage impacts and recent victims) into a single index that permits comparisons among villages. The weights used by the CIDC to generate the scores can be found at Appendix I.

Except in the improbable event that large numbers of recent victims (victims reported within the two-year period preceding the MLIS) are widespread, the Mine Impact Score assigns a large number of villages to the low-impact category. The need has therefore been expressed in Mozambique for a tool that would assist in establishing priorities among those low-impact villages. Some alternative indices are discussed in the national report.

Two villages in Maputo Province, one situated in Magude District near the northern border with Gaza Province and the other in Matutuíne District near Maputo City, fell into the high-impact category (Figure 3). A total of 35 moderately impacted villages were identified, including villages from all seven Districts visited. The aggregate population of the highly and moderately impacted villages totals approximately 38,000 persons, with individual village populations ranging from 41 to over 3,000 inhabitants. Low-impact villages, of which there were 63, were also identified in each District visited, with particular concentrations in the central part of the Province.

Of the 100 villages impacted, 37 (37%) identified the impacts of landmines as becoming more severe with time, while 31 (31%) reported the impacts as becoming less severe with time.

Map of Maputo Districts illustrating the distribution of group interviews and their Mine Impact Score.

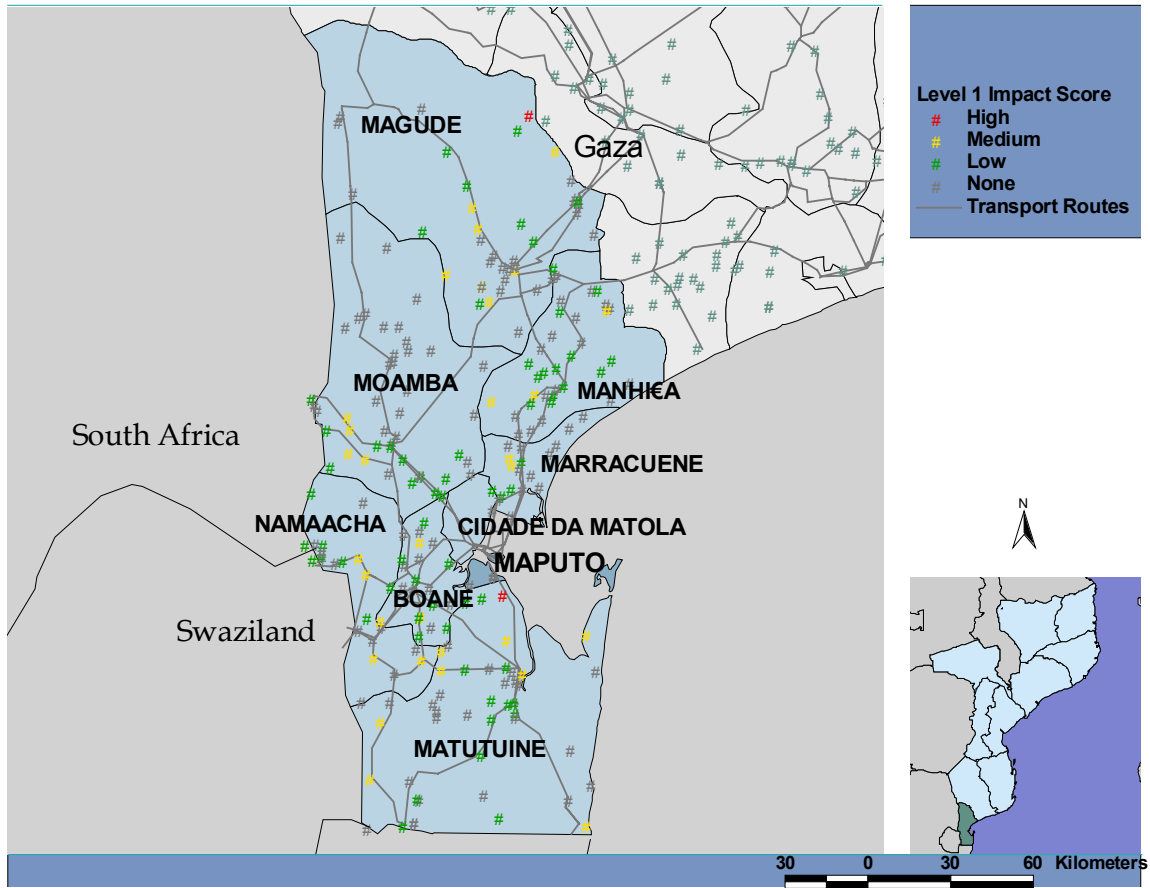


FIGURE 3.

MINE CONTAMINATION

DISTRIBUTION OF SUSPECTED MINED AREAS

Figure 4 illustrates that landmine contamination appears most concentrated in the central part of the Province, adjacent to and inland from the Bay of Maputo, and in the northeast portion of the Province in Manhiça and parts of Magude.

Map of Maputo Districts and administrative centres, illustrating the distribution of Suspected Mined Areas.

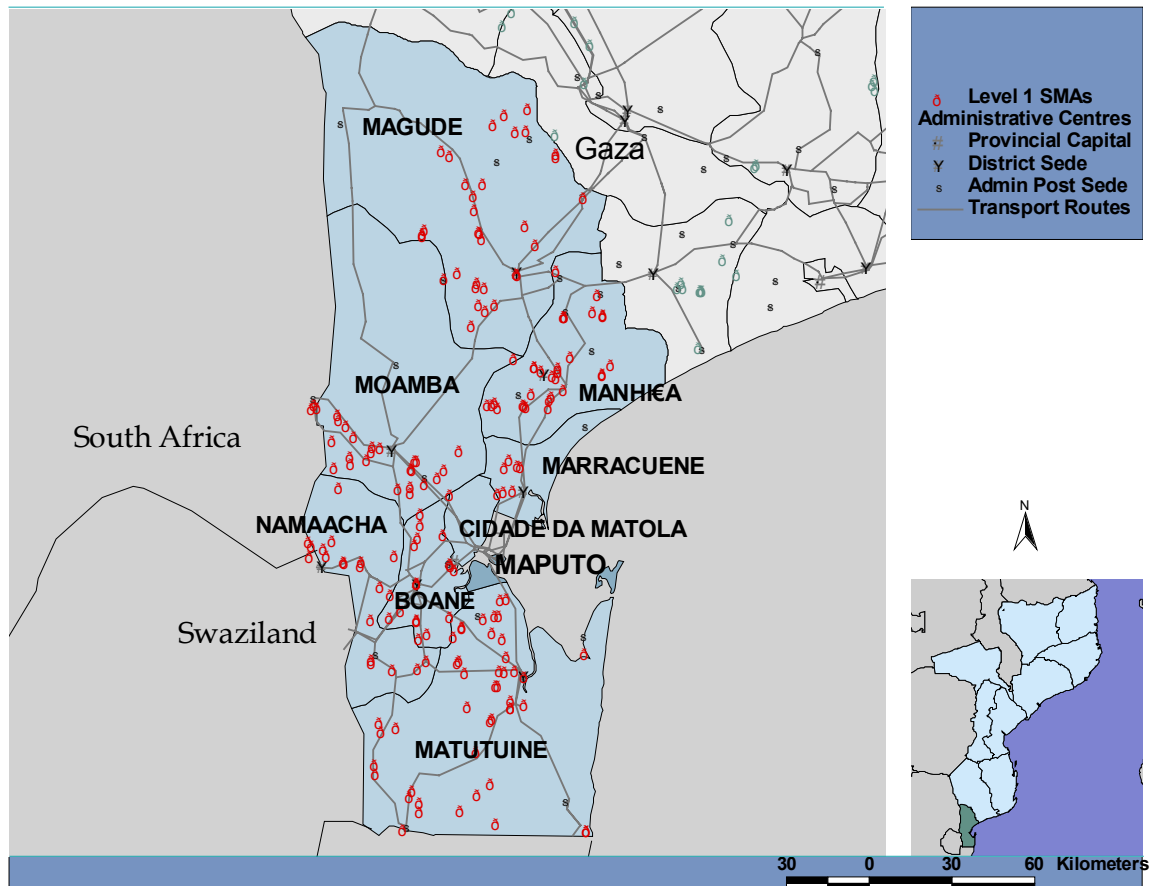


FIGURE 4.

Of the 100 landmine-affected villages identified in Maputo, 43% reported a single SMA and 52% reported two or three SMAs. Four villages identified four SMAs each: Pessene in Moamba District; Malatxota in Matutuine District; Macandzene in Manhiça District; and Timanguene in Magude District. One village (Bairro 151 in Matutuine District) identified seven SMAs.

Information on the year in which landmines were first laid and the year in which they were last laid was reported for 56% and 52% of SMAs respectively. Landmines in one SMA were first reportedly laid in 1977, after which SMAs were reportedly created every year between 1981 and 1991. The majority of mine-laying took place between 1984 and 1988, accounting for 75% of all SMAs. The earliest year in which landmines were last reportedly laid in individual SMAs was 1982. The temporal pattern thereafter is similar to that of first mine-laying.

TERRAIN AND TYPES OF ORDNANCE

SMA were predominantly described as having a flat ground profile (74%). Mixed vegetation was reported as the most common vegetation cover, accounting for 61% of SMAs, followed by grasses accounting for 21% of SMAs.

Most commonly, SMAs were classified as former military installations (28 of 184, or 15%). Twenty-three SMAs were classified as being proximate to trails (13%), ten (5%) proximate to roads, and nine (5%) proximate to a water source.

The majority of SMAs (120 of 184, or 65%) were reported to have no marking (signs or fences) that would indicate the area to be landmine-contaminated.

Of 100 landmine-affected villages, nine (9%) reported harbouring solely unexploded ordnance (UXO), and an additional 16 (16%) reported harbouring both landmines and UXO. The remainder reported solely landmines.

SIZE AND DISTANCE OF SUSPECTED MINED AREAS

A vast range of SMA sizes were reported, from several reports of single UXOs to the largest SMA covering 8.5 square kilometers reported in Pochane, Matutuíne District.

Frequency histogram of various Suspected Mined Area sizes

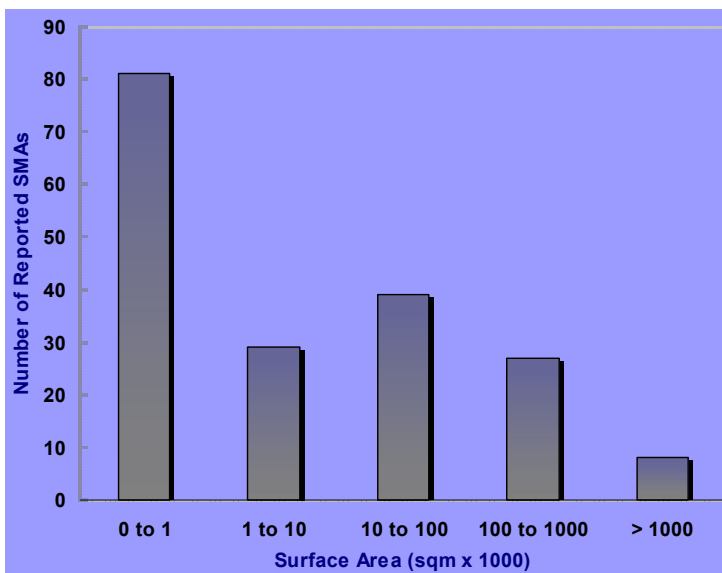


FIGURE 5.

Figure 5 shows the range of size estimates for the reported SMAs in Maputo. Forty-four per cent of SMAs were reported to be less than or equal to 1000 m², many of which are mined infrastructure points.

Seventy-two per cent of SMAs were reported to occur within 4 km of the affected village, and 97% were estimated to occur within 10 km. The most distant SMA was reported at a distance of 20.2 km from the affected village.

CONCLUSION

The principal findings of the MLIS in Maputo are as follows:

- Matutuíne District reported the highest number of landmine-affected villages, SMAs, and victims, followed by the Districts of Manhiça, Moamba, and Magude;
- Over 126,000 persons out of a total of 300,321 live in villages harbouring landmines, with at least 371 reported victims, 13 of whom were reported within the two years preceding the MLIS;
- Two villages were considered highly impacted and 35 villages were considered to be moderately impacted based on the Mine Impact Score;
- Blocked access to agricultural land was the most commonly reported impact of landmines on villages, followed by blockage to roads.

APPENDIX I – MINE IMPACT SCORE WEIGHTS

Variable	Weight
Types of Ordnance	
Landmines	2*
Unexploded Ordnance (UXO)	1*
Blockage Impacts	
Rainfed cropland	2
Irrigated cropland	0
Fixed Pasture	2
Migratory pasture	0
Non-agricultural land	1
Drinking Water	2
Other water uses	1
Housing area was blocked	0
Roads	1
Other infrastructure	1
Victims	
Victims within last 24 months	2*
Fixed Weights value cannot be changed	

Weightings Assigned to Variables in Calculation of the Village Mine Impact Scores

APPENDIX II – VILLAGE VISITS

LANDMINE-FREE VILLAGES:

District	Villages	District	Villages	District	Villages
MOAMBA	B.COMERCIAL	MAGUDE	BAIRRO-4	MANHIÇA	BAIRRO - 3 (TANINGA)
	BAGAMOYO		BAIRRO '20'		BAIRRO 121
	BIGUANE		BAIRRO '30'		BAIRRO 151
	CHIVONANHELETI		BAIRRO-2		C.CAMBEVE
	FANGO		CHICAENE		CHIBUCUTSU
	LANGUANA		CHICHUCO		CHICHAVANINE
	MADINGUINE		CUAMULA		CHITUTO
	MAHULANA		HEROIS MOCAMBICANOS		CIR. MALUANA
	MUCATINE		INHONGANE		HUNGUANA
	NHOQUENE		MACHAMBUIANA		MACHOVANA
TIRELE	MANGAJANE	MALUNGANA			
BOANE	BELULUANA	MATCHABE	MANGOINE	MIRONE	
	CIRCULO GIMO	MBUIYENE	MOBANA	NWAMATIBYANA	
	MASSACA-II	UNGUBANA-1	PATEQUE	PATI	
	MAVOCO	UNGUBANA-2	XINAVANE		
	MUZINGUIRE	MATUTUINE	BAIRRO-1	MARRACUENE	BOBOLE
	RADIO MARCONI		BAIRRO-3		CUMBEZA
	SALDANHA		CUMBANE DAMBO		GIMO OCOSSA
	UMPALA		DJABULA		GUAVA
	WACAMBO		HUCO		HOBJANA
	NAMAACHA		ALTO ENCHIZA		KETICANE
CASCATA			LIDZACA (TUCHAMANINE)		MARRACUENE
CHIGUBUTA 1A1			MABILIBILI		MATIMANA
DONGUENE			MAMOLI		MICHAFTUTENE
GOBA ESTACAO			MANHIHANE		MUCIZE
KULULA		MASSINDLA	MURONDZANE		
MAHELANE		MUDISSA	NANDJA		
MATIANINE 1C1		NCASSANE	SAMORA MACHEL		
MATSEQUENHA		NCUNVANA			
MAZIMINHAMA		SALAMANGA A			
MICHANGULENE	ZIHALE				
NAMAACHA	ZITUNDO				
NDIMBIDUANE					

LANDMINE-AFFECTED VILLAGES:

District	Admin Post	Village	Village Population	Number of SMAs	Total Victims	Recent Victims	Mine Impact Score
BOANE							
BOANE							
		BOANE	Unknown	2	N/A	0	Low
		TCHOMISSA	782	2	10	0	Medium
		25 DE JUNHO	713	1	2	0	Low
		MARIAN NGUABI	1167	2	7	0	Medium
		EDUARDO	1922	1	0	0	Medium
		MAHUMANA	125	2	0	0	Low
		MAHANHANE	224	1	3	0	Medium
MATOLA RIO							
		MULOTANA	794	3	3	0	Low
		MATOLA-RIO	2650	3	1	0	Low
MAGUDE							
MAGUDE							
		MAGUDE	Unknown	2	N/A	1	Medium
		COLO	813	2	4	0	Low
		CHICHANDUCO	719	1	1	0	Medium
		MOINE-SEDE	637	3	N/A	0	Medium
		SIMBE	330	2	N/A	0	Medium
		GUINHANA	Unknown	1	N/A	0	Low
		TIMANGUENE	343	4	1	0	Medium
MAHELE							
		MAHELE-SEDE	293	2	1	0	Low
		CHICUTSO	337	2	3	0	Low
		MANJANGUE	478	3	9	3	High
		MATONGOMANA	258	2	N/A	0	Low
MOTAZE							
		MACHAVANA	117	2	2	0	Medium
		MANGUZULANA	125	1	0	0	Low
		MOTAZE	961	1	3	0	Medium
PANJANE							
		PANJANE-SEDE	302	3	5	0	Medium
		CHIVONGUINE	415	2	0	0	Medium
MANHIÇA							
3 DE FEVEREIRO							
		3 DE FEVEREIRO	5066	3	0	0	Low
		ALDEIA MALAVEL	4619	1	4	0	Low
		MATUCUTANE	167	1	1	0	Medium
CALANGA							
		CHIPUCO	771	1	0	0	Low
		CHECUA	1008	2	4	0	Low
ILHA JOSINA MACHEL							
		ILHA JOSINA MACHE	Unknown	3	8	0	Low
MALUANA							
		MACANDZENE	1119	4	0	0	Medium
		PHATENE	1375	1	1	1	Medium
		XERINDA	2577	3	3	0	Low
MANHIÇA							
		CHAFUTENE	1545	2	1	0	Low
		NHAMBI	1208	2	0	0	Low
		MITILENE	2065	2	1	0	Low
		MACHECANA	1099	2	0	0	Low
		MANHICA	306	1	0	0	Low
		MACIANA-SEDE	6096	2	4	0	Low
		MARAGRA - SEDE	607	1	0	0	Low
XINAVANE							
		MATLOLO	2106	1	1	0	Low

CONTINUED ON NEXT PAGE

District	Admin Post	Village	Village Population	Number of SMAs	Total Victims	Recent Victims	Mine Impact Score
MARRACUENE							
MARRACUENE							
		MAPULANGO	727	1	7	0	Low
		MALI	782	1	5	0	Low
		MUMEMO	313	1	3	0	Low
		NDIXE	509	1	5	0	Medium
		MATALANE	917	1	5	1	Medium
		NHONGONHANE	126	2	5	0	Low
MATUTUINE							
CATEMBE							
		MUGAZINE (Catembe)	Unknown	1	4	0	Low
		FELIPE	536	1	1	0	Low
		POVOACAO(DJABIS	206	1	4	0	Low
		CUACHE	260	1	0	0	Medium
		BAIRRO 151	383	7	6	1	High
CATUANE							
		MAHAU	1373	3	49	1	Medium
		MALATXOTA	1	4	3	0	Low
		MANHANGANE	3211	2	4	0	Medium
		CATUANE	96	1	1	0	Low
MACHANGULO							
		MACHANGULO	Unknown	1	0	0	Medium
MISSEVENE							
		BELA VISTA	Unknown	2	3	0	Medium
		HINDANE	648	2	4	0	Medium
		POCHANE	827	2	19	0	Low
		MADJUBA	632	2	6	1	Medium
		CAPEZULO	131	2	2	0	Medium
		DUNHA	215	1	2	0	Low
		SALAMANGA B	1024	1	15	0	Low
		TANGA	291	3	4	0	Low
		MACASSANE	710	2	1	0	Low
		TINONGANINE	446	2	8	0	Low
		SANTACA	287	3	0	0	Low
ZITUNDO							
		PONTA D1OURO	1243	2	2	1	Medium
		PHUZA	395	2	0	0	Low
MOAMBA							
MOAMBA							
		MOAMBA	Unknown	1	0	0	Low
		CHIMEZANE	41	2	6	1	Medium
		JOSINA MACHEL	70	1	3	0	Low
PESSENE							
		PESSENE	Unknown	4	5	0	Low
		MAGUAZA	156	2	N/A	0	Low
		DAMO	528	1	11	0	Low
		UACHAVANE	226	1	9	0	Low
		HLANGUENE	645	1	3	0	Low
		TENGA	578	2	11	0	Low
		MACHAMBUTANA	990	1	0	0	Low
RESSANO GARCIA							
		RESSANO GARCIA	Unknown	3	11	0	Low
		CHANCULO	369	3	0	0	Medium
		CHIPARANGUA	223	1	0	0	Low
		MOVENE	273	2	5	0	Medium
		MUBOBO	198	1	28	1	Medium
		PANGANE	165	1	2	0	Low
NAMAACHA							
CHANGALANE							
		PORTO HENRIQUE	1535	2	N/A	0	Medium
		CHANGALANE-SE	1703	3	1	0	Medium
NAMAACHA							
		BEMASSANGO	22	1	0	0	Low
		MATIANINE 1A1	385	2	4	0	Low
		MACUACUA	341	2	11	0	Low
		COCOMELA	615	1	0	0	Low
		MATIAMINE B	199	1	5	0	Low
		GERMANTINO	75	1	1	0	Low
		MANDEVO	1560	2	0	0	Medium
		MAFAVUCA I	348	2	2	1	Medium
		MUDAVENE	598	1	0	0	Low
		MICUACUENE	326	1	1	0	Low
		Zona "G"	Unknown	1	0	0	Low