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## 2019 Fire Report Foreword

The 2019 fire season came at the backdrop of Cyclone Idai which brought incessant rains and destruction mostly in the Eastern Highlands of the Country. The Agency early in the year had predicted a fire risk for 2019 which was to be generally in the medium (65.6%) to high (24.85%) risk zones. As a strategy to minimize risk, the Agency and its key partners conducted **775** awareness meetings and supported a total of **139** road shows to sensitize stakeholders on fire management. A total of **222 984** people attended the meetings in the targeted fire prone districts.



As a result of the awareness raising meetings, fireguards measuring **4 144.26 km** which protected a total of **393 883** hectares were constructed in **29** fire prone districts. Furthermore, a total of **2 374** beehives were distributed to **43** wards of the **20** districts to support beekeeping projects, as a strategic livelihood option that helped to protect the environment. More so, the Agency promoted **68** hay baling demonstration projects in provinces which produced **410 862** hay bales. In addition **704 462** thatch grass bundles were harvested from fire prone districts. Road authorities cleared **2 537.9 km** road servitude. Hay baling, thatch grass cutting and road servitude clearing reduced fuel load and empowered communities with alternative sources of income after product sales.

As a result of the above detailed efforts a total of **1 158 291.57** hectares were burnt from **1 508** fire incidences in 2019 while in 2018 during the same period, a total of **1 595** incidences were recorded which burnt **1 190 174.89** hectares. This translates to **2.68%** decrease in area burnt and **5.45%** decrease in fire incidences. The negative environmental and economic impacts of the veld fires in 2019 cannot be over underscored. Veld fires gutted property worth over **ZWL 5 269 655** comprising household goods and agricultural equipment. A total of **4** lives were lost due to veld fires.

In the year 2020, no lives should be lost to veld fires and a 25 % reduction of area burnt is being targeted in order to create a negative veld fire trajectory until sustainable fire levels are attained.

**A Chigona**

Director General

# 1.0 Introduction

This report details the 2019 fire management activities which were carried out in the eight rural provinces of the Country. The fire management activities range from raising awareness of correct fire management practices as well as prosecution of offenders on fire related offences chief among them being failure to put in place standard fireguards around farms and premises. The general observation was that farmers did not put in place adequate pre suppression measures in the form of fireguards, fire management communication systems as well as having adequate firefighting equipment.

# 2.0 Fire Behaviour Analysis

## 2.1 FIRE RISK PREDICTION

The Agency modelled the national fire risk to show the fire risk zones in the country in 2019. The fire risk model used vegetation and previous fire behaviour and showed that the country is generally in the medium (65.6%) to high (24.85%) fire risk zones.

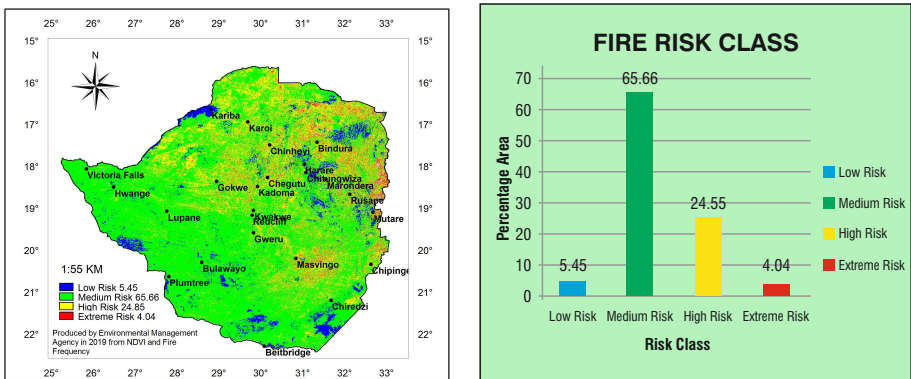


Figure 1 and 2: Fire risk model for 2019.

## 2.2 FIRE FREQUENCY ANALYSIS

Fire frequency analysis was done for the country to identify fire hot spots based on burnt area data over the period 2009 to 2018. The areas of concern are those areas with higher fire frequency of four and above in nine years as these areas have a negative effect of vegetation regrowth and biodiversity loss leading to land degradation. The analyses revealed that Hurungwe, Hwange, Gweru, Marondera, Chegutu, Chinhoyi and Bindura have been experiencing high fire frequency.

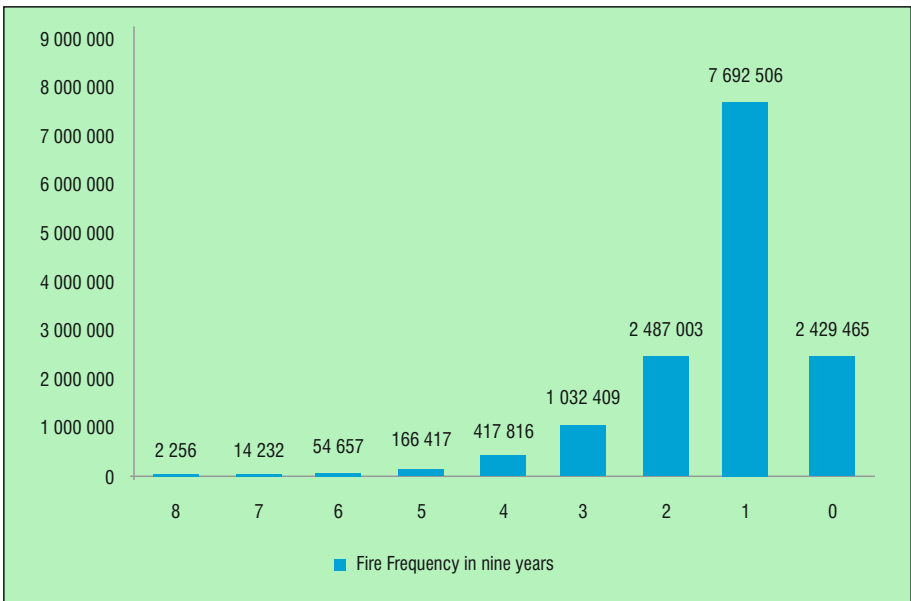


Figure 3: Fire frequency distribution

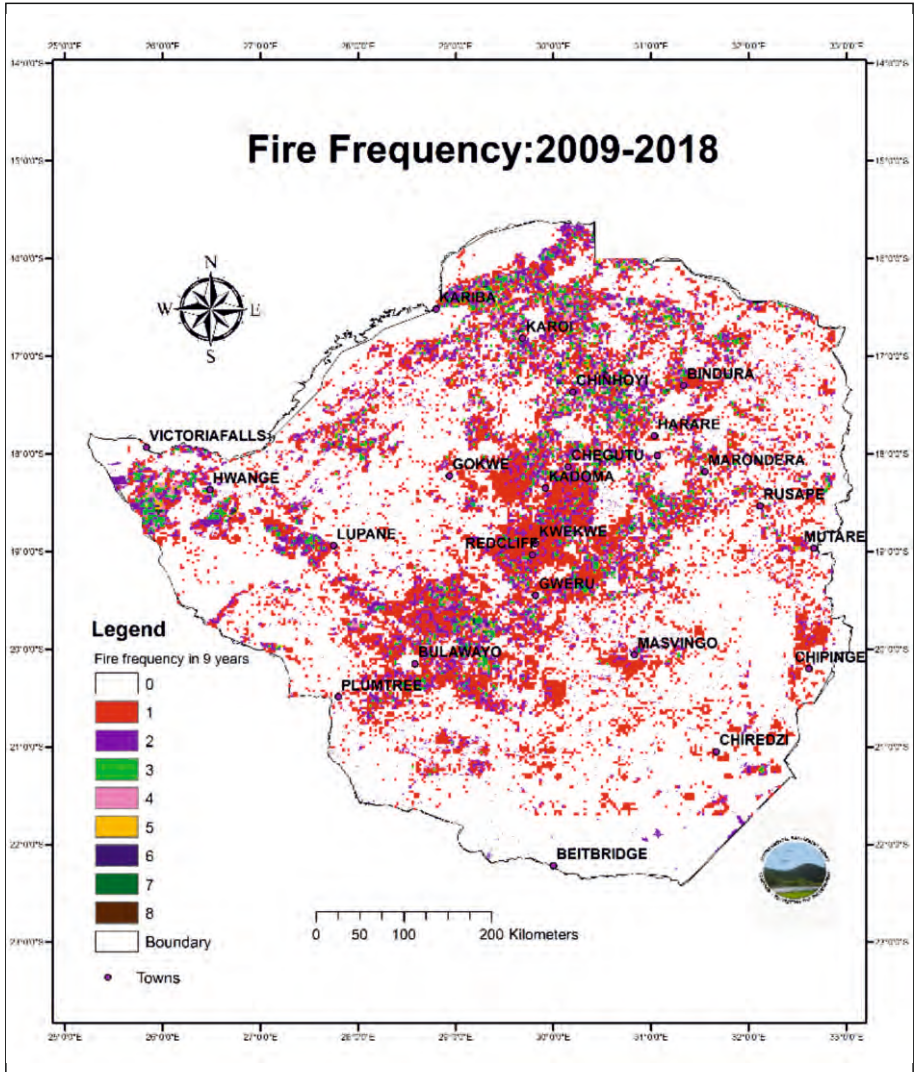


Figure 4: Fire frequency distribution for 2009 to 2018

## 3.0 Education, Awareness and Fire Training

### 3.1 AWARENESS MEETINGS

In a bid to reduce the extent of spread of veld fires the Agency ensured that communities are educated on fire management approaches. A total of 775 awareness meetings and 139 road shows were conducted reaching out to a combined 222 984 people across the country with the objective to influence behaviour change in fire management.

**Table 1: Fire meetings distribution**

Province	District	Ward/Area	Attendance	Number of meetings
Mash East	Provincial	PA' Boardroom	110	3
		Provincial Show Grounds	23	1
	Seke	Dangarendove, Rusirevi, Savanhu	320	5
		Ward 9	790	6
	Chikomba	Ward 8	480	3
		Ward 7	61	3
	Goromonzi	Ward 21	38	1
		Ward 9	113	5
		Ward 16	18	1
	Mutoko	Wards 13, 7, 18, 16, 9	220	5
	UMP	Ward 6	24	1
		Nhakiwa, Mashambanhaka & Muswe Community Halls	198	3
	Murehwa	Ward 30	60	1
Marondera	Ward 4	76	1	
Mash Central	Guruve	Ward 1, 9, 8,14, 19, 20,21	983	9
	Shamva	Mugwi farm	120	1
	Bindura	Ward 6, 5, 7, 8, 12, 21,		
		Bython and Mumhurwi Farm, Bindura urban (Fire research feedback & Climate change mainstreaming)	515	9
	Mt Darwin	Dolphin Park Farm	23	1
		Mt. Darwin Centre	27	2
Rushinga	Chimhanda	30	3	

Province	District	Ward/Area	Attendance	Number of meetings
	Muzarabani	Centenary	79	2
	Mazowe	RDC (FN Cluster)	12	2
	Mbire	Mbire RDC	252	4
Mash West	Zvimba	Mutorashanga, Murombedzi, Mapinga, Stockfield farm, Darwendale, Wards 1-33, Nyabira, Banket	11700	66
	Makonde	Chijaka, Muvhami, Kamhonde,		
		Kaswa, Fiona area	4790	18
	Hurungwe	Mudzimu, Chidamoyo, Magunje, Nyamakate, Chitindiva, Kazangarare, Tengwe, Rengwe, Chanetsa, Mujinga, Nematombo, Kebvunde, Birimahwe, Pote, Kasimure	6900	56
	Sanyati	27 Mines in Patchway, Chakari,		
		Bluegrass	2600	42
	Kariba	Kariba Town, Makuti, Siakobvu	2611	12
Mhondoro-Ngezi	Turf, Mamina, St. Michael	2500	19	
Mat North	Hwange	Ward 17,18, 19	789	12
	Lupane	RDDC, Full Council, Ward 13, 24, 25,26,28	2015	26
	Umguzu	RDDC, Ward 1, 5, 6 ,9,10,14,16	931	15
	Bubi	Ward 12, 14	238	2
	Binga	RDDC, Ward 4 Sinansengwe	750	10
	Nkayi	Ward 20,21	67	2
	Tsholotsho	Ward 6, Jimila, 12Mhlabangubo, 13 Nembe, Dombo and Nqoya, 22 Madziba and Mapulubisi	635	11
Masvingo	Gutu	Ward 1, 6,15 Mugari village	301	3
	Chivi	Ward 12	30	1
	Mwenezi	Ward 16 Lapachi Irrigation, Ward 16	97	2
	Zaka	Ward 1, 6	1420	4
	Bikita	Ward 10, 14, 15, Kushingira High Sch	226	6

Province	District	Ward/Area	Attendance	Number of meetings
	Chiredzi	Ward 10, 11, Chikombedzi	248	4
	Masvingo	Ward 6, Runde catchment, Stallion lodge, Chief Shumba homestead, Summertown and Floradale	590	18
Manicaland	Chimanimani	Ward 12, CPU meeting	3 438	21
	Makoni	Headlands, Zingondi, Makoni	143	3
	Mutasa		2 149	12
	Nyanga	Nyamupinga	2 340	23
	Mutare	Mutare Paper Mills	430	11
	Chipinge	Ward 6, Chirinda	476	9
Mat South	Umzingwane	Ward 17,18,14,19	219	11
	Mangwe	Ward 11, 12	67	3
	Bulilima	Ward 1,9,19	601	9
	Insiza	Ward 17,18,20,22,23 (Lambani and Killarney areas)	663	5
	Matobo	Ward 15, Ward 16 (Silozwi,Natisa, Lushumbe), Ward 17, Ward 18, Ward 24, Ward 27(Mthwakazi)	1 116	8
	Gwanda	Fire SAPCO	34	1
Midlands			10 252	258
<b>Total</b>			<b>65 938</b>	<b>775</b>



**Plate 1:** Chief Chundu from Hurungwe addressing a fire awareness meetings.



**Plate 2:** National Fire week training in Hurungwe, Mashonaland West



**Plate 3:** Community fire awareness meeting at Pote Secondary School in Hurungwe.

### **3.2 FIRE COMMEMORATIONS/INDABAS**

The Agency facilitated the commemoration of the national fire week countrywide. The National Fire week Launch was held in Mashonaland West in Hurungwe district at Chitindiva Primary School. The launch was well attended with 1982 people. A total of 43 commemorations were done nationwide reaching out to 5 444 people.

**Table 2: Fire commemorations**

Province	Type of Event	District	Ward/Area	Attendance	Number of commemorations
Mash West	Provincial Fire Week Launch	Hurungwe	Deve, Ward 24	1890	1
	National fire week launch	Hurungwe	Chitindiva, Ward 8	1982	1
Manicaland	Provincial Fire Week Launch/ Indaba	Mutasa		237	1
	District fire launches	Chipinge		125	1
	District fire launches	Chimanimani		86	1
Mat North	Provincial fire week launch	Umguza	Samukele Pry Sch, Mindora village, Ward 10	230	1
Masvingo	Provincial fire week launch	Mwenezi	Lapachi Irrigation Scheme	55	1
		Zaka	Ward 27	490	1
		Masvingo	Ward 6, Shopping centre, Chikangabwe	99	2
Midlands	Provincial indabas			-	4
	District fire indabas	Gokwe North, Kwekwe		-	2
	Ward indabas			-	18
	Chief indabas			-	8
Mashonaland East	District fire launch	Marondera	Ward 4	250	1
<b>Total</b>				<b>5 444</b>	<b>43</b>

### 3.3 TRAINING

A total of 109 training workshops were carried out for Environmental Sub-Committees, Monitors, Extension workers and Firefighting teams across the provinces which are fire prone. The training workshops had total participants of 8 801. The training resulted in the formation of actions plans for the concerned wards and action programs. Some of the workshops resulted in the procurement of 50 fire beaters for 3 wards in Hurungwe district (7, 8, and 9) with the other 50 being distributed to the 7 districts of Mash West for veld fire emergency purposes.

Province	District	Ward/Area	Attendance	Training	Target Group
Mash East	Seke	1, 21	50	2	Farmers
	Marondera	4	250	1	Farmers
Mash Central	Muzarabani	Upper/Lower	199	2	EC and ESCs
	Bindura	14	36	1	Monitors
		Ward	35	1	Firefighting team
		Ward	10	1	Safari Operators
	Mazowe	Ward	120	1	Farmers
		Tripple C Piggery	22	1	Firefighting team
Mbire	Kanyemba	20	1	Firefighting team	
Mash West	Makonde	Rudziwi High	50	1	Agritex Extension workers
		Lion's Den GMB	45	1	Agritex Extension workers
		Gudubu	200	1	Gudubu community fire management training
	Zvimba	Wards 1-33	6500	33	Community
	Hurungwe	Wards 7,8 and 9	78	3	EC and ESCs
		Karoi Town	15	1	Zimparks Rangers
Manicaland	Chimanimani	Ward	24	1	Firefighting team Traditional Leaders

Province	District	Ward/Area	Attendance	Training	Target Group
	Nyanga				Firefighting team Traditional Leaders
Masvingo	Bikita	Ward 31	56	1	Traditional
		Ward 14	9	1	Leaders
		Ward 31	45	1	ESCs Farmers
	Chivi	Ward 9	42	1	ESCs
	Gutu	Ward 11	47	1	ESCs Farmers
		Wards 11,13, 22, 24, 28	198	1	
	Masvingo	Ward 6	99	1	Farmers
Mwenezi	Ward 13		1	Farmers	
Mat North	Lupane	Ward 24 Gwayi	102	2	ESC
	Umguza	Mindora Ward 10	12	1	Fire team
	Binga	Sinansengwe	21	3	Fire teams
	Hwange	Ward 1	9	1	Rangers
	Bubi	-	25	1	Fire teams
	Tsholotsho	Ward 6,12, 13, 22	15	2	Traditional Leaders
Mat South	Matobo	Ward 15,16, 17,18, 24	380	1	Firefighting team Traditional Leaders
	Mangwe		35	1	Farmers
	Insiza	Ward 22 Charlet/Ensangu	52	3	Fire committee
Midlands	Chirumanzu, Gweru, Shurugwi, Kwekwe, Gokwe North	-	-	21	Firefighting team
	Gokwe North	-	-	1	EC
		-	1	7	ESCs
	Zvishavane	-	-	1	Extension Officers
<b>Total</b>			<b>8 801</b>		



**Plate 4:** Firefighting training demonstration in Ward 21, Seke district.

### 3.4 FIREGUARD CONSTRUCTION

Fireguards are an important fire management tool. They provide a defence line when fire fighting and also ensure that fires don't burn continuous but break. A notable length of 4 334.76 km fireguards were constructed in the country with the aim to suppress fires and protect the veld and valuable property. These fireguards protects a combined hectareage of 409 373 Ha of land as shown in the table below.



**Plate 5:** Fireguard at Surrey Farm, Marondera, Mashonaland East.

**Table 4: Distribution of Fireguard construction**

Province	District	Community / ward	Length of fireguard (km)	Area protected (hectares)
Mash East	Seke	Wards 10, 12, 13, 14	35.0	100
		Lanark Farm, Ward 10	12	1340
	Marondera	Marirangwe farm	40	1000
		Mutoramhandwe	40	428
		Churchill	9	450
		Ruzawi Forest	51.86	1221
		Woswick farm	32	950
	Hwedza	Imire Conservancy	81	4000
	Seke	Mantlavina	34	520
	Chikomba	Ward 1	4.0	120
		Roads (Redman Farm)	2.0	50
	Wedza	Kuleya farm	8.0	417
		Bow farm	15.0	870
		Baer farm	9.0	600
		Ruu farm	16.0	855
		Magure farm	9.5	400
		Chad farm	14.0	2600
		Dean farm	12.0	2020
		Balivadaid	10.0	720
		Bristol	5.0	890
		Idube	3.0	918
		Imire conservancy	81	4000
	Goromonzi	Makwe	8.0	1200
Ward 9		17.0	46	
Ward 21		18.0	32	
Ward 18		4	140	
Mash West	Zvimba	Debri Farm/ Ward 34	5	400
		Rorburgh Farm/Ward 19	6	300
	Sanyati	Ward 2	25	100
Mat North	Bubi	Inumwa Ranch 21	15	250
	Hwange	Robins Nat Park	20	15
	Binga	Ward 4 Sinansengwe	23	2300
	Umguza	Inyokeni ward 14	10	-
Masvingo	Gutu	Lot E of Shasha	5	500

Province	District	Community / ward	Length of fireguard (km)	Area protected (hectares)	
		Chinyaura	2.6	400	
		Zion Christian Church	2.5	358	
		Bucks Farm	1.8	160	
	Chiredzi	Hammond Ranch	15	17000	
		Malilangwe	35	20000	
		Humman Ranch	25	16500	
	Masvingo	Ward 8	8	100	
		Beza Farm	1.5	8	
		Rufaro Farm	8	30	
		Chinyoka Farm	1.5	30	
		Nhari Polt ward 2	8	53	
	Manicaland	Chipinge	Gvt Farm / 11	15	300
			National Parks / 5	58	1892
Glen View Resettlement			1.5	10	
Chipinge Holdings / 11			25	600	
Makoni		Merion farm ward 17	15	1200	
Mutasa		Gwiriri ward 19	2	200	
		La'mour ward 28	14	178	
Chimanimani		Chikukwa ward 10	4	400	
		Nyahode	1	100	
Mat South	Umzingwane	Bayethe community	4	20	
		Mpisini community	10	10	
		Crocodile	12	150	
		Hilton Farm	180	600	
		Warringham Farm	70	300	
		Lindmill Farm	35	300	
		Zimbili A & B	18	200	
	Mangwe	Ward 11, 12 (Marula & Zinyama SSCF, A1, A2)	850	25500	
	Insiza	A1 Farms (Ward 22 Lochard, Ensangu, Geluk of sweet home, Cala, Greenlands, Kombo, Annandale, Pioneer) Wessels Block, Inyozane	308	56186	
	Insiza	A2 Farms (Wards 23,19, 39, 17, 19, 18, 22, 13, 14)	957	123305	

Province	District	Community / ward	Length of fireguard (km)	Area protected (hectares)
	Matobo	Ward 24, Enyandeni Farm, Matopo National Park, Mgadla village ward 25, Tonbridge farm	214	78531
	Bulilima	Ward 19	250	15000
Midlands	Gweru	Somabula, MSU	250	20000
	Shurugwi	Ward 18 A2 farms	85	
	Gokwe North	Copperqueen	38	
	Zvishavane	Mimosa, Murowa	20	
	Kwekwe	Amatava, ACF, Sherwood, Mlala Park	110	
<b>TOTAL</b>			<b>4 334.76</b>	<b>409 373</b>



**Plate 6:** Fire guard on the boundary of Lot E of Shasha farm, Gutu

### 3.5 ROAD SERVITUDE/WAYLEAVE/ZESA LINES CLEARING

High biomass load may lead to severe veld fires occurrence along highways and electricity lines therefore grass cutting on road servitudes is a best tool to curb the challenge of veld fires along the side of the roads due to improper disposal of cigarette stubs by smokers and unattended fires. A total of 2 736.9 km was cleared along the major roads and a table below depicts the specific stretches.

**Table 5: Distribution of road servitudes cleared**

Province	District	Name of Area Cleared/Name of Road Cleared	Name of Clearing Authority	Length of cleared Stretch (km)
Mash East	Goromonzi	Hre-Juru	Individual farmers	30
		Hre-Surrey	G5 & Min of Transport	50
	All districts	All districts	ZESA	600
	Mutoko	Nyamapanda road	Min of roads	30
		Nyadire road	DDF	21
		Matedza road	DDF	35
	Murehwa	Macheke-Murehwa road	Murehwa RDC	56
		Macheke- Murehwa way leeve	Tel One	56
		Shamva toll gate-Chitowa	Department of Transport	87
	Mash West	Zvimba	Trelawney, Darwendale, Lilworth, Granary	ZETDC
Biri Dam, Backet-Mutorashanga			ZETDC	60
Chinhoyi-Harare Highway			Ministry of Transport	90
Msengezi-Mboma area along Chegutu-Chinhoyi highway			Ministry of Transport	40
Sanyati		A5 Road (Chegutu-Kwekwe Road Servitude)	Group 5	70
Kariba		Kariba-Makuti Highway	Ministry of Transport	66
Mat North		Bubi	Byo-Bubi	Roads department
	Lupane	Byo-Lupane Road	Min. of Roads	73
		Lupane - Nkayi Road	Min. of roads	25
		Jotsholo Road	Min. of Roads	22
		Ngamo line (way leave clearance)	ZETDC	42
Manicaland	Chipinge	Chipinge-Birchenough highway	Wattle, Mkandi, Glen View, Tanganda	54
		Chipinge -Jersey road	Mkandi Estates, Mr. Mangezi	13.4
		Chipinge-Tamandai road	Wattle, Mr. Mukushwa	7.5
	Mutare	Mutare-Clare- Harare Highway	Ministry of Transport	55

Province	District	Name of Area Cleared/Name of Road Cleared	Name of Clearing Authority	Length of cleared Stretch (km)
		Odzi-pipeline servitude	Petrozim Line (Pvt) Ltd	6
	Makoni	Clare-Headlands- Harare Highway	Ministry of Transport.	60
		Headlands- Mutare	Intertoll	170
	Chimanimani	Tilbury estate road servitude	Border timbers	12
		Nyahonde - Koppa road servitude	Border timbers	23
	Nyanga	Nyanga Mutare Highway	Ministry of Transport.	20
		CMED industrial area	Ministry of Transport.	6
		Lower Vumba near Manicaland University turnoff	Ministry of Transport.	2
Mat North	Bubi	Byo-Nkayi	Roads Dept	5
	Lupane	Vic Falls road	Ministry of Roads	73
		Lupane to Nkayi	Ministry of Roads	25
		Jotsholo road	Ministry of Roads	22
		Ngamo line (Wayleave clearance)	ZETDC	42
Masvingo	Masvingo	ZESA wayleave (Shashe in Mashava to Mutirikwi River after Bangala Dam)	ZETDC	150
Mat South	Mangwe	Plumtree - Bulawayo	Group 5	100
	Bulilima	Plumtree - Bulawayo	Tel one	70
	Insiza	Loehard - Shangani	ZESA	50
		Bulawayo - Shangani	Group 5	45
Matobo	Bulawayo - Kezi	Ministry of Transport	40	
Midlands	Chirumanzu	Masvingo - Harare Highway	Ministry of Transport	67
	Gweru	Gweru - Bulawayo	Group 5	20
	Gokwe North	Nembudziya - Sanyati	Ministry of Transport	21
	Chirumanzu	Harare - Mvuma	Ministry of Transport	20
<b>Total</b>				<b>2 736.9</b>

## 4.0 Environmental Management Projects

### 4.1 HAY BALING

The Agency in partnering with its various stakeholders engaged in environmental projects aimed at unlocking value from the environment whilst reducing the negative impacts of fires. The Agency engaged in the hay baling projects thereby reducing fuel load and preventing severe veld fires. A total of 410 862 hay bales were produced. The hay bales are an alternative source of income and are used as fodder.

**Table 6: Distribution of Hay baling projects**

District	Ward	Name of farm/village	Number of bales	Area cleared (Ha)
Marondera	4	Mutoramhandwe dairy	700	4
		Kudenga	3000	10
	5	Akasaba	4000	15
	6	Sambok	5000	25
Seke	21	Gwai	5000	25
	10	Redane farm	150	15
	20	Tavistock Farm	200	13
	Goromonzi	4	Domboshava Training Centre	5 000
9		Ivordale Farm	10 000	150
Hwedza	3	Imire	3 000	14
Zvimba	19	Rixburgh	2 000	5
Sanyati	Martin Spur	Martin Spur Area	7 500	20
Hurungwe	1, 22	Mwami and Kazangarare	10 500	30
Bubi	21	Inumwa	150	50
	21	Robins Farm	80	25
	13	Dollar Block Farm	20	12
Masvingo	6	Makoholi	68	5
	8	Mbungo Estate	112	328
		Cheek Farm	89	6
		Asked Farm	50	1200
Bubi	21	Inunwa Ranch	150	50
	13	Robins Farm	80	25
	21	Dollar block farm	20	12
Umzingwane	Ward 19	Zimbili A & B	45	280
	Ward 17	Lindmill Farm	120	150

District	Ward	Name of farm/village	Number of bales	Area cleared (Ha)
	Ward 18	Hilton Farm	60	500
Mangwe	Ward 11	Marshlands Farm, Syringarate Farm, Willsfred Hope, Sundown Farm	38 000	153.85
Bullima	Ward 19	Nokuthula Farm, Dalachy 18 Farm, Kalanga Farm	1 500	4000
Insiza	Ward 17, 13, 14, 19, 20 ,23	Pezulu, Debshan, The Glade, Fern Creek, Brae valley, Bungalow, Dalebrooks Estate, Dwala, High Shapparal, Innisfallen, Kleignbegin Oost of Shangagwe, Magohlo, Magohlo, Moahona of East Shangani, Pleasant View, Riversdale, Riversdale of Ebley, Rustgevonden, Sampson and Montrose, Shangagwe R/E, Tekwe Estate, Thorndale of Blinkbonny, Three Fingers Estate, Woodborne, Woodstock	132 500	565
Matobo	Tonbridge Farm, Enyandeni farm, Ward 25	Tonbridge Farm, Enyandeni Farm, Anglesea Farm, Maleme, Whitewater	16 568	126
Midlands			165 200	10 000
<b>Total</b>			<b>410 862</b>	<b>17 863.85</b>



**Plate 7:** Hay-bailing by Mbungo Estate along the Masvingo-Mutare highway

## **4.2 THATCH GRASS HARVESTING**

The Agency went on a drive to promote thatch grass harvesting so as to reduce biomass while communities realize income from thatching grass sales. Thatch grass harvesting has led to clearance of 1 693.6 ha and 705 462 bundles being made. Zvimba, Insiza, Gweru and Hurungwe Districts produced the highest number of thatch grass bundles aiding in reducing the frequency of veld fire occurrence. Thatch grass is being given a monetary value as participants generate income while protecting the environment.

**Table 7: Thatch grass harvesting projects**

District	Ward	Name of farm/village	Number of bundles	Area cleared (Ha)
Chikomba	9	Chivhu - Industrial stands area	2 000	1.5
	9	Chivhu- Northwood area	1 400	0.8
	9	South west of Chivhu town	15 000	1.5
Goromonzi	14	Proton Farm	7 000	3.0
	9	Saratoga Farm	6 000	4.0
	17	Baines Hope	6 000	4.0
Mutoko	26	Wards 1, 2, 3, 4, 7	12 000	6.0
Seke	20	Hockis Farm	20 000	2.5
Zvimba	26	Moon Racker	60 000	10
		Waigon Farm	100 000	15
		Dryham	40 000	8
Hurungwe	7	Nyamakate Village	200 000	20
Bubi	13	Allendale C village	120	20
		Wessels A village	150	50
		Clonmore Village	50	30
Lupane	24	Chimwara	40	250
Masvingo	3	Mushagashe	240	9
	6	Cooden Farm Plot 10	15 030	64.5
	8	Keppur Farm	66	2
		Zishumbe Farm	32	3
	6	Summerton, village 10	2 500	6
22	Village 9 and 10	260	12	
Bubi	13	Allendale C Village	120	20
		Wessels A village	150	50
		Clonmore village	50	30
Lupane	24	Chimwara	40	250
Umzingwane	17	Crocodile	75	20
		Ntebemnyama	60	18
		Mpisini	95	30
		Zimbili	110	50
Mangwe	11 Marula	Marshlands Farm, Syringarate farm Willsfred Hope, 3 Streams, Smithblock Manama, Webster Huntington, Haygrange	13 350	117.8

District	Ward	Name of farm/village	Number of bundles	Area cleared (Ha)
Insiza	13,14,17,18, 19,20,21,22	Lochard, Ensango, Greenlands, Kombo, Annadale, Cala Estate, Inyozane, Lynwoods, Montrose, Bolo, Heathfield, Dwala, Umtata, Bungalow, High shaperal, Virginia, Visha, Altyre, Lambamai, Mpalawani, Phaphama, Geluk Sweet Home, Pioneer, Wessel's Block	77000	110
Matobo	15,16,17, 18,25	Chapo/Dewe/Bhazha, Silozwe/ Lushumbe/ Gwandavale, Gulathi, Matopo National Parks	28 402	350
Bulilima	9,10,19	Fairview, Manora, Watershed, Makhulela, Bambadzi	888	125
Gweru			80 000	
Gokwe North			10 234	
Chirumanzu			7 000	
<b>Total</b>			<b>705 462</b>	<b>1 693.6</b>

### 4.3 BEEKEEPING

Apiculture projects have proven to be ideal projects that lead to protection of the forests while communities benefit from honey and sales of other by products. In 2019 a total of 64 beekeeping projects that were implemented in the districts during the fire season with a total of 2 306 beehives.

**Table 8: Apiculture Projects distribution**

District	Ward	Name of farm/village	Number of beehives
Chikomba	1	Ngezi - Mtegesa	12
	8	Welkom	22
Goromonzi	17	Middleton Farm	22
	21	Iddlesleigh	16
	14	Proton Farm	10
	21	Enterios Farm	30
	21	Liember Farm	8
	21	Bronton	13
	21	Upton	18
	24	Mandalay	20
	17	Eton	14
	9	Chabwino	70
	Makonde	19	Chijaka
Muvhami			10
18		Kamhonde	10
Hurungwe	14	Chivende	40
Zvimba	17	Hunyani Farm	64
Lupane	9	Tshongokwe	24
	24	Chimwara	24
Hwange	1	Wood lands Farm	15
		Railway Farm 55	38
	2	Chidobe	34
	15	Dete and Silewu	200
	16	Mabale	25
	17	Songwa	12
Masvingo	8	Mutendi Primary School	15
	12	Great Zimbabwe Monuments	40
	17	Chebvute	55
	18	Njovo	20
	22	Gunikuni	27
	35	Kushinga	34
Mutare	34	Nyagundi	20
Chimanimani	12	Charles Wood farm	64
Mutasa	7	Gwiriri	200
Lupane	9	Tshongokwe	24
	24	Chimwara	24

District	Ward	Name of farm/village	Number of beehives
Hwange	1	Woods Lands Farm	15
	1	Railway Farm 55	38
	2	Chodobe	34
Hwange	15	Dete and Silewu	200
	17	Mabale	25
	16	Songwa	12
Mangwe	11	Webster farm	5
	5	Romney Grazing scheme	5
Insiza	17	Cala	2
	22	Lochard, Ensangu, Kombo, Annadale, Mpalawani, Lambamai, Pioneer's Rest	19
Matobo	16	Villages of ward 16	20
Gwanda	8,6	Wabayi, Sibona, Siboza	60
Shurugwi		Reitfontein, Tumba, Mfiri	97
Gokwe North		Copper Queen, Chireya	470
Kwekwe		Sherwood	20
<b>Total</b>			<b>2 306</b>



**Plate 8:** Floradale Apiculture beehive setting, Masvingo district

## 5.0 Impacts of Fires

### 5.1 AREA BURNT

A total of 1 158 291.57 hectares were burnt by veld fires from 1 508 incidences by the 31<sup>st</sup> of October while in 2018 during the same period, a total of 1 595 fire incidences were recorded which burnt 1 190 174.89 hectares. This translates to 2.68% decrease in area burnt and 5.45% decrease in fire incidences. A total of 70 198.97 hectares was burnt after the fire season (31<sup>st</sup> October). Veld fires also gutted property worth over ZWL 5 269 655 comprising household goods and agricultural equipment.

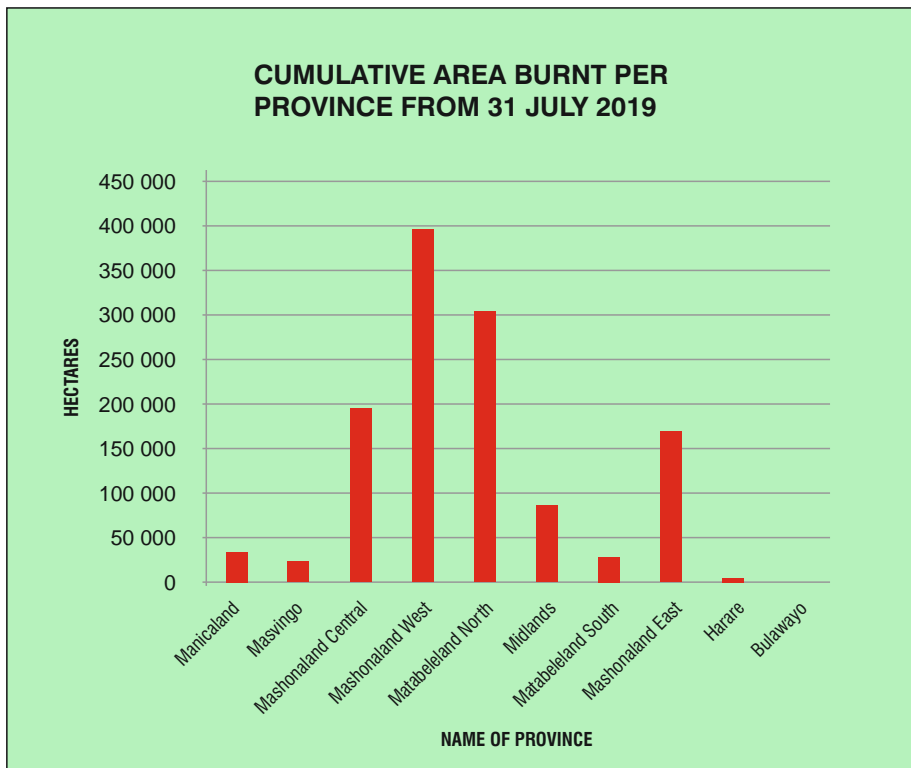


Figure 5: Fire season provincial area burnt

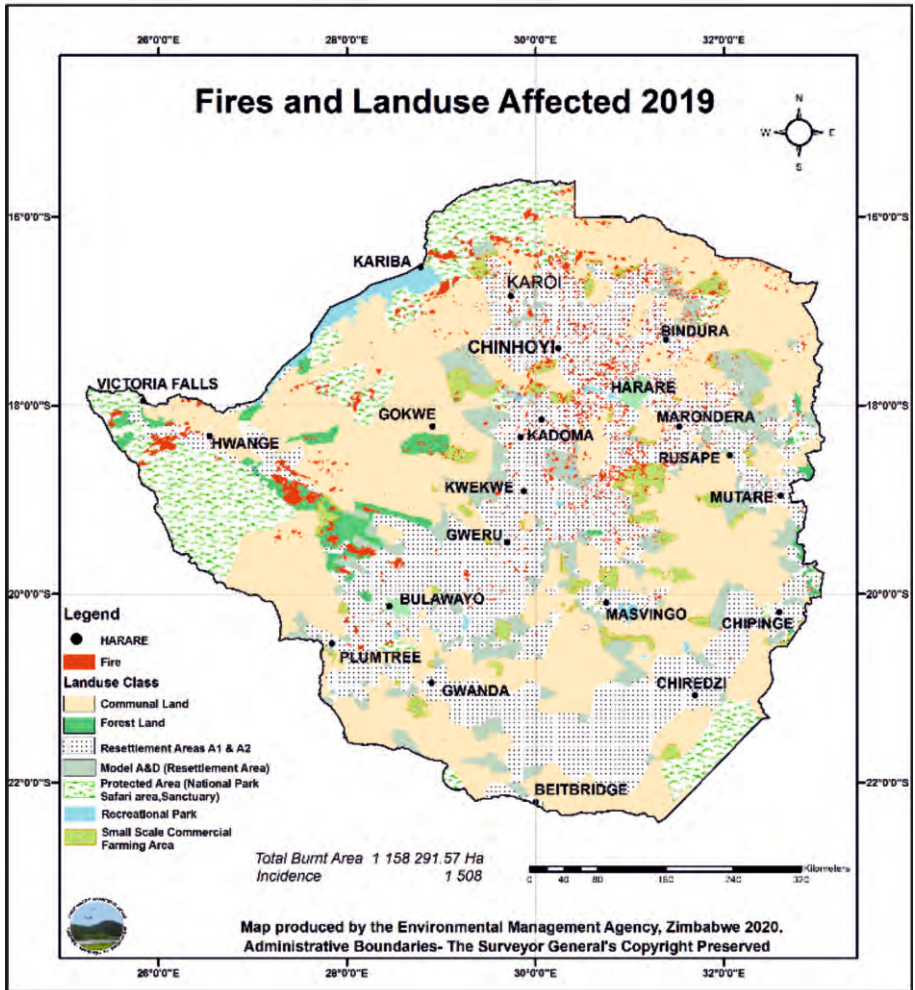
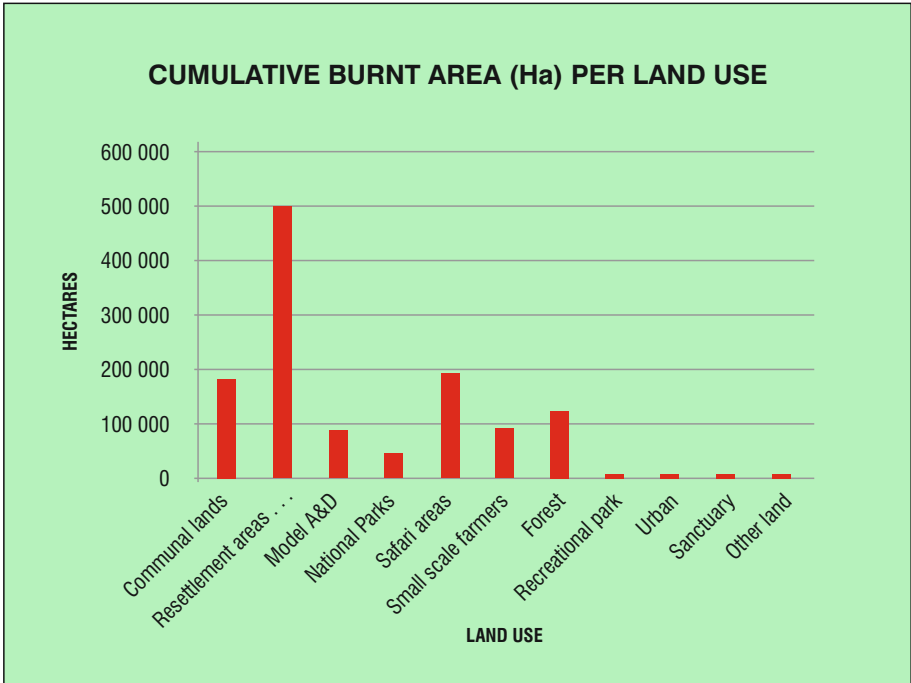


Figure 6: Fires and Landuse Affected 2019



**Figure 7:** Landuse area burnt

The majority of fires have been in Mashonaland West, Matabeleland North, Mashonaland East and Mashonaland Central Provinces respectively. Land use analyses revealed that most of the fires affected the resettlement areas (A1 & A2), Safari area, Communal areas and gazetted forests.

## 5.2 FIRE RELATED DEATHS

A total of **4** fire related deaths were recorded during the year. The deaths are generally of the vulnerable old and young people.

### Details of deaths recorded

The four (4) deaths recorded are as follows:

- A female adult aged 61 of Willeden Farm, Goromonzi District, and Mashonaland East Province.
- A male adult aged 50 of Chikali Farm, Ward 12, Muzarabani District Mashonaland Central Province.

- A female adult aged 55 of Arda Kairezi, Nyamugafata village, ward 21, Nyanga District Manicaland Province.
- A male adult aged 77 of Farm No. 592 Gandami East, ward 3 Chikomba District Mash East Province.

## 6.0 Law Enforcement

A total of 972 fire orders were issued to farmers, land users, owners, occupiers, lessees, and designated Authorities, to put in place standard fire management measures. Tickets were issued to those who caused uncontrolled fires after the 31<sup>st</sup> of July 2019 and 121 tickets worth ZWL 68 220.00 were issued. A total of 45 dockets were opened in all the rural provinces after the culprits caused fires which burnt properties and veld. Of the few finalized cases, one culprit was sentenced 210 hours of community service. In Lupane two culprits were fined a shovel each by a village head for causing a veld fire.

**Table 9: Distribution of tickets and orders issued**

Province	Orders Issued	Dockets Opened	Tickets Issued	Amount Charged (ZWL \$)
Mash East	66	7	20	\$10 300.00
Mash Central	50	2	15	\$9 000.00
Mash West	86	2	62	\$12 900.00
Mat North	57	0	4	\$2 000.00
Masvingo	73	0	4	\$1900.00
Manicaland	183	16	0	0
Midlands	340	2	30	\$30 920.00
Mat South	117	16	2	\$1 200.00
<b>Total</b>	<b>972</b>	<b>45</b>	<b>137</b>	<b>\$68 220.00</b>

*Table 1: Prosecution Summary*

## 7.0 Science Policy Interface

Recognizing that strategic use of the science-policy interface (SPI) can facilitate the development of innovative solutions to achieve policy goals and created the enabling environments to solve the fire scourge the Agency engaged Universities to help in answering the fire problem in the country. The Agency engaged Lupane University and Bindura University of Science and Technology to address the fire problem and the following was recommended by the research teams:

- *Review Traditional Leadership Act to make it functional in resettlement and commercial farming areas.*
- *Collaborative framework for Ministry of Local Government, Ministry of Environment and other stakeholders to eliminate discordance.*
- *Fire offenders to be tried by local jurisdiction (chiefs) and after that they are referred to courts for further sentencing.*
- *Funding of fire research to develop better fire management guidelines.*
- *Effective justice delivery system to increase rate of conviction of offenders in order to enhance public confidence, offenders to be tried at community courts by chiefs before being handed over to public prosecutor.*

## 8.0 Conclusion and Recommendations

There is need to increase engagement of local stakeholders on fire management issues. Environmental monitors need to be incentivized in order to encourage them to be active in the monitoring of fire; and in attending to environmental issues in their respective districts. The local authorities need to scale up their LEAP implementation activities especially on fire management, besides waste management.

## Annex 1: District Area Burnt

DISTRICT	AREA BURNT
BIKITA	764.16
CHIREDDI	890.39
MASVINGO	3835.34
ZAKA	75
CHIVI	100
GUTU	11936.53
MWENEZI	0
CHIRUMHANZU	13462.4
GOKWE NORTH	8422.1
GOKWE SOUTH	27072.29
KWEKWE	14164.69
MBERENGWA	855.4
GWERU	8290.23
SHURUGWI	3066.81
ZVISHAVANE	30.35
BULILIMA	6162.04
GWANDA	80
INSIZA	10323.15
UMZINGWANE	1365.07
MATOBO	5139.34
MANGWE	4565.92
BEITBRIDGE	59
SHAMVA	22223.75
RUSHINGA	12129.43
MUZARABANI	25891.08
MT DARWIN	35478.49
BINDURA	18455.18
GURUVE	19828.27
MAZOWE	33735.74
MBIRE	18363.69
CHEGUTU	50597.07
HURUNGWE	102141.62

DISTRICT	AREA BURNT
CHIMANIMANI	2646.04
MUTASA	1628.8
NYANGA	8870.83
CHIPINGE	95
MAKONI	10502.53
MUTARE	2123.53
CHIKOMBA	60873.59
GOROMONZI	16308.78
HWEDZA	11733.07
MARONDERA	17578.24
MUDZI	3612.67
MUTOKO	4574.19
MUREHWA	16364.8
UMP	2141.21
SEKE	25919.86
BULAWAYO	55
BINGA	20162.04
BUBI	8572.01
HWANGE	91109.53
LUPANE	121921.6
NKAYI	346.46
UMGUZA	41151.56
TSHOLOTSHO	7266.32
HARARE	645.68
KARIBA	55925
MAKONDE	72389.23
MHONDORO	24035.26
SANYATI	18819.87
ZVIMBA	51878.3
BUHERA	97

## Annex 2: Fire Management in Pictures



**Plate 9:** Mrs. Mavu inspecting the burnt hut



**Plate 10:** Panashe Mahlunge holding a burnt hat and cellphone



**Plate 11:** The fire spread in ward 15 of Chimanimani



**Plate 12:** Minister of State for Mashonaland West Province with trained ESCs