

**Photo Guide to estimate Forage Availability
in Namibian Rangelands
Otjiherero Version**

Omuyandjatjimariva ngwi
omunene



Ovayandjatjimariva varwe



Ovaungurise vondunge



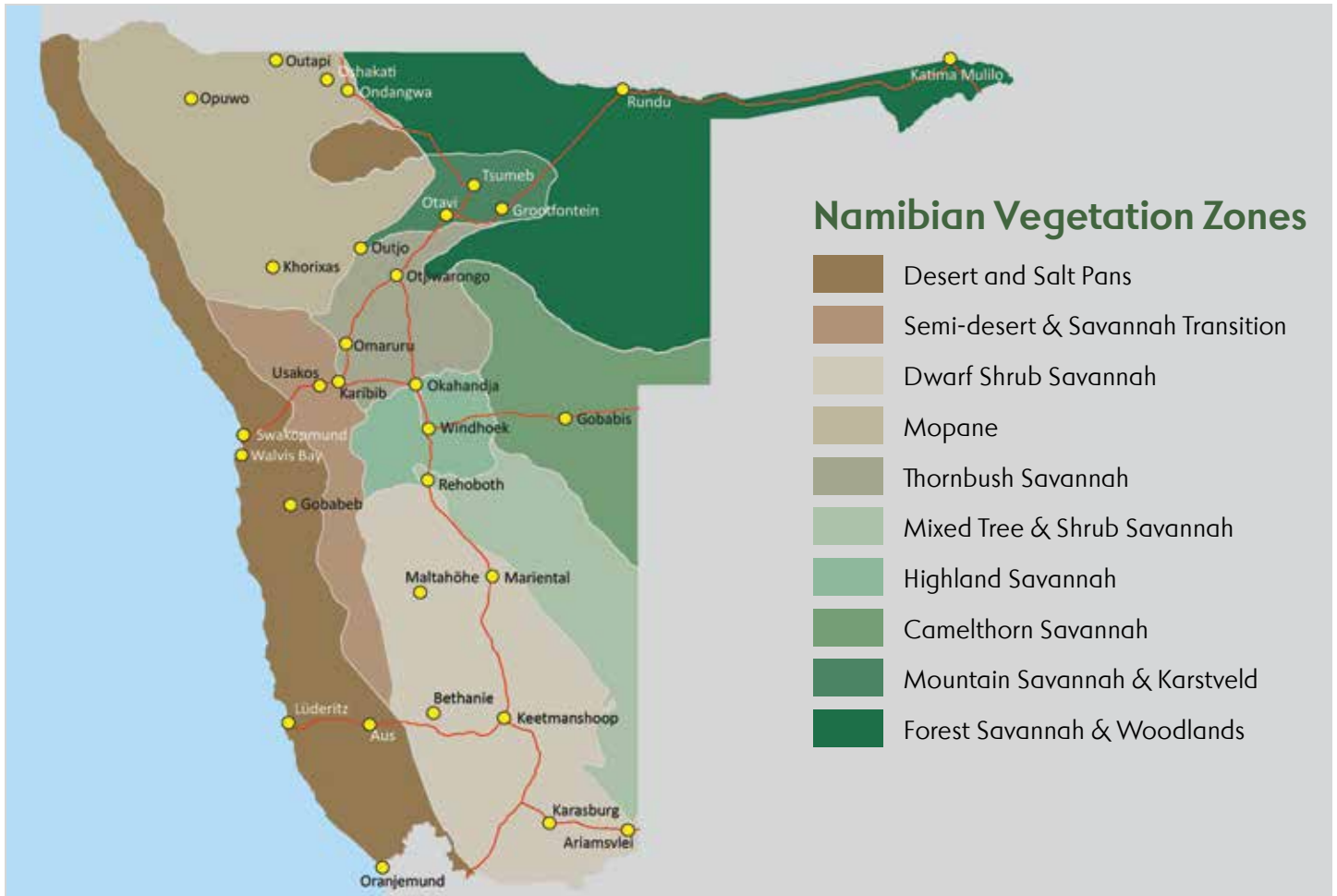
Omurya noviperendero: Mr Bertus Kruger, Dr Cornelis van der Waal & Mr Frank Wittneben

Omatwirepo nomaṭunino: Mr Michael Degé • Omataruriro: Dr Pauline Lindeque • Ra torokwa i: namtranslation.com

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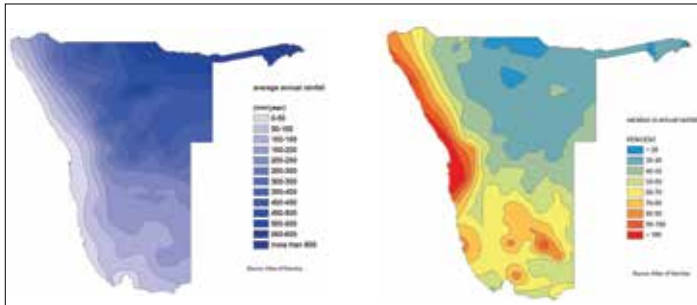


Namibian Vegetation Zones

- Desert and Salt Pans
- Semi-desert & Savannah Transition
- Dwarf Shrub Savannah
- Mopane
- Thornbush Savannah
- Mixed Tree & Shrub Savannah
- Highland Savannah
- Camelthorn Savannah
- Mountain Savannah & Karstveld
- Forest Savannah & Woodlands

Ehi rokongotwe

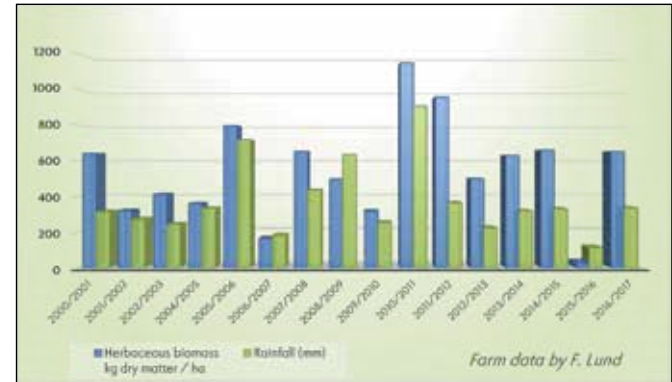
Oprojeka ndji ri kehi yena “Omekurisiro nomarorero womiano vyomarakiziro wokomurung’ oruveze ohunga nehi romarisiro pu novaṭuta ovatumbavinamuiyo mOnamibia” ya tanderwa kutja i kare nohambwarakaṅa kondjeverero yehi romarisiro tjinga amai zikamisa omiano vyokutjevera ehi romarisiro mbi mwina ko oviṅa okuza kokure nu vyomatarero nga sostonwa nawa. Oprojeka ndji otjimariva tjayo tjozoperesende 80 ya isa koporoharama oitja-10 yoEDF yena “Okupuparisa omarundurukiro womuinyo wevaverwa nokuriyenenisa pu wo, mu mu noviyakise”, nombatero yotjimariva okuza kombaanga yotutumbo novikunwa, o-GEF noporoharama yomayandjero wotjimariva otjitiṅi na wina o-Agra Ltd. Oviperendero mbi mavi raisa omiano vyokuhaka omario nge ri po mofarama mbi vya pitira moprojeka ndji.



Otjiraisiro otji-1: Omahaṅikiro momarokero wombura mOnamibia

Namibiab ge hoa !hṅu Saharab !naka Ægoegu !nâb Æîba hoagu Onamibia eehi ekukutu nda kava momahi ayehi wa Afrika nge ri komamuho wokuti onguza kwa Sahara nu omarokero

wombura pu ye haṅka tjinene mu indi ehi orini.MOTjiraisiro otji-1 okakarata nga ku ke ri komamuho make raisa momuano ohamure omahaṅikiro wombura yopokati otja tji i roka okuza komamuho okupikira koutokero okuyenda komanene okupikira koutjiro ngunda okakarata nga ku ke ri komanene amake raisa omahaṅikiro momarokero wombura otja momakweze womarokero wombura. Mape undjirwa kutja, pamwe na inga omarundurukiro womuinyo wevaverwa, omahaṅikiro momarokero wombura nga maye utu okumunikwa tjinene.

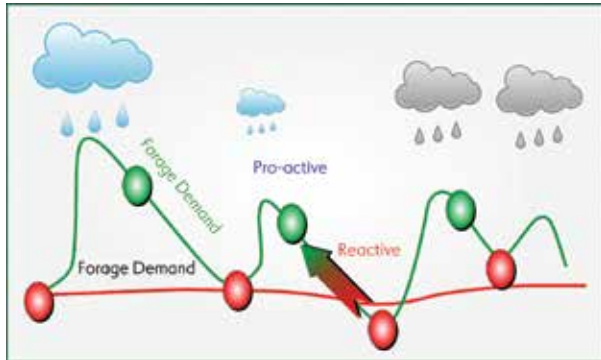


Otjiraisiro otjitiṅi-2: Omahaṅikiro momahapero wehozu nomiti mbi hapera kombura tji maye sasanekwa nomarokero wombura mofarama Okomumbonde koutjiro

Omaro nge ri po na wina ongaro yehi romarisiro komaandero Omaro nge ri po na wina ongaro yehi romarisiro komaandero wekweze momarokero wombura ye hitasana tjinene nomuano ombura mbu ya roka. Ondjivisiro ndji ri mOTjiraisiro 2 mai raisa omahaṅikiro omanene nge ri po momario nga sewa po pokati

komakweze womarokero wombura mozombura nga zokuza mo-2001 nga ko-2016 mofarama yOserekaze Lund mozondendera za Maruru, okuza kombanda indu omaryo tji ya ri otona imwe mohekta imwe mekweze ndi ro-2010/11 nga kehikehi mo-2015/16. Ihi matji raisa kutja omaryo ye runduruka kaye hungumanene poruveze rumwe. Okutja imba mape heye kutja amatokero nga hungama ovaṭuta vovinamuinyo mOnamibia okuyenenisa otjivarero tjovinamuinyo komaryo otja pu maye runduruka otja koruveze nga koruveze.

Okutja otjivarero tjovinamuinyo tji sokuhitasana nomaryo nge ri po. Tji pe ya nao okutja komoo sokuundjirako kutja mape kara ouzeu. Nungwari ombura tji i ha rokere nawa ekweze ndi mari teza mbo, au notjivarero otjingetjo tjovinamuinyo, mape heye kutja mape ya ape kakara ouhepe womaryo.



Otjiraisiro otjijta-3: Ozondyero nḡe sokutoorwa komurungu woruveze

Ohepero tjinene okuzikamisa komaandero wekweze romarokero wombura kutja pe nomaryo nge ṭa pi nokutja ya yenene nga

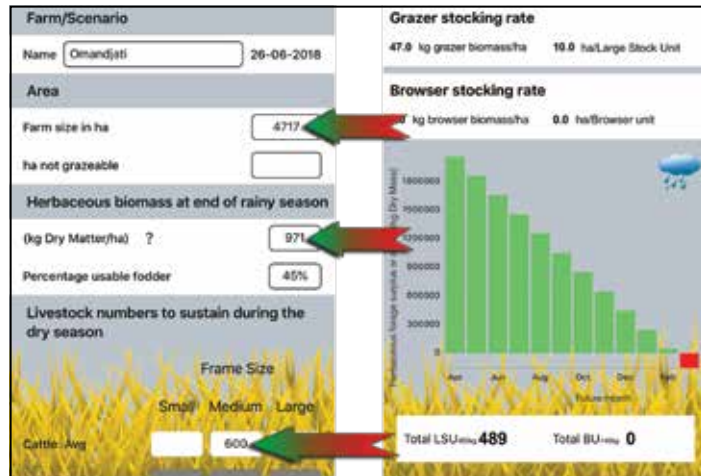
kekweze rarwe romarokero wombura. Ndoovazu omaryo kapuwo, otjivarero tjovinamuinyo tji sokuṭikonapariisiwa okupenga kutja omaryo aye ha karira omaheṅa pendje nokuundja orure ngandu ndi ongaro yovinamuinyo kotutu tji ya kangundipara poo tji vya utu okuwotama.

Pe nomiano omingi vyokuhaka kutja u nomaryo nge ṭa pi. Omuano omusemba nungwari mbu ri oviungura ovingi owo mbwi wokukonda ehozu potuveze pekepeke, okukahisa nokutwa kotjiviha kutja u hakere ko omaryo nge ri mohekta imwe. Ovaṭuta ovengi ve muna kutja mbwi omuano mbu kambura oruveze orungi.

Ovipendero mbi opu mavi yandjere omiano vyarwe vyohakahana mbi mavi yenene okutjita kutja u yenene okuhaka nawa nokuhina okuhepa okutara moutukondwa pekepeke wehi romarisiro. Pa yandjwa oviperendero pekepeke vyomiti nomahozu ngamwa nge hapa mOnamibia nomahaṅikiro womaryo otja potuveze, okuutira potjiperendero #1 pu pe nomaryo omangundi okukayandera poruveze pu pe nomaryo omawa poruveze ndwo. Tji mo ungurisa oviperendero mbi, orukondwa orunene rwomaryo waindji ofarama maru yenene okusasanekwa ku na imbi oviperendero mbi mavi hitasana na yo kutja ku rekenenwe omaryo wopokati nge ri morukondwa kaaṅi ndwo poo ofarama. Ovipendero mbi otja kotuveze kaaṅi ho, okutja u sokutoorora oviperendero mbya pwire po oruveze ndwi orwoye.

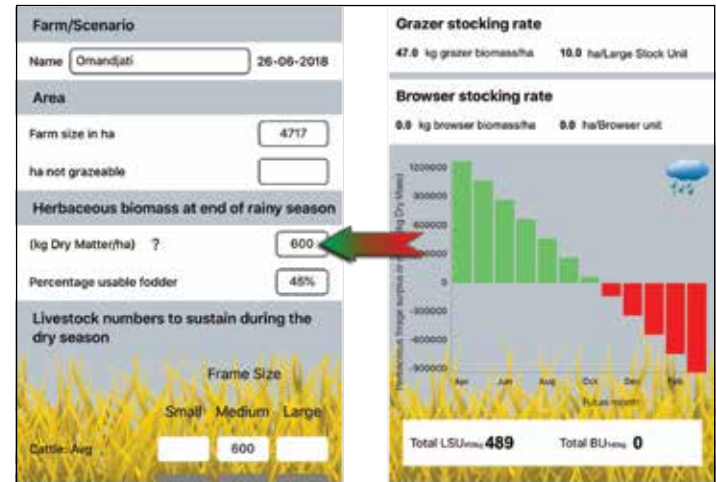
Omaryo ayehe kumwe nge ri po mohekta imwe tji ya zu nokuzikamisiwa, mape yenene o haka kutja mo hepa omaryo nge ṭa pi otja kotjivarero tjovinamuinyo nokumwinako kutja ya yenene poo inde. Okutjita kutja oviṅa vi rire ovipupu, pa ungurwa Otjiungurisiwa tjokutarerako omaryo mehi romarisiro (tji tji ungura moviungurisiwa vyoyue wakandino mbi no-

Android no-iOS) otjumuano omuweziwa nu otjiungurisiwa hi otjari tjamuhonge. Otjiungurisiwa hi tji yandjera kutja ovaṭuta ve tarere ko poo okuhaka kutja omaryo nge ri po mofarama poo mehi romarisiro maye yenene okutjinda ovinamuinyo mbi ri po nga kovipuka vyomokuti nu maku yenene okuungurirwa momiano pekepeke otja tji vya raisiwa mOtjiraisiro otjitja-4 nga kotjitja-6. (Arikana kara amo tjiwa kutja oviperendero mbi ri kekende vya ungurirwa kotjiungurisiwa tji tji no-iOS, nu tji vya ungurirwa kotjiungurisiwa tji tji no-Android otjiperendero matji munika omuano warwe, nungwari ndji ondjivisiro ndji mai raisiwa mai rire imwe.)



Otjiraisiro otjitja-4: Omarekeneno wotjivarero tjovinamuinyo otjihorera otji-1

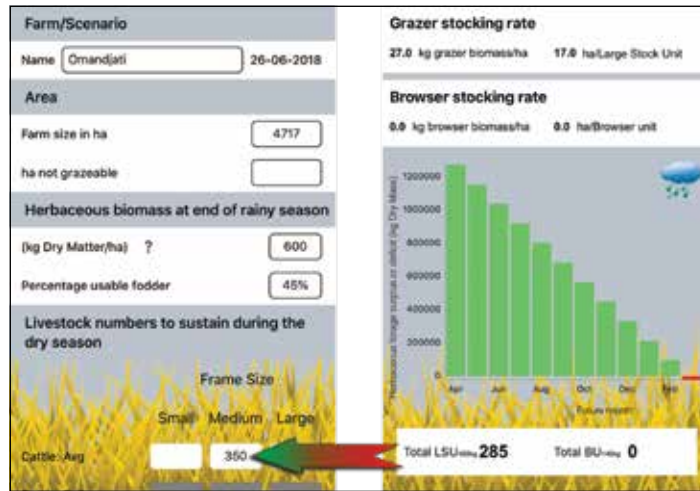
Motjiraisiro otjitja-4 mape raisiwa omarekeneno nga tjitwa kofarama younene wozohekta 4 717 nomaryo wozokiroharama 971 mohekta imwe, nozongombe 600 zounene wopokati. Otjihorera hi matji raisa kutja ofarama ndji i nomaryo nga yenene nga ku Tengarindi wombura ndji mai yende poo ndji mai kongorere mbo. Okutja mba mape heye kutja kape nohepero omuṭa ngwi okuṭikonaparisa otjivarero tjovinamuinyo vye.



Otjiraisiro otjitja-5: Omarekeneno wotjivarero tjovinamuinyo otjihorera otjitja-2

Motjihorera otjitja-2 tji ri mOtjiraisiro otjitja-5 mape raisiwa omarekeneno nga tjitwa kofarama otjingeoyo, ndoovazu omaryo ya ṭikonapara okuza komaryo wozokiroharama 971 mohekta imwe nga kozokiroharama 600 mohekta imwe uri. Kahi yozongaro nḁa mape undjirwa kutja mape kara ouhepe

womaryo okuza mu Ndengaŋi okuyenda komurungu. Otjivarero tjovinamuinyo tji tja tikonaparisiwa nga po-350, otja tji mape munika mOtjiraisiro otjitja-6, omaryo notjivarero tjovinamuinyo tjandje nao vya hitasana nu otji mape kara omaryo nga yenene nga ku Tengarindi wombura ndji mai yende poo ndji mai kongorere mbo.

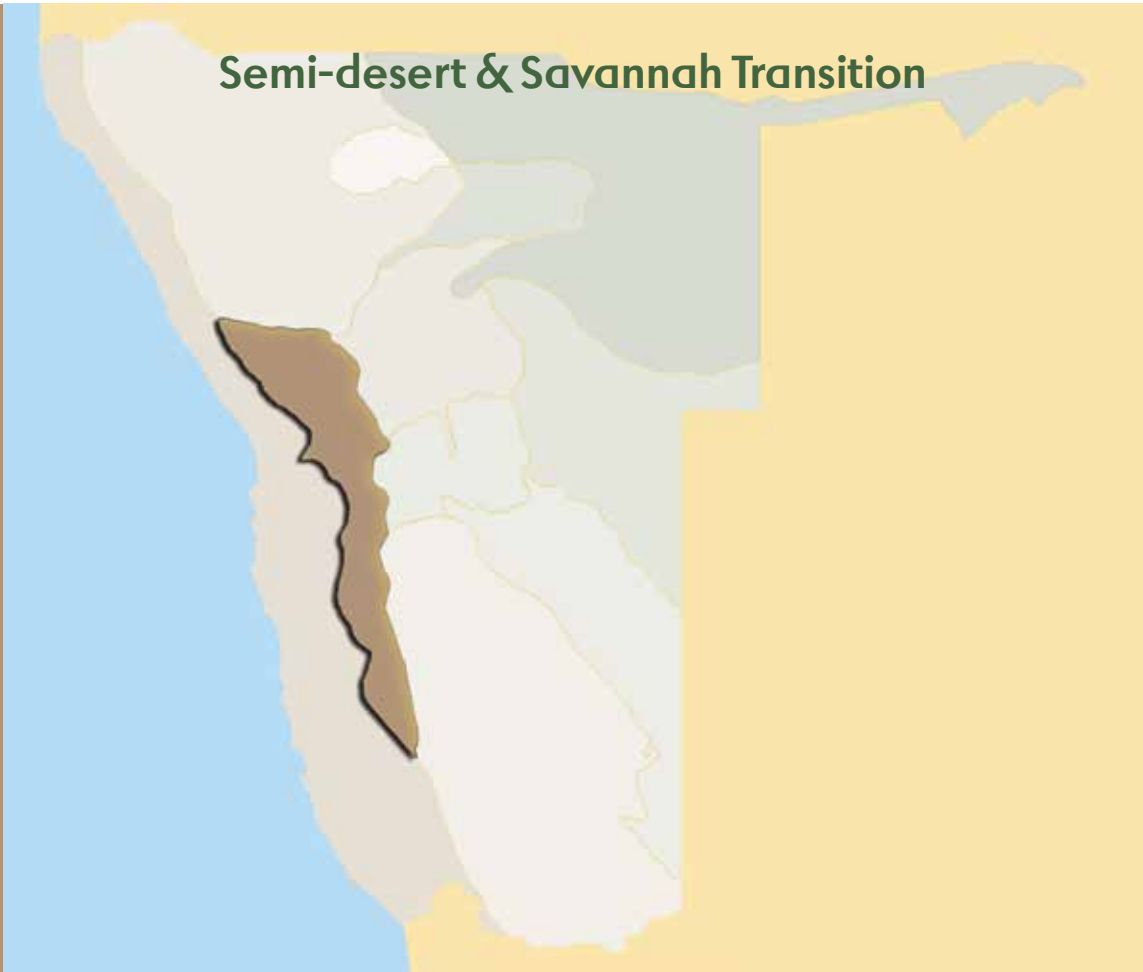


Otjiraisiro otjitja-6: Omarekeneno wotjivarero tjovinamuinyo otjihorera otjitja-2 (omuano warwe)

Kehi yotjihorera hi matu ungurisa ondjinda yokehi, yopokati noyokombanda okurekenenako omaryo. Omihoko vyozonegombe mbi mavi ungurisiwa otjotjihorera, (kara amo zemburuka kutja momuhoko umwe mbwo ngunda mamu kara omahaŋikiro mondjinda):

- Ondjinda yokehi, tj. Nguni/Sanga
- Ondjinda yopokati, tj. Oafrikaner, Obonsmara, Obefmaster
- Ondjinda yokombanda, tj. Osimindara, Osimbra, Ombaramana.

Semi-desert & Savannah Transition





Semi-desert & Savannah Transition

Onomora
yotjiperendero 1

100 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Semi-desert & Savannah Transition

Onomora
yotjiperendero 2

227 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Semi-desert & Savannah Transition

Onomora
yotjiperendero 3

284 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Semi-desert & Savannah Transition

Onomora
yotjiperendero 4

343 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Semi-desert & Savannah Transition

Onomora
yotjiperendero 5

523 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Semi-desert & Savannah Transition

Onomora
yotjiperendero 6

554 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Semi-desert & Savannah Transition

Onomora
yotjiperendero 7

645 Ozokiroharama zehozu nda
kahisiwa moheka imwei





Semi-desert & Savannah Transition

Onomora
yotjiperendero 8

1265 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Semi-desert & Savannah Transition

Onomora
yotjiperendero 9

1372 Ozokiroharama zehozu nda
kahisiwa moheka imwei





Semi-desert & Savannah Transition

Onomora
yotjiperendero 10

2244 Ozokiroharama zehozu nda kahisiwa
moheka imwei

Dwarf Shrub Savannah





Dwarf Shrub Savannah

Onomora
yotjiperendero 1

10 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Dwarf Shrub Savannah

Onomora
yotjiperendero 2

100 Ozokiroharama zehozu nda
kahisiwa moheka imwei





Dwarf Shrub Savannah

Onomora
yotjiperendero 3

330 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Dwarf Shrub Savannah

Onomora
yotjiperendero 4

430 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Dwarf Shrub Savannah

Onomora
yotjiperendero 5

750 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Dwarf Shrub Savannah

Onomora
yotjiperendero 6

800 Ozokiroharama zehozu nda kahisiwa
moheka imwei



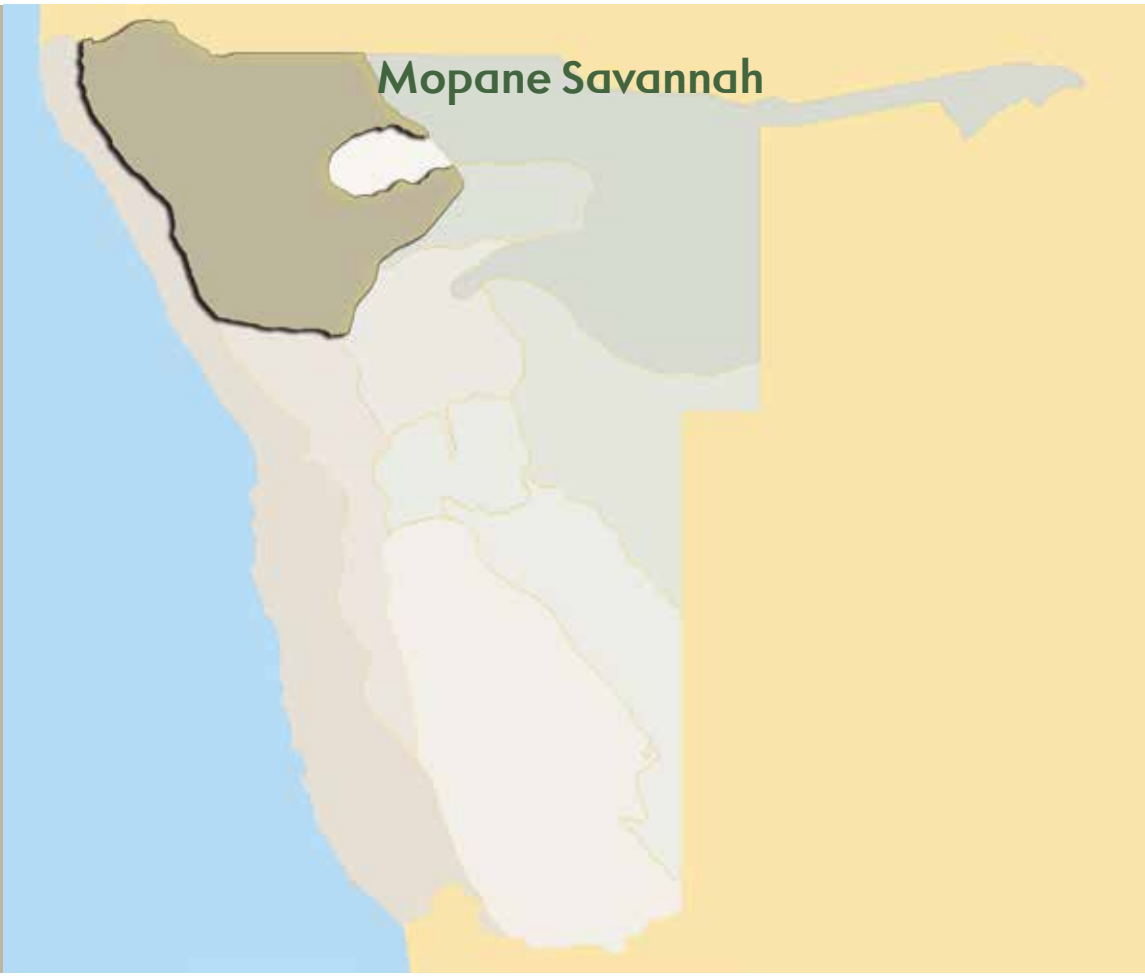


Dwarf Shrub Savannah

Onomora
yotjiperendero 7

950 Ozokiroharama zehozu nda kahisiwa
moheka imwei

Mopane Savannah





Mopane Savannah

Onomora
yotjiperendero 1

81 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Mopane Savannah

Onomora
yotjiperendero 2

145 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Mopane Savannah

Onomora
yotjiperendero 3

302 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Mopane Savannah

Onomora
yotjiperendero 4

578 Ozokirohama zehozu nda kahisiwa
moheka imwei





Mopane Savannah

Onomora
yotjiperendero 5

774 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Mopane Savannah

Onomora
yotjiperendero 6

906 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Mopane Savannah

Onomora
yotjiperendero 7

1022 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Mopane Savannah

Onomora
yotjiperendero 8

2285 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Thornbush Savannah





Thornbush Savannah

Onomora
yotjiperendero 1

30 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Thornbush Savannah

Onomora
yotjiperendero 2

141 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Thornbush Savannah

Onomora
yotjiperendero 3

190 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Thornbush Savannah

Onomora
yotjiperendero 4

300 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Thornbush Savannah

Onomora
yotjiperendero 5

511 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Thornbush Savannah

Onomora
yotjiperendero 6

900 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Thornbush Savannah

Onomora
yotjiperendero 7

1000 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Thornbush Savannah

Onomora
yotjiperendero 8

1203 Ozokiroharama zehozu nda
kahisiwa moheka imwei



Thornbush Savannah

Onomora
yotjiperendero 9

1950 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Thornbush Savannah

Onomora
yotjiperendero 10

2200 Ozokiroharama zehozu nda kahisiwa
moheka imwei

Mixed Tree & Shrub Savannah





Mixed Tree & Shrub Savannah

Onomora
yotjiperendero 1

192 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Mixed Tree & Shrub Savannah

Onomora
yotjperendero 2

302 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Mixed Tree & Shrub Savannah

Onomora
yotjiperendero 3

412 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Mixed Tree & Shrub Savannah

Onomora
yotjiperendero 4

618 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Mixed Tree & Shrub Savannah

Onomora
yotjiperendero 5

690 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Mixed Tree & Shrub Savannah

Onomora
yotjiperendero 6

832 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Mixed Tree & Shrub Savannah

Onomora
yotjiperendero 7

1032 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Mixed Tree & Shrub Savannah

Onomora
yotjiperendero 8

1132 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Mixed Tree & Shrub Savannah

Onomora
yotjiperendero 9

1367 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Mixed Tree & Shrub Savannah

Onomora
yotjiperendero 10

1459 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Mixed Tree & Shrub Savannah

Onomora
yotjiperendero 11

1466 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Mixed Tree & Shrub Savannah

Onomora
yotjiperendero 12

2021 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Highland Savannah





Highland Savannah

Onomora
yotjiperendero 1

240 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Highland Savannah

Onomora
yotjiperendero 2

290 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Highland Savannah

Onomora
yotjiperendero 3

390 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Highland Savannah

Onomora
yotjiperendero 4

480 Ozokiroharama zehozu nda
kahisiwa moheka imwei



Highland Savannah

Onomora
yotjiperendero 5

650 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Highland Savannah

Onomora
yotjiperendero 6

730 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Highland Savannah

Onomora
yotjiperendero 7

816 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Highland Savannah

Onomora
yotjiperendero 8

982 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Highland Savannah

Onomora
yotjiperendero 9

1100 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Highland Savannah

Onomora
yotjiperendero 10

1500 Ozokiroharama zehozu nda kahisiwa
moheka imwei



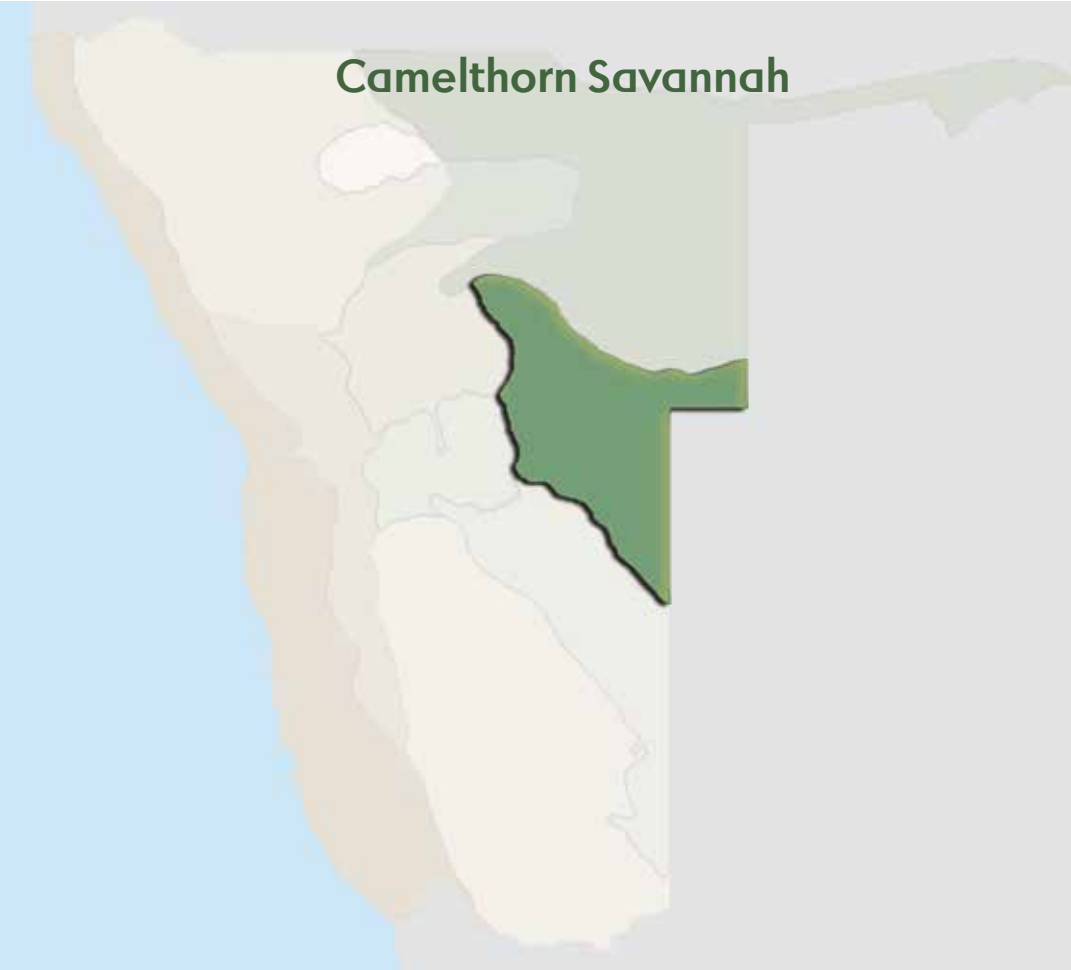
Highland Savannah

Onomora
yotjiperendero 11

2150 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Camelthorn Savannah





Camelthorn Savannah

Onomora
yotjiperendero 1

80 Ozokiroharama zehozu nda kahisiwa
moheka imwei





melthorn Savannah

Onomora
yotjiperendero 2

246 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Camelthorn Savannah

Onomora
yotjiperendero 3

287 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Camelthorn Savannah

Onomora
yotjiperendero 4

620 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Camelthorn Savannah

Onomora
yotjiperendero 5

824 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Camelthorn Savannah

Onomora
yotjiperendero 6

1009 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Camelthorn Savannah

Onomora
yotjiperendero 7

1297 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Camelthorn Savannah

Onomora
yotjiperendero 8

1430 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Camelthorn Savannah

Onomora
yotjiperendero 9

1900 Ozokiroharama zehozu nda kahisiwa
moheka imwei



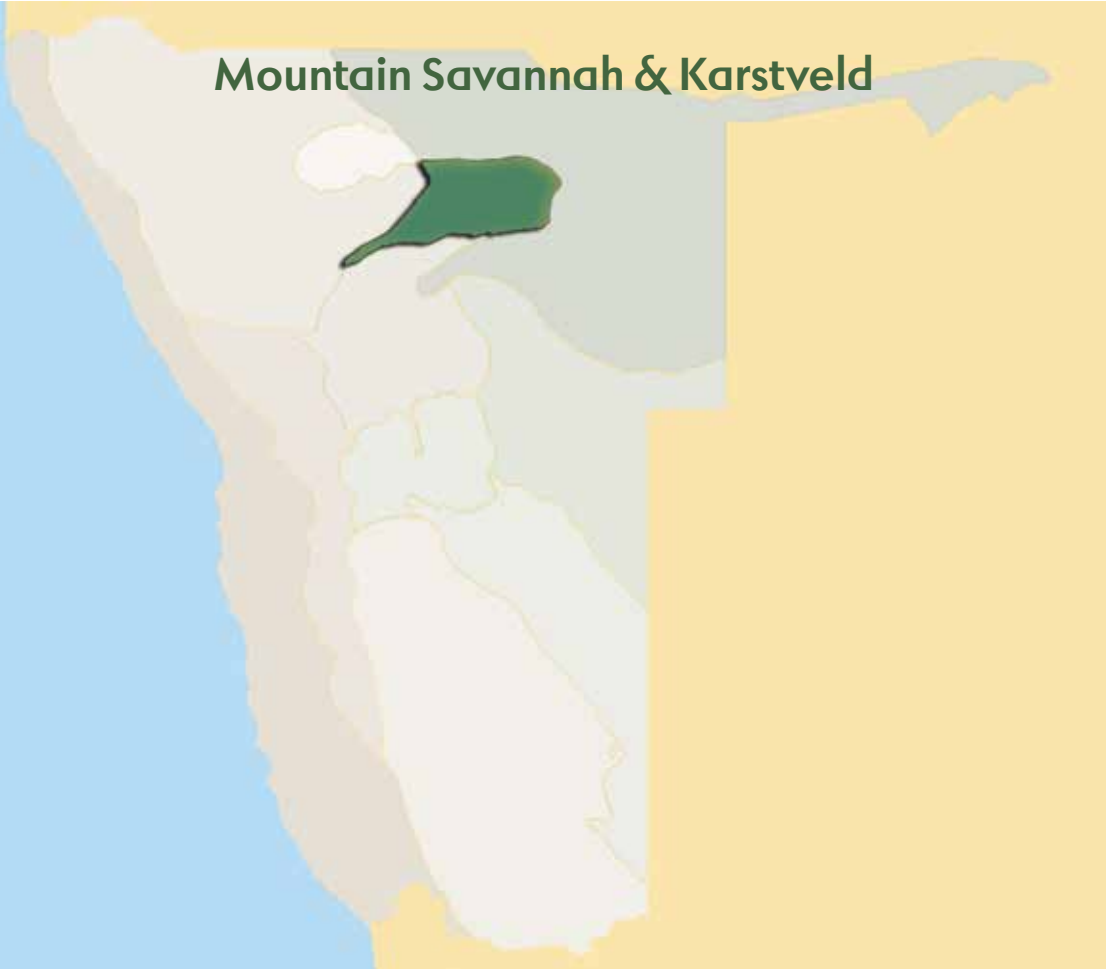


Camelthorn Savannah

Onomora
yotjiperendero 10

2523 Ozokiroharama zehozu nda kahisiwa
moheka imwei

Mountain Savannah & Karstveld





Mountain Savannah & Karstveld

Onomora
yotjiperendero 1

36 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Mountain Savannah & Karstveld

Onomora
yotjiperendero 2

213 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Mountain Savannah & Karstveld

Onomora
yotjiperendero 3

539 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Mountain Savannah & Karstveld

Onomora
yotjiperendero 4

723 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Mountain Savannah & Karstveld

Onomora
yotjiperendero 5

749Ozokiroharama zehozu nda kahisiwa
moheka imwei



Mountain Savannah & Karstveld

Onomora
yotjiperendero 6

1092 Ozokiroharama zehozu nda
kahisiwa moheka imwei





Mountain Savannah & Karstveld

Onomora
yotjiperendero 7

1279Ozokiroharama zehozu nda kahisiwa
moheka imwei



Mountain Savannah & Karstveld

Onomora
yotjiperendero 8

1662 Ozokiroharama zehozu nda
kahisiwa moheka imwei



A map of Nigeria with a dark green area in the north and northeast representing Forest Savannah & Woodlands. The rest of the country is divided into various shades of light green, yellow, and tan, representing different vegetation zones. The Atlantic Ocean is shown in light blue on the left side. The map is framed by dark green vertical bars on the left and right sides.

Forest Savannah & Woodlands



Forest Savannah & Woodlands

Onomora
yotjiperendero 1

35 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Forest Savannah & Woodlands

Onomora
yotjiperendero 2

397 Ozokiroharama zehozu nda kahisiwa
moheka imwei



Forest Savannah & Woodlands

Onomora
yotjiperendero 3

591 Ozokiroharama zehozu nda kahisiwa
moheka imwei





Forest Savannah & Woodlands

Onomora
yotjiperendero 4

974 Ozokiroharama zehozu nda kahisiwa
moheka imwei



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Onomora
yotjiperendero 5

1205 Ozokiroharama zehozu nda
kahisiwa moheka imwei





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yotjiperendero 6

1404 Ozokiroharama zehozu nda
kahisiwa moheka imwei



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yotjiperendero 7

1809 Ozokirohama zehozu nda
kahisiwa moheka imwei





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Onomora
yotjiperendero 8

2921 Ozokiroharama zehozu nda kahisiwa
moheka imwei

