



culture, sport & recreation

MPUMALANGA PROVINCE
REPUBLIC OF SOUTH AFRICA



***TRILINGUAL
CONSERVATION
TERMINOLOGY LIST***

ENGLISH -SISWATI -ISINDEBELE

OCTOBER 2016

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PREFACE

The Mpumalanga Provincial Language Act 2014 encourages public servants to provide service to clients in their own language. It also encourages people to use their own languages and learn other languages (multilingualism). Terminology development is one of the vehicles through which the implementation of the Act will be facilitated.

The project is also in line with the Department's mandate of promoting multilingualism and developing the previously marginalized languages. This project entails developing field specific terminology lists in the designated indigenous languages of the Province (isiNdebele and Siswati).

The department believes that the terminology list will contribute to:

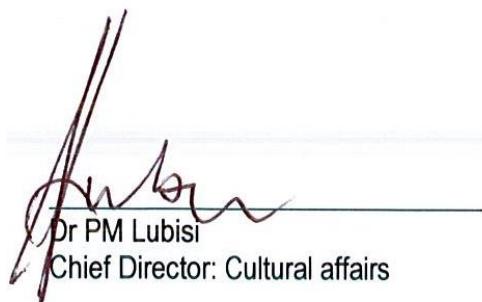
- developing isiNdebele and Siswati and promoting multilingualism;
- promoting the use of indigenous languages by all spheres of government and business;
- providing standardized conservation terminology in isiNdebele and Siswati;
- enhancing the quality of translating and interpreting of conservation documents;



- increasing the conservation term bank for indigenous languages; and
- teaching of indigenous languages in schools.

In undertaking this project, the Department depended on collaboration with its external professional stakeholders: namely, linguists, subject specialists, language practitioners and PanSALB. The Department of Agriculture, Rural Development, Land and Environmental Affairs nominated two subject specialists to participate in the project.

The list comprises of 352 terms.



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Many thanks go to the Department of Economic Development and Tourism for nominating specialists to participate in the project. Their high level of knowledge, professionalism and dedication made the task of developing the terminology easy for the collaborators.

The Department would also like to extend a word of thanks to the Pan South African Language Board (PanSALB) for allowing the Siswati and IsiNdebele National Language Bodies to verify and authenticate the terminology list.

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TRILINGUAL CONSERVATION TERMINOLOGY LIST

ENGLISH	SISWATI	ISINDEBELE
abatement	sigcinindzawo sivikelindzawo	iqhingalawulo lokusilaphazeka
acute exposure	kutsintfwa kwesikhashana	ukuthinta kwesikhatjhana
agro ecosystem	kuhlalisana kwendalo /kwemvelo kutekulima kuphilisana kwendalo/ kwemvelo kutekulima	ukusebenzisana kukophilako nokungaphiliko kezokulima
air pollution	kungcoliseka/kungcola kwemoya	ukusilaphazeka kommoya
air quality	lizinga lekuhloba kwemoya simotsite semoya	izinga lokuhlengeka kommoya
air sparging	luhlantomanti ngekuwabhubhudla ngaphasi kwemhlab luhlantomanti ngaphasi kwemhlabangemoya kuhlanta emanti ngemoya ngaphasi kwemhlab	umjovo wehlolommoya



ENGLISH	SISWATI	ISINDEBELE
air stripping	luhlantomanti ngekuwabhubhudla luhlantomanti ngemoya kuhlanta emanti ngemoya	ikambiso yokutsengwa kwamanzi
allele or allel	i-alili lufuto loluphikisanako	mhlobo othileko wefuzo
allee effect	kuphela kwelufutotsite kushabalala kwelufutotsite	ukuphela kokuphilako
alternative energy	luhlobo lolwehlukile lwemandla	umhlobo omunye wamandla wegezi
alternative fuels	tibaseli letehlukile emaftsa lehlukile	umhlobo omunye weembaseli
altruism (environmental)	luvelomvelo kuvelana nemvelo kucabangela imvelo	ilawulobhoduluko i-althrayizimu
ambient	umoyandzawo umoya wendzawo	ummoya wangaphandle
aqueous	-ba nemanti	okusamanzi
aquifer	umtfombomanti	idwala

ENGLISH	SISWATI	ISINDEBELE
		isanda enamanzi
arable land	umhlaba wekulima/ lolimekako	ihlabathi evundileko
artesian well	siyalu	isiyalu
asbestos	litjeboya maboya	i-asbhestosi
autofluorescence	i-othoflorisensi	i-othofloresensi
backfill	kugcwala sigcwali	ukuzalisa umgodi ngehlabathi
background concentration	lizingakungcoliseka lizinga lekungcoliseka tingcolisi	ukusilaphazeka kwebhoduluko
bedrock	lidvwala	idwala
beeswax	umtfwebeba	amafutha weenyosi
benthic	siphilamantini sihlalamantini	iimphilamanzini
behaviour	umkhuba	imikghwa

ENGLISH	SISWATI	ISINDEBELE
	setayelo	yokuziphatha
bioaccumulation	kwandza kwebutsi kulokuphilako kushevuteka	ukungezeleleka kokusilaphazeka emzimbeni
bioavailability	kumunyeka kulokuphilako	ukumukeleka kwezakhamzimba
biodegradable waste	inkhukhuma lebolako imvundzela umcuba	iinlahlwia ezingasebenziseka
bioenergy	emandla emafutsa / lakhiwe ngalokuphilako	amandla weenlahlwia
biological farming/ecological farming:	lulimomvelo kulima ngekwemvelo	ukutjala ngokwemvelo
bioremediation	luhlantomvelo luhlanto ngemvelo kuvuselela ngeluhlantomvelo	ikambiso yokubulala itjhefu
biota	lokuphilako	iimphili ibhayo-otha
black water	emantindle emanti endle	amanzi asilaphaziweko

ENGLISH	SISWATI	ISINDEBELE
blind	lisitsa inkhwace siviko	ukuzifihla kwabazumi
bog	litete	umdzwela
borehole	ingwedla lipitsi	umgodi wamanzi
brackish	sisawoti	amanzi amunyu
brood	sishoshomane bontsanga	okuqhoqhoselwe/ okuphandluselwe ngasikhathi sinye
brown rot	sikhuntsa	bulwele obubolisa imithi
canopy	kulenyoni	ingehla lomuthi
cap	sivimbeli sivimbo	isivimbamanzi
carbon offset	sincephetelisi khabhoni	ukuphungula ikhabhoni
carbonize	kwakha/kwenta ikhabhoni	ukukhabhonayiza
carrion	ingcuba	ingcuba



ENGLISH	SISWATI	ISINDEBELE
carrying capacity	silinganisomfuyo umtsamo bungako	isilinganisomthamo
cast	tinsalela ikhasti	isikghoro
cavity	sikhala imbobo	irholo lomuthi
climax stage	sigaba sekuphelela/ sekupheleliswa/ sekweneliseka	isiqongo isithori izinga lamaphelelo lokukhula
clutch	sigugudla	inani lamaqanda esirurhwini
commensal	sidlangandoda ikhomensali	ikhomensali
community forest	lihlatsi lemmango	ihlathi lomphakathi
composites	emadvwalanhlanganisela	umhlanganiso
conservation assessment	luhlolokongeka	ukuhlolwa kwemvelo

ENGLISH	SISWATI	ISINDEBELE
consumptive use	kufuna lokudlekako kufunela kudla	ukuzuma
contour feather	lusibakhulu	iinsiba ezikulu
contiguous forests	emahlatsi lahlalelene	amahlathi abelana umkhawulo
coppice	emahlumela	ikhophisi
copse	lihlashana	amakhophisi
containment	silawuli sivimbeli	ukuhlukaniswa kwekhucukhucu
contaminate	kungenelelela kungeta	-hlwengisa ihlabathi
carbon adsorption	luhlantomanti ngekhabhoni	ukutsenga ngekhabhoni
carbon count	silinganiso sekhabhoni	isilanganiso sekhabhoni
carbon credit	umhlomulo wekhabhoni	ikhabhoni enikelwako
carbon emissions	sisi sekhabhoni	ikhabhoni

ENGLISH	SISWATI	ISINDEBELE
		ekhutjhwako
carbon footprint	silinganiso sekhabhoni	isilinganiso sekhabhoni
carbon neutral	ngenakhabhoni	ukuphungulwa kwekhabhoni
carbon offset	kuncishiswa kwekhabhoni	ukulinganiswa kwekhabhoni
carbon tax	intsela yekhabhoni	intela yekhabhoni
carcinogen	ikhasinojeni sibangimdlavuta	isibangimhlaza isibangimdlavuza isibangikankere
catch basin or catch-basin	sikhageteli	isefomanzi
civic amenity site	etibini kamdodi	ebulahlelweni
climate	simotulu simo selitulu	ubujamo bezulu/itlayimethi
climate change	kugucugucuka kwesimotulu/ kwesimo selitulu	ukutjhuguluka kobujamo bezulu/ kwetlayimethi



ENGLISH	SISWATI	ISINDEBELE
collections care specialist	umongimvelo	isazi sezokongiwa/ sezokubulungwa kwemvelo
combustion	kusha	ukuthja
compost	imvundzisi imvundzela umcuba	isivundisi
compostable	vundzisekako vundzako	vundisekako
composting	kuvundzisa kubolisa	ukuvundisa
conservation	kulondvolota konga	ukutlhogonyelwa
conservation administrator	umphatsi wetekonga/ wetekulondvolota	umlawuli/umphathi wezokutlhogonyelwa
conservation biology	sifundo sekongiwa kwalophilako	isifundo sokutlhogonyelwa kweendalwa
conservation-dependent species	luhlobo loluncike ekongiweni	ukutlhogonyelwa kweendalwa

ENGLISH	SISWATI	ISINDEBELE
conservation educator	umfundzisi wetekonga/ wetekulondvolota	umfundisi wokutlhogonyelwa kwezemvelo
conservation scientist	sosayensi wetekonga/kulondvotola	usosayensi wezokutlhogonyelwa kwezemvelo
conservation technician	somachinga wetekonga/kulondvolota somasu wetekonga/kulondvotola somaciko wetekonga/kulondvotola	usotheknigi wezokutlhogonyelwa kwezemvelo
conservation tillage	kugala	ukilima
conservator	umongimvelo umlondvolotimvelo umongi/ umlondvoloti	umtlhogomeli wezemvelo
contaminant	butsi singcolisi	ikhucukhucu enobungozi
contaminant mass	bungakobutsi bungakokungcola bungako bebutsi /bekungcola	isilanganiso sekhucukhucu
corrosive	-dlako	edlako

ENGLISH	SISWATI	ISINDEBELE
	-tfombisako -dlavutako	
critically endangered species	luhlobomphilo lolusengotini yekushabalala/ yekuphela	m indalwa ezisengozini yokutjhabalala
cultural property	imphahlamlandvo imphahla yetemlandvo	ipahla eligugu
decomposers or saprotrophs	tibolisi tivundzisi	iimvundisi
decomposition (or rotting)	kubola kuvundza	ukubola
deforestation	kubulawa kwemahlatsi kuvunwa kwemahlatsi kucedvwa kwemahlatsi	ukugawula ukususa ihlathi
degreaser	sisusamafutsa	isisusagrisi
delisting	Kuhlela kabusha	ukuhlukaniswa kwekhucukhucu ngobungozi bayo

ENGLISH	SISWATI	ISINDEBELE
density dependent control	lulawulonani	ilawulo lokukhula kwenani labantu
desert ecology	sifundvo ngalokuphilisana elugwadvule	ubudlelwano bemvelo erhalawumbeni
desertification	kugwadvuleka	ukulaliswa kwenarha
destruction	kushababalalisa kubulala kucitsa kubhubhisa	ukutjhabalalisa
detritus	umcuba imvundziso	idithrayithasi
dioxins	emadayoksini butsi bentfutfu	amadayokzini
dispersion	kusakateka	ukurhatjha ukusabalalisa
disposal, dispose of	kulahla	ukulahla
distilled water	emanti lahlantiwe	amanzi ahlengisiweko
diurnal	lomini makhutsalemini	okuhlaniphe emini

ENGLISH	SISWATI	ISINDEBELE
	mandlemini	
documentation	kubhala kushicilela kurekhoda	imitlolo yobufakazi
downgradient	umehlelo umewukelo	ukwabiwa kwamanzi
drywell	inkelebhe	ipetsi etjhileko
dump nest	sidleke sembango	isiruruhuhlanganyela
dumping	kulahla budlabha	ukulahlwa kweenzibi ngokungemthetho
early successional	bomahluma kucala	iimilamsinya
Earth Summit	Umhlangano Wamhlabawonkhe Wetemvelo	Umhlangano Wezemvelo Zephasi
eco-assessment	luhlolo lwekuvikelwa kwemvelo luhlolokonga kwemvelo	ukuhlola ngomnqopho wokubulunga

ENGLISH	SISWATI	ISINDEBELE
eco-bag	sikhwama lesivikela/ lesingoni/ lesingaphatamisi imvelo	isikhwama sokonga/sokubulung a
eco-efficiency	kukhicitu ngekuvikela imvelo	ukunciphisa isilaphazeko lebhoduluko
ecosystem	kuphilisana kwendalo/ kwemvelo	ubudlelwano bokuphilako nokungaphiliko
eco-toxicity	-nebungoti kutemvelo/ emvelweni	ubungozi kwezebhoduluko
edge	umkhawulo	Umkhawulohlangana
effluent	i-efluwenti emanti lanebutsi/ lanebungoti	amanzi wekucukucu
emissions	sisi tingcolisimoya tinukubetimoya	ukukhutjhwa kommoya osilaphazekileko
emissions cap	umkhawulo welungcolisomoya/	ukukhutjhwa kwentuthu esilaphazekileko
		isilinganiso sommoya ongakhutjhwa



ENGLISH	SISWATI	ISINDEBELE
	welunukubetomoya	isilinganiso sokukhutjhwa kwentuthu
emissions projections	sibiketelo/ silinganiso selungcolisomoya silinganiso/sibiketelo sekunukubeta	ibonelophambili ngokukhutjhwa kwentuthu
emulsifiers	tihlanganisimafutsa	isikghonakalisimvang o
encapsulation	kulahlwa kwalokunebungoti	ukulahlwa kwekhucukhucu ukuya ngobungozi
endangered	-sengotini yekushabalala	iinwanababalelw e ezisengozini yokutjhabalala
endemic	kwendzawo kwesigodzi	abomaphilandawothil e
energy efficiency	kongiwa kwemandla	ukongiwa kwamandla
energy rating	silinganisomandla	isilinganiso samandla
environmental impact statement	satiso ngekutsintseka kwemvelo	isitatimende somthelela

ENGLISH	SISWATI	ISINDEBELE
	satiso ngemtselela emvelweni	ebhodulukweni
environmentalism	busimondzawo bushoshovu besimondzawo	ilemukiso ngezebhoduluko
environmental protection	kuvikelwa kwemvelo	ivekelobhoduluko
environmentally preferable	lokunconotekako emvelweni	inyulobhoduluko
epidemiology	tetifo sifundvo ngetifo	isifundo ngamalwele isifundo ngezifo
epistasis	kwesekelana kwetakhilufuto i-ephistasisi	ukungenelana kwefuzo
estivation	lubalekelokushisa kubalekela kushisa	ukubhaqa
evolution	ingucukolufuto luntjintjolufuto	indabuko yendalo
examination	luphenyo lucwaningo luhlolo	ukuphenya

ENGLISH	SISWATI	ISINDEBELE
exotic species (non-native species)	luhlobomphilo lwekufika/ lwekuchamuka	bomathathwandawa a
extinction	kushabalala kuphela	kuphela komhlobo othize
extirpate	lushabalalo ljesigodzi lushabalalo lwendzawo	kususwa komhlobo othize
extraction well	umgodzisimunyi	umgodi wokukhuphela
fallow	lifusi	Umrhula lfusi
fallout	tinhlaiya tinhlasi	linhlasela
family	umndeni lusendvo	Umndeni
feral	kwasendle kwemvelo kwendalo kwesiganga	linlwana iintjalo zommango
fire ecology	temlilo wesikhotsa/wesiganga sifundvo ngemlilo	mlilo wommango

ENGLISH	SISWATI	ISINDEBELE
	wesikhotsa/ wesiganga	
Fixed Action Pattern (FAP), or Modal Action Pattern	i-FAP umnyakato wemvelo longancamuleki/ longalawuleki	isenzeko sangokomvelo
flagship species	luhlobomphilo sikhangisi	isijamelinarha
flammable	okhelekako lumekekako	okungatjha
flash point	lizinga lekokheleka/ lekulumekaka	ukulumatheka msinya
fledge (v)	kuphuphuma	-khulile
fledgling	liphuphu	ukuphuphuruzela kwedzinyani
flora and fauna	titjalo/timila netilwane	iinlwana neemila
food chain	luchungechunge lwekudlana	umadlano
food circle	umjikeleto wekudla	umzombe wokudla
foodshed concept	sigodzi sekudlatsite umtfombo wekudlatsite	indawo yokukhiqizela

ENGLISH

SISWATI

ISINDEBELE

food insecurity	insweleokudla inswelekokudla kusweleka kwekudla indlala	itlhayelokudla itlhayelo lokudla
food miles	libangakudla libanga lekutfutsa kudla libanga lekuhanjiswa kwekudla	ibanga lokuthuthwa kokudla
food production	umkhicitokudla kukhicitwa kwekudla kukhicitwa kudla	ukukhiqizwa kokudla
food web (or food cycle)	umjikeletokudla umjikeleto wekudla	umzombe wokudla
fossil fuel	emafutsa etimbiwa/alokumbiwako tivutseli letimbiwako	isibaseli
foundation species	luhllobomphilo lolusisekelo	imvelo esisekelo
fuel poverty	kwesweleka kwemafutsa/ kwetivutseli	umtlhago wembaseli

ENGLISH	SISWATI	ISINDEBELE
food security	inala kwesutsa kudla lokwenele	inala
forest area	indzawo lenemahlatsi emahlatsi	ihlathi
fry	sihlanti bosobishobi betinhhlanti tinhhlanti letisandza kuchoboselwa	iimfesana
fugitive emissions	lungcolisomoya sikhicitibusi sisi lesinebungoti	intuthu eyingozi
gene pool	umtfombo/ungodla wesakhilufuto silulu sesakhilufuto	ifuzo
genetic aggression	lufuto ngco/ lolunemandla	ifuzo elimbi
genetic deterioration	Kudzamba/ kwehla kwelufuto	ifuzophela
genetic diversity	kwehlukahlukana kwelufuto	ifuzohluka
genetic drift	kwehlukana/ kukhwesha kwelufuto	ifuzo elikhamba liphela

ENGLISH	SISWATI	ISINDEBELE
genetic recombination	luhlanganiso lufuto	ifuzohlanganisela
genetic swamping	kuntjintjiselana lufuto	ifuzo elicatjhazelweko
genetic takeover	kwengama kwelufuto	ifuzo eliragako
genus	luhlobotsite umndeni weluhlobotsite ijinasi	umhlobo
global warming	kufutfumala kwemhlaba	ukufuthumala kwephasi
geothermal energy	kushisa lokubuya emhlabatsini sivuvu	amandla womtjhiso wephasi
grass farming/grass-based farming	lulimotjani kulima tjani	ukubhura ngamadliselo
green belt	indzawo yemvelo lengasedolobheni/ ngasemakhaya indzawo yemvelo lengatsintfwa	indawo ebekiweko
green design	kwakha ngelunakekelomvelo/	iplani ekhambelana nebhoduluko

ENGLISH	SISWATI	ISINDEBELE
	ngelunakekelondalo	
green economy	umnotfo wemvelo/wendalo	umnotho ophilisako
greenhouse effect	kuvaleleka kwekushisa/ kwekfutfumala	isakhiwo esilawula ubujamo bezulu
greywater	emanti lasebentile emanti langcolile langenabungoti	amanzi asetjenzisisweko
groundwater	emanti langaphasi kwemhlabo	amanzi waphasi
habitat	indzawo yekuhlala	indawo yemvelo
habitat conservation	kongiwa kwendzawo	ukongiwa kwendawo yemvelo
habitat conservation plan	luhlelo lwekongiwa kwendzawo luhlelo lwekulondvolotwa kwendzawo	ihlelo lokongiwa kwendawo yemvelo
hacking	kukhulisa emazini	ukudlelezewa
harvest (v)	vuna	ukuvuna
hatch	chamusela chobosela	ukucocosela
herbivore	ndlaluhlata	isidlüimila

ENGLISH	SISWATI	ISINDEBELE
	indlatimila	
herpetology	sifundvo ngetilwane letihumako/ ngabomahamba ngesisu	isifundo seenrhurhubi
heterotrophic	-ngakhoni kutakhela kudla -ngatakheli kudla phila ngalabanye dlangalabanye	iimphila ngezinye
hibernation	lubalekelomakhata kubalekela/ kubhacela emakhata	ukufukama sakubhaca ebusika
high forest	lihlatsi letihlahla letindze	ihlathi elide
horizontal gene transfer	kuzekanisa kutalanisa	ukudlulisela kwefuzo buthabalala
horticulture	kulinywa kwetingadze	ubukghwari bokutjala
immobilisation	kutsintsibalisa	ukuvimbela
impervious cover	sivimbelimanti	isivikelimanzi
impoundment	silulumanti simumatsimanti inkelebhe	isimumathi

ENGLISH	SISWATI	ISINDEBELE
incompatible waste	kungcola lokungahlanganiswa tibi letingahlanganiswa	ikhucukhucu engahlanganiswa nenye
incubation	kufukamelisa	ukufukamela
instinct or innate behaviour	imikhuba lotalwa nayo sivangenkhaba	izenzo zangokwemvelo
intensive/controlled grazing system	lulawulomadlelo	irhelo lokulawula idliselo
interbasin transfer	kunisela ngekushiyelana inkhasa	ukudoswa kwamanzi
interspecific competition	umbango wetinhlobonhlobo/ wanhlobonyenti kucophisana kwetinhlobonhlobo/ kwanhlobonyenti	ibangiswano leensetjenziswa kwemihlobo engafaniko
intraspecific competition	umbango wanhlobonye/ weluhlobo lunye kucophisana wanhlobonye/ kwaluhlobo lunye	ibangiswano leensetjenziswa kwemihlobo efanako
introgression	kufutisa	ukudlulisewa kwelwazi lefuzo

ENGLISH	SISWATI	ISINDEBELE
irrigation	kunisela	ukusezela ukuthelelela
irritant	sitfwaputisi sihashisi	okusilingako isisilingi
lead	umtfofu	umthofi
light pollution	kukhanya lokudlulele/lokuhlabako/ lokuphatamisako	ukuphandla ngomkhanyo
lagoon	ilaguni lichitjana	ilaguni ilitsha
land area	umhlaba	inarha
landfill site	etibini kamdodi	izala langokomthetho
land use	kusetjentiswa kwemhlabo	ukusetjenziswa kwenarha
leachate	inchukunchuku inchafanchafa inkhuchunkhuchu lubikibiki	amanzi wekhucukhucu
least concern (LC)	luhlobomphilo	iindalwa

ENGLISH	SISWATI	ISINDEBELE
species	lolungekho engotini	ezingawelindawo iindalwa ezinganamkhakha
life cycle assessment (LCA)	luhlolo lwelmjikeleto wemphilo	ukuhlolwa komzombe wepilo
litter	tibi kungcolisa	ukusilaphaza
livestock	imfuyo	lfuyo
load or loading	kulayisha kwetfwesa	ukungezelela
migration	kutfutsa kuhamba	ifuduko
mitigation	kunciphisa / kwehlisa /kuvimbela umonakalo	ukuphungula ubungozi
manure	manyolo umcuba	umsuqwa
medical waste	tibi tetekwelapha	ikhucukhucu yezamaphilo
monoculture	bulimi beluhlobo lunye kulima sitjalo sinye lulimo lwanhlobonye	ukubhura ngakunye
mutation	kuphakuleka	imuthetjhini

ENGLISH	SISWATI	ISINDEBELE
	kucwiyeka	
national nature reserve (NNR)	siciwi sekonga imvelo savelonkhe	isiqiwi semvelo senarha national nature reserve (nnr)
national parks	emapaki avelonkhe ticiwi tavelonkhe	amaphaga wenarha
native species	luhllobomphilo lwendzabuko/ lwemdzbabu	iintjalo neenlwana zendabuko
natural areas	tindzawo temvelo/tendzabuko/ temdzabu	iinarhamvelo
natural regeneration	kuvuselelwa kwemvelo luvuselelomvelo	iimilabuyeleta
natural monument or feature	tichuse temvelo/tendalo	iindawo zesikhumbuzo zendabuko
near-threatened species	luhllobomphilo lolusengotini yekushabalala	iindalwa ezsengozini yokuphela
nectaring	kutsatsela	ukumunya inektha

ENGLISH	SISWATI	ISINDEBELE
	kumunya luju	
neutralisation	kudzambisa	ukwenzaduma
non-renewable resources	tinsita letingavuseleleki	imithombo ongavuselelekiko iinsetjenziswa ezingavuselelekiko
noxious gases	sisi lesinebutsi/ lonashevu	ummoya onobungozi
nutrient management:	kulawulwa kwetivundzisi/ kwetinotsisi	ukulawulwa kwezakhamzimba
oil spill	kucitseka kwewoyela	ukuthuluka kwe-oli
organic food	kudla kwemvelo/lokukhicitwe ngekwemvelo	ukudla okwakha umzimba
organism	lokuphilako	okuphilako
overnourished population	sive lesondleke ngalokwengcelele/ ngalokwendlulele	isitjhaba esidla kusale
overnourishment	kondleka ngalokwendlulele/ ngalokwengcelele	ukndlakusale

ENGLISH	SISWATI	ISINDEBELE
overpacking	kukhongotela kwengamisa	ukupakha khulu
oxidising substances	sikhutsatimlilo	ezibamba umlilo msinya
ozone layer	lutfwatfwasi/ludvwadvwa s lwemhlaba iingubo yemhlaba	ilarha le-ozoni
particulate matter	singcolisimoya	iinhlavana
perennial	iphereniyali mnyakamnyaka mnyakamnyenti	ezisilaphaza ummoya -philako iminyakanyaka
permaculture	kulima ngekwemvelonge/ kwendzabuko	ukuvuselelwa ngobutjha kwemvelo
permanent crops	bomatsela minyakanyaka/hjalo bomatjalwa kanye	iintjalozasafuthi
pesticides	tibulalitinambutane tibulalitilokatane	limbulalinunwana imbulalitjhabalalisi
plasticulture	kukhulisa ngeplastiki kutjala ngenkwayindane	isivikelintjalo
point source	shimela	indawo

ENGLISH	SISWATI	ISINDEBELE
pollution (PS)	siphefumulisi	yokusilaphazekileko
population bottleneck	kwehla ngemandla kwelinani lalokuphilako	ukuncipha kwestijhaba
population density	kuminyana	ubungako babantu inani labantu
population ecology	sifundvo ngalokuphila endzaweni	isifundo ngobudlelwane bebhoduluko nabantu
population genetics	sifundvo ngelufuto lwendzawo/ ngebunjalo belufuto endzaweni	isifundo ngefuzo
population size	linani lalokuphila endzaweni	isibalo sabantu
plastic bag levy	intsela yetikhwama teplastiki	umthelo webhoduluko ngeplastiki
porous	lokunetimbobo lokunetikhala lokusisefo	imetheriyalimbotjana
post-consumer waste	kulahlwa kwalokusetjentisiwe	ikhucukhucu engasetjenziswa godu

ENGLISH	SISWATI	ISINDEBELE
potash	iphotheshi luhlobo lwamanyolo locinisako	iphothasi
preservation	kulondvolota kugcina konga	ukubulunga
preventive care (preventive conservation)	kuvikela kunakekela	ukubulunga ngokutlhogomela
primary crop	sivunongco sivuno phaca sivunonchanti	iintjalo zemvelo
primary product – livestock	umkhicitongco umkhitico phaca	okuvela bunqophha
primary woodland	lihlatsi	ihlathi elingapheliko
protected landscape/ seascape	indzawo levikelwe licele lelivikelwe	ukuvikeleka kobuhle benarha
range	umkhawulo	indawana ethileko
radiation	kushisa ngemisebe	irediyetjheni
radioactive (adj)	khafula umsebe	-khuphana imesebe

ENGLISH	SISWATI	ISINDEBELE
	lonebungoti	enengozi
radon	iradoni sitsintsibetimdlavuta sidzambisimdlavuta	irandoni
recycle	kuvuselela kabusha kwakha kabusha	ukusetjenziswa ngobutjha
reforestation	kubuyisela lihlatsi kuvuselela lihlatsi	ukutjalwa ngobutjha kwemithi
refuse	tibi inkhukhuma dodi imfucufucu imfucuta	iinzibi ifuhlufulu
regeneration	kuvuselela kubuyisela kuhlumelelisa	kuvuselwia komhlobo othileko
rehabilitation	kuvuselela kubuyisela esimeni	ibuyiselo ejameni bokuthoma
renewable energy	emandla lavuselelekako	amandla avuselelako
renewable resource	tinsita letivuselelekako	umthombo ovuselelekako
reproductive	kuvimbela/ kuvimba	ukungakghoni

ENGLISH	SISWATI	ISINDEBELE
isolation	kutalisa kuhlela	ukuzala ngokukhethululwa
residue	insalela insekese	iinsalela
resources	tinsita	linsetjenziswa
restoration	kuvuselela kubuyiselwa kugcina	ukubuyiselwa ebujameni bokuthoma/esigeni
retention	kugcina kulondvolota	ibulungomanzi
retention basin	lidamu lekugcina lichibi lekulondvolota	indawo yebulungomanzi
retrievable	buyiselekako buyisekako	-thola godu
reuse	sebentisa kabusha phindza usebentise	-sebenzia godu
reversibility	kubuyiseleka	ibuyiselomuva lobujamo
riparian restoration	kuvuselela lusentse lwemfula	ukubuyiselwa esigeni kweemila ezimagega nomlambo

ENGLISH	SISWATI	ISINDEBELE
rip-rap	sivikelikugedvuka	amatjana avikela ukukhukhuleka i-rip-rap
runoff	tikhukhula	umsedlana wamanzi
sanitary landfilling	kulahla ngekucophelela/ ngebucwepheshe/ ngebunyoninco/ ngekunakekela	indlela yokulahla ikhucukhucu
scheduled ancient monument	indzawo yemagugu indzawomlandvo yetichuse	indawo yesikhumbuzo
seeders	emaplantela tihlanyeli	iinsetjenziswa zokutjala
seed propagation	kwandzisa ngenhlanyelo/ngembewu	indlela yokutjala
semi-natural ancient woodland	lihlatsi lelinebumvelo	ihlathi lakade eliyisingamvelo
semi natural habitat	indzawo lesamvelo	indawo yokuhlala eyisingamvelo
sessile (adj)	-ngenangono (licembe)	i-sesile
shelterwood system	indlela/inchubo yekuvikela ngetihlahla	irherho lokuquntela ukuhluma

ENGLISH	SISWATI	ISINDEBELE
		ngobutjha
sink	simumatsi simunyi	isimunyimmoya
sinkhole	umgodzi umkheleketse	umgodi otjhingelako
site of special scientific interest (SSSI)	indzawo yemvelo lekhetskile kutesayensi	indawo evikelekileko yabososayensi
smokeless fuel	emafutsa langakhicitintfutfu/ langenantfutfu	iimbaseli ezingananantuthu
solar energy	emandla elilanga	amandla welanga
solar heating	kushisia ngelilanga	umtjhiso welanga
solidification	kucinisa kutiyisa	ukuqinisa
soot	umule	umsizi
sump	singwingwi simumatsi isampu	isampa
species management area	indzawo yekuvikela lokuphilako	indawo yokulawula iintjalo

ENGLISH	SISWATI	ISINDEBELE
		neenlwana
spinney	livungu lihlashana	ihlatjhana
stabilization	kusimamisa	isithundubazisilaphazo
strict nature reserve	siciwi lesivikelekile/lesigadziwe	isiqiwi semvelo esinemibandela eqinileko
succession	kwelamanisa kulandzelanisa	ikambiso elandelanako
sulfur dioxide	sibabule	isalfadayoksayidi
vermicomposting	kuvundzisa ngetibungu	ikambiso yokuvundisa buthaka
windpower	emandla emoya/laphehlwa ngemoya	ukuphehla amandla ngommoya
temporary crops	bonyakamunye	iintjalo ezikhula msinya
tree preservation order (tpo)	luhlelokongiwa/luhlelokul ondvolotwa kwetihlahla	ilayelo langokomthetho lokubulunga umuthi
tumulus	budvuli	igugumba lesibungu

ENGLISH	SISWATI	ISINDEBELE
understorey	bomakhulela phasesihlahla	iimila ngaphasi kwemithi
upgradient	umenyukelo umcansa	ipophoma iphororo
urban habitat	indzawo lebudolobha	iindawo zokuhlala zemadorobheni
volatile (adj)	-hwamukako -hamukako	-rhwamukako
vulnerable specie	luhlobomphilo lokusengotini yekushabalala	imihlobo esebujameni bokulimala
waste	tibi imfucuta emabibi idodi	ikhucukhucu
waste treatment	kususa tibi/imfucuta kususa dodi/ emabibi	ukulawulwa kwekhucukhucu
waste load allocation	umtsamokungcola lovumelekile umtsamo tibi lovumelekile	isilinganiso sekhucukhucu evunyelweko
waste disposal	kulahla tibi/ dodi/	ilahlogcino

ENGLISH	SISWATI	ISINDEBELE
	imfucuta kulahla	lekhucukhucu
waste disposal site	kamdodi indzawo yekulahla tibi etibini	indawo yokulahla ikhucukhucu
waste stream	umgudvu wemfucuta/ wetibi	umsele wekhucukhucu
waste management	kulawulwa /kwetibi	ukulawulwa kwekhucukhucu
waste prevention	kunciphisa tibi/ dodi/ imfucuta	inciphisongozi lekhucukhucu
watershed	imingenela	umqoqo wamanzi
water table	sehlukanisimanti imikhoco yemanti	ilarha lamanzi
weir	ludvonga lwemanti sikhongotelimanti sivimbamanti	umkikito wamanzi
wet flush	sitete	ukukhambisa ngamanzi
wetland	lichaphoti	umdzwela
white goods	tikhohlokhohlo tingwende	iinsetjenziswa zangeendlini ezilahlwako

ENGLISH	SISWATI	ISINDEBELE
wildlife conservation	kongiwa kwetilwane tasendle	ukuthogonyelwa kwemmangweni
wilderness area	lihlane	ummango
wildwood	lihlatsi	indawo yamahlathi
wind blow	siwiliwili sihhwishihhwishi kuhhusha kwemoya	ukuvunguza kommoya
wind energy	emandla laphehlwa ngemoya emandla emoya	amandla wokuphehla ngommoya
wind turbine	siphehlamoya siphekepheke	isiphehli
wood bank	lusentse lwelihlatsi umngcengcema welihlatsi	izikwana lokusezela
working face	libala ledodi/letibi/ lemfucuta	ubumukelo bekhucukhucu
vernal pool	sicobho	idanyana lesikhathjhana

REFERENCES

Collins Dictionary of the English Language. 1986 Hanks P. London: Collins Publishers.

Compact Oxford English Dictionary - Third edition. 2008. Oxford: Oxford University Press.

Concise Oxford Dictionary. 1999. 10th edition. J. Pearson. Oxford; Oxford University Press.

Concise Siswati Dictionary. 1982. DK Rycroft. Pretoria: JL van Schaik Publishers.

English – Zulu Dictionary. 1958. CM Doke et al. Johannesburg: Witwatersrand University Press.

English –IsiNdebele-Afrikaans Trilingual Dictionary. 2015. Iziko Lesihlathululi-mezwi. SesiNdebele. Heritage Publishers.

English-Afrikaans-Siswati Terminology. 2008. Mpumalanga Department of Culture, Sport and Recreation.

Isindebele Monolingual Dictionary. 2014. Isindebele Dictionary Unit. Kalahari Productions.

IsiNdebele Terminology and Orthography no.1. 2000. Department of Education.

IsiNdebele-English Bilingual and Explanatory Dictionary. (2006). Iziko Lesihlathululi-mezwi. SesiNdebele. Phumelela Publishers.

Isichazamazwi SesiZulu. IsiZulu National Lexicography Unit. 2014. South African National Lexicography Units.

Itheminoloji yeSiswati. Volume 2. 2003. Siswati Language Board.

Longman Dictionary of Contemporary English. 1995. Harlow, Essex: Longman Group.

Multilingual Natural Sciences & Technology list for grade 4 to 6. 2013. Department of Arts and Culture.

Orthography and Spelling Rules for Siswati No 1. 2008. Siswati Language Body.

Oxford South African concise dictionary 2nd edition. 2010. Dictionary Unit for south African English.Cape Town: Oxford University Press.

Pharos Bilingual Dictionary. 2005. Pharos-woordeboeke.

Sichazamagama Sesiswati. 2017. Siswati National Lexicography Unit. South African National Lexicography Units.

Silulu seSiswati English-Siswati/Siswati-English Dictionary. 2010. Siswati National Lexicography Unit. Macmillan Boleswa Publishers.