Newspaper Notices:

THE NAMIBIAN

THURSDAY 5 DECEMBER 2019 19

namibian mOshiwambo

Tuma etumwalaka lyoye ehupi nenge "sms" konumola ndji 99902, omanga lavo dhanga etumwalaka lyoye, tamoka nenhi-rya Oshi opo tse to landulithaka "sms" yoye. Osms kehe ota yi gu N$3.

Aakwazenimo ya yelitha kutya ehokololo lyopolisi olya nakalindi

AAKWANEZIMO yomuguudjoka ngoka a li a dhigagwa komapolisi gomonangeyi mOhoonaldaha oyati opolisi oya handje kombinga yaanhoka sha li sha ningwa po pethimbo a dhigagwa.

Jonny Doeseb (18), okwa ka yalwa mukwa komugolisi mOvendaka konuna taku hokolithwa a li a ndjiko oonyala mayi okandwa motyakaya komeya dha shunana.

Ashoke, nguumbe ya nakana oyati opolisi oya hoteke oshili kombinga yadhigago lye. Aakwazenimo ndjiyali oyali yu shikile oThe Namibian uuvidho wa kwatwa pethimbo aapolisi yaali mbaka yali ye nda nkuta yowala ya li taya unganga nalweneh mukwana gumwe okwa li e otha monkandja shoka sha li she eta esio lye.

Pethimbo ya li mwenkendabani noThe Namibian molukanda lwaDamara noKaoteni aakwazenimo oyati nakaka kali nande a tindi okakwatwa pevikapolisi mongeenaa yahwa. Aapambelo oyali ogolosi oyali yu gandja nalweenya wa paka kombinga yomahekelwa yali taya kongo, taya li monkanda gotakongo gwopolisi omwa li unona ya paka ngaadhi, ogandjanda lyohakalwa, meyelele wolwe wa unona oshi wa shilifa lyo. Oyati odhina lye monkanda gohekendo omwa li ndhona lya shangwa 'John Doeseb'.

Oksei okwatekela kepaka lyopolisi ndjoka tyali lya pambwa mOmaalodhu, omapolisi ngoka a li mahanga okwa li e yaha nokudhigaga Doeseb. ngoka ya tompoona kutya okwa li e tindi oksei iyetha komalenhweelo gopolisi, pethimbo lyeshikonga shoneenangeyi.

Okapota yopolisi oyati oshunungwanona shoka osha li sha ningilwa meputandando lyadhiwa Mas Etxab, ashike aakwazenimo oyatindi okutya kumwe paashoka taya li osha nogalwa meputandando lyedhina Ulrich Zwingi popepi ashike nepandando lyadhina Josef Garoeb.

Omupopiliko gwopolisi, Kauna Shikwambi okwa li a londwelele oThe Namibian kutya Doeseb okwa li omakokoshi ngoka a li ta kolagwa nokwa ashoka male a ya mo nomdhelongo sho a li i shitilo mo.

Kaunaa otho aapolisi yemonangeyi ya li ya mono mpoka e li, oyali ya yi ko yo ke mu kwatapo. Ashoke, omukokolwa okwa li a tindi oku dhimbulukwa naashoka osha li she eta opo omapolisi gumwe a unhe ondjeshu nelalakano lyokwi iganesha.

Ashike aakwazenimo oyati Doeseb kali nande 'omukokoshi' a neke oshiponga, ta kongwa azaano mondhelongo kobvidhu. Oya gwedhapo kutya Doeseb ondhelongo keyishi, ye kena nande onhjokomwa ya she yaashoka a ndhindhikwa e na.

Mumwaynakalhonga gwaDoeseb, Veronice Doeseb, okwa ti oyali negumbo taya li unhenhe sho mumwaynamuti a li unhike a ka landa nawita yokudhunga pehafe hapo ndhindilwa li li ashike popepi.

Kauna yedhindilo oyali ya avu nakuyanguko pondje.

Shi, Doeseb yi pondje nokumema mumwaynina a kwatwa kaapolisi yaali, okwa li e ya pala kutya otaye nu kwaciepo shike ye inaa ya shika omukanda gwekwaciepo lye.

"Okwa li nde kambadhala okehangekamena opo omapolisi kau dhenge mumwaxamene. Ashike okwa li a nagolesile omanhitho kutya ina dhenge nghe," osho Doeseb a popi ngaaka.

Okwa gwedha pe kutya okaza mpoka omapolisi gamwe okwa li e mu thanga mosheposhi, nagamwe gamongathimi lyoshikatiko nawa okwa li e nintho aapolisi mboka nekende.

"Ekande ndyeka inali mui'omapolisi dhenga," osho a popi ngaaka.

Engathilho lyoshikatiko nawa ndya li lyakambadhala okugamena Doeseb osho wo mumwaynina, naapolisi okaza mpoka oyali ya kutha mo oombinzati dhuno, shoka sha li she eta engathilo li hedhe ko.

Omapolisi omwenda, ngoka a ityuka nedhina "Shorty" noku shiwike nawa momapandando gomomadhingoloko ngoka, okwa li a hokolokiga nokutala athala Doeseb monyakaya e shi ningi e mu tshi kumwe nomapolisi gamwe.

"Okwa li a pumbula omapolisi ngiini ngele okwa li a mangitwa kumwe nayo," osho mumwaynina kaHonna a pula ngaaka.

Doeseb okwa tukile ko kutya omapolisi ngoka a li a nawa nokuanga ta dhiDoeseb, okwa li ye mumdhilile kokuna nokumuyaha. Nokuuna okwa li a mu hilile nepandando nokukatha mo likotango.

Mbevehi nityoka wo alukilwa oThe Namibian, Doeseb okwa li a monika a kwatwa mofenna kapolisi yaali.

Omapolisi omwenda okwa li a monika a hambata ikotango, omanga mongango omwali omuntu ogidhala ui "Shorty, ngeshi manga".

Kauna yelihitho, ondjenhoyali ya avaka ya xupa nomalenenta a kapa ta ya: "Omalenenta ngoka oye e mu yaha".

Dentse okwa ti komuna yokathanhe, opwa li pwa hokokele oshihanda shoka shali shilipo monumenhetwa ngoka a li a yaha mumwaynina, ashike omudhimbu gwe ogwa li owala gwa thigwa ngaaka. Otuta lwe okwa li ashike lwe dhwapo lwaanhu koumhalanga.

Okwa ti kapwali nande omapolisi gwe sha a mugwa sha. ty li opolisi yomundelandhi nayo oyali ya hokolelepo lwaanhu kaauna yeyaho lyaamumwayina ashike inayi pupa ko kaakwazenimo nenge kaakatalelele nawa kombinga yaashoka sha li sha ningwa po.

Shirley Gertze, omuhangiokulu pauloka yedhina Gorinangab Junior Secondary School, okwa ti Doeseb, ngoka a li monkendo 10, okwa li lela gumwe gomaulongwa anwaanwa, ye kali nande e na ondjokomwa yokwaanamukalo pauloka.

"Shoka hano mu uvite kondje naashoka tu shide lohany, iinum ya yeneka. Onashi vulika ovanhenhe kondje, ashike okwa li e nawa lela," osho omulongi gwe a popi ngaaka.

Shikwambi okwa ka konkwele *The Namibian* ndiiyali kutya Doeseb, mushiningwanima shoka, okwa li ta kengwa mapotse oyali yi na omalenpelo ge ta omukankamena opo yi mu kwatepo.

Okwa li Doeseb okwa kala e na epotha oyimbji nduyeka ya kwaneta mo okuyongayela omaliko gaantu, eyego kwahomatwa nomhele, ekongo kopolis, okukalamenena ya yakwa, okuteya omagambo, okudhengi aantu, oyugo kwa hematwa osho wo nokankathalhata yedhigago.

"Ohomagwanima shoka sha holeka pamuyua she a kanitha omenyo gwe inaa li tashi vulu okuyandwa ando itakasa okwa li a kengile kumwe mapolisi," osho a popi ngaaka.

Shikwambi okwa gwedha po kutya oshipotha shedhigago osha pambelilwa omapolisi ngoka a li a dhigaga Doeseb. "Oka tu inhile oeyaloyomaali ayehe lyaa pethimbo lyoshinigwanyina! ye ki dipote komumwa yOpolisi yaKaoteni-ogo ya pandje omukanda ldhumbungi kwaashoka sha nangwa pei opo ku kwathelwe molwe endelelela omanhitho lyomakenakona," osho a popi ngaaka.

Okwa li natango a kunkihile aakwashigwana kaaya kwatwem ko konakwakolo ngoka taga ningilwa "omanhithe onaga pambwa ngoka taga nangwa kilkandaneti ropankalathano [konalongula] ngoka taga nehanlaplatitha aakwashigwana".

"Uuna opolisi hayi nangi ekwato, itashi katya omunu ngoka okaxu endjeyokene ethikiloshi ya pambwa okumiga mumakalo gomhelo, sha hala okatya elongekalumwe oiya pambwa naashoka oshe pambwa okuningwa gambelewa ethimbo shike," osho a popi ngaaka.

Pekari ngoka, omugumdiyaka moshinigungu shaaihogi osho owo aanyatha nongonhu ye Landless People's Movement (LPM), Duminga Ndala, okwa li a popi nomukanda a pumba za kavikile Otubelewa yUuvelenhu womunhu ye ulhepe mo "mulenga yomahepo gamyanyakalunyi lenguwakapolisi oshowo kutya ye yilanga lyEgameno nomapandanda". "Otuwete kutya etuhe lyoilyo yEuagana lyEgameno oshowo opolisi mokati kaakwashigwana opo ya tale asilonga tovota nelandelelathano omaega lalli mwenhi inaihi pambwa, nenge nandi tye ashike ngaihingeyi oshi gwana, oshiremo mwale wethandu onaihi kakala sha gwina nayi oshilongo sheno okuyelekanitha naashoka nagu lalakanene okamena pakathumbo, ngele inapu ningwa shu kombinga yomashipago taga ningilwa aakwashigwana".

Ndalenkwa li natanga a kondema oku unha nenge omukalo gwa shu inaa ga shi okara kopolisi ngoka hagu etha ilita yapuligwanamaakwashigwana ouna ya ya yamukyila.

ETHIMBO LYENYANYU Jonny Doeseb (18) ta monyukwa pethimbo a li a tulaelwa nomumwaynikadhona Veronica, oomwadhi dha piti.

Ethimbo Lyae ipandula

Green Earth

CALL FOR PUBLIC PARTICIPATION/COMMENTS

ENVIRONMENTAL IMPACT ASSESSMENT FOR PHASE 1 (ONE) OF THE PROPOSED RELOCATION OF THE NORTHERN VETERINARY CORDON FENCE IN THE REGIONS OF KAVANGO WEST, MANGETTI WEST, KAVANGO REGION AND THE ONALUSHETE FARMS IN THE OSHIKOTO REGION, NAMIBIA

Green Earth Environmental Consultants have been appointed to attend to and complete an Environmental Impact Assessment and Environmental Management Plan (EMP) in order to obtain an Environmental Clearance Certificate as per the requirements of the Environmental Management Act (No. 7 of 2007) and the Environmental Impact Assessment Regulations (GN No. 30 of 6 February 2012) for Phase 1 (one) of the proposed relocation of the northern veterinary cordon fence in Namibia.

Name of proponent: Ministry of Agriculture, Water and Forestry (MAWF)

Project location and description: It is the intention of the MAWF to relocate the existing veterinary cordon fence in Namibia to a locality to the north of the current fence. The project will be undertaken in phases. During the First Phase portions of the Mangetti West Farms in Kavango West Region, Mangetti West, Kavango Region and the Onalushete Farms in Oshikoto Region will be included. By relocating the fence, disease free compartments in a more practical manner will be established in order to facilitate safe marketing of animals. These areas will then be incorporated in the FMD (Foot and Mouth Disease) free area fence. A public plan of the case is available at the offices of Green Earth Environmental Consultants at Bridgeview Offices, No. 4 Dr. Kwame Nkrumah Avenue, Klein Windhoek.

Interested and affected parties are hereby invited to register in terms of the assessment process to give their comments and concerns regarding the proposed project. Public meetings are scheduled at the following venues, dates and times:

Community Meeting	Meeting Venue	Village	Date	Time
Kavango West Regional Farmers Union	Mbukushu Traditional Authority Main Building	Mbukushu Traditional Authority Main Village	16 Dec 2019 (Monday)	11:00
Kavango East Cattle Union	Rundu	Kavango Regional Council Auditorium	16 Dec 2019 (Monday)	18:00
Ou Hambo (Mbunza and Mpwiza Village Committee) at the church, Mbata Settlement	Kapyanaka Village	Kapyanaka Community Hall	17 Dec 2019 (Tuesday)	9:00
Nakayale Constituency Office	Nakayale Village	Nakayale Constituency Office	17 Dec 2019 (Tuesday)	14:00
Mangetti Farmers Association and Ochikuku Community	Omuthiya	Omathiya Rural Development Centre (ORDC) Hall	18 Dec 2019 (Wednesday)	10:00
Ankarri Community	Ankarri Village	Ankarri Village Community Hall	19 Dec 2019 (Thursday)	09:00
Okavi Community	Okavi Village	Okavi Village Community Hall	19 Dec 2019 (Thursday)	14:00

The last date for comments and/or registration is 16 January 2020.

Contact details for registration and further information:

Green Earth Environmental Consultancy
Contact Persons: Charlie Du Toit/Carien van der Walt, Tel: 061-227545
E-mail: charlie@greenearthnamibia.com.na and carien@greenearthnamibia.com

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Tel: (061) 2080800 Fax: (061) 220584 Email: lmeroro@nepc.com.na

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NOTICE OF ENVIRONMENTAL ASSESSMENT AND PUBLIC PARTICIPATION PROCESS

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CALL FOR PUBLIC PARTICIPATION / COMMENTS

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ENVIRONMENTAL CONSULTANTS

CALL FOR PUBLIC PARTICIPATION/COMMENTS

ENVIRONMENTAL IMPACT ASSESSMENT FOR PHASE 1 (ONE) OF THE PROPOSED RELOCATION OF THE NORTHERN VETERINARY CORDON FENCE IN THE REGIONS OF KAVANGO WEST, MANGETTI WEST, KAVANGO REGION AND THE ONALUSHESHETE FARMS IN THE OSHIKOTO REGION, NAMIBIA

Green Earth Environmental Consultants have been appointed to attend to and complete an Environmental Impact Assessment and Environmental Management Plan (EMP) in order to obtain an Environmental Clearance Certificate as per the requirements of the Environmental Management Act (No. 7 of 2007) and the Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012) for Phase 1 (one) of the proposed relocation of the northern veterinary cordon fence in Namibia.

Name of proponent: Ministry of Agriculture, Water and Forestry (MAWF)

Project location and description: It is the intention of the MAWF to relocate the existing veterinary cordon fence in Namibia to a locality to the north of the current fence. The project will be undertaken in phases. During the First Phase portions of the Mangetti East Farms in Kavango West Region, Mangetti West, Kavango Region and the Onalusheshete Farms in Oshikoto Region will be included. By relocating the fence, disease free compartments in these areas will be established in order to facilitate safe marketing of animals. These areas will then be incorporated in the FMD (Foot and Mouth Disease) free area/zone. A locality plan of the site is available at the offices of Green Earth Environmental Consultants at Bridgeview Offices, No. 4 Dr. Kwame Nkrumah Avenue, Klein Windhoek.

Interested and affected parties are hereby invited to register in terms of the assessment process to give input, comments and opinions regarding the proposed project. Public meetings are scheduled at the following venues, dates and times:

Traditional Authority/ Community/ Farmers Union	Meeting Town/ Village	Venue	Date	Time
Kavango West Regional Farmers Union	Nkurenkuru (Kavango West Region)	Nkurenkuru Town Council Community Hall	16 Dec 2019 (Monday)	11:00
Kavango East Farmers Union	Rundu	Kavango Regional Council Auditorium	16 Dec 2019 (Monday)	18:00
[illegible] Cordon (Woma and Mperasa Village Communities to be invited: Mavera Katjinakatji)	Katjinakatji Village	Katjinakatji Community Hall	17 Dec 2019 (Tuesday)	9:00
Satotwa Communities	Satotwa Village	Satotwa Constituency Office	17 Dec 2019 (Tuesday)	14:00
Mangetti Farmers Association and Oshikoto Community	Omuthiya	Okashana Rural Development Centre Conference Hall	18 Dec 2019 (Wednesday)	10:00
[illegible] Community	[illegible] Village	[illegible] Village Community Tree	19 Dec 2019 (Thursday)	[illegible]
[illegible] Community	[illegible] Village	[illegible] Village Community Tree	19 Dec 2019 (Thursday)	14:00

The last date for comments and/or registration is 24 January 2020.

Contact details for registration and further information:

Green Earth Environmental Consultants
Contact Persons: Charlie Du Toit/Carien van der Walt, Tel: 0811279145
E-mail: [illegible] and [illegible]

Title of Position	Maintenance Technician
Business Unit/ Division	Wecke & Voigts Spar Division - Windhoek

Please submit: CV, Certified ID Copy & Grade 12 Certificate & other qualifications where applicable by 19 December 2019 to vacancies@weckevoigts.com.na

Position Function:

[illegible]

Main Areas of Responsibility / **Requirements**

• Staff Supervision • Stock Control & Procurement • General & System Administration • Maintenance & Repair Duties • General Duties	• Equipment Maintenance • Hygiene, Health & Safety • Cleaning & Housekeeping • General Engagement	• Planning & Control • [illegible] • [illegible] • Literacy • Time & Priority Management • Professionalism • Stress Management

Required Level of Education, Experience and Skills

Educational Background	• Grade 12
Previous Experience	• [illegible] Supervisory Experience • 4-5 Years' mechanical, electrical, plumbing, refrigeration and general maintenance experience
Specific Experience	• 4-5 Years' mechanical, electrical and general maintenance experience
Other Requirements	• Supervisory Skills • Excellent Customer Relations • Excellent Administrative Skills • Excellent People Skills and know how to motivate staff • [illegible]

Preference will be given to Namibian Citizens. Please note only shortlisted candidates will be contacted. Note that candidates not complying to the specific requirements need not to apply.

namibian mOshiwambo

Tuma etumwalaka lyoye efupi nenge "sms" konomola ndji 99902, omanga inoo shanga etumwalaka lyoye, tameka noshitya Oshi opo ihe to landulithako "omu" yoye. Osms kehe ota yi gu N$1.

Aakwazenimo ya yelitha kutya ehokololo lyopolisi olya nakalindi

AAKWANEZIMO yomugundjuka ngoka a li a dhipagwa komupolisi gomonanguyi mOsoondaha oyati opolisi oya fundju kombinga yaashoka sha li sha ningwa po pethimbo a dhipagwa.

Jonny Doëseb (18), okwa li a yahwa nokusa komupolisi mOvenduka konima taku hokololwa a li a ndjike oonyala mevi okutulwa miityakaya komiya dha shinana.

Ashike, aapambele yanakusa oyati opolisi oya holeke oshili kombinga yedhipagu lye. Aakwanezimo mEtiyali oyali yu ulikile oThe Namibian uuvidio wa kwatwa pethimbo aapolisi yaali mboka yali ya zala iikutu yowala ya li taya ungaunga naDoëseb nokonima gumwe okwa li e etha monkandja shoka sha li she eta eso lye.

Pethimbo ya li moonkundathana noThe Namibian molukanda lwaDamara moKatutura, aakwanezimo oyati nakusa kali nande a tindi okukwatwa po kopolisi manga inaa yahwa. Aapambele oyati opolisi oyali ya gandja uukwatya wu puka kombinga yomulekelwa yali taya kongo, taya ti monakanda gofukongo gwopolisi omwa li iinima ya puka ngaashi, epandaanda lyolukalwa, uuyelele waIwe wa umanaosho wo edhina lye. Oyati edhina lye momukanda gofukondo omwa li edhina lya shangwa 'John Duasab'.

Okwi ikwatelela kepeko lyopolisi ndyoka lyali lya pitithwa mOmaandaha, omupolisi ngoka a li milonga okwa li a yaha nokudhipaga Doëseb, ngoka ya tongoona kutya okwa li a tindi okwi iyutha komalombwelo gopolisi, pethimbo lyushikonga shomonanguyi.

Olopota yopolisi oyati oshiningwanima shoka osha li sha ningilwa mepandaanda lyedhina Max Eixab, ashike aakwanezimo oyatindi okatsa kumwe naashoka taya ti osha ningilwa mepandaanda lyedhina Ulrich Zwingt popepi ashike nepandaanda lyedhina Josef Gariseb.

Omupopiliko gwopolisi, Kauna Shikwambi okwa li a lombwele oThe Namibian kutya Doëseb okwa li omukolokoshi ngoka a li takongwa nokwa adhika naIe a za mo mondholongo sho a li i ifatile mo.

Konima sho aapolisi yomonanguyi ya li ya mono mpoka e li, oyali ya yi ko ye ke mu kwatepo. Ashike, omulekelwa okwa li a tindi okudhitikwa naashoka osha li she eta opo omupolisi gumwe a umbe ondjembo nelalakano lyokwi igamena.

Ashike aakwanezimo oyati Doëseb kali nande 'omukolokoshi a nika oshiponga, ta kongwa' a za mo mondholongo kobodoba. Oya gwedhapo kutya Doëseb ondholongo keyishi, ye kena nande ondjokonona ya sha yiimbulumu a ndhindhilikwa e na.

Mumwayinakadhona gwaDoëseb, Yeonice Doëses, okwa ti oyali megumbo taya li uulalelo sho mumwayinamati a li ashike a ka landa osawita yokudhenga pehala hapu landithilwa li li ashike popepi.

Konima yedhimbo oyali yu uvu omakuyungado pondje.

Sho, Doëses a yi pondje nokumona mumwayina a kwatwa kaapolisi yaali, okwa li e ya pula kutya otaye mu kwatelepo shike yo inaa yu ulika omukanda gwekwatopo lye.

"Okwa li nda kambadhala okahangukununa opo omupolisi kaa dhenge mumwaamene. Ashike okwa li u ningilendje omatilitho kutya ota dhenge ndje," osho Doëses a popi ngaaka.

Okwa gwedha po kutya okuza mpoka omupolisi gumwe okwa li e mu thanga moshipala, nagumwe gomengathithi lyookataleko nawa okwa li u umbu aapolisi mboka nekende.

"Ekende ndyoka inali ma[omupolisi] dhenga," osho a popi ngaaka.

Engathithi lyookataleko nawa olya li lya kambadhala okugamena Doëses osho wo mumwayina, naapolisi okuza mpoka oyali ya katha mo oombistoli dhawo, shoka sha li she eta engathithi li hedhe ko.

Omupolisi omutitata, ngoka a tseyika nedhina "Shorty" noku shiwike nawa momapandaanda gomomadhingoloko ngoka, okwa li a holoka elepo nokunda mbala Doëseh miityakaya e shi ningi e mu tala kumwe nomupolisi gumwe.

"Okwa li a ponokele omupolisi ngiini ngele okwa li a mangelwa kumwe naye?" osho mumwayinakadhona a pula ngaaka.

Doëses okwa tsikile ko kutya omupolisi ngoka a li a tulwa miiketanga naDoëseb, okwa li e mu undulile kekuma, nokumuyaha. Nokonima okwa li e mu tulile mepandaanda nokukutha mo iiketanga.

Muuvidio mbyoka wu ulukilwa oThe Namibian, Doëseb okwa li a monika a kwatwa mobema kaapolisi yaali.

Omupolisi omutitatu okwa li a monika a lumbata iiketanga, omanga mengungo omwa li omantu i igidha ta ti: "Shorty, tegelela manga."

Konima yethimbo, ondjembo oyali yu uvika ya topa, nomulumenu a kuga ta ti: "Omulumenu ngoka oye e mu yaha".

Doëses okwa ti konima yokuthimbo, opwa li pwa holokele oshihauto shoka sha li shi ilepo omunambelelwa ngoka a li a yaha mumwayina, ashike omudhimbu gwe ogwa li gwala gwa thigwa mpoka. Oluna lwe olwa li ashike lwi ilwapo lwanima koambulansa.

Okwa ti kapwali nande omupolisi gwa sha a ningwa sha, ta li opolisi yomoshilando nayo oyali ya holoka elepo lwanima konima yoyaho lyamumwayina ashike inayi pupa ko kaakwanezimo nenge kookataleko nawa kombinga yaashoka sha li sha ningwa po.

Shirley Gertze, omulongisikola posikola yedhina Goreangab Junior Secondary School, okwa ti Doëseb, ngoka a li mondondo 10, okwa li lela gumwe gumaalongwa aawanawa, ye kali nande e na ondjokonona yokwaanamikalo posikola.

"Shoka tutu mu uvile kondje naashoka tu shile Johnny ... ma ya yooloka. Otashi vulika omwithono kondje, ashike okwa he e li nawa lela," osho omulongi gwe a popi ngaaka.

Shikwambi okwa li a lombwele The Namibian mEtiyali kutya Doëseb, moshiningwanima shoka, okwa li ta kongwa nopolisi oyali yi na omatompelo ge na omakankamemo opo yi mu kwatepo.

Okwa ti Doëseb okwa kala e na iipotha oyindji mbyoka ya kwatela mo okuyonagula omaliko gaantu, eyugo kwahomatiwa nombele, ekongo kopolisi, okukala miinima ya yakwa, okuteya omagumbo, okudhenga aantu, eyugo kwa homatiwa osho wo onkambadhala yedhipago.

"Oshiningwanima shoka sha holoka panupya sho a kanitha omenyo gwe osha li tashi vulu okuyandwa ando nakusa okwa li a longele kumwe nopolisi," osho a popi ngaaka.

Shikwambi okwa gwedha po kutya oshipotha shedhipago osha patulululwa omupolisi ngoka a li a dhipaga Doëseb. "Ota na indile ooyihoyontali ayehe [ya li pethimbo lyoshiningwanima] ye ki ilopote kosasiona yOpolisi yaKatutura opo ya gandje omukanda [dhuumbangi kwaashoka sha ningwa po] opo ka kwathelwe mokwe endeleleka emanitho lyomakonaakono," osho a popi ngaaka.

Okwa li natango a kunkilile aakwashigwana kaaya kwatwen ko komabokololo ngoka taga ingaana "omatilitho inaa ga pumbiwa ngoka taga ningwa kiikundaneki yopankalathano [komalongula] ngoka taga mbandapalitha aakwashigwana".

"Uuna opolisi tayi ningi ekwato, inashi ti kutya omuntu ngoka okuna undjo onkene edhiniko olya pumbwa okuninga momukalo gombili; sha hala okutya elongelokumwe olya pumbwa naashoka osha pumbwa okuningwa pambelewa ethimbo alihe," osho a popi ngaaka.

Pokati mpoka, omugundjuka moshimpungu shaailongi osho owo aanyasha mongundu yo-Landless People's Movement (LPM), Dumingu Ndala, okwa li a popi momukanda a pititha ta kunkilile Ombelewa yUutheriba wonuntu yi idhope mo "miilonga yomahepo ga nyanyaleka tayi longwa kaapolisi osho wo kiilyo yEtanga lyEgameno momapandaanda". "Ota wete kutya etalo lyiilyo yEtagana lyEgameno osho wo opolisi mokati kaakwashigwana opo ya tale miilonga ooveta nelandulathano omanga tuli mombili inashi pumbiwa, nenge nandi tye ashike ngashingeyi osha gwana, oshizemo muule wethimbo otashi kakala sha guma nayi oshilongo shetu okuyelekanitha naashoka taya lalakanene okumona pakathimbo, ngele inapu ningwa sha kombinga yomashipago taga ningilwa aakwashigwana".

Ndala okwa li natango a kondema oku umba nenge omukalo gwa sha inaa gu uka okuza kopolisi ngoka hagu etitha lita yopashigwana naakwashigwana uuna ya ya yamukula.

Ethano: Lye gandjwa

ETHIMBO LYENYANYU ... Jonny Doëseb (18) a nyanyukwa pethimbo a li a thaanekwa nomumwayinakadhona Yeonice, oomwedhi dha piti. Doëseb okwa li a dhipagwa komupolisi mOsoondaha konguloshi konima taku hokolwa kutya okwa li a tindi nokukondjitha opolisi sho a li ta kwatwa po.

List of emails of Interested and Affected Parties:

'abnernatangwehikulo@gmail.com';
'abnernatangweshikulo@gmail.com'
adoltina98@yahoo.com
'adoltina98@yahoo.com';
'BP: Monty Rukoro' <monty@burmeister.com.na>
'BP: Yaseen Mohamed' <yaseen@burmeister.com.na>;
'charlie@greenearthnamibia.com';
christianwitbooi@yahoo.com
'christianwitbooi@yahoo.com'
'Clemens PC. Khaiseb' <Clemens.Khaiseb@mawf.gov.na>;
'coreztangeni@gmail.com';
'eksyoyo@gmail.com';
'fillemon2011@yahoo.com';
'gmuntenda@yahoo.com';
Hendrik Boshoff (hboshoff@burmeister.com.na);
info@nnfu.org.na
'jyutoni@nammic.com.na';
'Kingsley Kwenani (KKwenani@meatco.com.na)';
'Kuniberth Shamathe (KShamathe@meatco.com.na)';
labour@ananzi.co.za
'likuwajoo@gmail.com';
'mwanyangapoo@gmail.com';
'nangadonas@gmail.com';
Neshila Kaboy <neshila@gmail.com>
neshila@gmail.com
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'reservations@okashanardc.com'
'rnairenge@kavangorc.gov.na';
'sandrinathe1st@gmail.com'
'sheuyangatp@gmail.com';

'sheuyangetp@gmail.com'
'snmufenda@yahoo.com';
'thomasnakanyala@gmail.com';
'tmndiwakalunga54@gmail.com';
'tskativa@gmail.com';

Public Participation: Radio Notice

RADIO NOTICE

Meat Board of Namibia

Agricultural Boards
Windhoek NAMIBIA

website www.nammic.com.na
E-mail info@nammic.com.na

07-12-2019

MADIVISO!!!

Ruha ro Green Earth Environmental Consultants noru romberewa zo ndango zo nyama ndi asi Meat Board Kutundilira moRundu, kuna kupukurura nomukunda edi dina kakwamako asi ngatuya kara no yigongi ye hameseromo nkarapamwe me konakono ehenyeso lyo ndarate zomurudi ndi asi zaMururani ko muzogo gosirongo. Eyigongi kwakara mulyo nokutamba ko maruha ge pangero, vanandima, vakwetisiko, nava yakuguma no Nkarapamwe tupu nazinye zomoKavango gou pumezuva nogu goutokero. Yigongi ngayi karera monomukunda edi twaka tumbura apa, nedi da kundurukida da pu kuzigida.

Edina lyomukunda	Mazuva	Ruveze	Evega lyosigongi
Nkurenkuru	16 Sindimba 2019(Mandaha)	11H00	Nkurenkuru Town Council Community Hall
Rundu	16 Sindimba 2019 (Mondaha)	18H00	Kavango Regional Council Auditorium
Katjinakatji	17 Sindimba 2019 (Uuvali)	09H00	Katjinakatji Community hall
Satotwa	17 Sindimba 2019 (Uuvali)	14H30	Satotwa-Mankupi constituency office.

Mugavi madiviso: munamberewa Joseph S Likuwa.

0813123113

PLEASE RADIO WATO, MAY YOU RE-ANOUNCE THIS UNTIL THE DUE DATES !!!

THANK YOU!!!!

Comments from Interested and Affected Parties:

Comments and Inputs Received:
From: Neshila Kaboy Sent: Friday, December 06, 2019 12:31 AM To: charlie@greenearthnamibia.com; carien@greenearthnamibia.com Subject: locality plan for the relocation norther veterinary cordon fence Hi kindly forward me the relocation of the northen cordon fence locality plan regards Mr. K.F Neshila Pr. TRP (Bsc. Hons, Master in Urban & Regional Planning (UFS) Pr. Valuer (Masters of Land & Property Development Management (UFS) B- Architecture (CPUT) cell. +264 813290584 Architecture / Urban Planning / Property Valuation & Development / Market Research
From: Dr Witbooi <christianwitbooi@yahoo.com> Sent: Thursday, December 5, 2019 3:29 PM To: charlie@greenearthnamibia.com Subject: VCF Hi Charlie, Could you please send me more information on the VCF? Best wishes, Dr Witbooi Sent from Yahoo Mail on Android
From: Adolf Muremi <adoltina98@yahoo.com> Sent: Thursday, December 5, 2019 6:20 PM To: charlie@greenearthnamibia.com Subject: Consultation on veterinary cordon fence Good afternoon, My Name is Adolf Muremi, the Chairperson of Kavango east farmers union, would like to know why relocation of the VCF in the first phase is only covering farms in Kavango West, Mangetti and Oshikoto. What about the farms in Kavango east? Hope you will clarify this for us because on the paper circulating around there is only one date for Kavango east consultation with the farmers union in Rundu. While our sister region you are reaching some villages. Looking forward to hear from you I can also be reached on 0812516671

Regards

Mr.muremi

Sent from Yahoo Mail on Android

From: Popyeni Safaris & Tours <labour@ananzi.co.za>
Sent: Wednesday, December 11, 2019 5:29 PM
To: charlie@greenearthnamibia.com
Subject: Registration for information on the Proposed Relocation of Veterinary Cordon

Charlie,

Our discussion this afternoon has reference.
I'm herewith registering and would like to be forwarded the necessary information pertaining to the proposed relocation of the veterinary cordon.

Thanking you in advance

Kind regards

From: kandiwapa shivute
Sent: Thursday, December 12, 2019 2:51 PM
To: charlie@greenearthnamibia.com
Cc: carien@greenearthnamibia.com
Subject: Re:PEA Phase 1 as advertised per Namibian 12.12.2019

Dear Consultants

I am an affected national as per advert. Would like more info about the EPA as i would love to attend the meeting in Omuthiya as indicated on the 18th December 2019.

Can you provide maps specifically for Onalusheshwte Farm area. I am in the village called Amaye.

Your assistance in this matter is greatly appreciated.

Regards

Kandiwapa H. Shivute

0812145286

From: Theo Nicodemus <Theo.Nicodemus@nida.com.na>
Sent: Thursday, December 12, 2019 1:33 PM
To: charlie@greenearthnamibia.com
Subject: Relocation of the Northern veterenary cordon fence,

Good day Charlie,

I see you advertised in today's papers for public participation on the relocation of the Northern veterinary cordon fence, may you please forward the map.

Thanks

Kind Regards,
Theophilus Nicodemus
IDO Officer
Private Bag 13252 | 11 Goethe Street | Windhoek, Namibia
Tel: 061 206 2233 | Fax: 061233943 | Mobile: 081 1444167

Dear Sikunawa

Thanks for the feedback. It is very valuable comments which are highly appreciated.

You comments will be included in the EIA. We will have a follow-up meeting with the Proponent (MAWF) where your comments will also be discussed. From similar feedback received from other I & APs who participated in the public meetings we will propose amendments to the compartment as proposed for Phase 1 and we hope to convince them to include some of the areas as per your proposal.

We shall provide you with the feedback from the Proponent once received.

Regards

Charlie

Green Earth
ENVIRONMENTAL CONSULTANTS
1st floor Bridgeview Offices & Apartments, No. 4 Dr Kwame Nkrumah Avenue, Klein Windhoek, Namibia
PO Box 6871, Ausspannplatz, Windhoek
Phone: +264 61 248010
Fax: +264 61 248608, Email: charlie@greenearthnamibia.com
Charlie du Toit
Mobile: +264 81 127 3145

From: Sikunawa Negumbo <sikunawa.negumbo@gmail.com>
Sent: Saturday, January 11, 2020 5:59 AM
To: charlie@greenearthnamibia.com; Paul Strydom <pjstrydom@nammic.com.na>
Subject: comments on the background information docment for phase one f the proposed

relocation of NVCF

Dear Colleagues,

I read with interest the proposed relocation of the NVCF. It is a wonderful document with a lot of economic impacts that the farmers in the NCA may benefit from.
During my comments, I am not trying to oppose the proposals or to criticise their technical efforts but trying to add issues of paramount importance that according to me the consultants were supposed to add to this professional and important narrative.
(1) I wish therefore kindly to the proposed line of NVCF line. A small portion of the already fenced off farms in Mangetti west in Oshikoto region is not included the proposal. Is there any reason(s) for that? I propose that all those farms be included to avoid future problems between the affected farmers.
(2) page six(6) of the document paragraph four (4). The prices of meat and beef are affected by grades C or A and B. This argument is very debatable. The way Namibia beef or livestock prices is influenced by the way the philosophy of our market designers and by the demanded grades by the EU markets. But for sure there are many countries that are demanding C grade and can offer competitive meat prices. Again we need to calculate the price that a farmer is received from his culled breeding stock. Let assume the cows from which a producer is receiving a C based grade and those cows have already produced heifers and torries that have given young ones for which he received prices based on A or B grade. If that producer gets a price based on C grade, let us calculate the loss or benefit. This a hypothesis I wish all of us to calculate including the cost of keeping the cows for a number of the years it was kept on the farm without producing a calf before the owner decided to cull it.

(3) Page 6 paragraph five (5) or the last paragraph. The information or argument given here requires interrogation.
We must first find out whether the firstly the small-framed cattle raised in the NCA are actually be kept by design or by choice. The NCA is one of the highly populated areas and large famed cattle might not do well there because they are high consumers or grazers as compared to the Nguni or Sanga kept there. About 90% of cattle consumed by the drought experienced during 2018/2019 were those of the large framed and the amount number that survives are those of small frames. In the NCA it is difficult to control inbreeding because (a) the policy does not allow fencing for a good reason that is to prevent well to do individuals from fencing all the land rentering poor of the poor without land to graze. The good intentions of the government are now negatively affecting cattle breeding.
(b) Inbreeding when it is done in a short period of time actually is not a bad practice. Especially when it is done for the purposes of concentrating and perpetuating certain good traits or qualities for which that breed is known for. But in the NCA these practices have been being practices as long as I have was born.
I also wish to ask you, colleagues, whether it has ever come to your mind or attention that overgrazing in the NCA can be reduced if fodder production was introduced in the areas where cattle do not reach in the large unutilised areas in the NCA? If the government and private sector introduce this business this will be a solution.
(4) Public participation.
While I agree with the stakeholders participated n the discussion as indicated on page 14, I wish to advise that in the future the Northrn Abattoir Association must be included. One

person to represent all abattoir in the NCA such as Oshakati Eloolo Abattoir, Eenhana and Outapo, Rundu and Katima Mulilo abattoirs.

Kind egards
Sikunawa.

Sikunawa is a holder of MSc Agriculture Reading University UK, Four years university graduate in Animal Sciences Egerton University Kenya, Postgraduate Diploma University Imperial College of London
Employed as Manager: Marketing Meat Board of Namibia 12 years, Deputy Director Ministry of Agriculture Water and Forestry, Member of the Land advisory Commission, Contracted by the SADC to investigate the funding of Agriculture and agricultural development In Namibia as result of that funding, Member, and chairperson of KOEHO Namibia Development initiative, Advisory Committee on Cooperative, Board member of the Meat Board of Namibia, Chairperson of Board of Director Agrotour Development Initiative (PTY) as subsidiary of August26 Holding Company, an Executive Director Of KIAT

From: kandiwapa shivute
Sent: Thursday, December 12, 2019 2:51 PM
To: charlie@greenearthnamibia.com
Cc: carien@greenearthnamibia.com
Subject: Re:PEA Phase 1 as advertised per Namibian 12.12.2019

Dear Consultants

I am an affected national as per advert. Would like more info about the EPA as i would love to attend the meeting in Omuthiya as indicated on the 18th December 2019.

Can you provide maps specifically for Onalusheshwte Farm area. I am in the village called Amaye.

Your assistance in this matter is greatly appreciated.

Regards

Kandiwapa H. Shivute
0812145286

From: Dr Witbooi
Sent: Thursday, December 12, 2019 7:15 PM
To: carien@greenearthnamibia.com
Subject: Re: Background Information Document for the Relocation of the Veterinary Cordon Fence Phase 1 (One)

Hi Carien,

Many thanks for your email.

Could you please let me know how much money did the Namibian Government got from the

EU for the project?

Best wishes,

Dr Witbooi

From: Tweuya- Shapwa Nelumbu
Sent: Friday, December 13, 2019 8:48 AM
To: charlie@greenearthnamibia.com; carien@greenearthnamibia.com
Subject: Request for locality plan: Phase 1 of the proposed relocation of the northern veterinary cordon fence

Good morning

I trust this finds you well, I would like to request for the locality plan of the proposed relocation of the northern veterinary cordon fence.

Regards

Tweuya-Shapwa Nelumbu
+264 81 57 55 611
ymmagic@gmail.com

Morning Ms van der Walt

Kindly register the Roads Authority as an I&AP.

We would appreciate if a formal meeting could be arranged between the Ministry of Agriculture, Wildlife and Forestry and the Roads Authority before the end of February 2020 for purposes of identifying the potential impact that the proposed project may have on the interests of the Roads Authority. Such meeting should be arranged through our Ms Sophia Kasera who has been copied in above.

Regards and thanks

EAM de Paauw

From: Johannes Alugodhi
Sent: Friday, December 13, 2019 3:35 PM
To: carien@greenearthnamibia.com
Subject: Registration (environmental impact assessment

Kindly find our details for 16/12/ 2019

alugodhijs@gmail.com
Gerhardm@vmail. com

Thanks
John

From: Winni Metzger <metzger@mweb.com.na>

Sent: Sunday, January 5, 2020 6:28 AM
To: charlie@greenearthnamibia.com
Subject: Veterinary disease control fences NCA

Dear Charlie,

I am Winfried Metzger,57 years old, Namibian , Drilling contractor and farmer(cattle,crop and game) residing in Kanyikama village-Kavango west.
Having done military service (conscription) in the NCA- patrolling by armoured vehicle the central and eastern areas and for the past 20 years drilling waterwells in the whole NCA excluding Kunene.
With confidence, I can state that no other person has a better , geographical (with cattle farming background and common sense)overview of the NCA, than myself.

During the last FMD outbreak , I invested N$ 1,2 mio into the fence along the border with Angola and along the 18th degree south to Bravo gate-to prevent the outbreak from moving to Omaheke(520km VDCF deviding cattlefarms east of Bravo gate-only 110km vulnerable VDCF to the west of Bravo).
Thereafter, I presented a proposal to our honourable minister of Agriculture, John Mutorwa and his veterinarians. Well accepted and giving some momentum to the whole issue.

As politics is the problematic factor , and cattle rustlers, uncontrolled grazers and self-enriching individuals, who need uncontrolled east-west movement through western Kavango to do their business under the political umbrella of the current situation. –The current 2 proposals you are investigating are in line with this, and have no significant impact on the overall situation of Namibia-but will have the contrary effect because:
Along Charly line, from Casablanca to Elavi and on to Alex Muranda, this is the mostly used road with hundreds of accesses leading to farms. A bigger problem will be created, than what we currently have along the 520 km VDCF east of Bravo,with farmers bordering the VCF moving over it.
The most important aspect, must be the line of least disturbance in human and cattle movement, with minimum number of gates, necessary. Should the aspect of uncontrolled east west cattle movement, through Kavango west be politically so important, that the whole effort is derailed again, I would suggest to take the VCF from King Kauluma (north of Casablanca) straight north along 17 degree up to Onyati area and along the current farmfences between Ohangwena and Oshikoto, to the point , where they meet Kavango west. From here to proceed due east to Okatope community forest an down south to the red line.

I attach my old proposal, as presented to our government and look forward to a speedy solution of this single most important issue in Namibias agricultural development. Please do not hesitate, to contact me should you need any more information. I am prepared to spend time , effort and money, to resolve this issue.

Best regards
Winfried Metzger

From: Paul Strydom <pjstrydom@nammic.com.na>

Sent: Friday, January 17, 2020 12:27 PM
To: 'Dr Norval' <limmie@iway.na>; 'Limmie Norval (archie.norval1@gmail.com)' <archie.norval1@gmail.com>; 'Dr Shoopala' <shoopala@yahoo.com>; Johannes Shoopala <Johannes.Shoopala@mawf.gov.na>; charlie@greenearthnamibia.com; Dr. Anja Boshoff-De Witt <anja@nammic.com.na>
Cc: Magda van Schoor <magda@nammic.com.na>; Willie Schutz <willie@nammic.com.na>; carien@greenearthnamibia.com
Subject: EIA VETERINARY CORDON FENCE: EXPANSION FMD FREE ZONE

Good morning Charlie

The attached document has reference.

In terms of the request to discuss and submit comments/inputs to your office by 24 January 2020, representatives of the Meat Board of Namibia and in particular the Animal Health Committee wish to engaged with yourselves to receive more detail and or clarity of the request.

A consultative meeting has been arranged at the Meat Board of Namibia offices Tuesday, 21 January 2020: 10H00.

Please indicate your availability for such a consultation.

Kind regards

Paul Strydom

From: charlie@greenearthnamibia.com [mailto:charlie@greenearthnamibia.com]
Sent: Friday, January 17, 2020 4:39 PM
To: Paul Strydom <pjstrydom@nammic.com.na>; 'Dr Norval' <limmie@iway.na>; 'Limmie Norval' <archie.norval1@gmail.com>; 'Dr Shoopala' <shoopala@yahoo.com>; 'Johannes Shoopala' <Johannes.Shoopala@mawf.gov.na>; Dr. Anja Boshoff-De Witt <anja@nammic.com.na>; 'Kuniberth Shamathe' <KShamathe@meatco.com.na>; 'Kingsley Kwenani' <KKwenani@meatco.com.na>
Cc: Magda van Schoor <magda@nammic.com.na>; Willie Schutz <willie@nammic.com.na>; carien@greenearthnamibia.com
Subject: RE: EIA VETERINARY CORDON FENCE: EXPANSION FMD FREE ZONE

Dear Paul

Your email below refers.

We herewith confirm our availability and are looking forward to the meeting proposed.

Kind regards

Charlie

Green Earth
ENVIRONMENTAL CONSULTANTS

1st floor Bridgeview Offices & Apartments, No. 4 Dr Kwame Nkrumah Avenue, Klein Windhoek, Namibia
PO Box 6871, Ausspannplatz, Windhoek
Phone: +264 61 248010
Fax: +264 61 248608, Email: charlie@greenearthnamibia.com
Charlie du Toit
Mobile: +264 81 127 3145

Good afternoon Mr du Toit

Thank you very much for the opportunity to comment to the received:

"Background information document for Phase 1 of the proposed relocation of the northern Veterinary Cordon Fence (VCF) in the regions of Kavango West, Mangetti West and the Onalusheshete farms in the Oshikoto region, Namibia" Additional suggestions/proposals made during the discussions are not covered by our response.

Two discussion areas surfaced during our discussions, e.g. environmental clearance and feasibility of the proposed relocation of the VCF.

In terms of the feasibility of options of the proposed relocation of the VCF or whatever infrastructural intervention, e.g. the establishment of a FMD (and other disease?) free zone within the surveillance zone, I refer you to previous documents evaluating the same topic:

International Fund for Agricultural Development, (1993) Republic of Namibia Veterinary Cordon Fence Study, Confidential report No. 0403-NM
Norval, A.G., Walton, T.E. 2007. Strategic Plan for the Republic of Namibia to Attain Foot and Mouth Disease and Contagious Bovine Pleuropneumonia Freedom. A Report prepared for the Millennium Challenge Account and the Ministry of Agriculture, Water and Forestry. Windhoek
Dr Tony Forman. Document available at DVS

Various other options which I attached for perusal are available for achieving a FMD free environment. Since goal of the assignment is to "shift the VCF" or establishment of a FMD Free zone within the surveillance it is crucial:

The Directorate Veterinary Services (DVS) form an integral and central part of the formulation of proposals – the DVS is the only organ responsible for the certification of the animal disease status and meat hygiene status of Namibia AND NO ONE ELSE);
Any infrastructural amendment to the Free Zone should be accompanied by a diligent and detailed feasibility study incorporating the views of all stakeholders;
That any infrastructural amendment to the free zone be done in accordance with the OIE and importing country requirements – In no way should Namibia's export markets be tampered with;
That the intended future "new" free zone be affordable to GRN in terms of capital investment and maintenance by DVS – keeping in mind financial resources are limited;

That the “new” zone accommodate most of the commercial and semi-commercial farmers of the Oshikoto and Kavango Mangetti;
Should communal areas be included that sufficient provision be made rangeland management, livestock control, accessibility to waterpoints, availability of marketing infrastructure, and supporting services – roads, etc. Only a restricted number of livestock could be accommodated in such a opened zone;
That the integrity of the new Free Zone be guaranteed/maintained by GRN/DVS – besides for FMD other diseases such as CBPP are also applicable.
That the “advantaged” producers be under no illusion that benefits derived from the creation of a new free zone will result immediately.

It seems that the establishment of a FMD free zone (NA2) within Namibia’s Surveillance area seems to be the most viable option for the present, although we would appreciate that solutions for producers throughout the whole area north of the VCF in terms livestock marketing be developed, taking into consideration production systems, resource availability, socio-economics and cost benefit .

Kind regards

Paul Strydom

Comments received from Interested and Affected Parties:

DISEASE CONTROL AND ERRADICATION IN NCA-REACHING "FREE" STATUS and entering the export market ASAP

Suggestions & Thoughts

Political, Traditional Authority and communal-commercial cooperation is vital to succeed

Suggestions, for immediate actions, which are inexpensive and have big impact on reaching the goal (see attached map):

Oshikoto

Upgrading of existing road corridors fences along:
King Kauluma road (17 degree east),
Antoni road (17.25 Degree east),
TA Office road from Quarantine north, past Oshanashatemba,
Kanepolo to Oshanashomoonde and north
Eastern fence of Kavango regional border (18 Degree)
RA to upgrade and repair fence along Casablanca-Elavi road
Create first compartment to enter export market
Transnamib fences, along railwayline to be maintained

Ohangwena

Road Authority to upgrade fence along road reserve from Namasila to Oshikango road
Complete Min of L&R efforts of fencing SSCFU's (Gates) and completion of waterpoints
Short fences and boreholes for block north and east of quarantine camp
Disease control fences as requested by local communities-TA's.eg. north–south fence,west of Okongo. and sections along the Angolan border (as actively producing,compartments-SSCFU's,south of the border start to market for export,perception and crossborder movement pattern will change) The fence along the border is in my opinion not the most important issue currently and will fall in place by itself in due course

Kavango East&West

Fence upgrading of ALL SSCFU's
Priority on Lines due east of "Ou Kordon" and Farms bordering Tsumkwe compartment
An additional north south line doublefenced within the SSCFU's, to create high income, game farming, hunting& tourism farming compartment, with Kaudom park-see Kruger Park SA
Roads Authority to complete fencing of new tarred roads Kapereke to Mpungu
From Mbambi(Katwitwi turnoff) to Namasila and on to Eenhana
Repair the second fence inside Namibia from Katwitwi to 18th degree (Oshikome)
As there are no crossing points besides Katwitwi border post-this will be easy and not be destroyed again
TA's to advise on internal control fences, far, south of Kavango river

All areas:

1. Enforce movement control, with immediate prosecution.
   Strict double permit requirements by TA&DVS
2. Continuous inspections of fences and prosecution of people destroying fences.
   Easy during surveillance trips
3. No cattle in all corridors as with immediate effect until "all clear" by DVS.
   Thereafter a grazing period after rainy season will assist to create firebreaks
4. Massive information campaign to inform NCA and Commercial areas of the goal of disease free zone, with export status
5. Implement Namlits immediately (supply scanners and course to TA staff aswell)-traceability-all cattle have to be controlled in a successful vaccination campaign-also assists to curb theft and planning of annual grazing migration
6. Meatco to resume slaughtering asap-canned Beaf.-to reduce cattle numbers.
7. Compartments as existing through road corridors, with number of entrances reduced to a minimum, will assist DVS to achieve and maintain disease free status.
8. Install all drilled boreholes immediately.
9. Discussions to create disease free compartments in southern Angola
10. Give farmers and herders farming in both Namibia and Angola, dual citizenship

Massive political and economical gain for the whole country.

All SSCFU,s should be subsidised for UP TO STANDARD fences and water installations as was done by all previous governments and their favoured farmers.
Inspections and refunding, those who did development out of their own pockets-as these are the real farmers-entrepreneurs and not the "lucky" ones who now succeed to get this free of charge(ending up with double fences and two boreholes on the same SSCFU as happens now).

To reduce the current strain on the NCA, bigger commercial farmers-(cowherd owners and not oxen gatherers),currently in the NCA should be selected from economical perspective, without political involvement, to be given leasehold farms in Mangetti east and west.
A course in farming and marketing must be successfully completed and annual marketing agreements entered into with abattoirs.

Build additional auction facilities and tender auction services out (GRN to subsidise commission).

Some misconceptions and exaggerated half-truths:
Communal farmers do not want to trade cattle.
Oxen and unproductive cows are kept to show wealth
Most of Omaheke, communal farmers, have turned into strong producers and suppliers to abattoirs and feedlots during the past 30years

Once an acceptable market is established-trade-production, will flourish.

HONEST COOPERATION, BY ALL PARTIES INVOLVED, WITH FACTS ON HAND AND GOOD INFORMATION/COMMUNICATION WILL SUCCEED

I, Winfried Metzger, am a, born Namibian, drilling contractor, cattle and crop farmer, working in the NCA for the past fifteen years and do know the area and majority of its people very well. Farming north and south of the “red”line residing near Nkurenkuru in Kavango west.

It is my serious hope, that the goal of “Disease free and exporting” for the NCA will be reached asap.

I will assist, wherever I can, in order to reach this goal. It is not my intention to offend or criticise any person, having the same goal in heart and mind.

FMD- INTER OFFICE MEMORANDUM- 14 August 2015 comments by Winfried Metzger:

2. Current Situation on the ground and Discussions

2.1 The fence erected ,repaired and upgraded, constitutes the western boundary of the "Small Scale Commercial Farms" in Kavango West, (not a new fence) built by local leasehold farmers and partly constructed by the Ministry of Lands and Resettlement, and the Roads Authority (around 2009), from Angola, south to Bravo gate on the red line.

This fence, together with the two road blocks put up by DVS, indeed prevented the spread of FMD to Kavango west for 4 weeks!(a roadblock , without fences does not control cattle movement in any way).FMD only reached Kavango west after a large number of cattle where moved(against the honourable Ministers instructions) into Farm 1821, occupied by illegal grazers, from the neighbouring regions. Mainly due to this fence, FMD was controlled in a zone 40km parallel to this line and prevented from spreading to the east, exposing the free zone, 520km "red line", where cattle are on both sides of the red line and spread into the free zone would have been imminent.

The only other point, where FMD reached Kavango West, was Farm 1845, the farm bordering Angola to the north. Here thousands of cattle move from Shikome in Ohangwena, directly around the corner into Angola, daily. The close contact between cattle along the farms border fence, may have caused infection. This is the main reason, why here double fencing was started on leasehold farm ground.

2.2 The meeting was informed, by myself, that at independence, a veterinary cordon fence was standing along this line, as well as along the Angolan border (double fence,10metres apart, 1x game proof and 1x cattle proof). The remaining posts were pointed out. This national asset was vandalized by illegal grazers and thieves, without any action to curb it, by the police or DVS. Apparently, it was tolerated in the name of freedom-and contributed to the grazing conflict in the area. (Where the High Court ordered eviction of illegal grazers and their livestock from Kavango west in November 2007)

The fences constructed and upgraded, are according to DVS standard, but not complete, as the farmers and my own resources and donations, were insufficient to add the remaining, intermediate wires and long poles(for which I have requested DVS numerous times, without receiving answers, as this material lies in abundance at Mururani gate unused).

2.3-2.7 The sentence in 2.3 Farmers requesting material for their private farms is misleading-as material for this and other approved veterinary cordon fences in the area, to be constructed by farmers and offering to maintain them, was requested. A subsidy system for permanent improvements on leasehold farms, was proposed by myself.

In fact, the whole of 2.3-2.7 creates, the impression of farmers and myself being demanding, ignorant, poorly informed and transgressing. 2.8 is further proof, as farmers cut poles to build their fences, cut lines, clear fields and use trees to farm. No trees were cut for harvesting or trade. Since DVS and the police were unable to control illegal movement of animals, the farmers and myself made tremendous efforts to assist-only to be criticised now, by the very persons, whose responsibility it is to control the whole disaster.

The farmers and myself are of the understanding, that with proper fences along this line and other similar lines(where fences , constitute farm boundaries or road protection and farmers or RA maintain them) compartments can be created and rezoning can take place- which currently cannot be done, due to the shortage of boundaries for zones/ compartments. The current situation leads to more disasters, as one infection 1000 km away, will lead to the "closure" of the whole, huge compartment. Judging by FMD outbreaks, occurring after vaccination (see recent outbreaks in Caprivi and poor second round vaccination in Kavango west, where Illegal grazers hide their cattle). The abovementioned fence creates two compartments out of previously one. The zone, as a single, huge compartment as it stands currently, is irresponsible in my view (you do not carry all your eggs in one basket) and has caused and will cause tremendous poverty and losses to the, already poor community.

"The erection of the Fences has created grazing problems/challenges for communal farmers who do not have fenced off private farms". A political statement, Totally untrue! I repeat: these fences are farm fences of government approved small scale farms-partly built by GRN, protecting the communal farmers cattle. Illegal grazers, cutting these private farm fences, not being brought to justice by anyone, are the cause of the whole problem and expenditure. FMD combat and High Court rulings.

3.The way forward;

A meeting in 6(six) months time is clearly not the way to go! A meeting within this month is appropriate.

5 (five) consultative meetings have been held at Kahenge, with the three TA's, affected communities and farmers.

Requests and recommendations to the honourable Governoress of Kavango west and the honourable deputy Minister of MAWF went unanswered.

As no culprits have been charged and punished to date, Namibia will continue to loose all along. I have been told, by the regional police commander of Oshikoto region, that cattle along Kaperiki –Bravo will be controlled and removed from the corridor- cattle being chased

over the RA fence into Kavango region and cattle in the corridor have been reported by me to the station commander at Bravo. Her reply was: ”we can’t do anything”. The cattle numbers, counted by DVS, drinking at Kapereki, inside Kavango west, have more than doubled because of this-clearly against all instructions, newest press releases etc.

The rule of law and order must be enforced-High court judgements are not necessary, if the police and DVS are allowed to do their work.

Political understanding and will (outside veterinarians, consultants can be called in again, as our Namibian, private vets are not liked by the DVS, to properly inform) , is necessary to reduce a lot of poverty and stop exploitation, here in our poorest region in Namibia.

Once the Namlits system is functioning and compartments/zones are created, farming will contribute its right full share to the Namibian economy.

Just think of double the Namibian beaf production (add 2bn annually) and all the current, commercial losses turned into profits.

Lets kick the ball.
Yours sincerely

Winfried Metzger

Public Meetings that was held:

Traditional Authority/ Community/Farmers Union:	Meeting Town/Village:	Venue:	Date:	Time:
Kavango West Traditional Authority	Nkurenkuru (Kavango West Region)	Office of the TA	16 December 2019 (Monday)	9h00
Kavango West Regional Farmers Union	Nkurenkuru (Kavango West Region)	Nkurenkuru Town Council Community Hall	16 December 2019 (Monday)	11:00
Kavango East Farmers Union	Rundu	Kavango Regional Council Auditorium	16 December 2019 (Monday)	18h00
Ou Cordon (Woma and Mpenzo Village Communities to be invited), Mpora, Katjinakatji	Katjinakatji Village	Katjinakatji Headmen Tree or Community Hall	17 December 2019 (Tuesday)	9:00
Satotwa Communities	Satotwa village	Satotwa School or Tree or Constituency Hall	17 December 2019 (Tuesday)	14h30
Ondongo Traditional Authority	Ondangwa	Office of the TA	18 December 2019 (Wednesday)	14h00
Mangetti Farmers Association and Oshikoto Community	Omuthiya	Okashana Rural Development Centre Conference Hall	18 December 2019 (Wednesday)	18h00
Antoni Community	Antoni Village	Antoni Village Community Tree	19 December 2019 (Thursday)	9h00
Ollavi Community	Ollavi Village	Ollavi Village Community Tree	19 December 2019 (Thursday)	14h30

Attendance Register: Kavango West (Nkurenkuru) – 16 December 2019

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Meeting closed at 15:00

Date: 16/12/2019 9:00 & 11:00

Attendance Register: KAVANGO WEST (NKURENKURU) TA + KAVANGO WEST REGIONAL FARMERS UNION

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
1	Lius K. Kapikara	Councillor	0812402070	[signature]
2	Hompa Kubamo Eugen Siwombe	Chief	0816085133	[signature]
3	MATHEW NAIRENGE	FARMER	mnairenge2@gmail.com 0811293464	[signature]
4	Shikukumwa Erna Ndemupa	Farmer	0812902174	[signature]
5	Sranda Theresiá Rukunde	farmer	0812353471	[signature]
6	Petrina Haingura	Farmer	0814076389	[signature]

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
7	Joseph Likuwa	The area included in option is too small for significant sclastic livestock	0813123113 likuwajoseph@gmail.com	
8	Tjandja Aling	part of the location	081632 8450	A V Tjandja
9	Kwenye Sara	part of the location	0812092219	
10	Hamutenya Lukas H	lukashamutenya55 com mail	0812178930	
11	Kangumbe Paulus Ndunga	Farmer	0816943881	
12	SINDANO J.C.	FARMER	0812900602	Sindano
13	Ngoma T.	include my area in phase one of relocation Farmer	0812570118 DOAS34 @dcms gov.na	
14	BERTHA NANGOLO	farmer	0812936168	
15	ALBERTINA NANGOLO	farmer	0816873612	
16	Apollos Oiva	Farmer	0817525005	
17	Kanakonyan Ndonono	〃	[illegible]	

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
18	J.S. Alugodhi	Relocation	alugodhifs@gmail.com	
19	Gerhard Mouton	Relocation	Gerhard.Mouton@nidac.com.na	
20	Kandjimi Willem	Relocate,	Gava	Kandjimi
21	Tomas Murango	Relocation	Mukekete	Thomas
22	Sapelama Andilas	Relocation	Naimanya	Thomas
23	Sindere E.M	farmer	sindere72emil@gmail.com	
24	Shanyengana Kornelius	farmer	0812398736	
25	Namutenda. Sem.	munandima	0815747462	
26	Kaunna Andreas	farmer	0814204204	K.
27	SIKWAMBI Filippus M	farmer	0816196365	
28	HAUSIKU Johannes HAUSIKU	KWRFU-secretary	0814438612	

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
29	IMMANUEL M. NAKARE	Farmer	0811276339	[signature]
30	Ngoma Omar Frans	Farmer	0814289427	[signature]
31	Mukuve Abraham	Farmer	0814335039	[signature]
32	Kamasuni Anna	Farmer	0814715076	[signature]
33	Sefima Muwambo	Farmer	—	—
34	Maurus Kanegimi	Famer		
35	Kavera Mehuwc A	FAMER		[signature]
36	Musongo Markus Max	Farmer	0812332005	[signature]
37	Kudumo Johannes	Farmer	0812346035	[signature]
38	Adolf Handiba	Farmer	0814278858	[signature]

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
39	Josef S. Kandjimi	Farmer	0812711041 josefkandjimi1948@gmail.com	[signature]
40	Kamati Justina	Farmer	0813796179	[signature]
41	Annastasia Kambinda	Farmer	0817450185 annastasia.kambinda@.com	[signature]
42	Elia Kamati	farmer	0812876260 Kamatibumgu@gmail.com	[signature]
43	Paulus Ramelka	Farmer	0812875989	[signature]
44	Sikongo Joseph	farmer	0812202560	[signature]
45	Namatasa Matheus	Farmer	0813177040	[signature]
46	KOTOKENI WILLEM KOTOKENI	Farmer	0817130687 kwillemk@yahoo.com	[signature]
47	Zepee HAVARUA	MAWF - staff CASO - DAPEES	zhavarua@yahoo.com	[signature]

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
48	OIVA H. MAHINA	Livestock farming	08129155 13 sf69.mahina@gmail.com	
49	HERBERT K. KARAPO	Livestock farming	0811544752 herbertkarapo@gmail.com	
50	SABINE MUFENDA	KWRFU	samufenda@yahoo.com 0812461479	
51	Kandjimi Pius	Livestock farming	0814232410	

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Date: 16 December 2019 (monday) 18h00

Attendance Register: Kavango East Farmers Union (Rundu)

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
1. Moses Mpareke	FARMING	murambamc@gmail.com	
2. Bonifasius M Kavedjima	FARMING	mbkavedjima@gmail.com	
3. ADOLF MUREMI	FARMING	adolfmu98@yahoo.com	
4 Simpire Nathanael	Farming	0831736298 snkavadjimi@gmail.com	
5. SAMUEL SIKETA	FARMING	0812218545 Seketas@lyahoo.	

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
6.	Haupindi Lorenz	FARMER	0812902668	
7.	ITEPU S. FRANS	FARMING	0812948041	
8	VINCENT K MBEREMA	Farming	0811289526	
9.	OLAVI MAHINA	FARMER	0812463953	
10	MUNDJENGE NICODEMUS	FARMING	nmundjenge@gmail.com 0812843718	
11.	VEIKKO HAUSIKU	FARMING	[illegible] 0812911257	
12	KAPIRARA PIUS	FARMING	0812402070	
13	Anselm Mberekera	farming	0812522084	
14	HAUSHIKU THADEUS	FARMER	081-223 2284	
15	ILPO HAIKERA	FARMING	0856937017	

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
16	A.K. Lihonzo	Farming	081 287 1575	
17	J.R. Mukimina	FARMER	0813673843	

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9h00

Date: 17 December 2019

Attendance Register: Katji na katji Community Hall

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
1	Lukas S. Muha	Communal	0812269717 muhalukas@gmail.com	
2	Pius K. Kapitaa	Farmer	0813402070	
3	Sakwe Mafenda	KWRFU – Chair	0812461479 sumafenda@yahoo.com	
4	Mukuve Raphael	Communal	0816406016	RMK
5	Johannes. M. Hamurenge	Communal	john.hamurenge@gmail.com 0816022126	

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
6	EVANISTHA KAULINAWA KAMBONDE	Farmer	0812964355 evanistha.kambonde@mof.gov.na	[signature]
7	ISHOLA TUIOVT TERESIA	Farmer	0812985339 Tessy ishola@...	[signature]
8	Kwenye Sara	Farmer	081 209 2219	S Kwenye.
9	Mbangu Lukas	FARMER	usurawehumills@gmail.com 0811248052	[signature]
10	Haingura Petrina	Farmer	0814076389	[signature]
11	Polycarp matheus Sikwaya	Usukiro member	0812276667–0813116[8]	[signature]
12	ALBERTINA N Nangolo	Farmer	0812936168	[signature]
13	DUNCAN Silungwe	Farmer	0816131479 duncan silungwe@gmail.com	
14	Gerson Johannes	communal	0817291081 gerson79j@gmail.com	[signature]
15	ATHANASIUS KATAMBA	COMMUNAL	akkatamba@gmail.com 0814803628	[signature]
16	Zuze Luis	Communal	0816887953	N/A

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
17	Esaya Nhumba	Communal	0813481378	N/A
18	Bosko Neizeimana	Communal	0813~~4813~~4368357	~~[illegible]~~
19	Themba Johannes H	Communal	0816396665	T.J.H
20	Frans Soudaka	Communal	0814040549	~~[illegible]~~
21	Jodaki Ndya	Communal	0818390845	Jodazk
22	Nbanyima Gabriel	Communal	0818684774	N/A
23	Tobias Ruben	Communal	ø	
24	Sinaya Fernandu	Communal		
25	Samba Albertu	Communal	081 5711307	
26	Johannes Haingura	Communal	08166965	J. Thobias

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
27	Kameya Matias	Communal		
28	George Matjayi	Communal	081329850I	
29	Rev. Laurentius Haufiku	Farm	Posbus / Rundu 0812406694	[signature]
30	Ngaezi Mateus	Communal	0817610206	
31	Masati Fabianus	Communal		
32	Santu Erick	Communal		
33	Kuwaha Benjiman	Communal	081309458	[signature]
34	Emanuel Mutesi	Communal	0816007255	
35	Olavi Roswitha	Communal	0813125860	
36	Kasiki Veronika	Communal	0813481344	

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
37	Katamba Agnes	Communal	0844731553	
38	Muronga A	Communal	0813365648	
39	MATOVU VICTOR MBABAZI	Communal	0812602140	
40	Namukwaya Rudolph	Communal	0818392496	
41	Moses Kafosa	Communal		
42	Mangundi paulus	Communal	0812077539	
43	Titus Rukundo	Communal	0813826029	
44	Murango felex	Communal	0814717928	
45	Hamuenyera Erastus	Communal	0818344399	
46	Kakonia sivanus	Communal	0813192933	

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9h:00

Date: 17 December 2019

Attendance Register: Katji na Katji Hall

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
47	WILLEM KOTOKENI KOTOKENI	Communal	081 3130689 K.willemK@yahoo.com	
48	Maliti Christine	Communal		
49	Shikukuma ERNA	Farmer	0817902174 ernandempa.gmail.com	Shikukuma
50	Liyeve Herdveg	Communal	0813038071	Liyeve
51	Haruwodi Elisabeth	Communal	0812926302	Haruwodi

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
52	Immanuel Nainú	Communal	0814541881	I. Nainú
53	Johannes Rebecca	Communal	0812015[illegible]222	
54	Rosie Sarah	Communal	trossySarah@gmail.com 0817140437	
55	Sylvester Eva	Communal		
56	Namukwata Hellena	Communal	0812604675	
57	Natail Emilia	Communal		
58	Mahereva andrias	Communal	0813593019	A. MAHEREVA
59	Benedicta Sikongo	Communal	0817109988	B Sikongo
60	Johannes Muti	Communal	0813900439	
61	Kanyanga petras	Communal	0812207261	

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
62	SIWEKA SHIKEUS	Communal	0812040004 ssshinubikal@gmail.com	[signature]
63	Hamutenya Markus H	Communal	0817833859	[signature]
64	Mukungu Kafdo	Communal	0816317596	
65	Kukowonga Silia	Communal	0813964168	
66	MATHEW NAIRENGE	FARMER	0811293464	[signature]
67	Ndumba Johannes	COMMUNAL	0813287710	[signature]
68	EZekiele Katengo	communal	0814421308	[signature]
69	Kananda Andreas	Communal	0813400154	[signature]
70	Lurendo Simon	Communal	0812636047	[signature]
71	Masuyo Funete	Communal	0814775871	

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Date: 7 December 2019

Attendance Register: Katji na Katji Hall

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
72	Markus Nduno	Communal		
73	Johannes Kavera	Communal		
74	Gideon Gabriel	Communal	081 8898025	[signature]
75	Hamutenya Johannes	Communal	0814800241	[signature]
76	Mukazo Reino	Communal	0813128237	[signature]

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
77	Hikenwa Serafine Mpingang	Communal	0813806596	SMHikenwa
78	Mbangu Wilhem	Communal	08133/7773	Mbangu
79	Nyango Christine	Communal		NC
80	Nalia Kufuna	Communal		N.K
81	Haingura Maria	Communal	0813807423	MHaingura
82	NSeu Leopoldine	Communal	081657481	L NSeu
83	Haupindi Adolfine	Communal	081655291	A. Haupindi
84	Haufiku Anastasia	Communal	08133865 70	A Haufiku
85	Mparelwa Benedicta	communal		B Mparelwa
86	Siranda Theresia Rukunde	Farmer	0812353471	Siranda T/R

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
87	Riam Matias	Communal		R.M
88	Kambinda Regina	Communal	0812918400	K.R
89	Hamukenya Eugenia	Communal	0813437114	[illegible]
90	[illegible] Anastasia	Communal	0813165924	A.Hausiku
91	Kaveto Eiva	Communal	0813766356	K.E
92	Hausiku Albertina	Communal	0818473665	A.Hausiku
93	Kambango Tiramba	Communal		
94	Victoria Kasera	Communal		V.K
95	Hellena Sinke	Communal	0818579404	H.S
96	Hausiku agnes	Communal	0814113126	H.A

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Date: 9 December 2019

Attendance Register: Katji na katji Hall

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
97	Kasanga Nukoti	Communal	0816865342	K.M
98	Nauyoma Martha	Communal	0	M Nauyoma
99	Tjerucanda Hellena	Communal	Ø hlennyaka@gmail	Tjerucanda.
100	Haubiko Johanna	Communal		Johanne
101	Emilia Simpweka	Communal		E.S

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
102	Ngongo Anna	Communal		N.A
103	Hamwenge Anastasia	Communal		H.A
104	Albertina Thomas	Communal		A.T
105	Theresia Simpire	Communal		T.S
106	Vihinda Raina	Communal		V.R
107	Trosi Anna	Communal		T.A
108	Mukazo Johanna	Communal		M.J
109	Hamudenya Ernestine	Communal		H.E
110	Elisabeth Kiduma	Communal		E.K

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Date: 17 December 2019

Attendance Register: Satotwa Village (Councelor's office)

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
1	Abrahat Haingura	Communal		G Haingura
2	Mutero Simon	Communal		
3	G Jise Joseph	Communal	0812892945	Jize
4	Kamab Johannes	Communal	0816450328	Kamapa
5	Muwamba Manfred	Communal	081318940?	

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
6	Kamukwanya Nikodemus	Communal	0817576366	
7	Sivi agustinus	Communal	081426239	
8	Veikko Ndara	Communal		V.N
9	Simbungu frans	Communal		S.F
10	Emanuel Mununga	Communal	0814190793	
11	Ndjau Noritus	Communal	0815657258	
12	Kahonzo Andrias	Communal	0813891818	
13	Kaiuaua Amaudas	Communal	0814535875	
14	Ndara poules	Communal	0814505132	
15	Julius lumbongo	Communal	0812581838	

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
16	Joseph petrus	Communal	0812086506	
17	Siteketa Kosmos	Communal	081476555 22	K.M
18	Nduma Daniel	Communal		ND
19	Bonifatius Kaliwone	Communal		B.K
20	Ndara petru	Communal	08155~~7-787~~1	N.p
21	Fernanda Muronga	Communal	0816125557	
22	Chisita Awardus	Communal	0813661089	C.A
23	Mberema Martinus	Communal		MM
24	Wimpando Stanislaus	Communal	081360878	
25	Kanzware petrus	Communal	0817277794	

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Date: 17 December 2019

Attendance Register: Satotwa village

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
26	Secilia Kavelo	Communal		S.K
27	Ruhandu mariane	Communal		R.M
28	Vensia Kautikili	Communal		V.K
29	Toive Nambase	Communal		T.N
30	Haupindi verona	Communal		H.V

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Date: 17 December 2019

Attendance Register: Satoma village

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
31	MWanby beata	Communal	0817716295	MB.
32	Sitekela Sabine	Communal	081 7677009	Sabine
33	Kantoka mbeyata	Communal	0813625344	K.M
34	Sikompo NCame	Communal		S.N
35	Kudumo emilia	Communal		K.E

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Date: 18/12/2019 ONDONGA KING'S PALACE ONDANGWA

Attendance Register:

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
MANNETJIES KAMBONDE	P.A. ONDONGA KING	0811246236 ISENKYO@AFRICAONLINE.COM.NA	
ALFRED KAKWIELE	ONDONGA PALACE	0812517902	

Mangetti Farmers Association – 18 Dec. 2019 – 18h00 (Omuthiya) Okashana Centre

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
1	ERNESTINE SHALI		0812479216 sonnekbornfarm@gmail.com	
2	Donatha Kapitango	- How animal desease will be controlled. - Impact on meat mkt	0812963638 Donatha.Kapitango@mlr.gov.na	Kapitango
3	Iipinge Paulus. E		0812800702 Helenaipinge90@gmail.com	
4	IMMANNUEL S. JOHANNES		0813136561 Farm	
5	Ester s Ndeutepo		0812568041	
6	WILHELM ALWEENDO		wiyaloo@gmail.com 0813783197	
7	Paulina-P. Uugwanga		0812976796	P Puugwanga
8	WERNER LENGA		wernerlenga@ymail.com 0812082201	
9	LISA SHILONGO		HHshilongo@gmail.com 0815756613	HShilongo
10	Mariana Shilongo		0813500734	

2

Attendance Register: Mangetti Farmers Association – 18 December 2019

	Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
11	Ruusa.ic Nahongko		0816207880	[signature]
12	[illegible]	Animal Movement vs Grazing	0812597558	[signature]
13	HELENA SHOWA		0812780136	[signature]
14	Johannes Andreas	Animal Movement and grazing	081435522	[signature]
15	Timo / Nambahu	Climate change adaptation	0812455425	[signature]
16	Mercy Hashiti		mercy.hashiti@gmail.com 0812508688	[signature]
17	Kaumeti Amwaalwa	Anex grazing	0812724791	[signature]
18	Josef Pinehas	Anek grazing	0813956211	[signature]
19	Nangen Utoon	Anek grazing	0813877653	[signature]

ATOUT MEETING

NAME + SURNAME	NATURE OF INTEREST	CONTACT DETAILS PHONE + EMAIL	SIGNATURE
1. Ernestine Shali		0812491216 sonnblomfarm@gmail.com	
2. Donatha Kapitango		0812963638 Donatha.Kapitango@mlagov.na	
3. Frans Nghitalepo		0812283248	
4. Naftali Shilikomweny o		0812977513	
5. David Nakalemo		0816243715	
6. David Williams		0813405770	
7. Amweto Martin		0814760955	
8. Gideon Kanakelo		0818038025	
9. Tuhafeni Awala		0813728156	

NAME + SURNAME	NATURE OF INTEREST	CONTACT DETAILS PHONE + EMAIL	SIGNATURE
10) Hamadeni Simon		0814724863	
11) Tuhadeni Christian		0817753792	
12) Gabes Immanuel		0813155529	
13) Shikesho Theofelus		0816881653	
14) Jona Mwalola		0814467496	
15) Andreas Simon		—	
16) Nikanor Kambala		—	
17) Mongua Haufiku		—	
18) Maria Shivute		—	
19) Linea ~~Jete~~ Josef		0815481931	

NAME + SURNAME	NATURE OF INTEREST	CONTACT DETAILS PHONE + EMAIL	SIGNATURE.
22) Daniel Vanyela		0814303014	
23) Ellen Nghitaleko		0817201013	
24) Maria Nghitaleko		0813386788	
25) Ndamona Nghitaleko		0814624799	
26) Haufiku Lavinia		0816442637	
27) Josef Nepando		0818536566	
28) Filipus Ingashipola		0813161958	
29) Mbanguka Klaudia		/	
30) Kauha Lukas		0816360350	
31) Ndemononghenda Katumbe		0813788804	

	Name + Surname	Nature of Interest	Contact Details Phone + Email
30)	Dorotea Andreas		0812969280
31)	Nangula Natale		0817612596
32)	Ndinelao David		0817625505
33)	Ulebaetina Alfeus Elifas		0814267339
34)	Helmani Ndishihafela		0817534982
35)	Manika Hashali		0818864461
36)	Lucia Oaesmus		0818693947
37)	Nghilengei Josef		0812452149
38)	Johanna Ipinge		~~081~~

Name + Surname	NATURE OF INTEREST	CONTACT DETAILS PHONE & EMAIL	SIGNATURE.
39) Nachula Samuel		0812211924	
40) Anna David		0817755483	
41) Haufiku Julia		0816281228	
42) Heluí Shapange		0812852966	
43) Jonas Malelo		—	
44) Linus Kahenge		0812979384	
45) Linda ELIA		0818245575	
46) Daniel Natalia		0813433671	
47) Daniel Amadulu		0812773649	
48) Paulu Shilumbu		0812104105	
49) Jeremia Nelleka			
50) Wilhelm Selma		0815573803	
51) MBwale Maria		0812079700	

Minutes of Public Meetings:

1. **Items covered in the meeting**

At each of the meetings the following was presented:

- The purpose of the meeting as well as the role of Green Erath and the Meatco Foundation;
- A short introduction explaining Phase 1 and the reasons for the compartmentalization (block approach in including areas of the NCA). The MAP obtained from the MAWF showing the 'proposed Compartments in the NCA's was used as the basis for this;
- The proposed alignment of the boundaries of Phase 1 (Option 1 and Option 2). Maps prepared by the Green Earth and Meatco Foundation were displayed at the meetings and used as the basis for the discussion; • Once presented, the attendees were invited to ask questions, comment and or to make proposals on the information and maps presented.
- The meetings were conducted in English while representatives of the Meat Board and MAWF assisted with translation into the local language where required.

2. **Comments received**

Chief Mr Eugene Siwombe Kudumo - Kavango West Traditional Authority:

- Chief supported the compartmentalization project
- Chief wanted confirmation that the current land tenure will remain. Thus although the land is included in the proposed compartment that it will still fall under the jurisdiction o the Traditional Authority
- He opted for an option that excludes Katjinatji, Ou cordon, Mpora and Satotwa community.

Kavango West Regional Farmers Union:

- They opted for an option that exclude Katjinatji, Ou cordon, Mpora and Satotwa community
- They strongly requested for the project to include the farms laying north of the new proposed VCF fence-line.
- The ministry should initiate and fund a program to teach farmers within the compartment about good rangeland management otherwise there will be overgrazing due to incentive of market.
- The ministry supposed and must delegate senior staff from Windhoek to answer questions not regional staff that are not able to answer questions. In fact staff needed should be from DVS not from any other departments.
- Participants wanted to know the budget and timeline in the completion of the compartment.

- What will be status quo of the current Mangetti Surveillance Area given that the compartment will be on the northern side of the surveillance area. Will the status be upgraded to that south of the red line or will it remain a surveillance area?
- Which area will be included under Phase 2? The timeline for the implementation of the next Phases?

Kavango East Farmers Union:

- Initial discussion focused on why the project starting with Kavango West and Oshikoto, yet the request was from Kavango East Farmers Union.
- Requested if the line can be straight (to the west of the east of the Mururani/Rundu Road) so that it can include in Kavango East.
- Later they indicated that they will accept the proposal on a condition that part of Oshikoto excluded so that farms north of Mangetti block in Kavango West included.
- Ministry absence was an issue
- Which area will be included under Phase 2? The timeline for the implementation of the next Phases?

Katjinakatji community meeting:

- The fence-line be moved away from the community to include only formalized farms (Option 2 presented at the meeting)
- The fence-line was specified which farms to be included and corners
- Woma community also to be excluded
- Can you add more gates?
- Can the project consider gravelling Charlie Road?
- Can the ministry ensure semi-skilled and unskilled job for construction of the compartment be given to the local people instead of outsiders (people from community to be employed)
- Can the government buy the two farms within the communities (settlements) so that the area will be used for grazing by the communities? Communities sometimes graze their cattle in the free pocket areas between commercial farms. Fencing off these areas means communities will suffer during drought hence suggesting if the government can help to buy these two farms and take off the fence to be used by the communities.

Satotwa meeting:

- Ndjikiti community be excluded
- Can the project consider gravelling Charlie Road?
- The fence-line must avoid passing the crop field otherwise government should be prepared to compensate owners.
- Tuzeni communities be included in the compartment
- The fence-line was specified which farms to be included and corners. It was requested that the consultant to come back on 20th December to show them specifically where the line will pass and corners.
- Can the project help with illegal fencing?

Ondongo Traditional Authority – represented by PA Mr Kambonde:

- They strongly requested for the project to include few farms laying north of the new proposed VCF fence-line. Specifically, to include the King's farm and other farms aligned to his farm.
- Farmers with the support of Ondongo Traditional Authority are prepared to contribute to the project if the MAWF budget for Phase 1 cannot accommodate their inclusion into Phase 1. Mr Kambonde is of the opinion that farmers can be convinced to contribute at least two cattle to support the relocation of the fence financially. Estimated contribution about 9 million. 5

Oshikoto regional farmers' union and Mangetti Association:

- Which area will be included under Phase 2? The timeline for the implementation of the next Phases?
- How will the compartment affect the grazing?
- Why DVS senior staff not represented?

Antoni Community:

- The gate to be moved closer to Antoni gate so that people can be able to walk to the gate to access the road to hike to Oshivelo town and travel to the other villages
- The ministry should facilitate to drill two new boreholes since the fence will enclosed them in the compartment hence, they will not have access to the boreholes they are currently using since they are on the other side of the road.
- The line should shift on the other side of the road so that the construction of the fence does not destroy their settlement/houses. Ministry should be prepared to pay compensation of they want to the line to go the houses.
- Implication of the project on the availability of grazing since the community used to practice pendular grazing where farmers take their animas to farms located to the north of the Community during drought and bring them back to Antoni when the grass have recovered.
- What will happen to the quarantine? Will the ministry build another quarantine since the current quarantine will be inside the compartment?
- Can the project assist with resolving illegal fencing so that all farmers within the compartment are organized?

Elavi community:

- The meeting was cancelled halfway claiming that inputs from Ondongo Traditional Authority should be sufficient.

3. Conclusion

From the meetings and the observations while travelling through the area it is concluded that:

- The meetings were well attended and conducted in a good spirit;

- The communities affected by Phase 1 of the project are overwhelmingly supporting the project on condition that their concerns are accommodated where possible;
- Neighbouring Communities excluded under Phase 1, due to budgetary or practical considerations, need to be informed on the timeline and areas to be included in the flowing Phases;
- Further discussions are required with the Proponent (MAWF) to see how the comments from the meetings should be used as basis for the final alignment of the compartment under Phase 1;
- The final alignment of the boundaries of Phase 1 should also be evaluated holistically and practically to ensure that this Phase has not to be revisited soon to include small areas which cannot be accommodated in the proposed following Phases;
- It was observed that sections of the roads servicing the area to be included in Phase 1 are very sandy and narrow. Because of this, cattle must be transported from the farms to markets by 4 X 4 vehicles with small trailers (capacity limited to 3 – 4 animals pending on size). This adds huge costs to the marketing of the animals and has a negative effect on the profit margin of the farmer. These roads will have to be upgraded to maximise the benefits from including this area in the compartment under Phase 1;
- In case where the alignment of the proposed boundary of Phase 1 separates communities from supporting infrastructure like water supply points, schools, clinics, churches etc. access to this infrastructure should be provided by installing a gate (to be manned 24hours) or by duplicating the infrastructure on both sides of the fence. This should be avoided as it will add unnecessary costs to the project.

4. Recommendations

From the meetings and the observations while travelling through the area it is concluded that:

- The communities affected by Phase 1 of the project are overwhelmingly supporting the project on condition that their concerns are accommodated where possible;
- Neighbouring Communities excluded under Phase 1, due to budgetary or practical considerations, need to be informed on the timeline and areas to be included in the flowing Phases;
- Further discussions are required with the Proponent (MAWF) to see how the comments from the meetings should be used as basis for the final alignment of the compartment under Phase 1;
- The final alignment of the boundaries of Phase 1 should also be evaluated holistically and practically to ensure that this Phase has not to be revisited soon to include small areas which cannot be accommodated in the proposed following Phases;
- It was observed that sections of the roads servicing the area to be included in Phase 1 are very sandy and narrow. Because of this, cattle must be transported from the farms to markets by 4 X 4 vehicles with small trailers (capacity limited to 3 – 4 animals pending on size). This adds huge costs to the marketing of the animals and has a negative effect on the profit margin of the farmer. These roads will have to be upgraded to maximise the benefits from including this area in the compartment under Phase 1;

- In case where the alignment of the proposed boundary of Phase 1 separates communities from supporting infrastructure like water supply points, schools, clinics, churches etc. access to this infrastructure should be provided by installing a gate (to be manned 24hours) or by duplicating the infrastructure on both sides of the fence. This should be avoided as it will add unnecessary costs to the project.

Photos of Public Meetings:

Minutes of meeting with MAWF:

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MINUTES OF MEETING:

Veterinary Control Fence Compartmentalization Phase 1

Meeting with MAWF and Stakeholders

Dates: 15 January 2020

Time: 9h00

Venue: MAWF Head Office 4th Floor - ED's Boardroom

Agenda:

1. Opening and welcoming – Clemens //Khaiseb (Directorate of Agricultural Research and Development)
2. Introduces everyone at the meeting - Clemens //Khaiseb
3. Purpose of this Meeting – Clemens //Khaiseb
4. Project Description and Current Status – Charlie du Toit (Green Earth Environmental Consultants)
5. Overview of the Environmental Impact Assessment - Charlie du Toit
6. Discussions, questions and answers – the meeting attendees

Project description:
The project was presented to the meeting by Clemens //Khaiseb.

In Attendance:
See attendance register attached at the back of the Minutes.

QUESTIONS AND DISCUSSIONS:
The meeting was opened for questions, representations, objections, comments, issues and views.

Person:	Comments from Meeting:	Action and responsibility
Charlie Du Toit	Public, Stakeholder and Traditional Authority meetings were conducted. Numerous farmers, community members	Investigate if proposed Phase 1 can be expanded to include portions of Kavango East.

	and interested members attended the meetings. Kavango East was not happy to be excluded from Phase 1 of the project. It was consulted to them that they might be included in Phase 2.	Include Kavango East in Phase 2. To be investigated by Project Team and communicated to I&APs by Green Earth.
Charlie Du Toit	It is requested that some of the roads in the project area be upgraded and improved in order to make access better. Communities might be divided by the proposed relocation of the fence. It is proposed that this should be prevented. Some issues were identified namely children attending schools might have to travel extensive distances to reach school with the introduction of the new fence. Budget constraints prevent the expansion and size of the area to be included in the project. It will not be economically feasible if the correct option is not implemented.	Roads included in the Compartment or impacted upon by the new boundary of the Compartment to be discussed with Roads Authority. Meeting to be scheduled once Compartment's Boundary is determined based on consultations thus far. Funding for road upgrades to be obtained from RA. Green Earth to arrange meeting with RA.
Charlie Du Toit	The availability of water to the community members and community farmers should be taken into account when deciding on the relocation of the fence. Access to water points should not be fenced in since this may cause individuals to be without necessary water.	Need to ensure that eventual Compartment Boundary does not separate communities from water sources as well as other supporting facilities.
Charlie Du Toit	The deadline for comments/inputs on the Background Information Document for the Environmental Impact Assessment is 24 January 2020.	Updated BID to be circulated during last week of January to first week February by Green Earth.
JD Shoopalo (DVS)	The surveillance area on the map are already included in the red line. Some of the Mangetti	Maps used by the Team to be amended as per Dr. Shoopala's comments.

	Farms are therefore included. The current red line coordinates will be sent to the stakeholders to confirm where maps need to change. The Ou Cordon gate is the existing gate for the red line.	
Kuniberth Shamathe (Meatco Foundation)	Kavango West community members had issues and disputes regarding which areas to be included in the project and which areas to be excluded from the project. It was requested that formal farms be included in relocation of the fence. The children going to schools in the vicinity needs to be accommodated, this may cause issues if children do not have access to schools. The community members suggested that they will need compensation from government if they have to move or relocate.	Final position of Compartment Boundary to be determined by the Project Team considering these comments.
JD Shoopala	Were there consultation meetings held and where were the meetings held? Commercial farms should be included in the process.	I&APs registered and was consulted. The Farmers Unions representing the commercial farmers were included.
Charlie Du Toit	Consultation meetings were held in the project area and Donatha from the Ministry of Lands and Resettlement attended the meetings. Donatha provided details regarding land development and mentioned disputes within authorities.	Further consultations with Lands and Resettlement to ensure the correct information is used for the determination of the Compartments Boundary will be held by Meatco Foundation and Green Earth.
Kuniberth Shamathe	Some farms are not yet finalized as farms, some are in the process of obtaining land ownership and some are still disputed.	
Albertina Shilongo (DVS)	The issue of including non-commercial farms were foreseen. Will there be an	To be investigated by the Team and based on further consultation with affected communities.

	issue with making one straight line where the red line may be? Limited funds are the reason some farms are excluded. Will a feasibility study be carried out?	
Kingsley Kwenani (Meatco Foundation)	Should the parks be excluded from the line?	Khaudum National Park to be excluded. Pending on position of new boundary of Phase 1, Mangetti National Park to be included or excluded. This will be decided by the Team.
JD Shoopala	Yes, the parks should be excluded.	
Clemens //Khaiseb	The Ministry of Environment and Tourism should be consulted.	
Emmanuel Hikufe (DVS)	There is a statement that says the straight line does not cut communities however in reality this is not true. Open roads are needed and used by the individuals in the area to reach other areas.	
Charlie Du Toit	Proclaimed roads will have to remain as it is otherwise the roads will have to be de-proclaimed.	Green Earth will discuss with RA.
Albertina Shilongo	An option is that the project will not be compartmented but rather be done in zones.	To be investigated by the Team. Terminology to be inline with OIE definitions and processes.
Clemens //Khaiseb	There will be consequences between compartments and zones.	
JD Shoopala	Free zones will then receive certificates.	
Albertina Shilongo	The line should benefit the communities.	
Hendrik Boshoff (Burmeister and Partners)	The cost of the relocation should be considered. The cost estimate should include new roads to be constructed and the construction and removal of the fence and the gates. The straight line may eliminate dispute.	To be covered under the feasibility by the Team.

Clemens //Khaiseb	A meeting at the end of the month of January is proposed.	Date to be finalised pending further information and comments received.
JD Shoopala	The grazing of animals will be a problem if the line is not planned discretely.	
Charlie Du Toit	People use water from the rivers for tourism activities and to give water to their animals therefore the rivers can not be used as a boundary either for a natural or red line boundary.	Following the formal International Boundary or rivers as proposed position for the new fence is not supported by the people consulted and also not practically feasible.
Kingsley Kwenani	At the moment the area is dry and therefore limited to no water is present in the rivers, animals graze and walk freely through the rivers.	
Charlie Du Toit	If grazing is a problem in the future after the redline is relocated, the people will have to reduce their animals, therefore the line should be planned correctly. When farmers are inside the red line, they can move freely to obtain grazing land but when they are outside the red line, they might have to reduce animals in dry seasons.	
Albertina Shilongo	All stakeholders should be involved in the process, all semi-commercial farms should be included.	
JD Shoopala	More animals should be included in the free zones where possible.	
Emmanuel Hikufe	More gates are needed. The line should not cut through the mahangu fields when a straight line is implemented, it should also not cut off roads, this may cause more compensation that is required to the farmers and community members.	The final alignment of the fence to limit the impact on communities and infrastructure in order to not disrupt their activities and the need for compensation for affected infrastructure of fields. This will be finalized by the Team.
Charlie Du Toit	People who farm semi-commercially would like to be included in the free area.	
Hendrik	Kavango East has a lot of	

Boshoff	cattle, it will be good to include the cattle.	
Kuniberth Shamathe	A lot of options should be presented to the people, there are already three options that can be examined.	
Charlie Du Toit	Communities should not be separated from families and friends. The Ministry of Environment and Tourism should be consulted on the Mangetti West parks.	
Hendrik Boshoff	Roads should be fixed; gates and fences might be expensive but good roads are also required and needed to accommodate the farmers. Bravo to Ou Cordon road should be considered. Heavy sands are present on the roads and the roads are two spore roads making it difficult to pass on-coming vehicles. The evaluation of feasibility studies on the roads should be done.	Green Earth will discuss with RA.
Clemens //Khaiseb	Closes meeting at 11h00.	

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Date: 15 January 2020 - 9h00 - ED Boardroom 4th Floor

Attendance Register:

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
SIEGFRIED KHAISEB	DVS	0811434560 Siegfried.Khaiseb@mawf.gov.na	
Clemens !Khaiseb	Livestock development & market access	061-2087052 clemens.khaiseb@mawf.gov.na	
JD Shoopala	DVS	johannes.shoopala@mawf.gov.na	
Kingsley Kwevani	Meatco foundation	0812876855 KKwevani@meatco.com.na	
H. Boshoff	Burmeister &	081 1287644 hboshoff@burmeister.com.na	

Attendance register of meeting:

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
Obert Maswahu	Livestock Support Programme Project	0813190110 obert.maswahu@mawf.gov.na	[signature]
A. Shilongo	CVO_DVS	Albertina.shilongo@mawf.gov.na	[signature]
EH. Hikufe	DVS	emmanuel.hikufe@mawf.gov.na	[signature]
K Shamathe	Meatco Foundation	Kshamathe@meatco	[signature]
N. Kaelapeli	LSP	0812880105 vihoroka@gmail.com	[signature]
J. Nzehengwa	LSP	0811623573 nzehengwaj@gmail.com	[signature]

Photos taken at meeting:

Attendance Register: Meeting Meat Board & Animal Health – 21 January 2019

Green Earth
ENVIRONMENTAL CONSULTANTS

Date: 21 January 2020 - 10h00

Attendance Register: meeting with meatBoard + Animal Health

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
Golieth Tujendo for	goliathe@nammic.com.na	0811296336	
Paul Strydom	MBN	pjstrydom@nammic.com.na	
A. Boshoff	MBN	meatboard@nammic.com.na	
A- Norval	MBN	limmie@iway.na	
J.A. Shoopala	MBN	Shoopala@yahoo.com	

1

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
CHARLIE BUTLER	GREEN PARTY	charlie@green...	

Kavango West Regional Farmers Union Letter: 17 December 2019

KAVANGO WEST REGIONAL FARMERS UNION P.O BOX 6277 NKURENKURU

Enquiries: [illegible]

Email: [illegible]

17 December 2019

SUBMISSION FOR PRATICAL CONSIDERATIONS OF THE ENVIRONMENTAL IMPACT ASSESMENT (EIA) FOR PHASE 1 (ONE) OF THE PROPOSED RELOCATION OF THE NORTHERN VETERINARY CORDON FENCE IN THE REGIONS OF KAVANGO WEST,MANGETTI WEST,KAVANGO REGION AND ONALUSHESHETE FARMS IN THE OSHIKOTO REGION,NAMIBIA,THROUGH GREEN EARTH ENVIRONMENTAL CONSULTANTS,MINISTRY OFAGRICULTURE, WATER AND FOREST (MAWF) AND KEY STAKEHOLDERS.

Words of acknowledgement:

First and foremost, we wish to extend our sincere appreciation and thank the Government of the Republic of Namibia for the great steps taken to start implementing the resolutions taken during 2nd National land conference in Namibia and it is the intention of the MAWF to relocate the existing veterinary cordon fence in Namibia to a locality north of the current fence.

Kavango West Regional Farmers Union Specific Objectives:

The objectives of the union are to serve communal as well as commercial farming in Kavango West Region and beyond its border.

The Kavango West Regional Farmers Union is affiliated to the Namibia National Farmers Union (NNFU) and has eight District Farmers Associations which are constituency-based according to the political demarcation.

During the meeting held on 16 December 2019 at Nkurenkuru community hall with Green Earth Environmental Consultants, Meatco Foundation, Farmers union, MAWF, Farmers and Members of the public who are direct and indirect affected in Kavango West Region.

INTEREST IN PROJECT:

1. Diseases Free Animals/Free area zone.
2. Establish Safe Market in local, SCF and International through Abattoirs, butchery and feedlot).
3. Rangeland Management.
4. Livestock management.
5. Farming business.
6. Import and Export marketing regulation.
7. Inclusive of community farmers in free rangeland.
8. Forestry harvesting and Other Natural resources (timber and charcoal production)
9. Land use Planning and Tenure system in the NCAs.
10. Bankability of lease-hold and community farmers.
11. Infrastructures development e.g. (road, water, power, school, health facilities and others important consideration)
12. Cropping, fodder and horticulture production.
13. Control and movement measures.
14. Equipment and materials needed.
15. Capacity building/ Training.
16. Value chain.

COMMENTS/RECOMMENDATIONS ON THE PROJECT.

1. In general the idea of shifting the redline is in full support as well as map option two (2).
2. Consideration of the farms on the north Chali Cutline (about 10 km) must be highly priotized and including in map option two (2).
3. We recommend the phase two (2) of relocation of redline us per Millennium Challenge Account (MCA) decision and to speed up the mapping process to all infected parties.
4. We want all the farmers in both the two regions to benefit from this project , therefore we demand the economic viability of this project which must include all surveyed demarcated farming units in both Kavango East and West and the reason being for the sustainability and operate of Rundu abattoir and inclusivity of all small scale, commercial and local farmers in the two regions.
5. Training needed for farmers in both community and commercial set up.
6. Bring in board all financial institutions to help financed all the farmers in the NCAs without Title Deed.

7. All other important practical considerations must be included during the commencement of the project.
8. Land use planning must be at first to avoid conflict in a long run of the project.
9. The Government under the Ministry of Land Reform and Resettlement should allocate funds for infrastructure development every year.
10. Removal of all illegal fences in the infected areas during or before the commencement of the shifting of redline.

IN conclusion, the Kavango West Regional Farmers Union sees the implementations of this project as the road map towards vision 2030.

Yours sincerely

.....

Mrs.Mufenda Sabine.

Chairperson

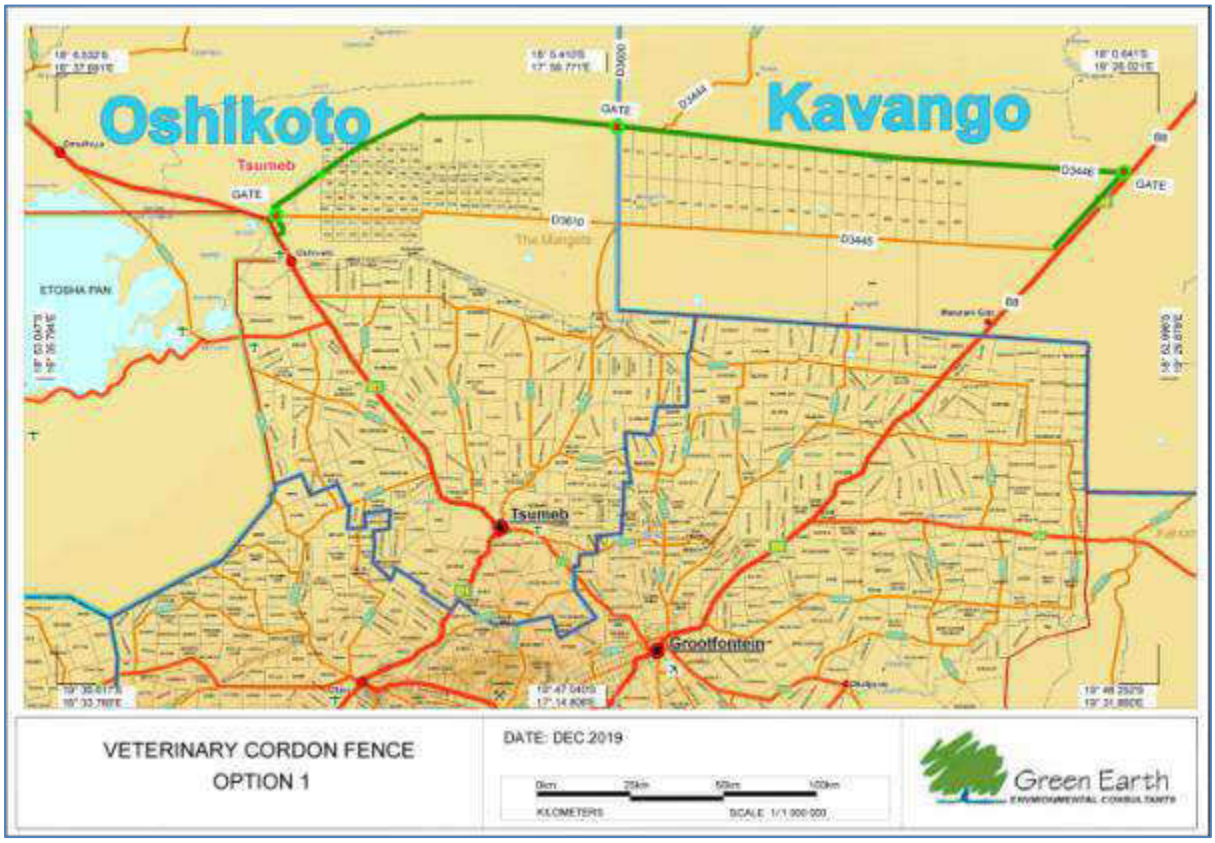
Kavango West Regional Farmers Union

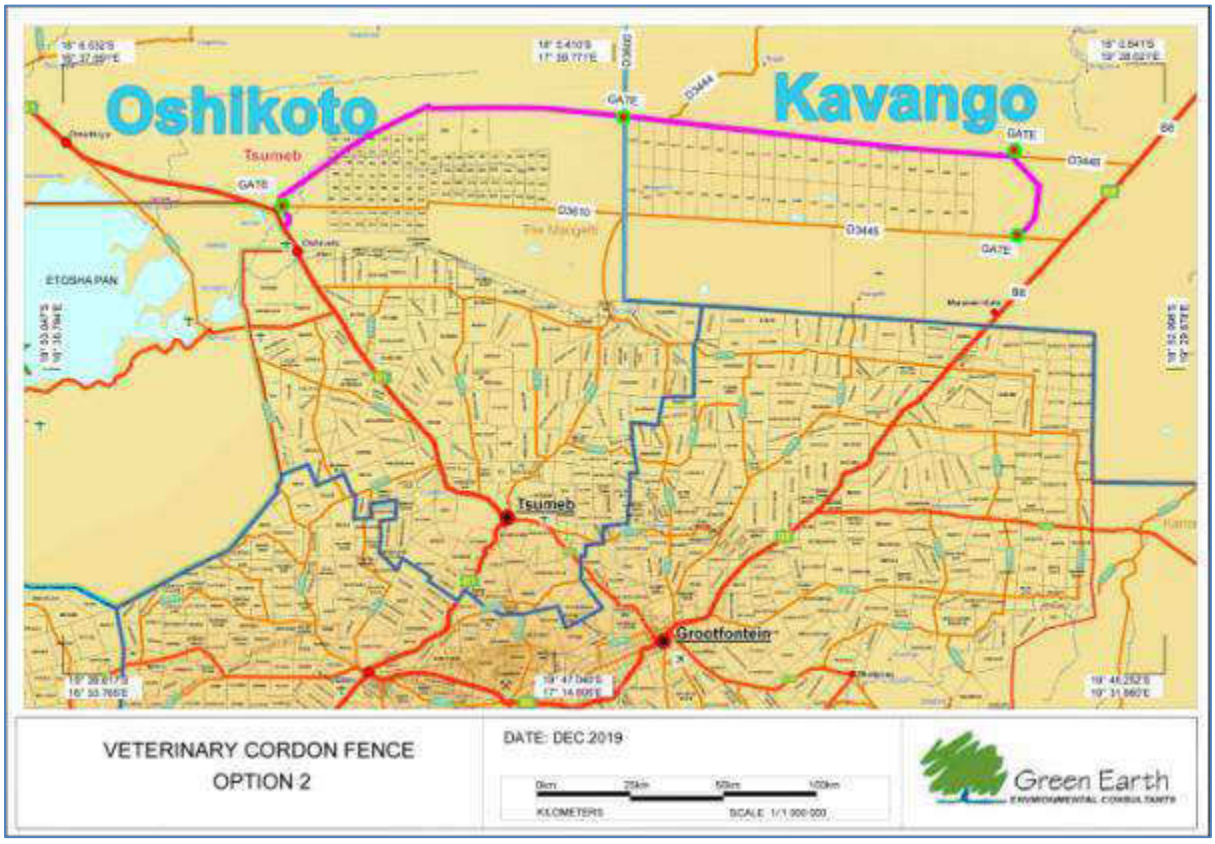
Cc. Regional Governor of Kavango West Region.

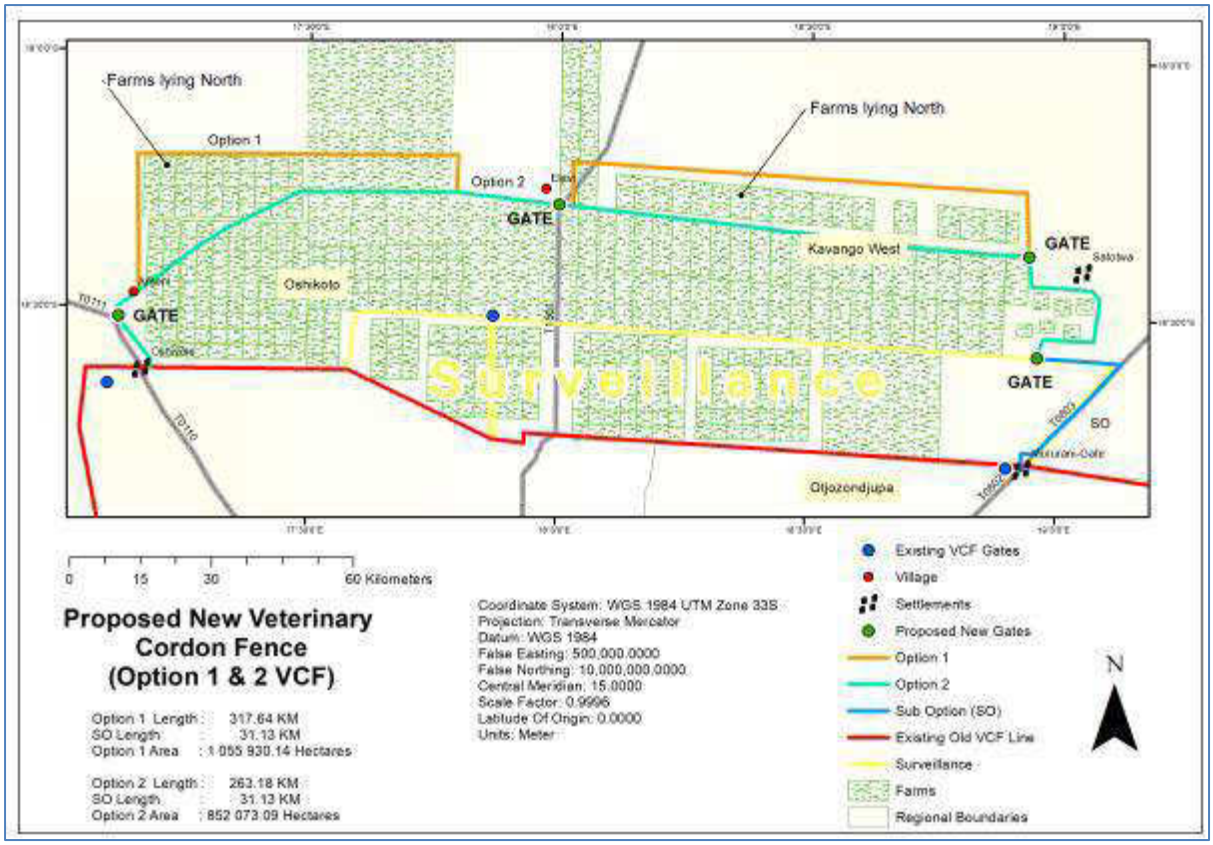
Chairperson/CRO of Kavango West Regional Council.

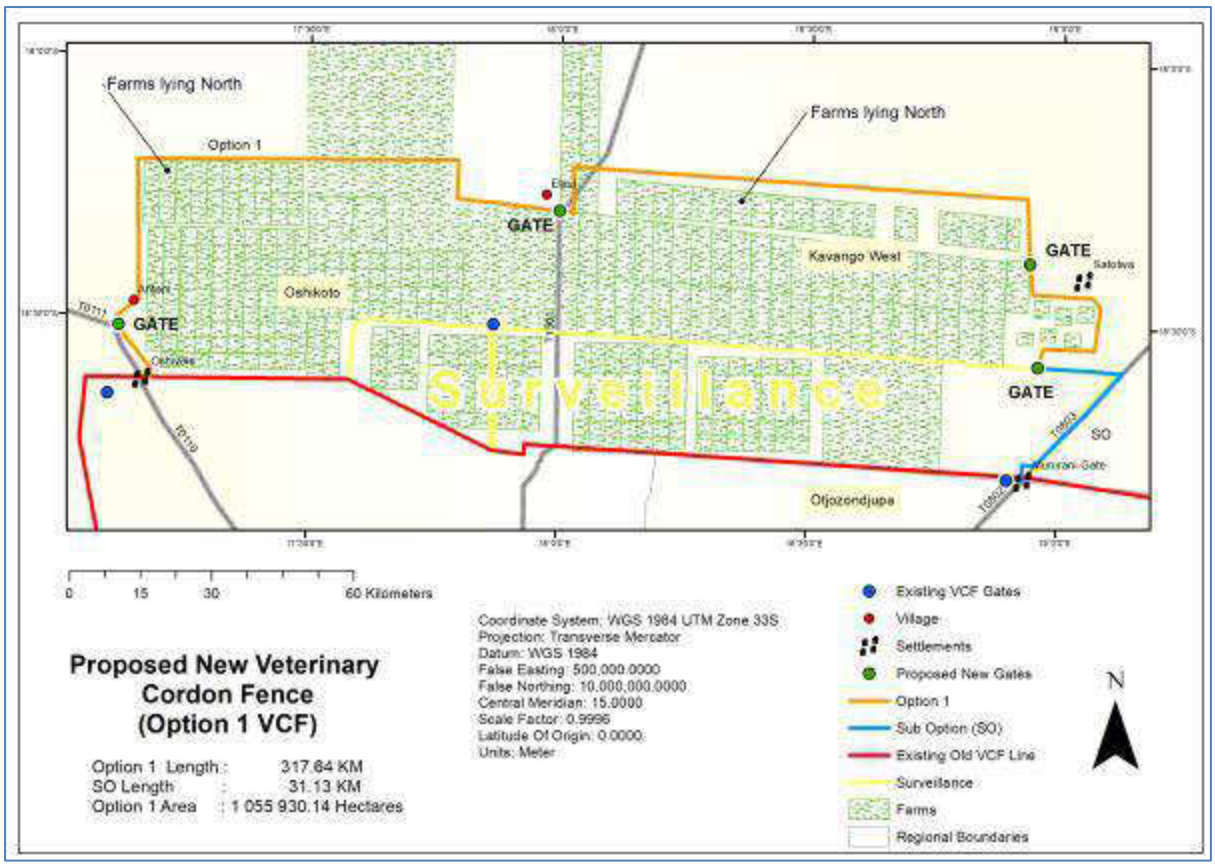
NNFU Executive Director.

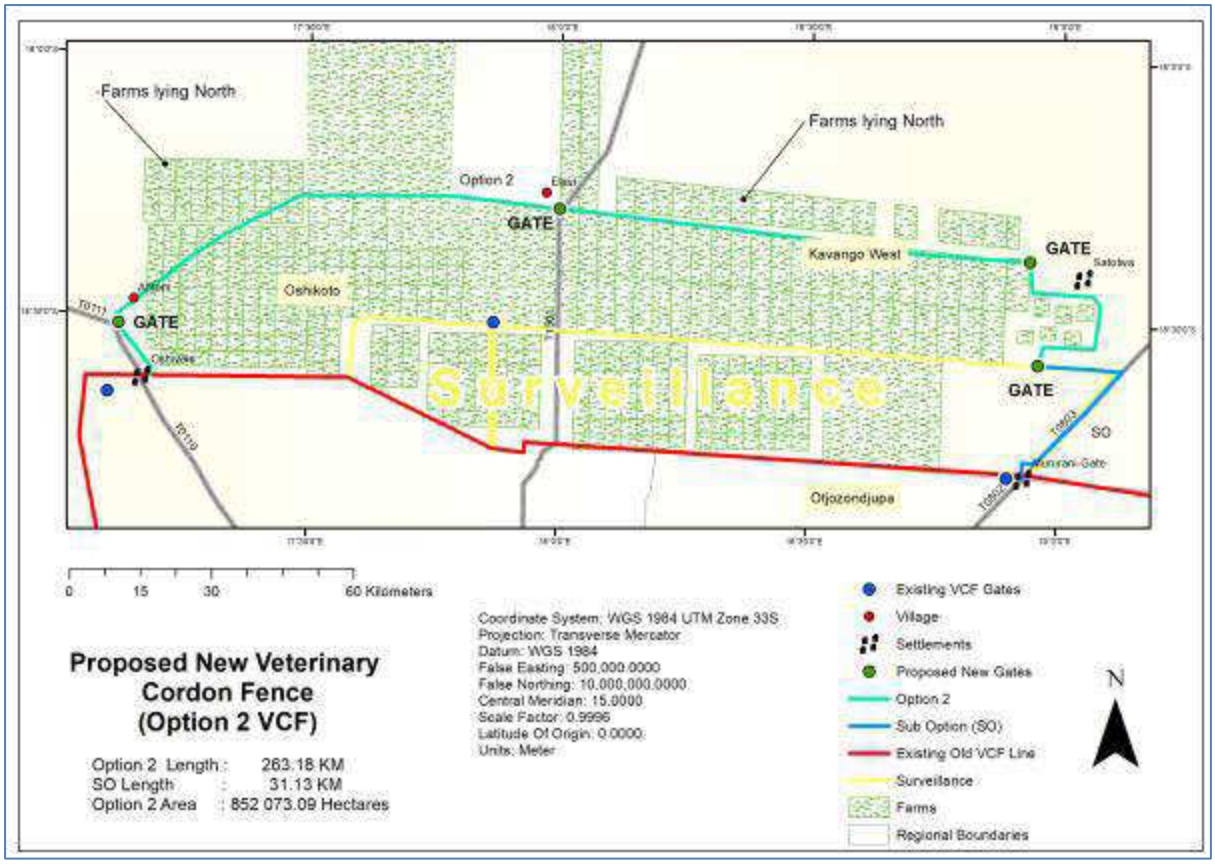
Options on maps evaluated for the line:



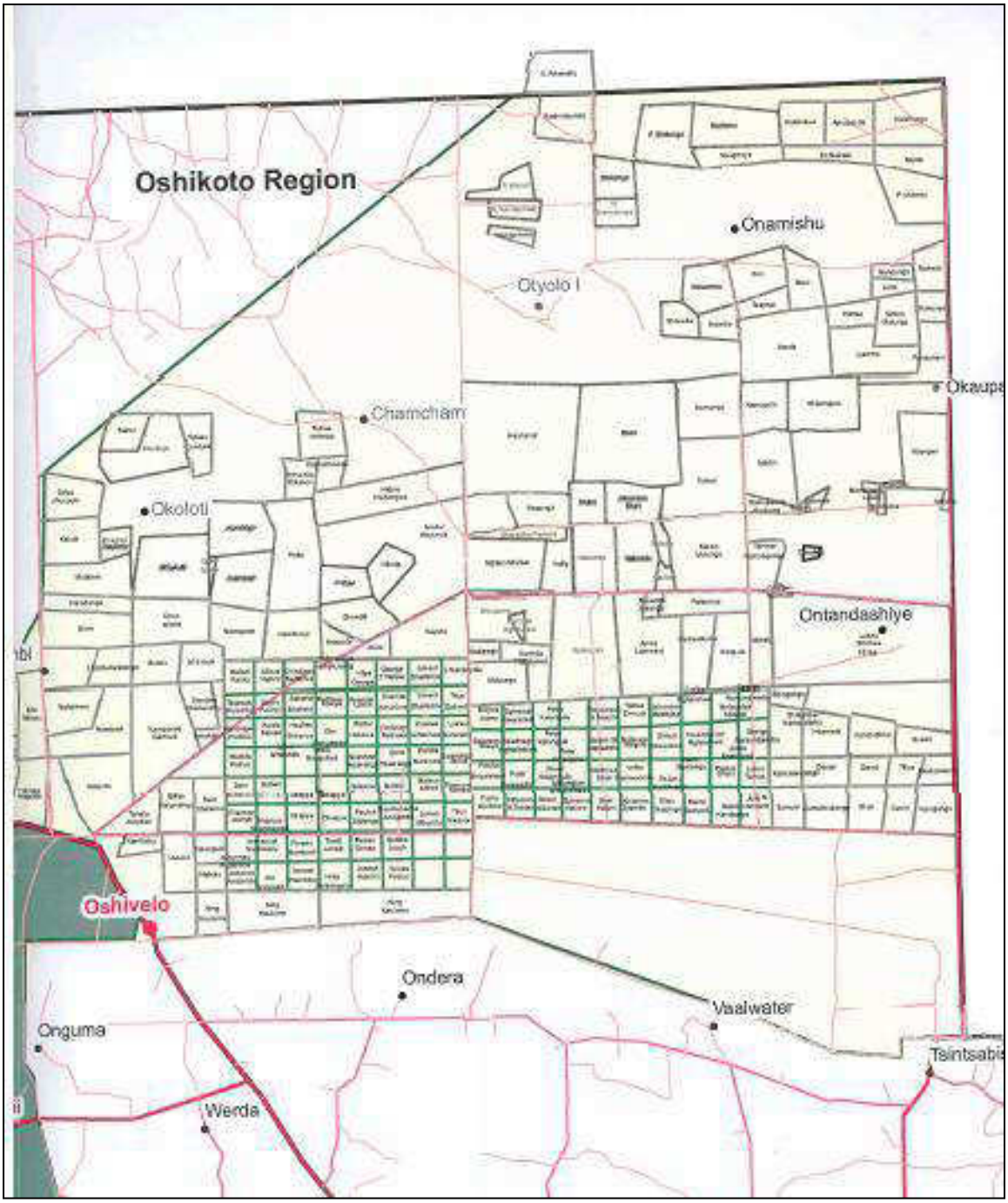



Farms lying North
Option 1
Option 2
GATE
Farms lying North
Kavango West
GATE
Satolwa
Oshikoto
GATE
Surveillance
GATE
SO
Otjozondjupa
0 15 30 60 Kilometers
Proposed New Veterinary Cordon Fence (Option 1 & 2 VCF)
Option 1 Length : 317.64 KM
SO Length : 31.13 KM
Option 1 Area : 1 055 930.14 Hectares
Option 2 Length : 263.18 KM
SO Length : 31.13 KM
Option 2 Area : 852 073.09 Hectares
Coordinate System: WGS 1984 UTM Zone 33S
Projection: Transverse Mercator
Datum: WGS 1984
False Easting: 500,000.0000
False Northing: 10,000,000.0000
Central Meridian: 15.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Existing VCF Gates
Village
Settlements
Proposed New Gates
Option 1
Option 2
Sub Option (SO)
Existing Old VCF Line
Surveillance
Farms
Regional Boundaries
N


Farms lying North
Option 1
Farms lying North
GATE
Kavango West
GATE
Satolwa
Oshikoto
GATE
Surveillance
GATE
SO
Otjozondjupa
0 15 30 60 Kilometers
Proposed New Veterinary Cordon Fence (Option 1 VCF)
Option 1 Length : 317.64 KM
SO Length : 31.13 KM
Option 1 Area : 1 055 930.14 Hectares
Coordinate System: WGS 1984 UTM Zone 33S
Projection: Transverse Mercator
Datum: WGS 1984
False Easting: 500,000.0000
False Northing: 10,000,000.0000
Central Meridian: 15.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Existing VCF Gates
Village
Settlements
Proposed New Gates
Option 1
Sub Option (SO)
Existing Old VCF Line
Surveillance
Farms
Regional Boundaries
N



(Foot and Mouth Disease Control Fences)



(Inside and Outside Farms – Mangetti)

Letter from Ministry of Agriculture, Water and Forestry (Livestock):

REPUBLIC OF NAMIBIA

MINISTRY OF AGRICULTURE, WATER AND FORESTRY

Tel: (264) 61 2087542
Fax: (264) 61 2087779
Enquiries: Dr. F. Chitate
Email: chitatef@mawf.gov.na
Reference: V /8/2

Directorate of Veterinary Services
Private Bag 12022
Ausspannplatz
WINDHOEK

15 June 2016

Office of the Prime Minister
Directorate of Disaster Risk Management
P Bag 13338
Windhoek

Attention: Ms. Anastasia Amunyela

RE: LIVESTOCK LOSSES FOR THE PERIOD 2011 TO 2016

Reference is made to our discussion of yesterday on the livestock losses affecting the country for the past five years from 2011 to 2016.

Total livestock losses due to disease for the period 2011 to 2015 are highlighted in the following table ad was as follows: cattle (13,962), goat (7,389), sheep (3,406), pig (1,059) and chicken (2,740).

The common diseases causing deaths in cattle are; pasteurellosis pneumonia, black quarter, botulism, plant poisoning and nutritional deficiency.

Sheep and goats diseases commonly causing deaths include the following: enterotoxaemia, plant poisoning, pasteurellosis pneumonia, verminosis, nutritional deficiency and malignant oedema.

Pig losses are mainly due to pneumonia and poisoning.

Common diseases causing deaths in chickens include: Newcastle disease, coccidiosis and nutritional deficiency.

Table: Livestock losses due to disease from 2011 to 2015

Period	Cattle	Goat	Sheep	Pig	Game	Chicken	Donkey	Horse
2011	3,433	2,325	1,485	77	406	423	10	96
2012	2,214	1,886	619	65	760	524	13	13
2013	3,516	1,147	170	173	568	281	11	8
2014	2,782	1,041	1,033	727	243	923	13	25
2015	2,017	990	99	22	780	589	15	8
Total	13,962	7,389	3,406	1,059	2,757	2,740	62	150

The country has also lost livestock as a result of drought which was experienced in different parts of the country from 2011 to the present moment. Accurate statistics on losses due to drought are difficult to get since most farmers may not report such cases to the Directorate of Veterinary Services. A total of 40 880 cattle, 13 895 sheep, 236 goats, 63 horses and 18 donkeys succumbed due to starvation occasioned by drought during the period October 2015 to May 2016 as shown in the following table.

Table: Livestock losses due to drought from October 2015 to May 2016

Region	Cattle	Sheep	Goats	Donkeys	Horses
Zambezi	0				
Kavango East	520				
Kavango West	700				
Ohangwena	500				
Oshikoto	6,493				
Oshana	30,000				
Omusati	38,326				
Kunene	64,472	2,742	135	393	
Otjozondjupa	388	483	101		
Khomas	9	156			
Omaheke	120	260			
Erongo					
Hardap	1,328	12,936		18	63
//Karas	45				
Total	142,901	16,577	4,861	411	63

Farmers are being advised to move their livestock to areas with better grazing to mitigate the effects of the drought. Crop residues are also being used to supplement the available grazing and destocking is being advised to minimize grazing pressure.

Dr. F. Chitate
For: Chief Veterinary Officer
DIRECTORATE OF VETERINARY SERVICES

MINISTRY OF AGRICULTURE, WATER AND FORESTRY
CHIEF VETERINARY OFFICER
2016 -05- 15
P/BAG 12022, WINDHOEK
REPUBLIC OF NAMIBIA

Public Notice at Control Gate:

Letter from Kavango West Regional Farmers Union:

KAVANGO WEST REGIONAL FARMERS UNION P.O. BOX 6277 NKURENKURU

Enquiries: Mr. Hausiku J.H. secretary (0814438612/0812461479

Email:jhausiku@gmail.com/snmulenda@yahoo.com

06 JULY 2020

To: Green Earth Environmental Consultant
P O Box 6871
Auspanplatz
WINDHOEK

Subject: Feedback meeting to stakeholder on the environmental impact assessment for the proposed alignment and construction of the veterinary cordon fence to create a new free zone.

The meeting took place on the 3rd July 2020 at Nkurenkuru community hall and 42 farmers were in attendance.

After the presentation by the consultants follows by questions and comments from the participants, the meeting came up with the following way forward.

- Redline to include all official gazetted farms in KWR in phase 1
- Undisputed and ungazetted farms/communities to be included in phase 2 and proper awareness should be done by key stakeholders.
- The project of removing the redline need to be speeded up.
- Two persons from RFA to assist with the mapping exercise.
- Gates to be determined during the mapping by looking at aspects like distance, roads etc.
- Establish a committee for the redline consisting of TA, Union, Meatboard and other stakeholders from line Ministries and Regional councils.
- During the tour on mapping a land planner must be included and after mapping process consultation must be done with community/villages affected by the redline to hear their views.
- If the redline is aligned farmers should be included in the charcoal business and harvesting natural resources.
- After mapping, avail the maps in time to all stakeholders.

- Namibia became a sovereignty state since 21 March 1990 and the GRN promised the removal of Redline to the border between Angola and Namibia, because it divided our country and disadvantage Northern Communal Famers/communities and GRN should fulfil this promises.
- During 2nd National Land Conference it was resolved the removal of redline to the border, therefore we are demanding to the GRN to speed up implementation of the project to benefit all Namibian citizen in phase 2.

Chairperson\Secretary ..... 06/07/2020 Date

Cc: Hon.Sirkka Ausiku Regional Governor of Kavango West Region

Hon Joseph S.Sikongo Chairperson of Kavango West Regional Council.

Hon.Hompa of Ukwangali, Mbunza and ShambyuTraditional Authority

Mr Shamate Meatco Foundation

KAVANGO WEST REGIONAL FARMERS UNION
2020 -07- 06
P.O. BOX 6277
NKURENKURU, NAMIBIA

Letter from Kavango East Regional Council:

KAVANGO EAST REGIONAL COUNCIL
NDONGA LINENA CONSTITUENCY OFFICE

Tel. No. 066 – 258803
Fax. No. 066 – 258805
Enquiries: *P. Kavhura*

Private Bag 2124
RUNDU
NAMIBIA

14 July 2020

To: Mr. Kuniberth M Shamate
Project Manager
Meatco Foundation

Dear Mr. Shamate

SUBJECT: REDLINE (NEW FENCE)

1. Reference is made to the courtesy call briefing at the Senior Traditional Authority Councillor of the Gciriku Traditional Authority on 13 July 2020.

2. Your presentation on the construction of the additional fence to include Semi-Small Scale Commercial Farmers is welcomed. However, wider consultation on the grassroot with the communities needs to be carried out on the proposal.

3. In consultation with the Senior Traditional Councillor, it was agreed that a meeting will be called to consult with all stakeholders and affected communities.
4. The planned meeting will determine the area and the boundaries to be included in order to ensure that the majority benefit in the development.

Kind regards.

Yours Sincerely,

Petrus. M. Kavhura, MP
Regional Councillor
Ndonga-Linena Constituency

KAVANGO EAST REGIONAL COUNCIL

Office of the Regional Councillor
Mukwe Constituency

Tel.: +0264 66 258 398/ 395
P.O. BOX 5105
Fax: +0264 66 258 367
Divundu
Email: mukwecic@iway.na
Namibia

09 March 2020

Green Earth Environmental Consultants

Dear Sir/Madam

RE: INVITATION LETTER TO GIVE FEEDBACK TO STAKEHOLDERS ON THE ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED ALIGNMENT AND CONSTRUCTION OF THE VETERINARY CORDON FENCE TO CREATE A FREE ZONE

1. I refer to the above subject matter and your letter dated 7 July 2020.

2. As Regional Councillor of Mukwe Constituency and in support of the farming community in Mukwe Constituency i wish to expressed our thanks and appreciation that your organization has organisation has arranged a meeting in Rundu to give feedback on the above subject matter.

3. We have noted with grave concern on the veterinary proposed map which you have attached to your letter of invitation. It appears that the whole area of Mukwe Constituency or district was excluded.

4. As a matter grave concern and because this is affecting the livelihood of the people of Namibia, the region and Mukwe Constituency in particular, we would like to make use of this opportunity to register our discontent, because your proposal will totally exclude the farmers in this area starting at 19° degrees until 21° degrees.

5. This area has about 18 farm units which was demarcated and approved by the Ministry of Agriculture some years ago.

6. On behalf of farmers and the entire community of Mukwe Constituency, we are requesting your company to reconsider your decision and to include that area.

7. We are proposing the extension of the blue new cordon fence to pass through the following degree coordinates as listed here under:

7.1 18°12`09.3``S 20°42`04.2``E
7.2 18°05`37.5``S 20°59`12.0``E
7.3 18°03`12.8``S 21°05`47.7``E
7.4 18°02`32.2``S 21°13`44.6``E
7.5 18°07`03.0``S 21°23`04.1``E
7.6 18°11`39.4``S 21°32`28.4``E
7.7 18°17`56.6``S 21°32`56.5``E

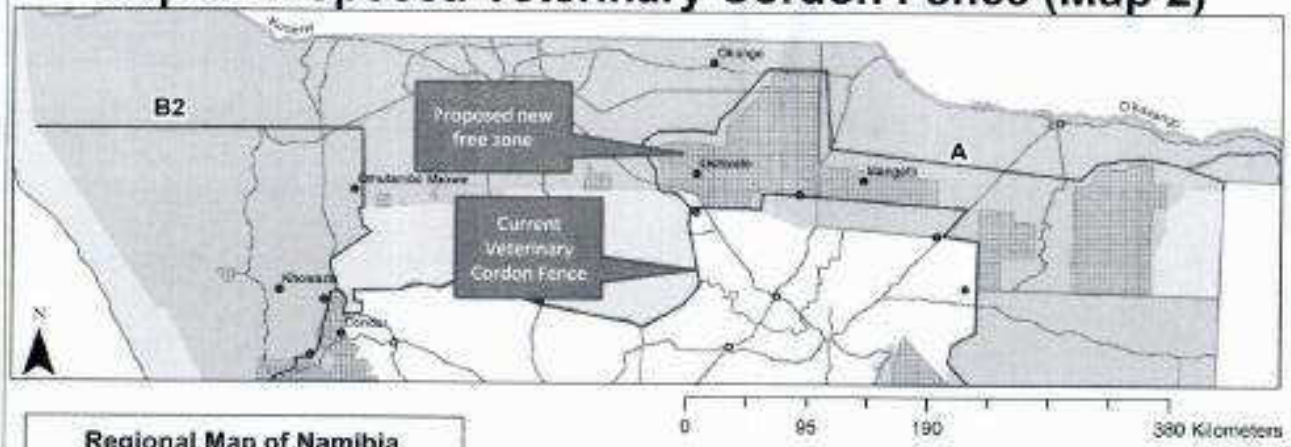
8. We have attached a map with a drawing in red line highlighted in yellow indicating the area which need to be covered or included.

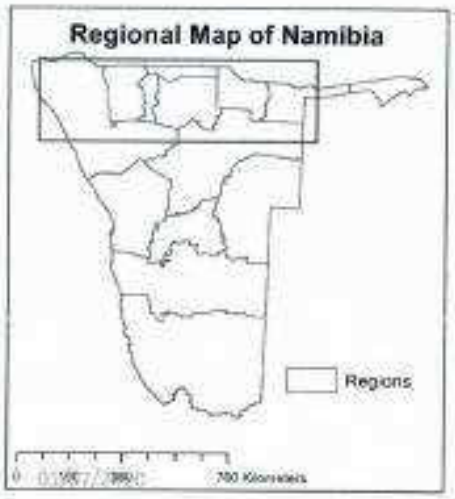
9. This area is highly potential for large and small stock farming.

Kind regards

HON. JOHANNES H THIGHURU
REGIONAL COUNCILLOR

Map of Proposed Veterinary Cordon Fence (Map 2)



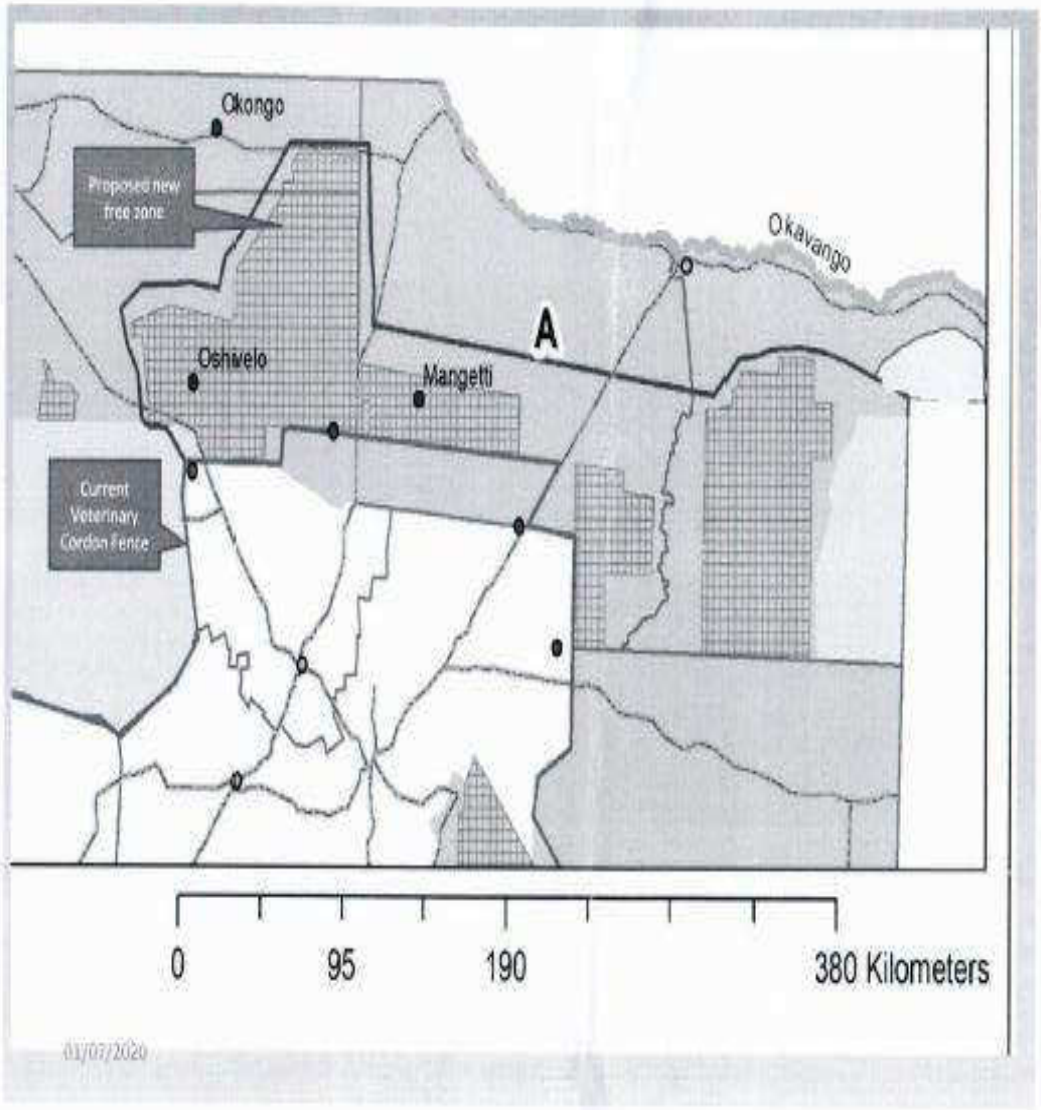


- Quarantine Camps
- Main Towns
- Veterinary Control Gates
- Veterinary Cordon Fence
- Part A
- Part B2
- Perennial River
- Main Roads N11
- Trunk Roads N11
- New Private Farms
- Regional Boundaries
- National Parks
- Communal Land

Distance of Proposed VCF 2:

Total Sum Length	:	*1 470.559 km*
Part of Current VCF	:	*422.639 km*
Part A	:	*634.494 km*
Part B2	:	*413.426 km*

Coordinate System: WGS 1984 UTM Zone 33S
Projection: Transverse Mercator
Datum: WGS 1984
False Easting: 500,000.0000
False Northing: 10,000,000.0000
Central Meridian: 15.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter


Okongo
Proposed new free zone
Okavango
A
Oshivelo
Mangetti
Current Veterinary Cordon Fence
0
95
190
380 Kilometers
01/07/2020

Letter from Roads Authority:

SAFE ROADS TO PROSPERITY

ROADS AUTHORITY
Private Bag 12030
Ausspannplatz
Windhoek
NAMIBIA

Our Ref: RA14/19/2/74

Your Ref: CE002/WM/cn/1071

Enquiries: EAM de Paauw
Telephone: +26461 284 7027
Fax: +26461 284 7151
E-mail: depaauwe@ra.org.na

29 March 2016

Mr C Nyamaphene
Conselect Engineering
PO Box 184
Oshakati

Sir

MAIN ROAD 0074: CONSTRUCTION OF NEW VETERINARY OFFICES AND STAFF ACCOMMODATION FACILITIES AT ROOIDAG GATE: ERECTION OF ROOF-OVER-ROAD: ROOIDAG VETERINARY CONTROL GATE

Your letter of 16 March 2016 has reference.

Approval is herewith granted for the erection of a roof-over-road structure across Main Road 0074 at the Rooidag Veterinary Control Gate.

The minimum dimensions of the structure shall be as follows:

- Width: minimum horizontal clearance between columns of 17.400 metres across the road, measured 90° to the road centerline, and
- Height: minimum vertical clearance of 5.200 metres measured vertically from any point on the road carriageway and shoulders

Kindly note that at least one bypass road needs to be provided to allow for abnormally large loads to be conveyed past the roof structure. This bypass road is to consist of at least two 150 mm layers of sub-base quality material on top of the necessary roadbed preparation and to be bitumen surfaced. The structural design of this bypass road as well as the route that the bypass road is to follow is to be determined in consultation with and be approved by the office of the Regional Engineer of the Roads Authority in Otjiwarongo before any such works may be proceeded with.

At points where heavy vehicles are required to be taken off the main road for inspections, etc, the bitumen surface edging of the main road is to be protected, either by surfacing the turn-off or by providing concrete edging.

The erection of the roof structure is further subject to the following conditions:

- **Before commencing with any excavations inside the road reserve it will first need to be determined whether any services such as telecommunication cables are present.**
- All necessary precautions must be taken to ensure the safety and comfort of the travelling public during the construction process.
- Suitable warning signs complying with the Road Traffic and Transport Act and its regulations must remain erected for as long as the works are in progress.
- The local Area Manager of the Roads Authority must be informed at least two days in advance of the commencement and completion dates of the works in order to allow for the necessary inspections, if any, to be carried out.
- It is of paramount importance that all aspects of the works be carried out in close co-operation with the office of the Regional / District Engineer and in accordance with his/her instructions.
- The road reserve must, at the completion of the works, be left in a clean and tidy state and all rubble and excess construction material must be gathered and carted away from the site.
- The Roads Authority will not accept responsibility for any damage, injury or loss of life that may occur as a result of negligence, inadequate warning signs or the inadequacy of any other precautionary measures needing to be taken while the works are in progress.

Yours sincerely

CHIEF EXECUTIVE OFFICER

Invitation Letter for Meeting June 2020:

Green Earth
ENVIRONMENTAL CONSULTANTS

1st floor Bridgeview Offices & Apartments, No. 4 Dr Kwame Nkrumah Avenue, Klein Windhoek, Namibia
PO Box 6871, Ausspannplatz, Windhoek
Phone: +264 61 248010

29 June 2020

Dear Sir/Madam

FEEDBACK MEETING TO STAKEHOLDERS ON THE ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED ALIGNMENT AND CONSTRUCTION OF THE VETERINARY CORDON FENCE TO CREATE A NEW FREE ZONE

Green Earth Environmental Consultants were appointed by the Proponent, the Ministry of Agriculture, Water and Land Reform to conduct an Environmental Impact Assessment and an Environmental Management Plan for the proposed alignment and construction of a veterinary cordon fence to create a new free zone for the marketing of livestock.

This letter serves as an invitation to interested and affected stakeholders to attend the public meetings (see meeting schedule in table below) where feedback on the status of the project will be provided.

Purpose of the meeting:

It is the intension to give feedback on the status and progress with the project. Issues to be covered in the meetings include the following:

- The replacement of the proposed compartments with a new free zone.
- The area to be included in the new free zone.
- The alignment of the veterinary cordon fence which will form the boundary of the new free zone.
- The socio-economic and biophysical implications of the creation of the new free zone.
- Comments/inputs from the affected stakeholders.
- The way forward.

Members of the Traditional Authorities / Farmers Unions / Farmers Associations / Government Departments / General Public are invited to attend any of the meetings at the dates, times and venues as set out in the table below.

Public Meetings to be held

Date	Time	Town	Venue	Meetings	Contact Person
30 June 2020 (Tuesday)	15h00	Ondangwa	Palace of the King	Meeting with the King and representatives	Mannetjies Kambonde (081 124 6236)
01 July 2020 (Wednesday)	10h00	Omuthiya	Okashana Rural Development Centre (065 244 100)	Meeting with Oshikoto Farmers Union and Ministry of Lands representatives	Ismael Shaillemo (081 632 0425) Thomas Nakanyala (081 279 3485) Tuhafeni Sheuyange (081 217 2519)
02 July 2020 (Thursday)	08h00	Ohangwena	Office/Palace of the Queen	Meeting with the Queen and representatives	Queen secretary: Mr Sheya (0814865535) Chief Efraim Weyulu (0812598197)
02 July 2020 (Thursday)	10h00	Eenhana	Eenhana Town Council (Expo Hall)	Meeting with Ohangwena Farmers Union, Chief and Ministry of Lands representatives	Martin Nghiitombo (081 292 3704)
03 July 2020 (Friday)	9h00	Kavango West (Mbunza area)	Office of the Chief	Meeting with Chief Lafons Kaundu and representatives	Chief secretary: Mrs Maria (0813431939) Chief spoke person: Elia Kamanya (0814938007)
03 July 2020 (Friday)	11h00	Nkurenkuru	Nkurenkuru Town Council (Community Hall)	Meeting with Kavango West Farmers Union, Chief and Ministry of Lands representatives	Sabine Mufenda (081 246 1479) Chief Mr Eugene Siwombe Kudumo (081 602 5123)

For more information on the meetings and locality of the proposed venues you are welcome to contact the people listed in the table above or Carien van der Walt at 0814718073.

We are looking forward to your attendance at the meetings.

Charlie du Toit

Invitation Letter for Meeting July 2020:

Green Earth
ENVIRONMENTAL CONSULTANTS

1st floor Bridgeview Offices & Apartments, No. 1 Dr Kwame Nkrumah Avenue, Klein Windhoek, Namibia
PO Box 6871, Ausspannplatz, Windhoek
Phone: +264 61 248010

7 July 2020

Dear Sir/Madam

FEEDBACK MEETING TO STAKEHOLDERS ON THE ENVIRONMENTAL IMPACT ASSESSMENT FOR THE PROPOSED ALIGNMENT AND CONSTRUCTION OF THE VETERINARY CORDON FENCE TO CREATE A NEW FREE ZONE

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- Comments/inputs from the affected stakeholders.
- The way forward.

Members of the Traditional Authorities / Farmers Unions / Farmers Associations / Government Departments / General Public are invited to attend any of the meetings at the dates, times and venues as set out in the table below.

Public Meetings to be held

Date	Time	Town	Venue	Meetings	Contact Person
13 July 2020 (Monday)	10h00		Office of the Chief/Palace	Meeting with Shambyu (Chief) Traditional Authority and representatives	Chief Sophia Mundjembwe Kanyetu - Shambyu Traditional Authority (081 296 2075) (066 256 076)
					Mr Kosmas Mekenge - Senior Headman (081 303 5818)
Next Meeting					
13 July 2020 (Monday)	14h30		Office of the Chief/Palace	Meeting with Gciriku (Chief) Traditional Authority and representatives	Mr Festus Shikerete - Senior Headman and Acting Chief (081 397 8946)
Next Day					
14 July 2020 (Tuesday)	09h00	Rundu	Omashare Hotel (066 266 600)	Meeting with Kavango East Farmers Union, representatives and other stakeholders	Mr Adolf Muremi (081 154 7775) Mr Thimotheus Kativa (081 143 8515) Please ask them to invite many farmers
			Rundu Regional Council Hall not available due to renovations		Honourable Governor Bonifasius Wakudumo (066 267 243) (081 831 4533)
					Mr Ludwig Thikusho (066 266 000) The Regional Council should also please invite Hon. Johannes J.H. Thighuru who is the Chairperson Kavango East Regional Council
Next Meeting					
14 July 2020 (Tuesday)	16h30	Kavango West (Mbunza area)	Office of the Chief/Palace	Meeting with Chief Alfons Kaundu (Traditional Authority) and representatives	Mrs Maria – Chief Secretary (081 343 1939)

For more information on the meetings and locality of the proposed venues you are welcome to contact the people listed in the table above or Carien van der Walt at 0814718073.

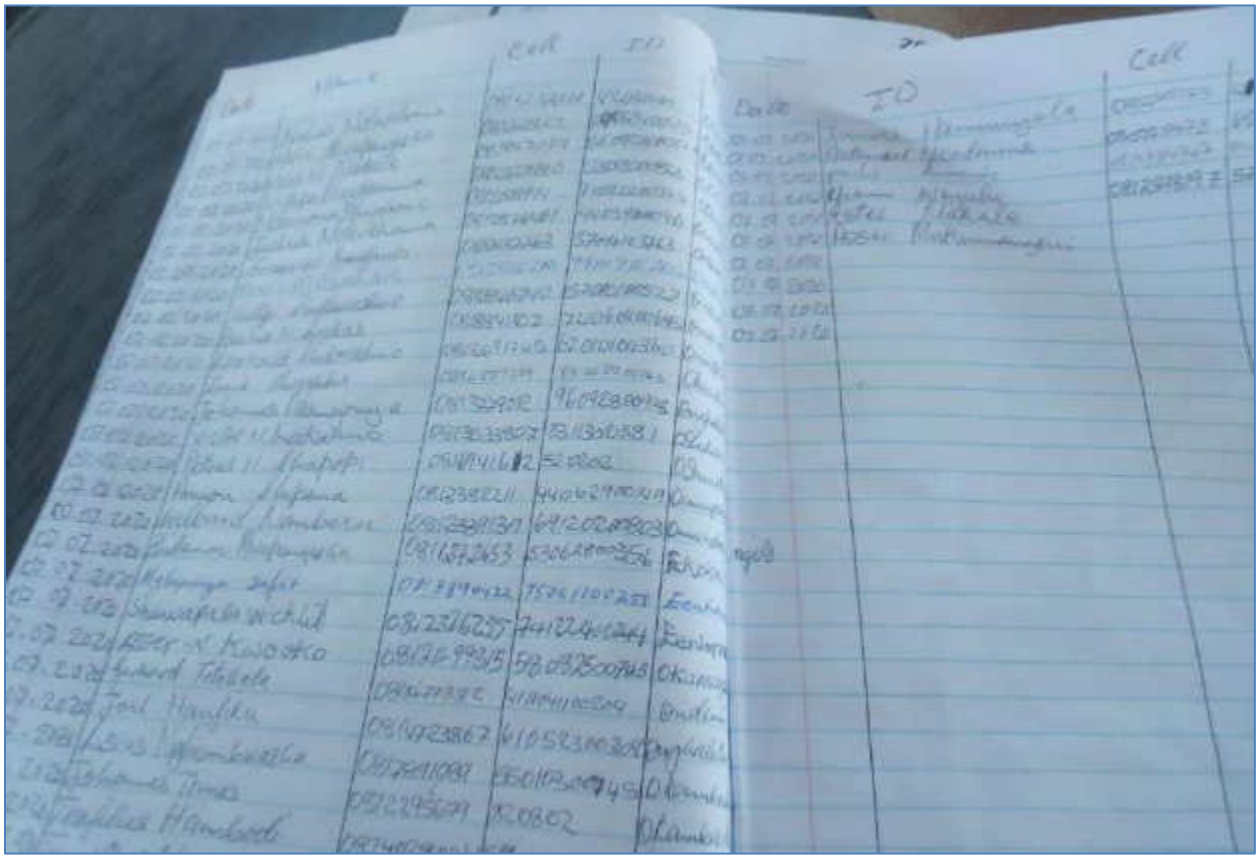
We are looking forward to your attendance at the meetings.

Yours faithfully

Charlie du Toit

Green Earth

Attendance Register:



Farmers Meeting Minutes:

Feedback on farmers meeting regarding the shifting of the Veterinary Cordon Fence

Date: 7th July 2020

Venue: Oukwanyama Traditional Authority Office, Okongo

Time: 9H00

Compiled by: Mr. Efraim Weyulu
Mr. Paulus Amaambo

Table of Contents:

1. Introduction

The Veterinary Cordon Fence (VCF), also referred to as the "Red Line", was erected in 1896 as a pragmatic disease surveillance and exclusion fence separating northern and central Namibia to southern Namibia. The VCF in its current form and location remains a challenge to the entire livestock industry in general and the northern farmers in particular. Although the VCF's main purpose is to control animal and meat movement from the north to the south of Namibia as well as ensuring that marketing of animals from the South of the Veterinary Cordon Fence (SVCF) with a different disease status as those from the NCA is controlled. To ensure that the lucrative market is maintained, it's essential to ensure that complete adherence and compliance to protocols and regulations required by major international clients like the United Kingdom (UK), China, Norway and European Union (EU) are maintained.

The Ohangwena farmers met on 7th Jul 2020 in Okongo to discuss the proposed gradual shifting of the veterinary cordon fence. The meeting was chaired by Mr. Mukumangeni. Mr. Efraim Weyulu informed the farmers that there is a consultant appointed to engage the farmers in order for the farmers to propose the area that they think is suitable to be included in the zoning of the VCF area. The meeting was necessitated by the fact that the initial meeting was not well attended and it seems the invitation to the farmers was not well coordinated because even the regional leadership including the office of the Hon. Governor was not aware that there is a consultant appointed to consult the farmers.

2. Discussion

The farmers discussed the issue and considered many aspects. Farmers noted that there is always discrepancies and distortion of information. Having noted the above, the farmers nominate institutions and individuals to serve in the committee that will spearhead the demarcation of the proposed area where the CF shall shift. Additionally, the farmers discussed and identified different areas were the gates could be constructed. Farmers observed that the costs of constructing gates is always high and they proposed only three (3) gates to be erected. However, consideration must be made to make movement of people smooth when visiting their farms. Consequently, the farmers discussed and proposed the localities where the VCF must be shifted which should include the community forests and the quarantine and motivation of shifting the VCF as well as mitigation measures to be in place to prevent diseases.

3. Committee

The farmers noted that the consultant should be guided in order to capture the correct proposed localities and points were the VCF is planned by the farmers to be shifted. The following people and institutions were nominated to form part of the working group/team that will accompany the verification and mapping team in the field.

1) Onghalulu Cooperative
2) Okongo Community Forest
3) Omufituwekuta Community Forest
4) Okongo Farmers Association
5) Ohangwena Livestock Marketing
6) MAW&LR (Directorate of Veterinary Services)

4. Gates

The farmers proposed that the gates must be elected at the following points

1) Omhana
2) Onehanga
3) Omauni

5. Proposed VCF servitude

The farmers proposed that the VCF must be shifted along the following localities and points.

The VCF must start from Mangetti farms to Polopolo road, Onghalulu, Ekokofi, Onane and it must include the whole area of Okongo Quarantine, Omufituwekuta Community Forest, Okongo Community Forest up to Angolan and Namibian boarder until the border between Ohangwena and Kavango west region.

6. Motivation

The farmers indicated that, the main motivation for the VCF to be shifted to the proposed area above is as per the following reasons

1) Commercial marketing of livestock
2) Access to global market - the purpose is to enable the northern farmers to export to larger market and for the farmers to be integrated in the wider Namibian livestock market and the addition of livestock north of the VCF will greatly boost the country export volume
3) Economic growth of the country economy
4) To unite Namibian in the meat industry

7. Proposed mitigation

The farmers propose that the following must be in place or should be embarked on namely:

1) Embarking on vigorous vaccination programme
2) Capacity building of farmers
3) Introduce very strict veterinary control - Control measure on the movement and keeping of livestock
4) Mind shift of farmers from being livestock keeper to livestock farmer
5) People who has constructed residential homestead (traditional homestead) in the community forests must relocate because the area is aimed for farming and all those who reside in the community forests after it was gazetted are illegal settling in the area.

8. Conclusion

The farmers in Ohangwena region are recommending that, the VCF must be shifted as per the zoning above and the mitigation measures must be promptly incorporated in the shifting documentation plan in order to control and maintain the lucrative oversea livestock market and the meat industry in general.

Annexure 1- Attendance register

End

Email from Roads Authority:

Dear Mr. Charlie du Toit,

My apologies for the late response.

Nonetheless, In response to your e-mail of 21 Feb 2020 please find the following below :

Placement/construction and operation of new gates
This is carried out by the proponent (MAWF). The layout/design needs to be approved by RA. Usually a roof-over-road is also erected as part of the project – please see attached to this email a typical letter of approval (with Ts & Cs) for such structure.

Requirements for de-commissioning of a gate
Each gate will need to be addressed individually. We suggest that MAWF submit to RA their proposal as to what is meant by de-commissioning and RA evaluates and responds.

Any plans for upgrading of identified (earth graded) roads by RA
Planned for in the Roads Authority strategic plan of 2018/2019 to 2022/2023 for upgrade to an engineer gravel road. However, detailed design and construction will only commence once funding is secured.

- D3446 : From Helavi on TR15/1 to Alex Muranda on TR8/3
- DR3445: From Bravo Veterinary Gate(Mangetti West) on TR15/1 to Ou'cordon fence on TR8/3

Planned for in the Roads Authority strategic plan of 2018/2019 to 2022/2023 for upgrade to an engineer gravel road. Detailed design was completed and construction of the gravel road to commence soon.

- DR3610 phase 2: From Bravo Veterinary Gate(Mangetti West) on TR15/1 to 50 km westwards on DR3610

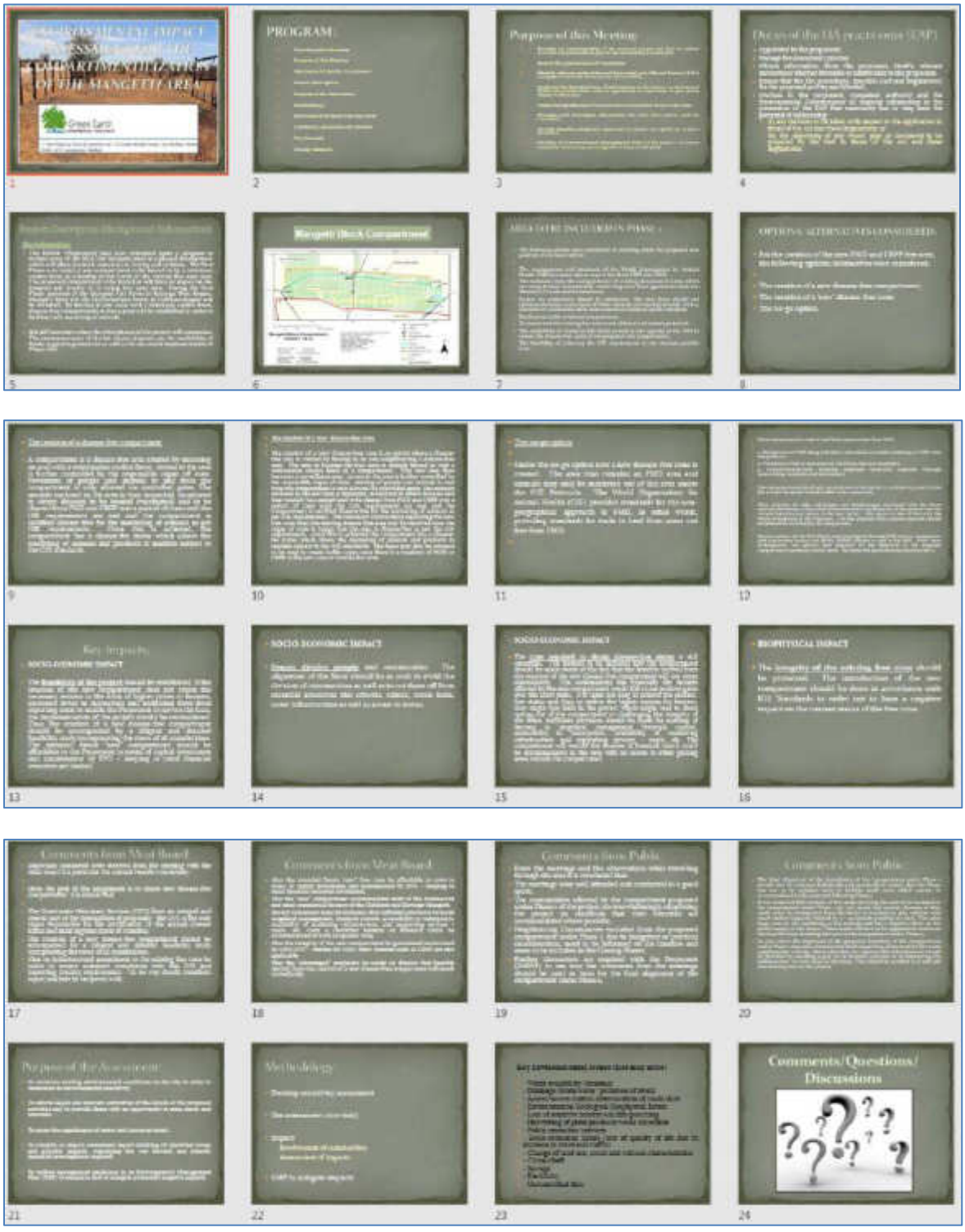
Availability of funds to upgrade above roads
Funds are only available at the moment to upgrade DR3610 phase 2 to a gravel road as indicated above. The rest of the projects within the roads Authority Strategic Plan will only be implemented once funding is available

Kind Regards,
Sophia

Interested and Affected Parties:

'adoltina98@yahoo.com';
'andrew.haingura@gmail.com'
'asikuta@nbc.na';
'benitha.ndara@gmail.com';
'carlmasonde@gmail.com'
'Fillipus.Muzanima@mlr.gov.na';
'governor@kavangoeastog.gov.na';
'josephlikuwa@nammic.com.na';
'kndumba@yahoo.com';
'ksikuta@nbc.na';
'l.amushila@yahoo.com';
'likuwajoo@gmail.com';
'lkthikusho@kavangorc.gov.na';
'lthikusho@kavangorc.gov.na';
'Maria Mundula' <mariamundula90@gmail.com>;
'mosesmunenge@yahoo.com';
'robertmupiri5@gmail.com';
'tskativa@gmail.com';
‘yanadingara <yanadingara@gmail.com>

Power Point Presentation:



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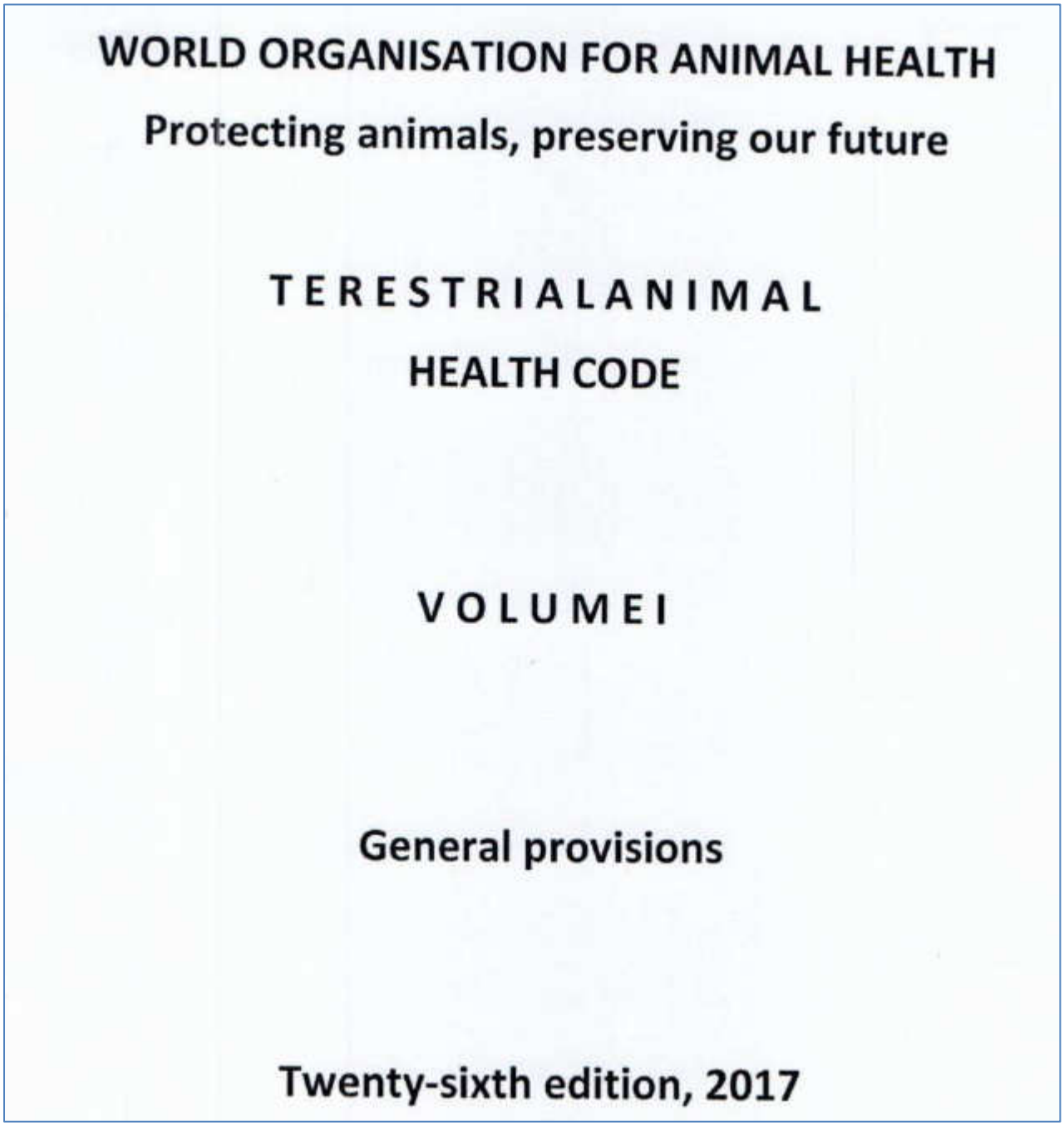
World Organisation for Animal Health:



Article 4.3.1.

Introduction

For the purposes of the Terrestrial Code, 'zoning' and 'regionalisation' have the same meaning.

Establishing and maintaining a disease free status throughout the country should be the final goal for Member Countries.

However, given the difficulty of establishing and maintaining a disease free status for an entire territory, especially for diseases the entry of which is difficult to control through measures at national boundaries, there may be benefits to a Member Country in establishing and maintaining a subpopulation with a distinct health status within its territory.

Subpopulations may be separated by natural or artificial geographical barriers or, in certain situations, by the application of appropriate management practices.

Zoning and Compartmentalisation are procedures implemented by a Member Country under the provisions of this chapter with a view to defining subpopulations of distinct health status within its territory for the purpose of disease control or international trade. **While Zoning: applies to an animal subpopulation defined primarily on a geographical basis (using natural, artificial or legal boundaries),**

Compartmentalisation: applies to an animal subpopulation defined primarily by management and husbandry practices related to biosecurity. In practice, spatial considerations and good management including biosecurity plans play important roles in the application of both concepts.

A particular application of the concept of zoning is the establishment of a containment zone. In the event of limited outbreaks of a specified disease within an otherwise free country or zone, a single containment zone, which includes all cases, can be established for the purpose of minimizing the impact on the entire country or zone.

This chapter is to assist Member Countries wishing to establish and maintain different subpopulations within their territory using the principles of compartmentalisation and zoning. These principles should be applied in accordance with the measures recommended in the relevant disease chapters. This chapter also outlines a process through which trading partners may

recognise such subpopulations. This process is best implemented by trading partners through establishing parameters and gaining agreement on the necessary measures prior to outbreaks of disease.

Before trade in animals or their products may occur, an importing country needs to be satisfied that its animal health status will be appropriately protected. In most cases, the import regulations developed will rely in part on judgements made about the effectiveness of sanitary procedures undertaken by the exporting country, both at its borders and within its territory.

As well as contributing to the safety of international trade, zoning and compartmentalisation may assist disease control or eradication within a Member Country's territory. Zoning may encourage the more efficient use of resources within certain parts of a country and compartmentalisation may allow the functional separation of a subpopulation from other domestic animals or wild animals through biosecurity measures, which a zone (through geographical separation) would not achieve. Following a disease outbreak, the use of compartmentalisation may allow a Member Country to take advantage of epidemiological links among subpopulations or common practices relating to biosecurity, despite diverse geographical locations, to facilitate disease control or the continuation of trade.

Zoning and compartmentalisation cannot be applied to all diseases but separate requirements will be developed for each disease for which the application of zoning or compartmentalisation is considered appropriate.

To regain free status following a disease outbreak in a zone or compartment, Member Countries should follow the recommendations in the relevant disease chapter in the Terrestrial Code.

Green Earth
ENVIRONMENTAL CONSULTANTS

Date: 26 June 2020 - 9h00

Attendance Register: Meeting with NNFU

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
Mr JASON EMVULA	NNFU	kanduceo@gmail.com 0812355630	
Donna Amunyela	NNFU	d.amunyela@gmail.com	
KRISTIAN HANSEN	NNFU	Krisyhunse@gmail.com 0311 986032	
Yvonne Howoes	NNFU	0812 7818 15 yhowoes43@gmail.com	
Amon M. Kapi	NNFU	amonkapi@gmail.com	

Attendance Register: NNFU:

Name & Surname:	Nature of Interest/ Impact:	ntact Details (phone number and email address):	Signature:
THIMOTEUS . S KATIVA	NNFU	tskativa@gmail.com	
ELIJAH M KALUNDU	NNFU	0712035581 elijahkalundu@gmail.com	
Patricia Gurubes	NNFU	08134796772 pgurubes@yahoo.com	
Beata IT Xulu	NNFU Secretaria	bxulu@nnfu-orgna beata-xulu@gmail.com	
Sikunawa Negumbo	KIAT	sikunawa.negumbo@gmail.com	

Green Earth
ENVIRONMENTAL CONSULTANTS

Date: 12 February 2020 - 10h00

Attendance Register: Roads Authority - Veterinary

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
Carien van der Walt	Green Earth	0813891705 carien@greenearthnamibia.com	
Sophia Kasera	Road Authority. NP&C	061 284 7416 kaseras@ra.org.na	S Kasera
Eugene de Waal	Roads Authority	081 129 1947 dpaauwe@ra.org.na.	
Manfred Burth	RA	burthma@ra.org.na	

Attendance Register: Roads Authority:

Attendance Register: Oshikoto Farmers Union:

Green Earth
ENVIRONMENTAL CONSULTANTS

Date: 1 July 2020 - 10h00 (Oshikoto Farmers Union)

Attendance Register: Okashana Rural Development Centre - Omuthiya

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
① Manngutis Kambonde	OTA.	0811246236 TSENAYO@AFRICAONLINE.COM.NA	
Ves Kamanja	DTA.	0811289057	
Shuumbwa Filemon Nangolo	OTA Ondangwa	0812563089	
E.J. Amutenya	OTA Ondonga	0815925255	
Jerry Pendapala Nguwena	R/Councilor	0813164015	

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Oshikoto Farmers Union

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
Kashona Malulu	OTA	0871249770	
Ismael Shailemo	OTA	0816320425	
Petrus Gabriel	OTA	08166795 5	
Nambili Fillemon	OTA	0812613835	
Malulu G. Kambonde	OTA	0811277870	
Anneli Sakaria	O.T.A	08 11494971	
Mwandingi Amukongo	O.T.A	0811272 427	
Leonard Ngalagombe	OTA	0811286993	
Ilungwanga Natangwe	OTA	0814 22220	
Shihweka Victoria	OTA	0813046496	

Oshikoto Farmers Union

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
Lot J. KASAMANE	OTA	0812522099	[signature]
Kornelius Kaulela Kapenda	OTA	0811270504	[signature]
Musaso-[illegible] O	MAWSF/DADEC	0812497558	[signature]
John Utoni	Meat Board of Namibia	0811471813	[signature]
Tuhafeni P. Shevyange	EAFII LSP Oshikoto	0812172519	[signature]

Green Earth
ENVIRONMENTAL CONSULTANTS

Date: 1 July 2020 - 10h00

Attendance Register: Omuthiya

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
Petrus N.R David	FARMER - Represent BRAVO FARMERS ASSO	0811422916 ~~Adam~~ PNKdavid88@gmail.com	
Thomas Nakanyala	OGRFU	0817279485 ~~DG~~ nakanyalathomas@gmail.com	
LUMETA EMMANUEL	DVS - Omuthiya	elumeta@yahoo.com	
MAGNUS NANGOMBE	FARMER	081 378 6242 MGN19091@gmail.com	
MOSES P. AMUKOTO	FARMER	0812461373 amukotomoses810@gmail.com	

Name & Surname:	Nature of Interest/ Impact:	ntact Details (phone number and email address):	Signature:
SAKEUS NAMUHUYA	NORTHERN LIVESTOCK CO-OP	0811277323 nkeloco@gmail.com	
ANDREAS NGULU	NORTHERN LIVESTOCK COOP	081764479	
[redacted]			
KENNETH. K. SHOOMBE		0813257491	
Tuhafeni P. Shenyange	EDF-LSP-RLO OSHIKOTO	081217 2519	
JOHN. Y. UTONI	Meat Board of Namibia	0811471813	

Green Earth
ENVIRONMENTAL CONSULTANTS

Date:

Attendance Register:

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
Ephraim HamAKWA WEYULU		0812598197 ephweyulu@gmail.com	WEyulu
Tuhafeni P. Shenyange	EDF11 LSP RLO OSHIKOTO	0812172519 shenyangetp@gmail.com	
John Utoni	Meat Board of Nam	0811471813 jyutoni@nammic.com.na	
Michael Naungango	Directorate of Veterinary Services	0812728745 naungangom@yahoo.com	
Likius Nghishekwa Nakamwe	Farmer	0811273333 Likiusnakamwe@yahoo.com	

Green Earth
ENVIRONMENTAL CONSULTANTS

Date: 3 July 2020 - 11h00

Attendance Register: Nkurenkuru

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
Mr. Hamunyera Hambyuka		hhambyuka@yahoo.co.uk 0811242861	
Mr. Kafene Hoshia Sifeketa		kafene@iway.na 0811291163	
Mr Hompa Kudumo Eugen Siwanta		ekuyoyo@gmail.com 0816025173	

Attendance Register: Nkurenkuru:

ATTENDANCE REGISTER: KAVANGO WEST FARMERS UNION 3/7/2020 - Nkurenkuru

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
(1) Hausiku Johannes Hausik	Removing Redline to the border	0814438611 hjhausiku@gmail.com	[illegible]
(2) Zepee HAVARUA	Understanding the zoning area for KW	0812862572 [illegible]@yahoo.com	[illegible]
3. Joseph Likuwa	Knowing the sentiments of majority to the zoning	[illegible]	[illegible]
4. Ambrosius Siranda	understanding the impact and benefits of zoning	0814030974 Ambrosiussiranda93@gmail	[illegible]
5. Dinyando Nelson	understanding the impact and benefits of zoning	0814467930 Maganot018@gmail.com	[illegible]
SIRKKA AUSIKU	[illegible]	0814284482 sausiku@[illegible].com.na	[illegible]
SEKETA SAMUEL	Shifting Redline	Seke[illegible]@gmail.com 0812218545	[illegible]
Markus Musongo	remove redline first zoning than later remove redline to border	0812752005	[illegible]
VINCENT K MBEREMA		0811289526	[illegible]
OIVA H MAHINA	FIRST PROPOSED ZONE BE IMPLEMENTED, SECOND PHASE TO BORDER	0812915513	[illegible]

[illegible] West Farmers Union 3/7/2020

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
Alberth Mutesi	The impact on sales of livestock	0812978664 mutesialberth@yahoo.com	
Muvendera Werner	Shifting of redline	0681597790	
I. S. Ausiku	SPEED UP THE IMPLEMENTATION OF SHIFTING OF RED LINE	0681850665	
A. M. Ngoma	SPEED UP THE IMPLEMENTATION AND SHIFT DOWN WITHIN OUR FARMS	0812007923 ngomaandreas77@gmail.com	
M. Hausiku	Speed up the implementation		
Simulenga Villho	See Shifting the red line	villhosimulenga@gmail.com	
Ngoma Thomas	Acces to Markets	0812570118 schotamatthias@yahoo.com	
Mufenda Sabine	The project need to be implement within [illegible]	smmufenda@yahoo.com	
Kamati Elia	To include all SSFU in KAVANGO WEST	0812876260 Kamatifarm@gmail.com	

Green Earth
ENVIRONMENTAL CONSULTANTS

Date:

Attendance Register:

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
JOSHUA D. SHEYA	SECRETARY TO THE QUEEN	0811259972	[signature]
MARTHA MWASINOWO YA CHRISTIAN NELUMBO	QUEEN	dimeingeo@gmail.com —	
Likus Kakololo	CHIEF OF PROTOCOL	0812461285	[signature]

Attendance Registers: Griciriku Traditional Authority:

Green Earth
ENVIRONMENTAL CONSULTANTS

Date: 13/7/2020: MEETING GRICIRIKU TRADITIONAL AUTHORITY

Attendance Register:

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
Petrus Kavhura	R. Council	0811564009 pmkavhura@yaroo.com	
Festus SHIKERETE	SENIOR HEAD MAN	0813978946	
Edward Haudiba	DoRS Analyst	0812776332	
Alex Kahukura	V.D.C. chairperson	0818947918	

Attendance Register: Shambyu Traditional Authority:

Green Earth
ENVIRONMENTAL CONSULTANTS

Date: 13/7/2020 MEETING: SHAMBYU TRADITIONAL AUTHORITY

Attendance Register:

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
Maranga Kosmos Kakat	Senior TA Councillor	0811500149/0813035818	
Mutero Edward Sikerete	Senior Councillor	0813431973	
Shiputa Joseph Ndhimbi	Headman	081865449	
Mukuve Theresia	Headwomen	0818061884	
Kativa Willibard	Headman	0814834119	

Shamuya Traditional Authority

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
Makaka Ntjamba	Traditional Councillor	0812900552	
Anton Pauline	T/Councillor	0812270029	
Kufuna Michael	T/Councillor	0816985354	
Lucas Mbangu	Shakambai farmers Ass.	0812442807	
Karonde Maria Magdalena	Headwoman	0817910930	
Mushongo Christine Makena	T/Councillor	0814208024	K.M Makena
Kapitango Matheus	T/Councillor	—	M.K.

Green Earth
ENVIRONMENTAL CONSULTANTS

Date: 14/7/2020 : MBUNZA TRADITIONAL AUTHORITY

Attendance Register:

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
Alfons Kaunda	MBUNZA TRADITIONAL AUTHORITY	0977774447	M.K. Alfons

Attendance Register: Mbunza Traditional Authority:

Attendance Register: Kavango East Farmers Union:

Green Earth
ENVIRONMENTAL CONSULTANTS

Date: 14/7/2020 KAVANGO EAST FARMERS UNION

Attendance Register:

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
Mathew K. Kakhonda	KERFU	0812776330	[signature]
BENEDICTUS MUSHONGO	FARM	0812075056	[signature]
Silvester L. Kavindja	Farm	0855524227	[signature]
Timotheus Shinkeva	Farmer	0811243911	[signature]
Haindaka Shinkumi Wenzel	Farmer	0812778990	[signature]

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Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
Kayimbi Virginia N	Farmer	0812968729 Box 193 [illegible]	[illegible]
Porto Augustinus	Farmer	0816017570 [illegible]@gmail.com	
Hausiku Lukas Kudumo	Farmer	0811286507 lukashausiku@yahoo.com	[illegible]
Robert Mazemwa	Farmer	[illegible]@gmail.com	[illegible]
Katimba Michael	Farmer	0812115599	[illegible]
Haininga Mak	Farmer	0814498833	[illegible]
Hausiku Thadeus	Farmer	081-2232284	[illegible]
Anselm K. Mbwerekera	Farmer	0812522084	[illegible]
Milka Ansindi Pinto	DAPEES	0812206329	[illegible]
Kapula Immanuel .K	Farmer	0817309223	Kapula

Kavango East

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
HAIRWA Basilius	FARM	0812238631	[signature]
Salomon Asino	Farmer / [illegible] / [illegible]	0812344484	[signature]
Kamunoko Paulus R.	farmer /	0816887579	[signature]
LUCAS R. KAJERA	Mashare FA	0812800279	[signature]
Sebastian. H. Kantema	Farmer	0811244390	[signature]
Annafrieda N. Rikoro	Farmer	0812972552	[signature]
Brigitte Thikusho	Farmer	0812450886	[signature]
Amos Amsiku	Farmer	081 269 1689	[signature]
Veronica Thikusho	Farmer	0814244464	[signature]
Sikongo Josef S	farmer	0813186163	[signature]

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
Alfonse Hamutima	Farmer	0812838983 alfonsinehamutima@gmail.com	[illegible]
LUKas makayi	Farmer	0812947102 [illegible]	[illegible]
MARANGA K. Kosmos	FARMER	0811500149	[illegible]
Shikusho J.K.	FARMER	0812354793	[illegible]
ERASTUS SOMENO	FARMER	0812301919 esomeno@yahoo.com	[illegible]
KATIVA T.S.	MCATU	0812745984	[illegible]
Kingsley Kuwenam	Mleako	0812876855	[illegible]

Photos of Public Meetings:


AND SOCIAL AND ENVIRONMENTAL ASPECTS

Meetings with Conservancies:

Public Meetings to be held

Date	Time	Town	Venue	Meetings	Contact Person
12 October 2020 (Monday)		Windhoek		Nyae Nyae Conservancy	Gerrie Cwi (Chairperson of Nyae Nyae Conservancy)
19 October 2020 (Monday)		Windhoek		Nyae Nyae Conservancy	Gerrie Cwi (Chairperson of Nyae Nyae Conservancy)
Next Meeting					
27 October 2020 (Tuesday)		Windhoek		Na Jaqna Conservancy	Sarah Zungu (Chairperson of Na Jaqna Conservancy)

Attendance Register for Nyae Nyae Conservancy:

Green Earth
ENVIRONMENTAL CONSULTANTS

MEETING: NYAE NYAE CONSERVANCY

Date: 19/10/2020

Attendance Register:

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
GUNTER FIA SIONORA	Management Com. Nyae Nyae Conservancy	0818825498	
HEINRICH ERASMUS	Manager Nyae Nyae Conservancy	0815678108 heagtnue@gmail.com	
Ciqae Gerrie Cui	NYAE NYAE Conservancy Chairperson	cuicigae@gmail.com	
Toma Leon Tsumkxao	Member Nyae Nyae Conservancy	0814697622 [illegible]@gmail.com	
Xama Gtqao	28' Member NNC	0812939374	XAMA

1

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
Ikoce Oza	Member NNC	0813623240	Ikoce
Wendy Vialy	NNDFN	nndfn@iafrica.com.na 0812595398	

Letter from Nyae Nyae Conservancy:

Nyae Nyae CONSERVANCY

And COMMUNITY FOREST

Tsumkwe, P.O. Box 45, Grootfontein, Namibia. Tel/Fax no: 067-244011

17 November 2020

TO: Meatco Foundation

Dear Kuniberth and Charlie

Thank you for your consultative meeting with us on Monday 12 October.
After discussion at our committee level and at the AGM on 17 November 2020, we agreed that the Nyae Nyae Conservancy would like to be excluded from the suggested free zone.
We have indicated with a red pen on the map where we would like the new red veterinary fence to be, which is the gazetted northern boundary of the Conservancy (see attached), excluding the area of Khaudum boundary, as we need the game animals to move freely between Khaudum and Nyae Nyae, as we are dependent on these animals both traditionally and for Trophy hunting .
Attached please find the map with our proposed red line and the gazetted co-ordinates of our conservancy boundaries.

If you have any questions, please contact us.

Yours sincerely

Gerrie Cwi
Chairperson

form the basis of representation at Board meetings. As such, the community places the highest value on regular n!ore meetings, radio communications and village visits from the Management Committee as well as on an Annual General Meeting (e.g: RADA meeting), as appropriate fora for discussion and decision-making.

1.6 Recognizing the above, the Nyae Nyae Conservancy includes all land users who have usufruct rights to be conservancy members as outlined in 11.1 and 11.2.

1.7 The Nyae Nyae Conservancy Committee (hereafter referred to at the NNC Board) and Management Committee shall manage the conservancy within the constraints of the constitution and shall, (subject to the constitution), have ultimate authority with regards all activities related to the conservancy.

1.8 The community adopted this constitution at an Annual General Meeting (RADA meeting) held on 14-16 September, 2009 at Klein Dobe, Tsumkwe Constituency It was amended and adopted at the AGM held 3–5 September 2013 at Klein Dobe.

2. NAME AND ADDRESS

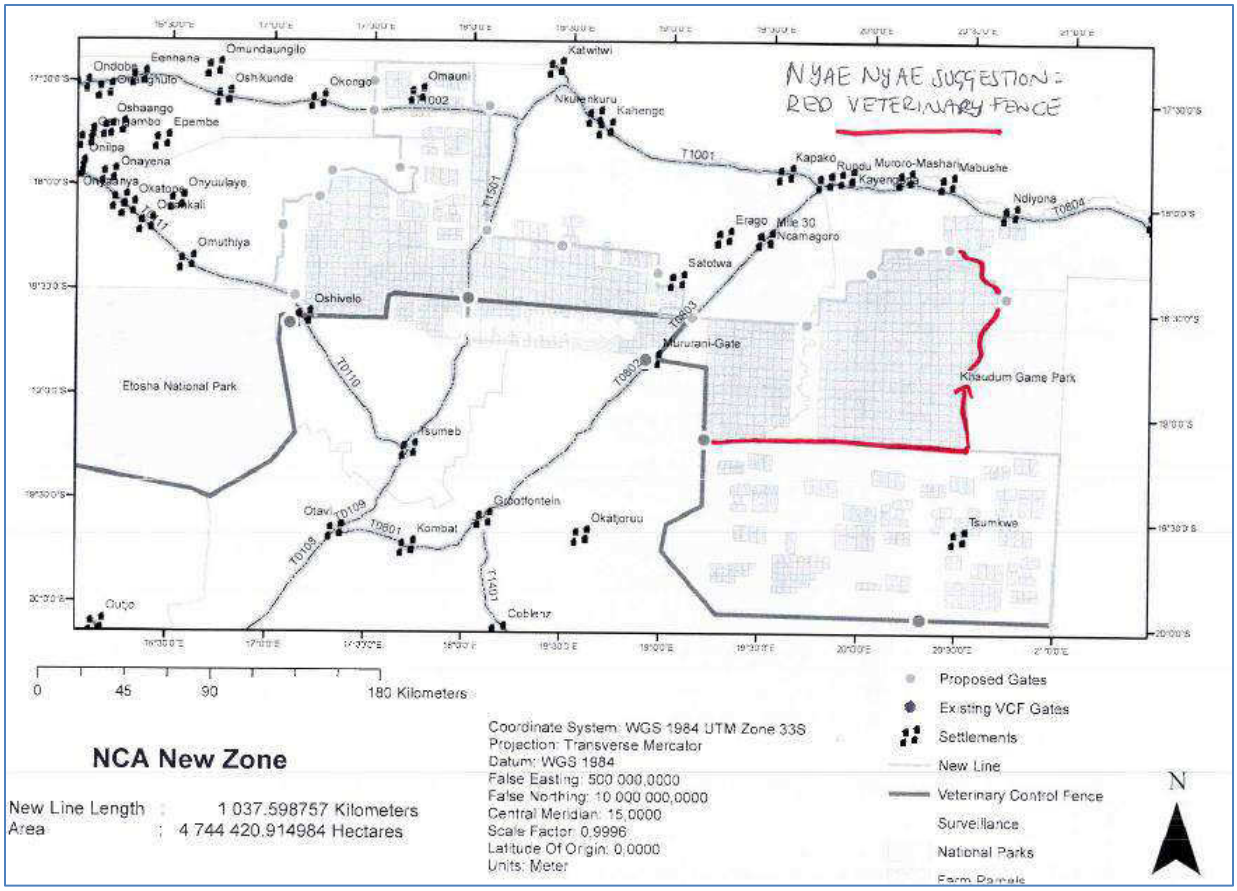
2.1 The name of the conservancy shall be the Nyae Nyae Conservancy, hereafter referred to as "the Conservancy" or 'NNC".

2.2 The address of the Conservancy shall be P.O. Box 45, Grootfontein, Namibia.

3. BOUNDARY DESCRIPTION OF THE CONSERVANCY

3.1 The Nyae Nyae Conservancy's eastern boundary coincides with the national border between the Republic of Namibia and the Republic of Botswana. The most northern point along this boundary is 21 degrees 00' E and 19 degrees 10' S and the most southern point is at 20 degrees 00'S where the boundary turns west and follows the veterinary cattle fence until it intersects with a north/south going track at 19 degrees 54'E. It follows this track northwards until it reaches the borehole known as !Am!'ha (19 degrees 52' 47" E and 19 degrees 37 ' 21" S). From !Am!'ha the boundary continues straight in a north eastern direction to the borehole known as Tjeka (20 degrees 06' 47" E and 19 degrees 34' 21" S). From Tjeka the boundary continues north along a track until it intersects with the main road to Tsumkwe (20 degrees 06 '47" E and 19 degrees 30' 21" S). From this point the boundary runs eastward following the center of the main road until the 20 degrees 14' longitude. From this point the boundary continues north until a point at 20 degrees 25' E and 19 degrees 10' S. It then goes north until a point 20 degrees 14' E and 19 degrees 10' S where it joins the southern boundary of Khaudum Game Park and continues east to the boundary of Botswana at 21 degrees 00' E and 19 degrees 10'S. The NNC covers an area of 9023 square kilometer.

3.2 Tsumkwe village, approximately 30 square kilometers is exempted from the conservancy area.


NYAE NYAE SUGGESTION:
RED VETERINARY FENCE
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Eennana
Ondobe
Oshikunde
Okongo
Omauni
Katwitwi
Nkulenkuru
Kahenge
Oshaango
Epembe
Onijipa
Onayena
Okatope
Onyuulaye
Omuthiya
Oshivelo
T1001
Kapako
Rupudu Muroro-Mashari
Kayengona
Mabushe
Ndiyona
T0604
Erago
Mile 30
Ncamagoro
Satotwa
T0603
Mururani-Gate
T0602
Khaudum Game Park
Etosha National Park
T0110
Tsumeb
Otavi
T0109
T0108
T0601
Kombat
Gobabis
Okatjoruu
Tsumkwe
T1401
Cobleriz
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180 Kilometers
NCA New Zone
New Line Length : 1 037.598757 Kilometers
Area : 4 744 420.914984 Hectares
Coordinate System: WGS 1984 UTM Zone 33S
Projection: Transverse Mercator
Datum: WGS 1984
False Easting: 500 000.0000
False Northing: 10 000 000.0000
Central Meridian: 15.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Proposed Gates
Existing VCF Gates
Settlements
New Line
Veterinary Control Fence
Surveillance
National Parks
Farm Parcels
N

Attendance Register for Na Jaqna Conservancy:

Green Earth
ENVIRONMENTAL CONSULTANTS

CORDON FENCE MEETING

Date: 27/10/2020

Attendance Register: Na Jaqna Conservancy

Name & Surname:	Nature of Interest/ Impact:	Contact Details (phone number and email address):	Signature:
Loretta Kirkpatrick	Consultant NNDFN	0813814393 lkirkpatrickassa@gmail.com	L Kirkpatrick
Susanna Sauses	Management Committee treasurer	0814041225	
Sarah Zungu	Chairperson	0816514059 0813213050	
Frans Gamab	Coordinator	0813310267	
Visser Naici	Vice Chairperson	0818569593	

Name & Surname:	Erf Number:	Phone Number:	Email Address:
Alberto Kalezi	Additional Member	0813425875	alberto.kalezi2@gmail.com
Wendy Viall	NNDFN.	0812595398	nndfn@iafrica.com.na
Saskia den Adel-Shreehama	NNDFN	0812727391	saskia.nndfn@gmail.com

Letter from Na Jaqna Conservancy:

N≠A JAQNA CONSERVANCY P.O.Box 1049 Grootfontein Telephone/Fax: 067 245047

5th November 2020

Mr Kuniberth Shamati
Mr Kingsley Kwenani
Meatco Foundation
Windhoek

Mr Charlie du Toit
Greenworld
Windhoek

Dear Sirs

Your consultative meeting with us on Tuesday 27th October 2020 has reference.

After discussions with our Management Committee, we decided that the Na Jaqna Conservancy must be excluded from the suggested new free zone.

We have indicated with a red pen on the map where we would like the new red veterinary fence to be, which is the gazetted northern boundary of the Conservancy, excluding the area of Khaudum boundary, as we need the game animals to move freely between Khaudum, Nyae Nyae Conservancy and N≠a Jaqna Conservancy as we are dependent on these animals both traditionally and for Trophy hunting .

Attached please find the map with our proposed red line. The boundaries of the Conservancy are described in Government Notice No.162 in the Government Gazette No. 3027 of 24 July 2003.

If you have any questions, please contact us.

Yours in development

Chairperson
Sarah Zungu

P. MALIMA
MINISTER OF ENVIRONMENT
AND TOURISM

Windhoek, 30 June 2003

DESCRIPTION OF BOUNDARY OF THE N#A-JAQNA CONSERVANCY SITUATED IN THE OTJOZONDJUPA REGION

The point of beginning is at point 1, which is situated in the south-eastern corner of the conservancy. From the point of beginning the boundary follows the veterinary fence in a western direction up to point 2, when it turns north-westerly along the veterinary fence to point 3 and then in a northern direction still following the veterinary fence to point 4. From this point the boundary turns eastwards to point 5 and then in a south-western direction up to point 6, whereupon it follows a road in a north-eastern direction to point 7. From here the boundary moves in a south-western direction to point 8 before turning southwards to point 9, which is situated on the main Tsumkwe-Grootfontein road. The boundary follows this road in a western direction through point 10 to point 11, before turning southwards to point 12 and then in a south-western direction to point 13. From this point the boundary follows a road in a southern direction up to the point of beginning.

Co-ordinates of the boundary of the N#a-Jaqna Conservancy

Point	S (degree)	S (minute)	E (degree)	E (minute)
1	20	0.000	19	54.000
2	20	0.000	19	9.631
3	19	50.945	19	0.222
4	19	10.000	19	12.264
5	19	10.000	20	9.082
6	19	16.877	20	7.198
7	19	14.327	20	18.585
8	19	17.00	20	13.999
9	19	32.018	20	13.999
10	19	31.638	20	12.449
11	19	30.693	20	06.816
12	19	34.730	20	06.840
13	19	37.377	19	52.969

MINISTRY OF ENVIRONMENT AND TOURISM

No. 163 2003

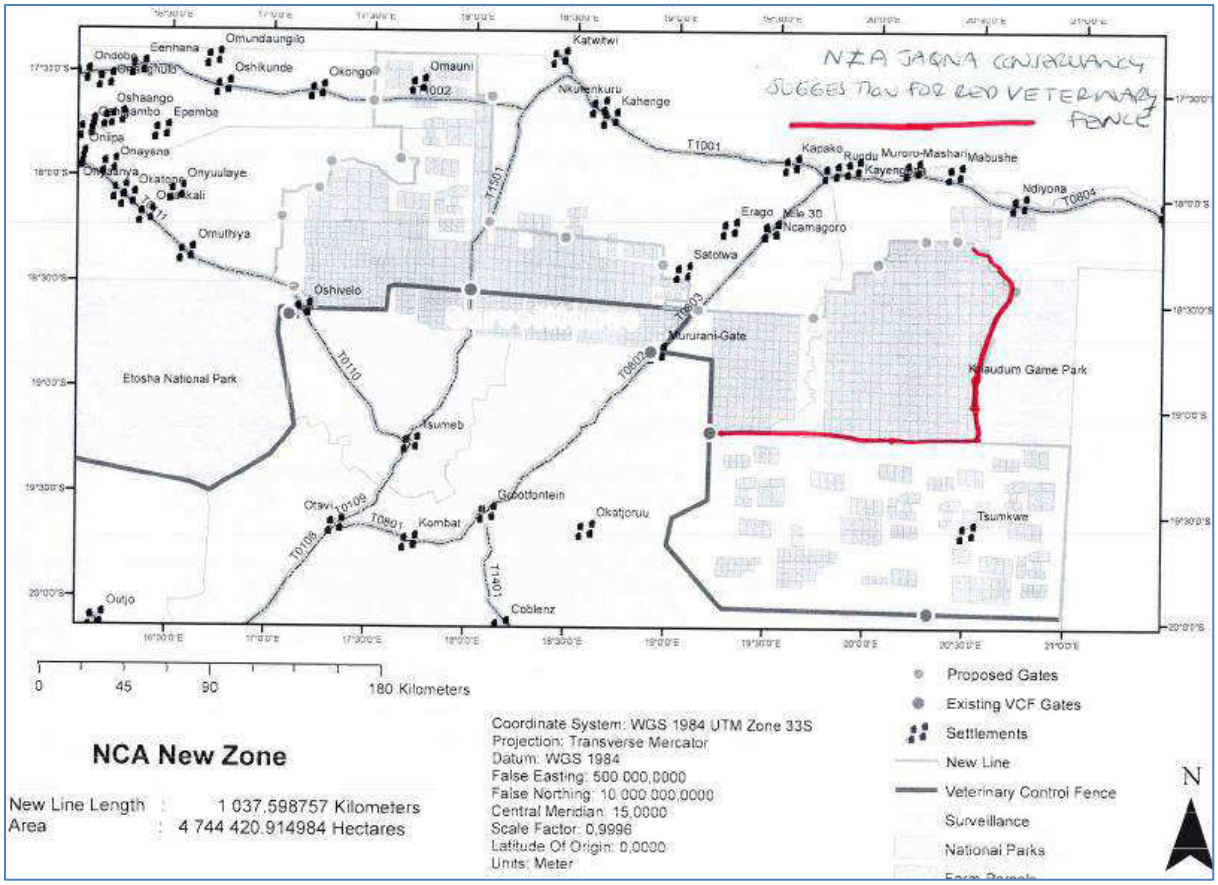
DECLARATION OF AN AREA AS A CONSERVANCY: //HUAB CONSERVANCY

In terms of section 24A(2)(ii) of the Nature Conservation Ordinance, 1975 (Ordinance No. 4 of 1975), I declare the area, of which the geographic boundaries are set out in the Schedule, as the //Huab Conservancy situated in the Kunene Region.

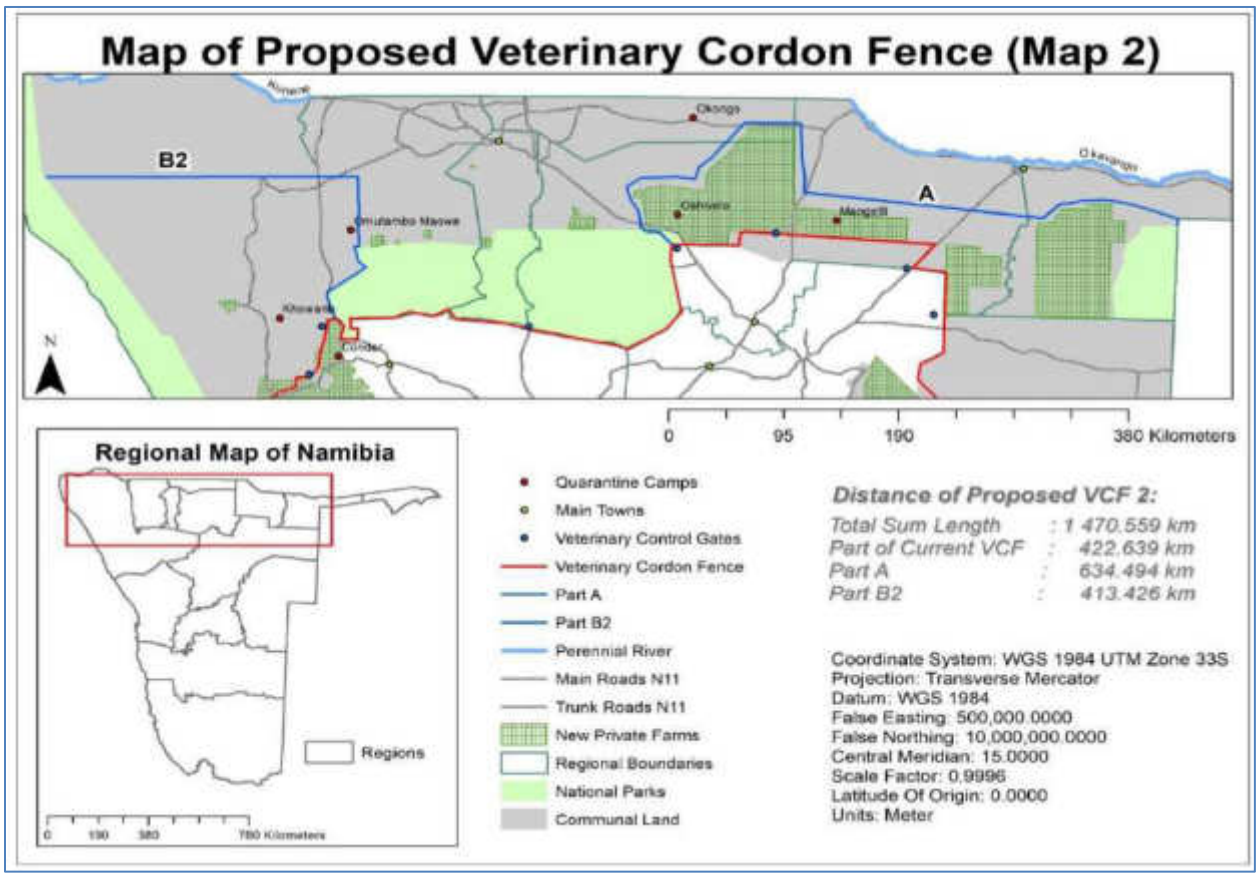
A map of that conservancy will be open for inspection at the offices of the Directorate: Parks and Wildlife Management in the Ministry of Environment and Tourism, Capital Centre, Independence Avenue, Windhoek.

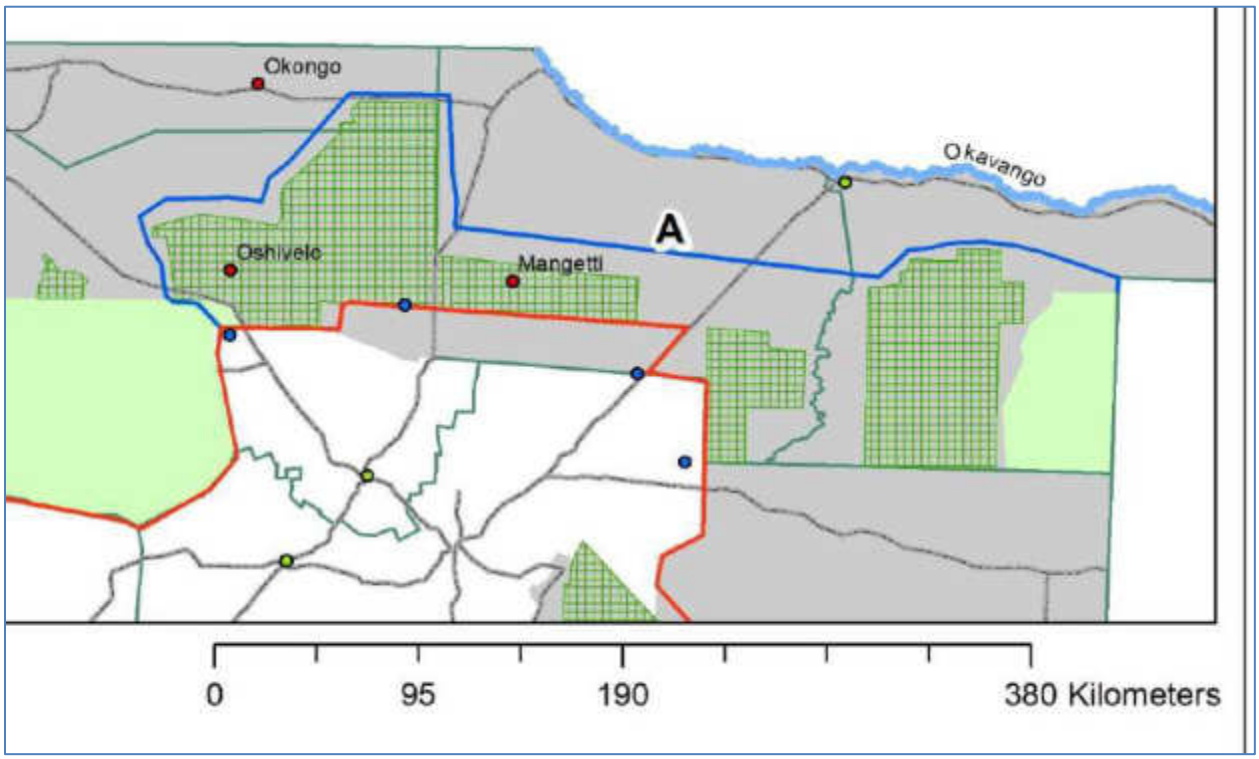
P. MALIMA
MINISTER OF ENVIRONMENT
AND TOURISM

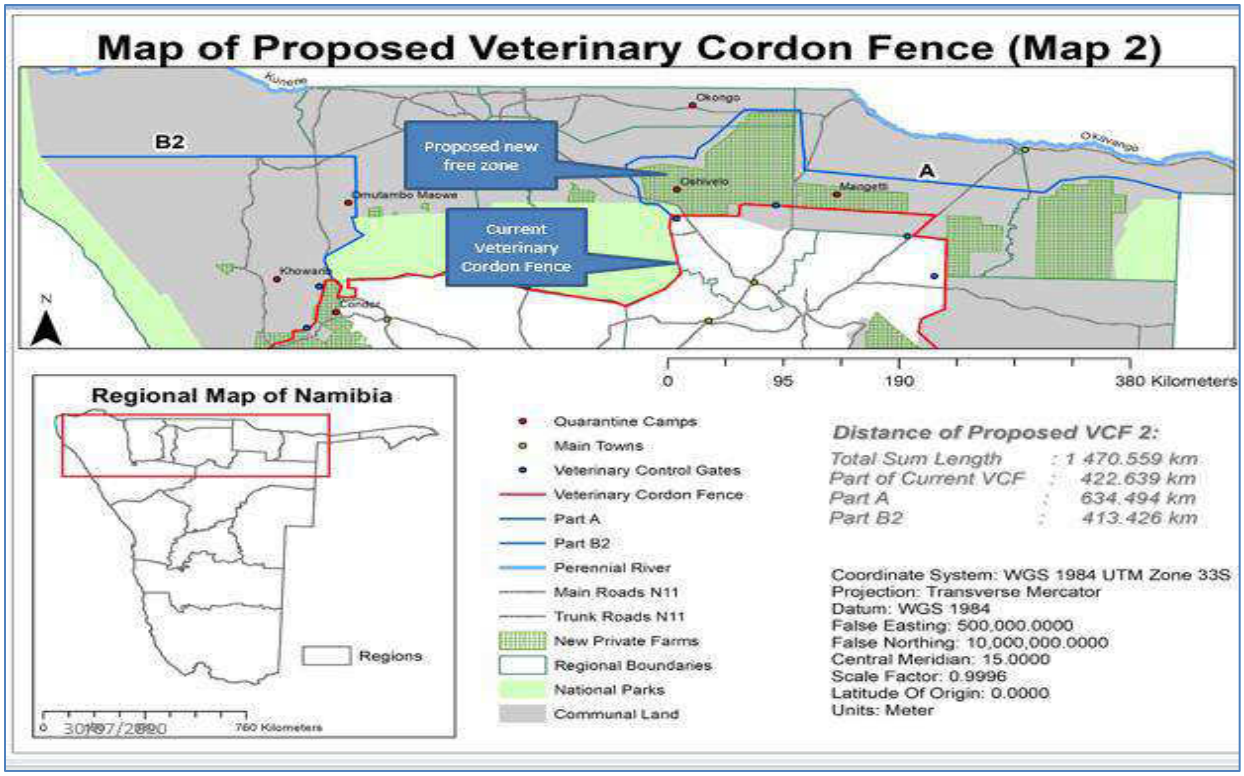
Windhoek, 30 June 2003


NZIA JAGNA CONSERVANCY
SUGGESTION FOR NEW VETERINARY FENCE
Omundaungilo
Senhana
Ondobe
Oshikunde
Okongo
Omauni
Katwitwi
Nkurenkuru
Kahenge
Oshaango
Epemba
Onipa
Onayena
Onyuulaye
T1001
Kapako
Ruuddu
Mururo-Mashari
Mabushe
Kayengo
Ndiyona
T0804
Erago
Mile 30
Ncamagoro
Satotwa
Onuthiya
Oshivelo
T0813
Mururani-Gate
Etosha National Park
T0110
T0803
Kaudum Game Park
Tsumeb
Otavi
T0109
T0108
T0801
Kombat
Gobabis
Okatjoruu
Tsumkwe
T1101
Outjo
Coblenz
0
45
90
180 Kilometers
NCA New Zone
New Line Length : 1 037.598757 Kilometers
Area : 4 744 420.914984 Hectares
Coordinate System: WGS 1984 UTM Zone 33S
Projection: Transverse Mercator
Datum: WGS 1984
False Easting: 500 000,0000
False Northing: 10 000 000,0000
Central Meridian: 15,0000
Scale Factor: 0,9996
Latitude Of Origin: 0,0000
Units: Meter
Proposed Gates
Existing VCF Gates
Settlements
New Line
Veterinary Control Fence
Surveillance
National Parks
N

Maps and Plans proposed during the Consultation Meetings:






Map of Proposed Veterinary Cordon Fence (Map 2)
B2
Proposed new free zone
Current Veterinary Cordon Fence
A
Okongo
Oshivelo
Mangetti
Okavango
Omutambo Maowe
Khowarib
Condor
N
0
95
190
380 Kilometers
Regional Map of Namibia
Regions
760 Kilometers
Quarantine Camps
Main Towns
Veterinary Control Gates
Veterinary Cordon Fence
Part A
Part B2
Perennial River
Main Roads N11
Trunk Roads N11
New Private Farms
Regional Boundaries
National Parks
Communal Land
Distance of Proposed VCF 2:
Total Sum Length : 1 470.559 km
Part of Current VCF : 422.639 km
Part A : 634.494 km
Part B2 : 413.426 km
Coordinate System: WGS 1984 UTM Zone 33S
Projection: Transverse Mercator
Datum: WGS 1984
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False Northing: 10,000,000.0000
Central Meridian: 15.0000
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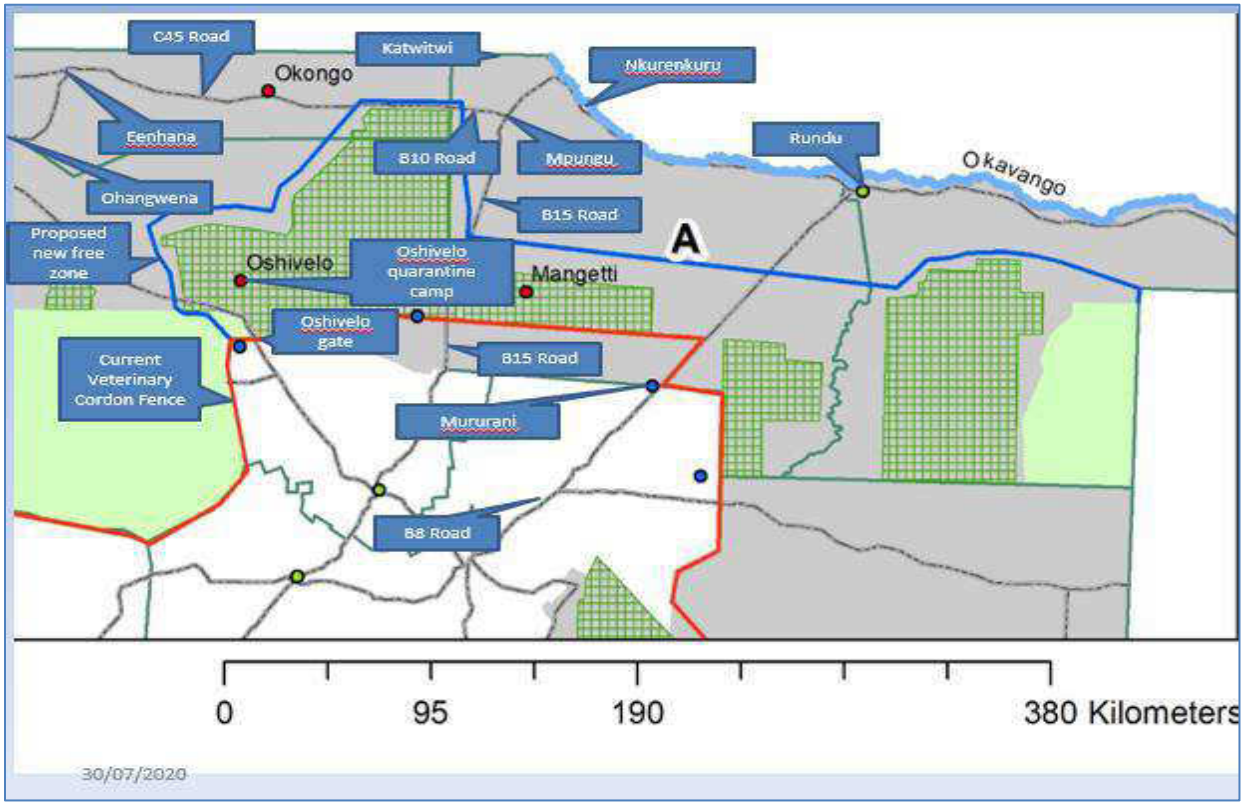
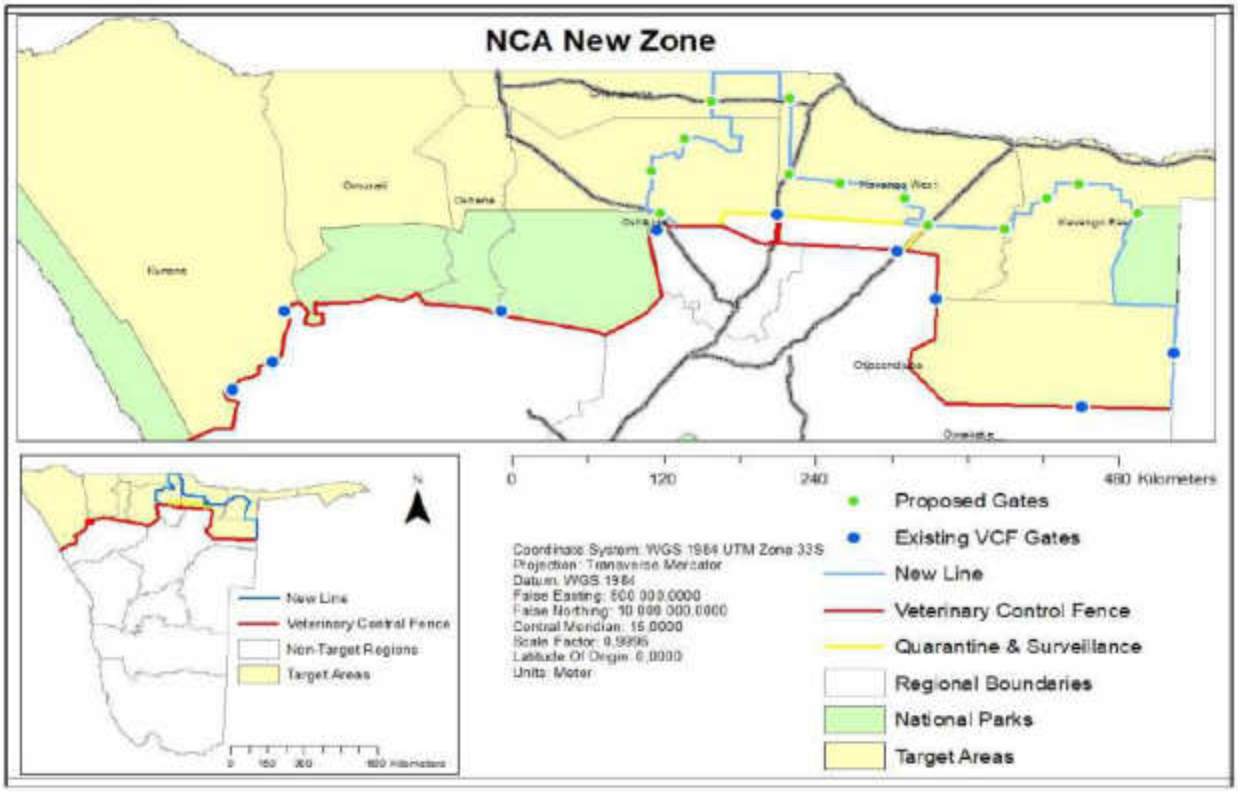
Units: Meter


C45 Road
Katwitwi
Okongo
Nkurenkuru
Eenhana
B10 Road
Mpungu
Rundu
Okavango
Ohangwena
B15 Road
A
Proposed new free zone
Oshivelo
Oshivelo quarantine camp
Mangetti
Oshivelo gate
B15 Road
Current Veterinary Cordon Fence
Mururani
B8 Road
0
95
190
380 Kilometers
30/07/2020


NCA New Zone
0
120
240
480 Kilometers
Proposed Gates
Existing VCF Gates
New Line
Veterinary Control Fence
Quarantine & Surveillance
Regional Bounderies
National Parks
Target Areas
Coordinate System: WGS 1984 UTM Zone 33S
Projection: Transverse Mercator
Datum: WGS 1984
False Easting: 500 000.0000
False Northing: 10 000 000.0000
Central Meridian: 15.0000
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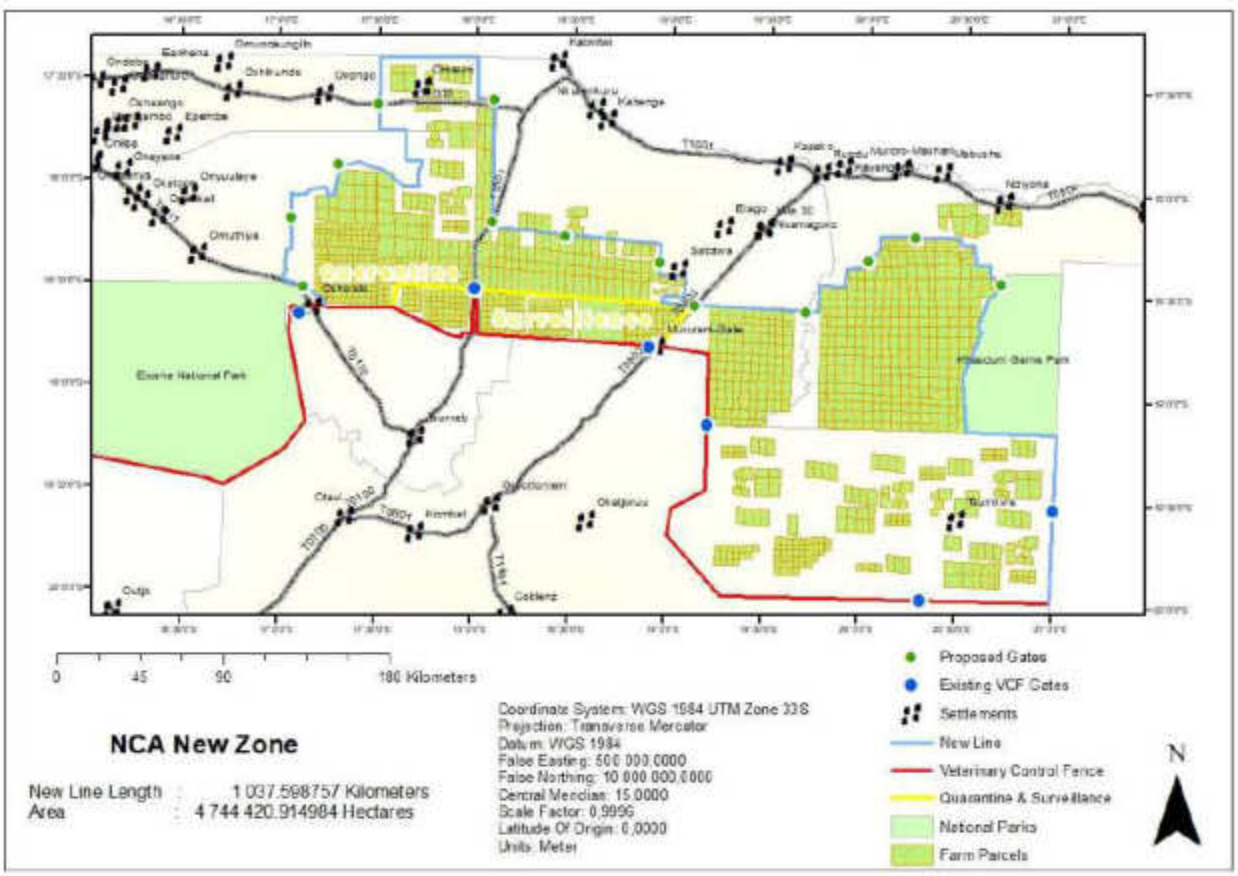
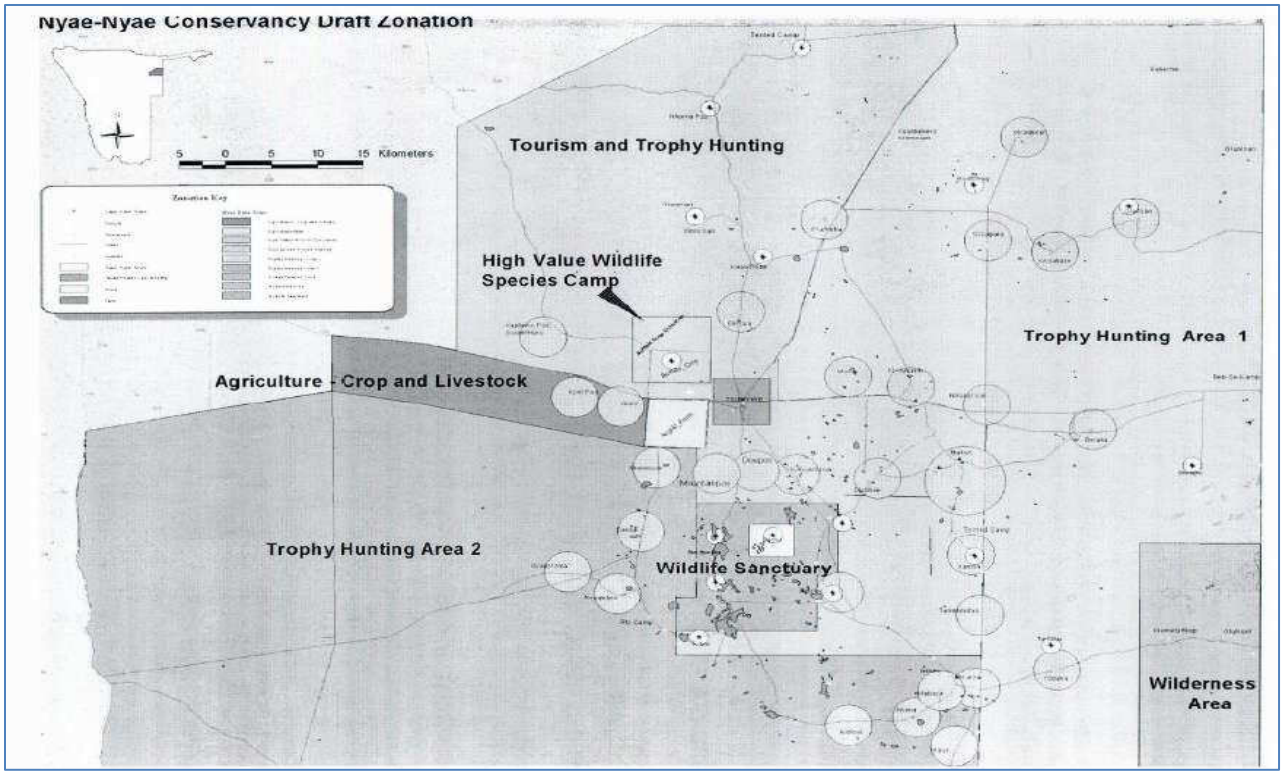
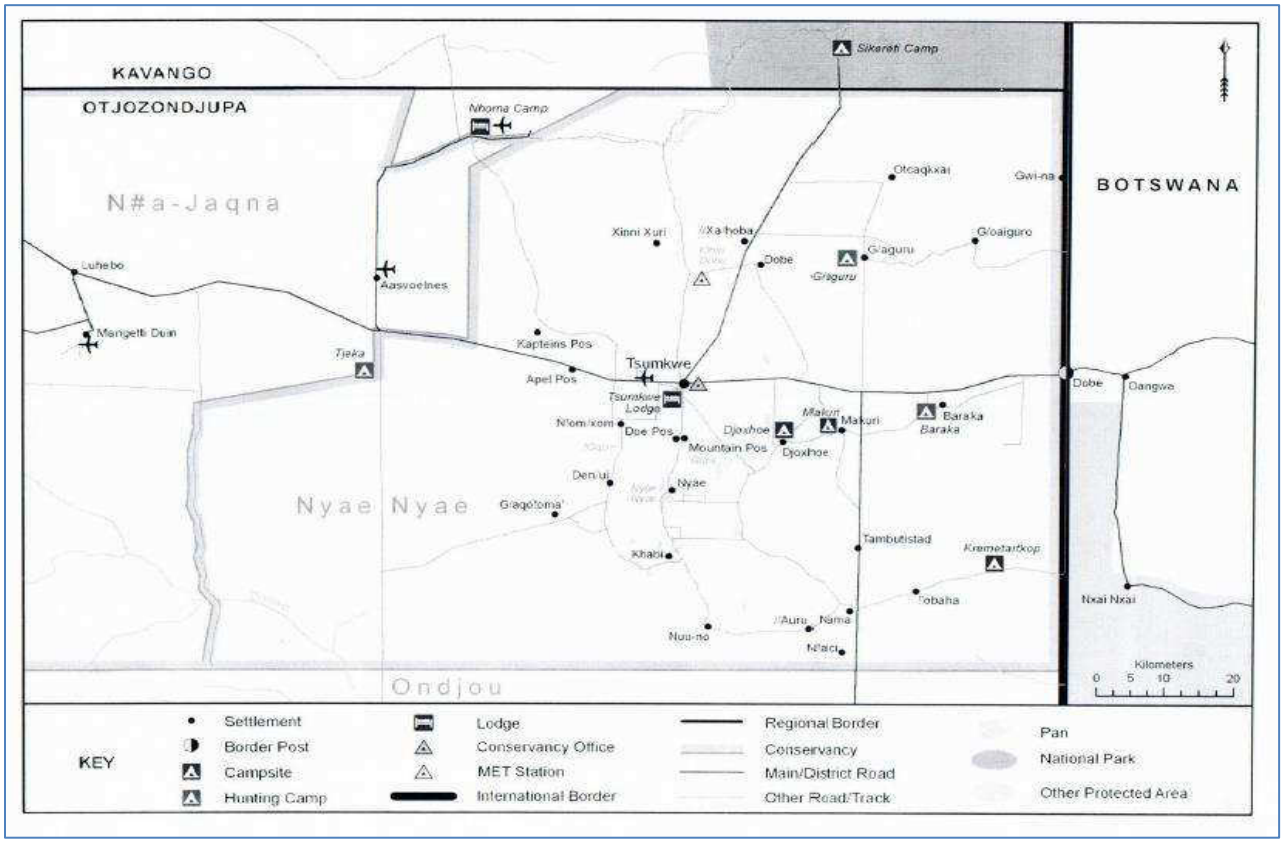
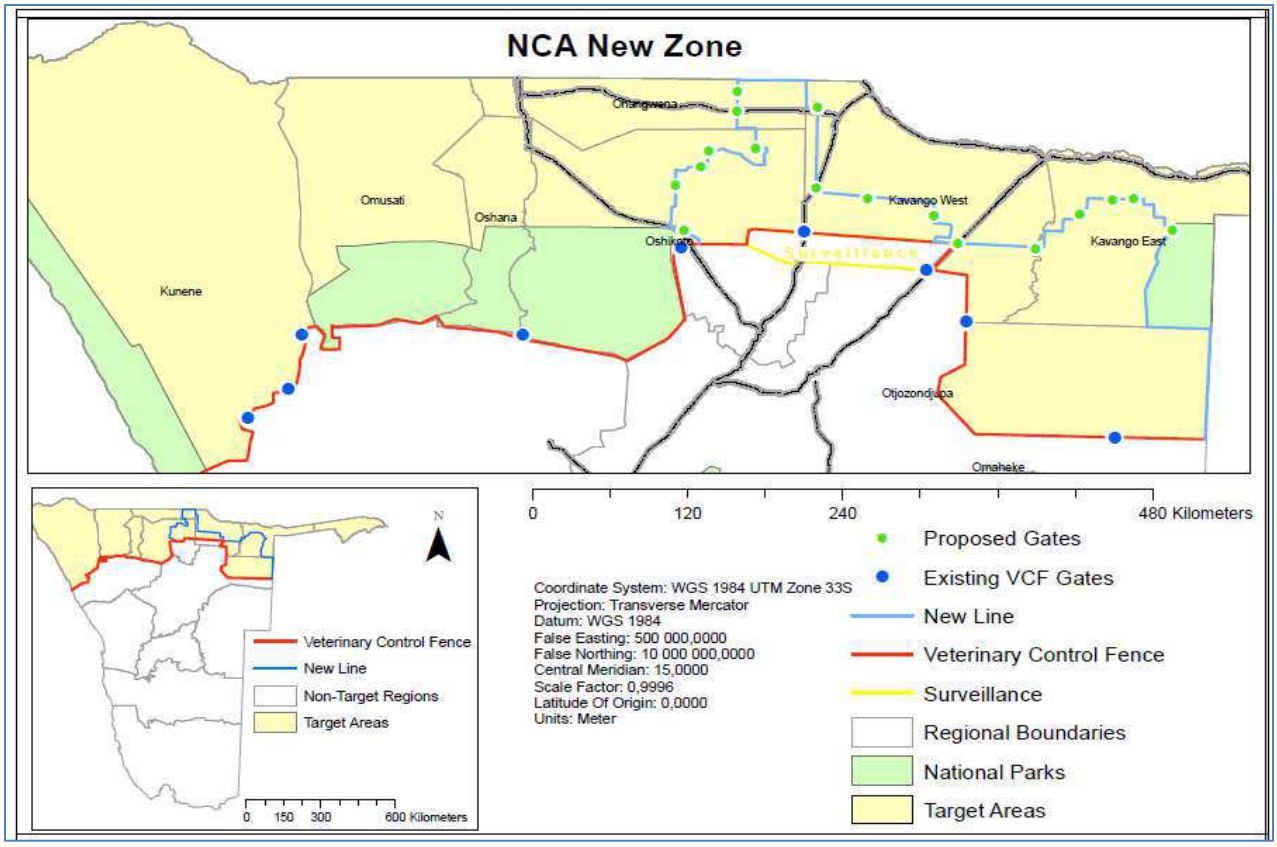
Latitude Of Origin: 0.0000
Units: Meter
New Line
Veterinary Control Fence
Non-Target Regions
Target Areas


Etosha National Park
0
45
90
180 Kilometers
NCA New Zone
New Line Length : 1 037.598757 Kilometers
Area : 4 744 420.914984 Hectares
Coordinate System: WGS 1984 UTM Zone 33S
Projection: Transverse Mercator
Datum: WGS 1984
False Easting: 500 000.0000
False Northing: 10 000 000.0000
Central Meridian: 15.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Proposed Gates
Existing VCF Gates
Settlements
New Line
Veterinary Control Fence
Quarantine & Surveillance
National Parks
Farm Parcels
N


Nyae-Nyae Conservancy Draft Zonation
5 0 5 10 15 Kilometers
Tourism and Trophy Hunting
High Value Wildlife Species Camp
Trophy Hunting Area 1
Agriculture - Crop and Livestock
Trophy Hunting Area 2
Wildlife Sanctuary
Wilderness Area


KAVANGO
OTJOZONDJUPA
Sikereh Camp
Nhoma Camp
N#a-Jaqna
Otcaqkxai
Gwi-na
BOTSWANA
Xinni Xuri
//Xa'hoba
Dobe
Gaguru
Gloaiguro
Luhebo
Aasvoelnes
Mangetti Dune
Kapteins Pos
Tjeka
Apel Pos
Tsumkwe
Tsumkwe Lodge
Dobe
Gangwe
N!om!kom
Dbe Pos
Djoxhoe
Makuri
Baraka
Mountain Pos
Den!ui
Nyae
Nyae Nyae
Grage!oma!
Tambutistad
Khabi
Kremetartkop
!obaha
Nxai Nxai
//Auru
Nama
Nuu-no
N!aici
Ondjou
Kilometers
0 5 10 20
KEY
Settlement
Border Post
Campsite
Hunting Camp
Lodge
Conservancy Office
MET Station
International Border
Regional Border
Conservancy
Main/District Road
Other Road/Track
Pan
National Park
Other Protected Area


NCA New Zone
Ohangwena
Omusati
Oshana
Oshikoto
Kavango West
Kavango East
Kunene
Otjozondjupa
Omaheke
Surveillance
0 120 240 480 Kilometers
Proposed Gates
Existing VCF Gates
New Line
Veterinary Control Fence
Surveillance
Regional Boundaries
National Parks
Target Areas
Coordinate System: WGS 1984 UTM Zone 33S
Projection: Transverse Mercator
Datum: WGS 1984
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False Northing: 10 000 000,0000
Central Meridian: 15,0000
Scale Factor: 0,9996
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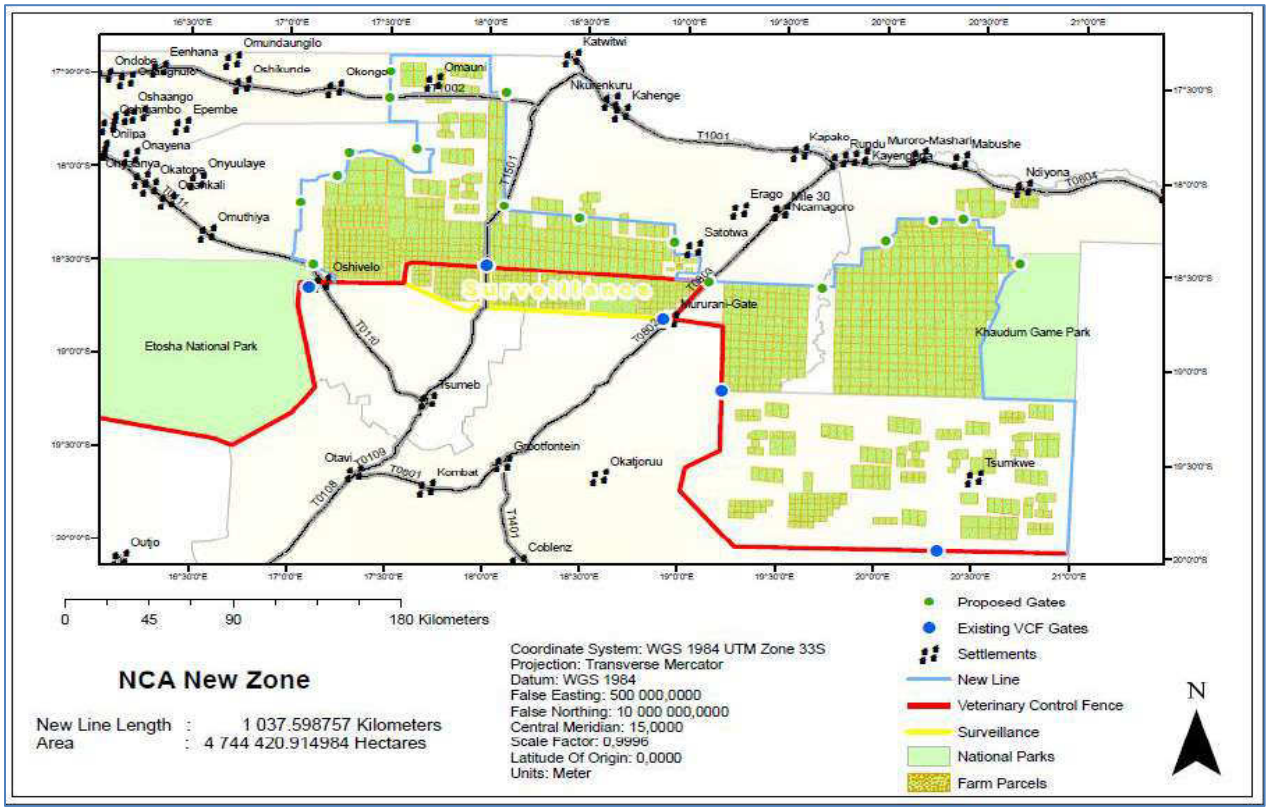
Units: Meter
N
Veterinary Control Fence
New Line
Non-Target Regions
Target Areas
0 150 300 600 Kilometers


Omundaungilo
Katwitwi
Eenhana
Ondobe
Oshikunde
Okongo
Omauni
Nkurenkuru
Kahenge
Oshaango
Epembe
Onayena
Okatope
Onyuulaye
Omuthiya
Oshivelo
Kapako
Rundu
Muroro-Masheri
Kayengona
Mabushe
Ndiyona
Erago
Mile 30
Ncamagoro
Satotwa
Mururani-Gate
Khaudum Game Park
Etosha National Park
Tsumeb
Otavi
Grootfontein
Kombat
Okatjoruu
Tsumkwe
Outjo
Coblenz
Surveillance
0 45 90 180 Kilometers
NCA New Zone
New Line Length : 1 037.598757 Kilometers
Area : 4 744 420.914984 Hectares
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Projection: Transverse Mercator
Datum: WGS 1984
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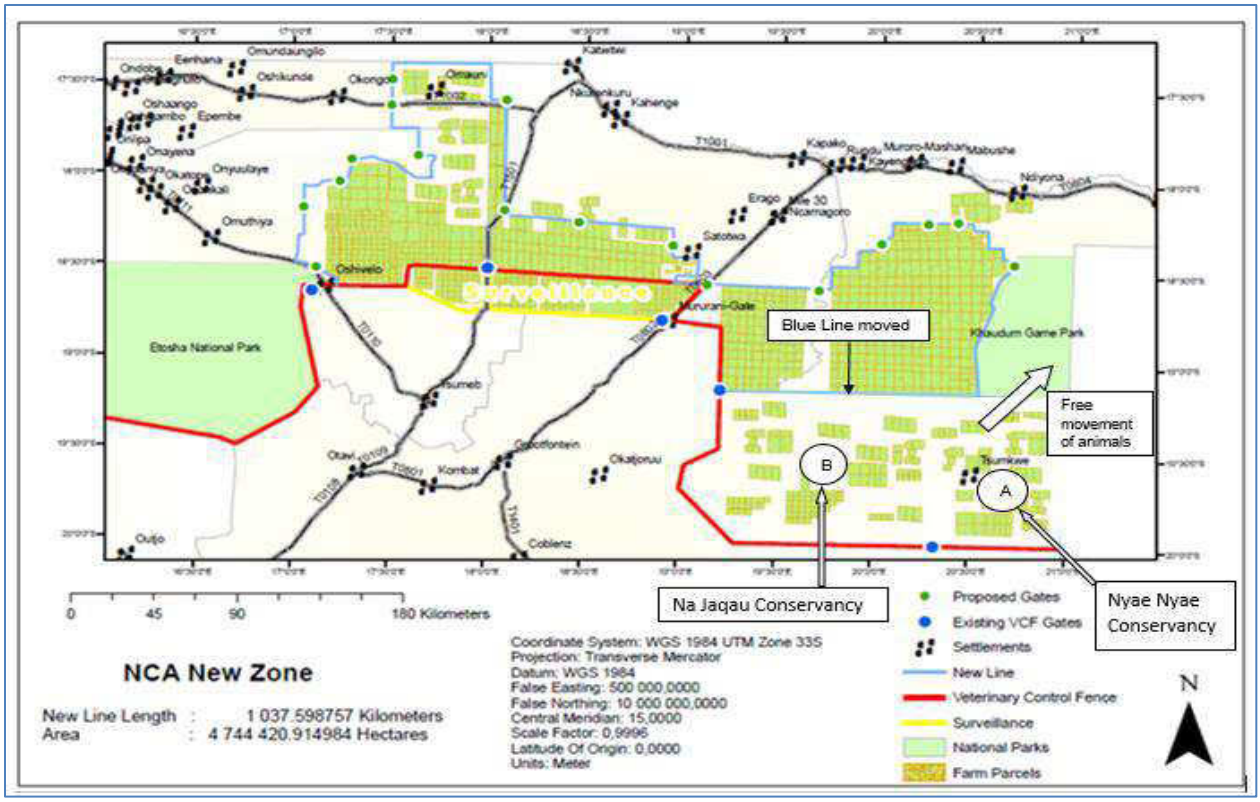
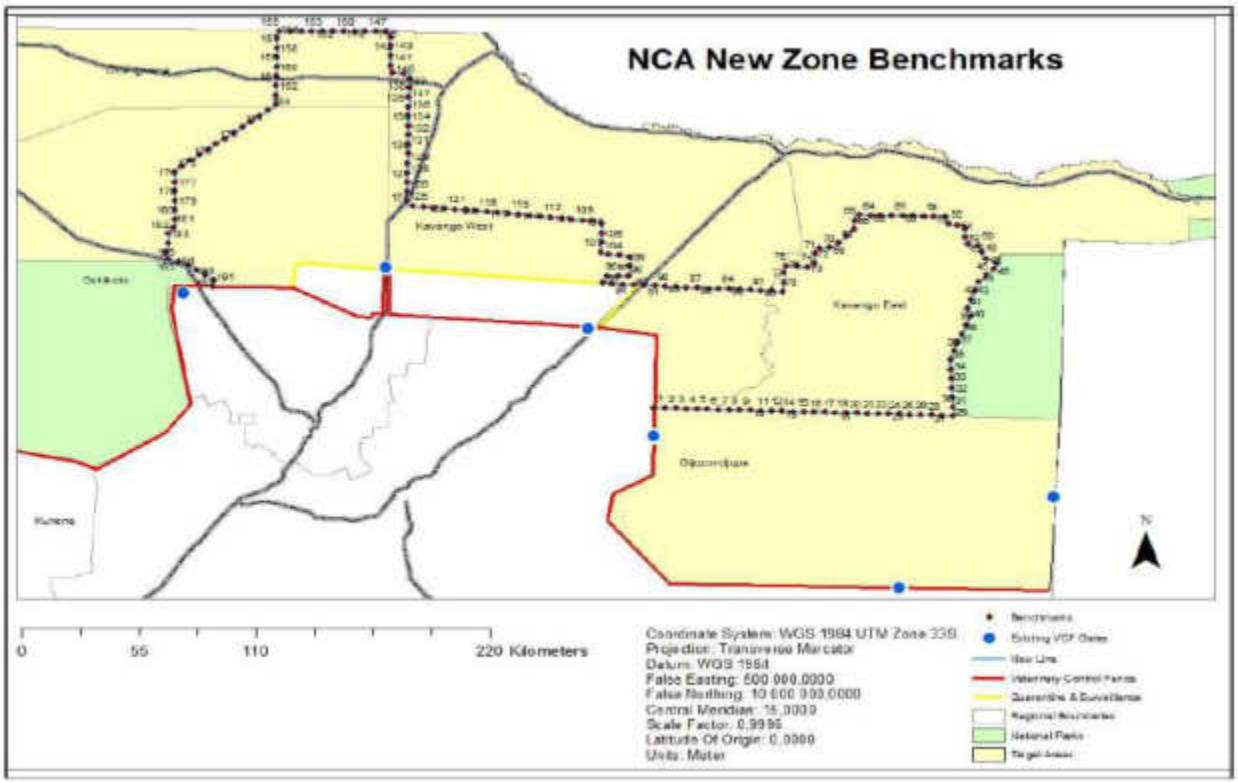
False Northing: 10 000 000,0000
Central Meridian: 15,0000
Scale Factor: 0,9996
Latitude Of Origin: 0,0000
Units: Meter
Proposed Gates
Existing VCF Gates
Settlements
New Line
Veterinary Control Fence
Surveillance
National Parks
Farm Parcels
N


Blue Line moved
Free movement of animals
Na Jaqau Conservancy
Nyae Nyae Conservancy
Etosha National Park
Khaudum Game Park
Surveillance
A
B
0 45 90 180 Kilometers
NCA New Zone
New Line Length : 1 037.598757 Kilometers
Area : 4 744 420.914984 Hectares
Coordinate System: WGS 1984 UTM Zone 33S
Projection: Transverse Mercator
Datum: WGS 1984
False Easting: 500 000,0000
False Northing: 10 000 000,0000
Central Meridian: 15,0000
Scale Factor: 0,9996
Latitude Of Origin: 0,0000
Units: Meter
Proposed Gates
Existing VCF Gates
Settlements
New Line
Veterinary Control Fence
Surveillance
National Parks
Farm Parcels
N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0 55 110 220 Kilometers
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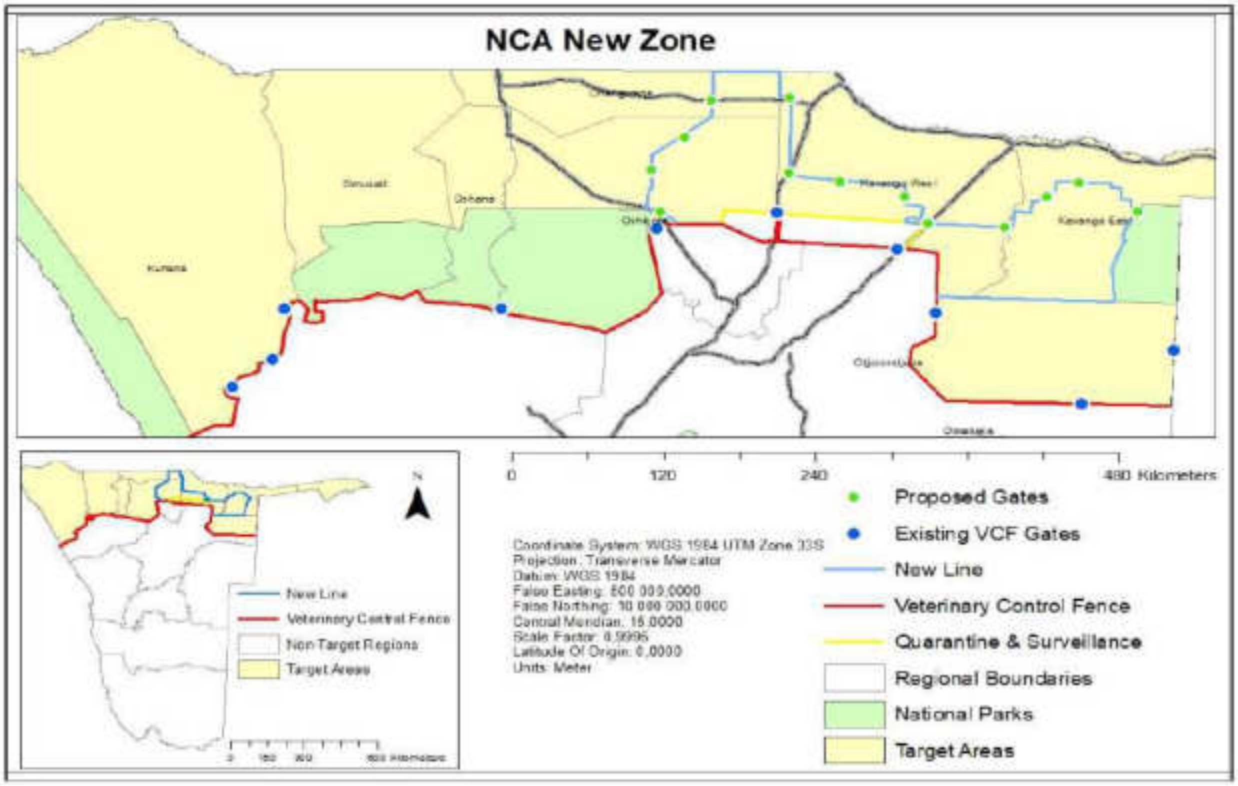
Latitude Of Origin: 0,0000
Units: Meter
N


NCA New Zone
0
120
240
480 Kilometers
Proposed Gates
Existing VCF Gates
New Line
Veterinary Control Fence
Quarantine & Surveillance
Regional Boundaries
National Parks
Target Areas
New Line
Veterinary Control Fence
Non Target Regions
Target Areas
N
Coordinate System: WGS 1984 UTM Zone 33S
Projection: Transverse Mercator
Datum: WGS 1984
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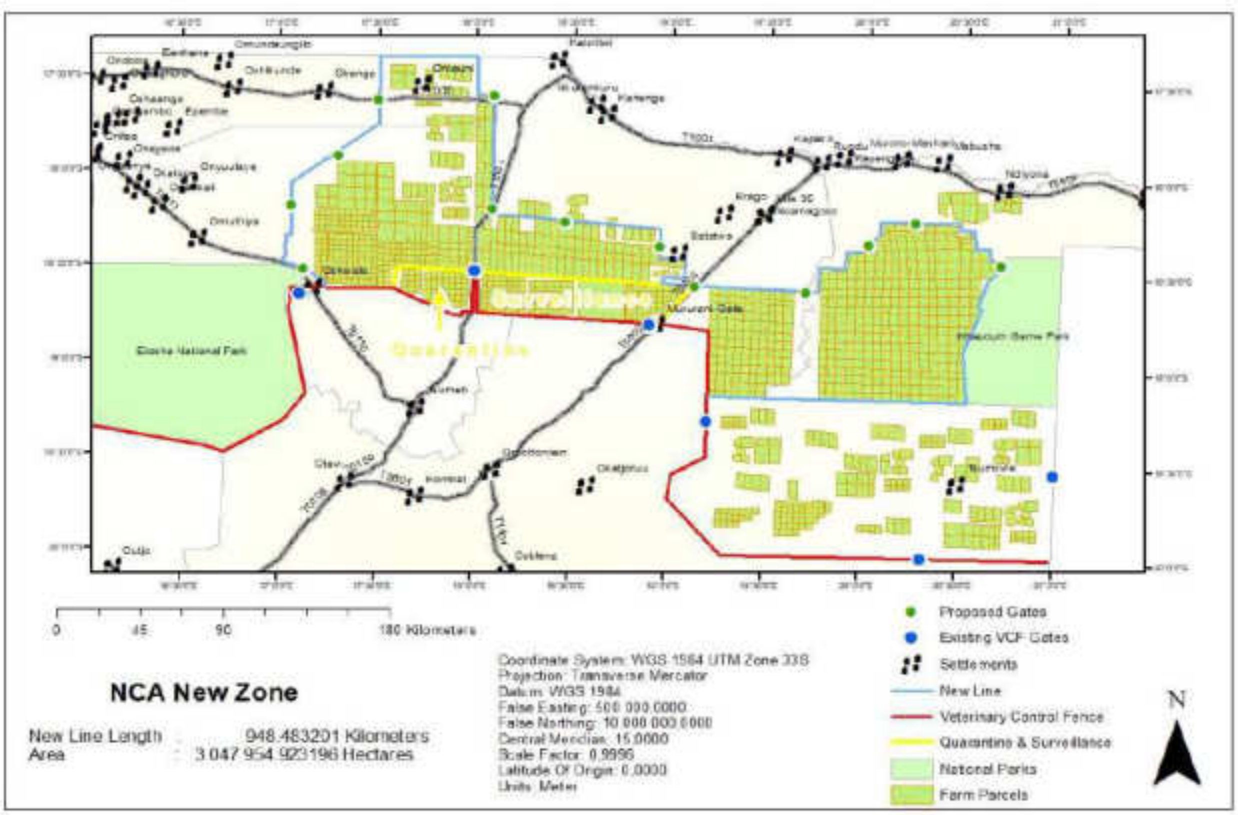
Etosha National Park
Quarantine
Surveillance
0
45
90
180 Kilometers
NCA New Zone
New Line Length : 948.483201 Kilometers
Area : 3 047 954.923196 Hectares
Coordinate System: WGS 1984 UTM Zone 33S
Projection: Transverse Mercator
Datum: WGS 1984
False Easting: 500 000.0000
False Northing: 10 000 000.0000
Central Meridian: 15.0000
Scale Factor: 0.9996
Latitude Of Origin: 0.0000
Units: Meter
Proposed Gates
Existing VCF Gates
Settlements
New Line
Veterinary Control Fence
Quarantine & Surveillance
National Parks
Farm Parcels
N

Project Name:	***BACKGROUND INFORMATION DOCUMENT FOR PHASE 1 (ONE) OF THE PROPOSED RELOCATION OF THE NORTHERN VETERINARY CORDON FENCE IN THE REGIONS OF KAVANGO WEST, MANGETTI WEST AND THE ONALUSHESHETE FARMS IN THE OSHIKOTO REGION, NAMIBIA***
The Proponent:	**Ministry of Agriculture, Wildlife and Forestry (MAWF)**
Prepared by:	Green Earth ENVIRONMENTAL CONSULTANTS 1st floor Bridgeview Offices & Apartments, No. 4 Dr Kwame Nkrumah Avenue, Klein Windhoek, Namibia PO Box 6871, Ausspannplatz, Windhoek
Release Date:	**December 2019**
Consultant:	**C. Du Toit** **C. Van Der Walt** **Cell: 081 127 3145** **Fax: 061 248 608** **Email: charlie@greenearthnamibia.com**

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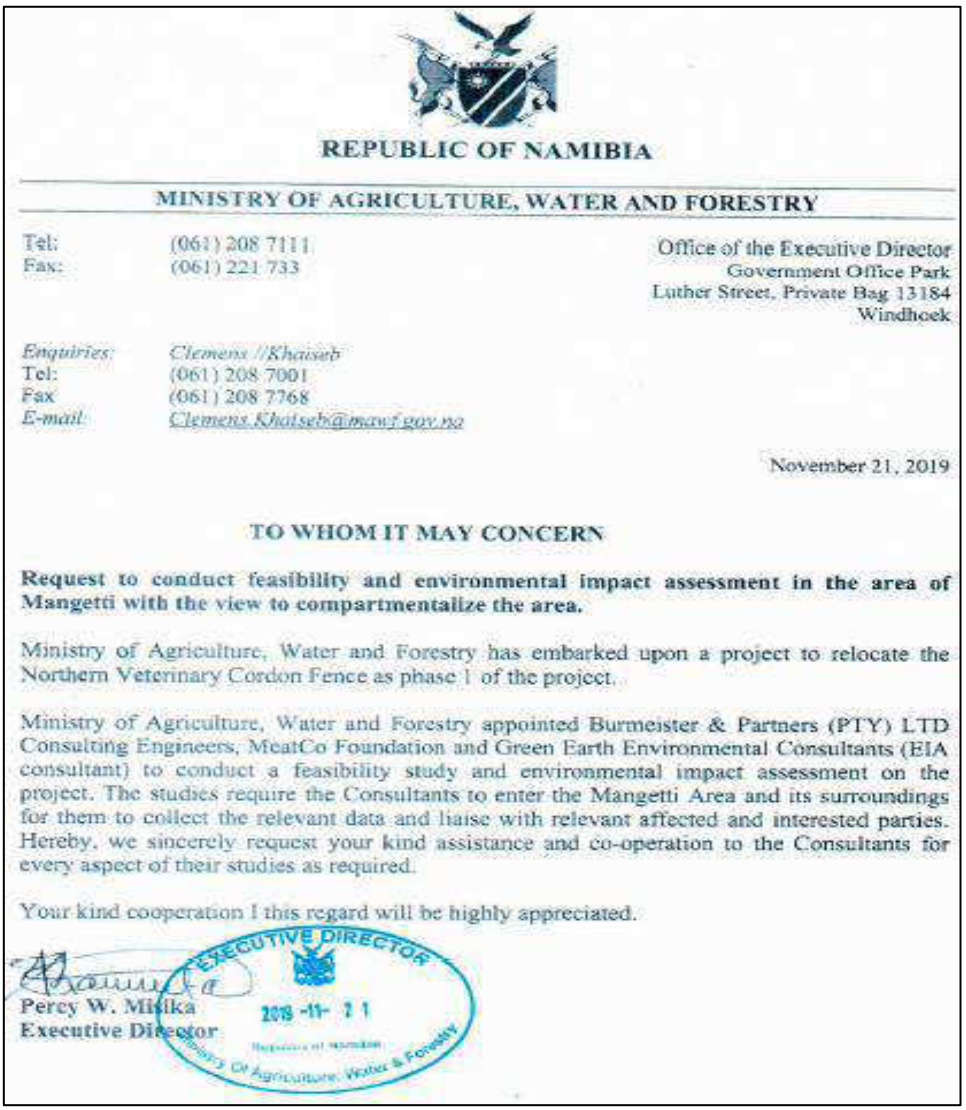
List of Figures

THE FOLLOWING IS A BACKGROUND INFORMATION DOCUMENT FOR THE ENVIRONMENTAL IMPACT ASSESSMENT AND ENVIRONMENTAL MANAGEMENT PLAN TO OBTAIN AN ENVIRONMENTAL CLEARANCE FOR PHASE 1 (ONE) OF THE PROPOSED RELOCATION OF THE NORTHERN VETERINARY CORDON FENCE IN THE REGIONS OF KAVANGO WEST, MANGETTI WEST AND THE ONALUSHESHETE FARMS IN THE OSHIKOTO REGION, NAMIBIA

1. Introduction

Green Earth Environmental Consultants have been appointed by the Ministry of Agriculture, Water and Forestry (MAWF) to attend to and complete an Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) in order to obtain an Environmental Clearance Certificate for Phase 1 (one) of the proposed relocation of the northern veterinary cordon fence in Namibia as per the requirements of the Environmental Management Act (No. 7 of 2007) and the Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012). See below copy of the appointment letter from the MAWF:



REPUBLIC OF NAMIBIA

MINISTRY OF AGRICULTURE, WATER AND FORESTRY

Tel: (061) 208 7111
Fax: (061) 221 733

Office of the Executive Director
Government Office Park
Luther Street, Private Bag 13184
Windhoek

Enquiries: Clemens //Khaiseb
Tel: (061) 208 7001
Fax (061) 208 7768
E-mail: Clemens.Khaiseb@mawf.gov.na

November 21, 2019

TO WHOM IT MAY CONCERN

Request to conduct feasibility and environmental impact assessment in the area of Mangetti with the view to compartmentalize the area.

Ministry of Agriculture, Water and Forestry has embarked upon a project to relocate the Northern Veterinary Cordon Fence as phase 1 of the project.

Ministry of Agriculture, Water and Forestry appointed Burmeister & Partners (PTY) LTD Consulting Engineers, MeatCo Foundation and Green Earth Environmental Consultants (EIA consultant) to conduct a feasibility study and environmental impact assessment on the project. The studies require the Consultants to enter the Mangetti Area and its surroundings for them to collect the relevant data and liaise with relevant affected and interested parties. Hereby, we sincerely request your kind assistance and co-operation to the Consultants for every aspect of their studies as required.

Your kind cooperation I this regard will be highly appreciated.

Percy W. Misika
Executive Director

EXECUTIVE DIRECTOR
2019 -11- 21
Ministry Of Agriculture, Water & Forestry

Figure 1: Letter from the MAWF

The Background Information Document (BID) serves to convey information regarding the proposed project to Interested and Affected Parties (I&APs) to allow them the opportunity to comment on the proposed project.

This document contains the following information:

- A brief background on the proposed project
- The approach to the environmental assessment process

2. Project Background, Description and Location

2.1. Project Background

The MAWF identified areas in the Northern Communal Area (NCA) which are regarded as low risk areas in terms of Foot and Mouth Disease (FMD) and Contagious Bovine Pleuropneumonia (CBPP), however they are not declared as disease free as they are situated in the FMD protection zone. The identified areas are: Karikubis in Kavango East Region, Mangetti East farms in Kavango West Region, Mangetti West and Onalusheshete farms in Oshikoto Regions, Ombuga area in Oshana Region, Omutambo Maowe area in Omusati Region and Sesfontein area in Kunene. The MAWF intends to establish disease free compartments, in a phased program, in these areas in order to facilitate safe marketing of animals, and for the purpose of in-cooperating those areas in the FMD free area/zone once the standards required for a compartment are met. The low risk areas are shown in the figure below:

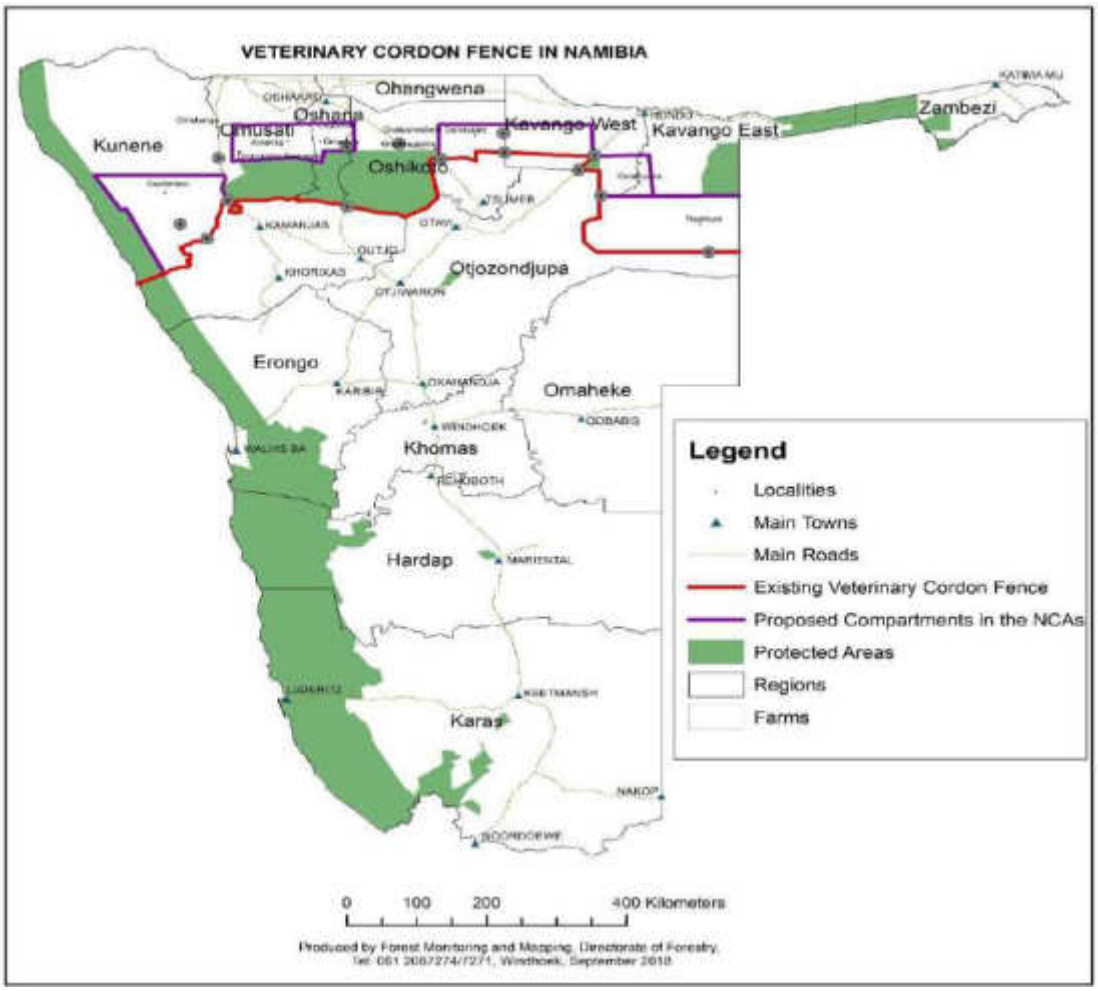


Figure 2: Existing Veterinary Cordon Fence (MAWF, 2019)

The project will focus on inclusive and sustainable growth through employment creation by promoting economic opportunities through market-based solutions and the provision of support to private sector actors. Therefore, the success of the program will be measured in terms of economic growth of all actors in the beef value chain, starting from local farmer communities.

At sectoral level, the program will be implemented within the framework of the relevant government policies and strategies that have been put in place to implement the NDP5 and Vision 2020, such as the Harambee Prosperity Plan and more specifically, the Harambee Comprehensively Coordinated and Integrated Agricultural Development Program (HACCIADEP), the Namibia Agricultural Policy, the Marketing and Trade Policy and Strategy, and the Grow at Home Strategy, amongst others. More specifically, the program will address key strategic issues.

These include:

- To improve the quality and productivity of livestock in the NCA's;
- To develop markets for agricultural products;

- To develop commodity value chains and commercialize subsistence agriculture (compliance to standards and requirements);
- To develop participatory research projects for efficient information and knowledge management;
- To improve regulatory environment where laws, regulations and policies are responsive to current development initiatives;
- To implement and monitor food safety standards, in recognition of the close link between food production and human health;
- To improve and maintain optimal animal health status in Namibia;
- To empower small and medium scale producers and agri-processors (meat processors) to access local and regional markets.

Agricultural production in the NCAs is challenged by several factors such as low and variable rainfall which limits most of the agricultural activities. In addition, animal diseases, FMD in particular, contributes negatively to livestock marketing. This is further compounded by the challenge of low livestock off-take resulting in high animal densities and degradation of rangelands. Considering the current market access limitations, there is a deed for the Government to ensure that small and medium scale agriculture producers and agri-processors are capacitated and have access to fair and sustainable local, regional and, in the medium-term, international markets.

NCAs' livestock production is mainly sold in the local market and, in smaller quantity, to other neighbouring African countries such as South Africa, Angola and Zimbabwe. However, more than half of the meat locally consumed in the formal market needs to be supplied from outside the NCAs. In fact, only 12% of the total NCAs' cattle population is sold or consumed (the so-called off-take) compared to 25-30% in the commercial areas. While cattle farmers are unable or reluctant to sell their animals, the economic potential of the sector in the NCAs, even in terms of satisfying the local demand, remains largely unexploited.

The low off-take is mainly caused by market inefficiencies, which will constitute one of the program's priority areas of intervention. From the demand side, the beef industry is mainly export oriented and requires a regular supply of high-quality grade (A and AB) for lucrative markets. However, from the supply side, all NCA animals are produced in Foot & Mouth Disease areas and are virtually excluded from the export market and significantly disadvantaged in accessing the domestic market south of the Veterinary Cordon Fence (VCF). In addition, more than 75% of animals delivered to the local abattoirs are of lower quality (C grade), resulting in low prices paid to farmers and inefficiencies in the processing industry.

A significant production loss is associated with inadequate rangeland management and animal husbandry, resulting in overstocking, land degradation, poor animal fertility and small frame size. Extensive inbreeding of cattle coupled with insufficient research on improved breeding material and livestock husbandry practices is significantly contributing to the low quality of animals. The body conformation or frame of livestock affects the grading of its meat. By contrast, most livestock produced in the FMD-free zone, which is predominantly composed of commercial producers, are of breeds which exhibit large frames when compared to those produced in the NCAs. Meat produced in NCAs is therefore usually graded lower when compared to that from livestock in areas south of the VCF. Eventually, the challenges lead to

the marketing of undesirable animals and therefore farmers in the NCAs do not achieve good returns from their animals.

As farmers in the NCAs are reluctant to sell their animals, the number of cattle in the NCAs is growing, with increasing negative effects on the already stressed rangeland's stocking capacity. Overstocking and overgrazing, associated with widespread soil degradation and bush encroachment, have become a common phenomenon, affecting more than 45% of the land. Furthermore, due to the land tenure system in the NCAs, the responsible authorities (traditional leaders, Land Boards, Local Authorities, etc) are often unable to regulate the use of rangeland in common areas.

If farmers' awareness on sustainable animal husbandry practices is not promoted, together with a more effective governance of natural resources, the negative environmental impacts would progressively affect the productivity of the whole livestock sector. In the long term, this could also have an impact on the social cohesion and overall political stability, as it would support the perception that livestock farmers in the north of the country are still disadvantaged, when compared to well-off farmer communities in the south.

Due to uncontrolled cattle movements, there is a constant risk of importing animal diseases from infected areas, as it happened in the FMD outbreak of July 2015, probably caused by cattle contracting the virus after grazing in neighbouring countries. This caused additional restrictions to the movement and trade of livestock throughout the NCAs, with additional dampening effects on the whole value chain. Marketing of livestock and livestock products in the NCA continues to be hampered by the presence of Transboundary Animal Diseases (TADs), like FMD, CBPP and others.

In order to enhance the management of disease control and eradication strategies in the Northern Communal Areas, livestock movement across the borders with Angola needs to be closely monitored. In terms of the protocol on cross border livestock movements agreed upon with the Angolan Veterinary Authorities, it must include inspection, vaccination and quarantine of livestock crossing the border in order to allow for disease detection and to prevent diseases being spread.

2.2. Project Description

It is thus necessary to build infrastructure along the northern border to enable livestock containment, testing and isolation. The MAWF have no embarked upon a program to include areas of the NCA in a phased development which will allow livestock containment, testing and isolation. The First Phase is to relocate the existing veterinary cordon fence to a locality to the north of the current fence. During the First Phase portions of the Mangetti East Farms in Kavango West Region, Mangetti West and the Onalusheshete Farms in Oshikoto Region will be included. By relocating the fence, disease free compartments in these areas will be established in order to facilitate safe marketing of animals. These areas will then be incorporated in the FMD free area/zone.

It is still uncertain when the other phases of the project will commence. Currently 2 Options are proposed for the alignment of the proposed new cordon fence. These options will be

discussed with the Interested and Affected Parties (I&APs) and the final option will be decided upon pending the outcome of the consultations as well as the feasibility of the proposed alignment.

2.3. Area to be included in Phase 1

See below the maps showing Option 1 and 2 for Phase 1 of the alignment of the proposed new cordon fence. Option 1: the proposed area to be included is between the “black line” and the “green line” and Option 2: the proposed area to be included is between the “black line” and the “pink line”.

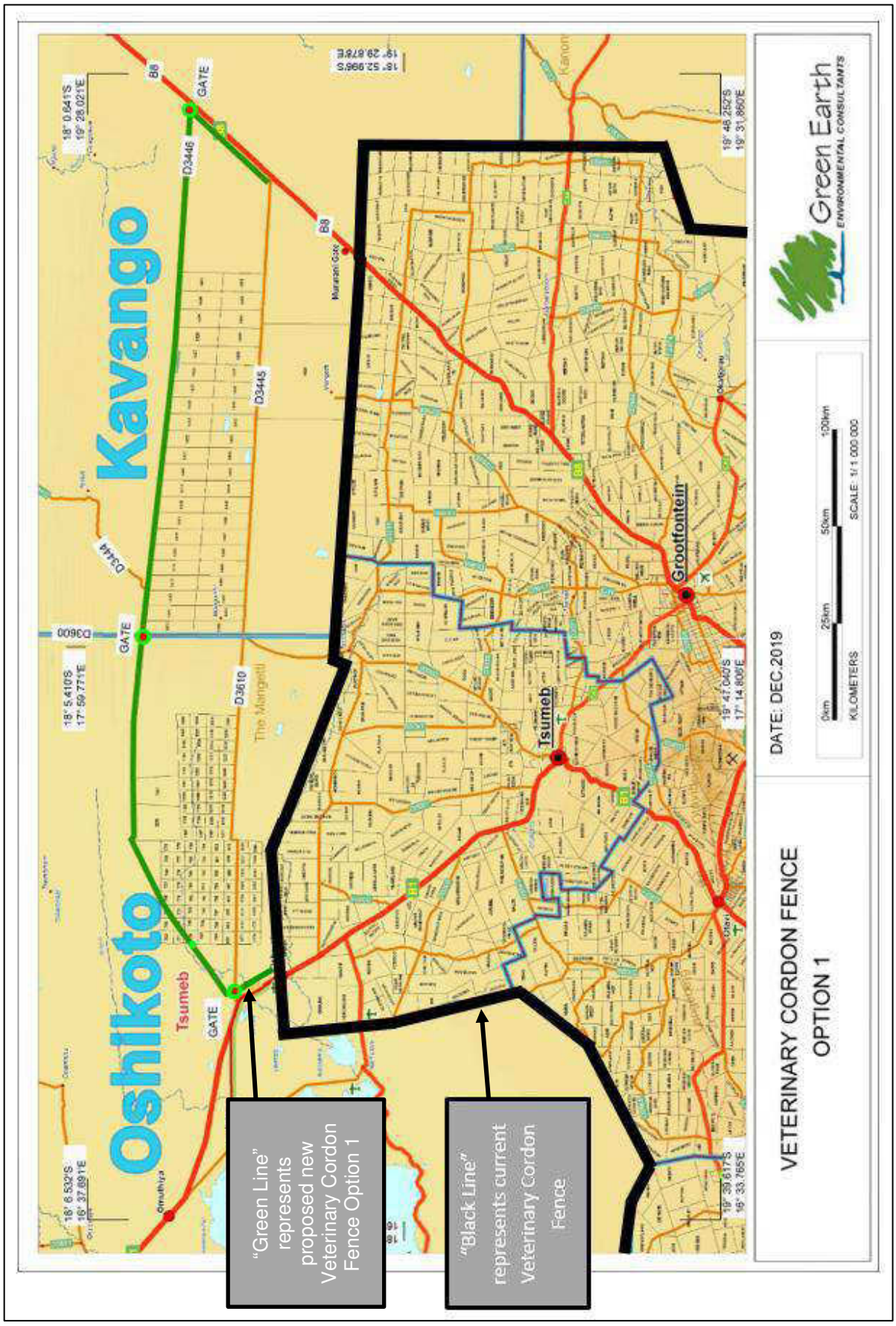


Figure 3: Veterinary Cordon Fence Option 1 with Current Cordon Fence

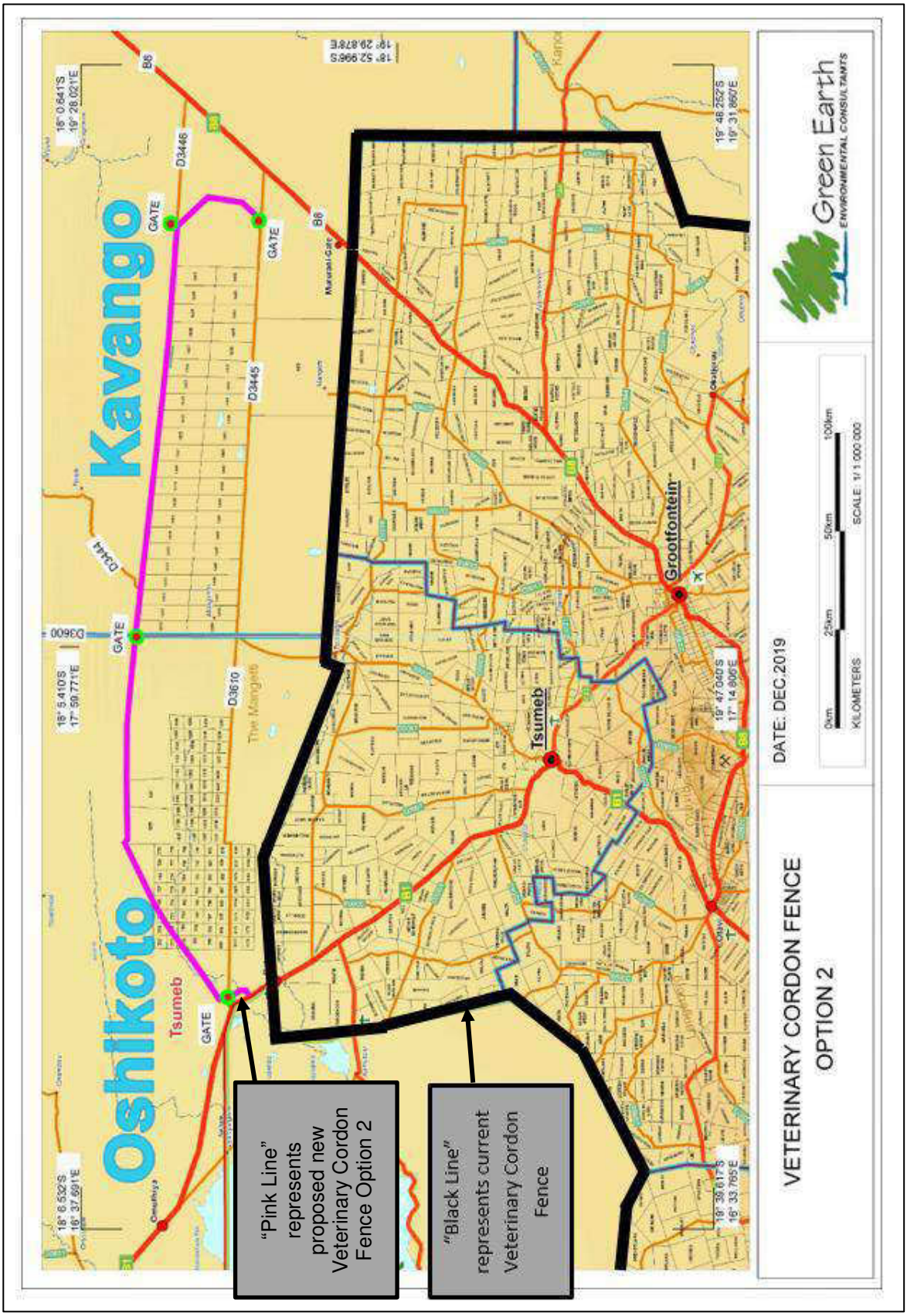


Figure 4: Veterinary Cordon Fence Option 2 with Current Cordon Fence

2.4. Specifications of the fence

The fence to be constructed will have the following qualities:

- It will be a duel fence 10m apart;
- The outside fence (to the perceived area of disease) will be a normal stockproof fence;
- The inside fence (directly next to the disease-free zone) will be a game proof fence;
- The area between the fences as well as on both sides of the fences will be cleared of vegetation to prevent direct contact of livestock from the perceived area of disease prevalence with the other livestock that are in the disease-free zone;
- The game fence will be elephant proof (probably electrified);
- The fence will be a straight line as far as possible;
- The fence will be outside of road reserves where it is aligned along a proclaimed road;
- The livestock fence will consist of wire mesh to prevent the crossing of small stock;

2.5. Bulk Services and Infrastructure Provision

2.5.1. Access and Internal Roads

The proclaimed tar and gravel roads in phase 1 of the project area are maintained by Roads Authority. The existing tar and gravel roads are sufficient for the purpose of the operations and no new roads have to be created on site. The roads include B8, B1, D3610, D3600 and D3446. Where the proposed new fence cannot be accessed by one of the existing roads, the area to be cleared for the construction of the fence will be used for a road to patrol, inspect and maintain the fence.

2.5.2. Water Supply

Water for human consumption during the construction of the fence will be obtained from either farmers or community members in the area or from containers that will be transported to site. The new gates to be constructed will obtain water from existing boreholes located near these sites.

2.5.3. Electricity Reticulation

Electricity will be obtained from NamPower supplemented by solar power and standby silent generators where required.

2.5.4. Sewage Disposal

It is advised that the nonlocal construction workers are housed in formalised communities with formal sewer and ablution facilities along the proposed fence route for the duration of the construction period. If it is required to set up temporary construction camps along the proposed fence route it is proposed that a portable chemical toilet system is used during the construction phase at the construction site to be used by workers during normal working hours when on site. The sewer generated during the construction phase (depending on the system used) must be disposed of in the sewer systems located at nearby towns (Rundu, Nkurenkuru, Otjivelo, etc.) on a weekly basis with the necessary permission from the local authority.

The infrastructure to be constructed (offices, houses and other supporting facilities) at the new gates has to be provided with an approved sewer system which will treat the water to 'Special Standards' (as per the MAWF standards) before it may be spilled into percolation drains or French Drains.

2.5.5. Solid Waste Disposal/Refuse Removal

It is proposed that the normal household waste and building rubble which will be generated on the construction site be sorted into glass, paper, metal, plastics, noxious materials and others and stored in a dedicated area on the site from which it is collected and transported to the approved landfill site of the formal Towns in the area. Permission must be obtained by the contractor from these Town Councils for the dumping of the waste at the sites.

3. National Legislation

3.1. Environmental Management Act (No. 7 of 2007)

In accordance to the Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012) of the Environmental Management Act (No. 7 of 2007), the activities listed below, which forms part of the planning, construction and operation of the project, may not be undertaken without an Environmental Clearance:

> ***FORESTRY ACTIVITIES***
> *4. The clearance of forest areas, deforestation, aforestation, timber harvesting or any other related activity that requires authorisation in term of the Forest Act, 2001 (Act No. 12 of 2001) or any other law.*
>
> ***LAND USE AND DEVELOPMENT ACTIVITIES***
> *5.3 Construction of veterinary protected area or game proof and international boundary fences.*
>
> ***INFRASTRUCTURE***
> *10.1 The construction of- (b) public roads;*

3.2. OIE Terrestrial Animal Health Code (Terrestrial Code)

The Office International des Epizooties (OIE) Terrestrial Animal Health Code (Terrestrial Code) provides standards for the improvement of animal health and welfare and veterinary public health worldwide, including through standards for safe international trade in terrestrial animals (mammals, reptiles, birds and bees) and their products. The health measures in the Terrestrial Code should be used by the Veterinary Authorities of importing and exporting countries to provide for early detection, reporting and control agents that are pathogenic to animals or humans, and to prevent their transfer via international trade in animals and animal products, while avoiding unjustified sanitary barriers to trade.

Other Acts, Policies and guidelines will also be consulted to ensure that the project is constructed and operated in accordance with Namibian and International Legislation and guidelines.

4. Purpose of the Environmental Assessment

The purpose of the Environmental Impact Assessment is to consider social, ecological, legal and institutional issues related to the intended use of the land, guided by the principles and stipulations of the Namibian Environmental Assessment Policy (1995) and Namibia's Environmental Management Act (2007), to determine the desirability of the proposed activities on the suggested area and to develop an Environmental Management Plan (EMP) to mitigate and manage environmental issues identified in the process.

In order to accomplish the above, the impact study will be undertaken and based on the outcome of the findings; further specialists' investigation might be required to fully assess all impacts.

5. Aims of the Impact Process

- To comply with Namibia's Environmental Management Act (2007) and its regulations (2012);
- To ascertain existing environmental conditions on the site in order to determine its environmental sensitivity;
- To inform I&APs and relevant authorities of the details of the proposed activities and to provide them with an opportunity to raise issues and concerns;
- To assess the significance of issues and concerns raised;
- To compile an impact report detailing all identified issues and possible impacts, stipulating the way forward and identify specialist investigations required;
- To outline management guidelines in an Environmental Management Plan (EMP) to minimize and/or mitigate potentially negative impacts.

6. Methodology

a) Desktop sensitivity assessment

Literature available on the area will be reviewed in order to determine potential environmental issues and concerns.

b) Site assessment (site visit)

This involves investigating the environmental parameters on site in order to enable further understanding of the potential impacts on site.

c) Impact process

Local stakeholders will be given the opportunity to comment on the proposed activities and engage in the planning process. The findings of the assessment process will be incorporated in the environmental impact assessment report.

7. Public Participation

The following Interested and Affected Parties (I&APs) have been identified and were included in the Public Participation:

- The Meatco Foundation;

- The Namibian National Farmers Union (NNFU);
- The Namibian Farmers Union (NFU);
- Meatco;
- The Meat Board of Namibia;
- The Kavango Regional Council;
- The Ministry of Environment and Tourism;
- The Ministry of Lands and Resettlement;
- The Roads Authority;
- NamPower;
- Traditional Authorities;
- Farmers in the Project Area;
- Community Members;
- Members of the General Public who registered as I & Aps;

8. Environmental and Planning Issues Identified

From previous experience with projects and comments received from Affected Parties, the proposed project will have the following possible impacts on the receiving environment:

Biophysical impacts:

- On ground and surface water (water quality, water tables and sustainable water supply on consumers who rely on the water source)
- Surface drainage systems (flow of surface draining systems)
- Possibility of air pollution (dust during construction)
- Effect on vegetation (grass, trees and shrubs directly in on arears to be cleared for construction of the fence and supporting infrastructure at the gates)
- Effect on movement of animals
- Effect on birds
- Effect on natural and general ambiance of the area and surroundings
- Concerns if the area can be restored/rehabilitated to an acceptable status once the infrastructure have been removed or reconstructed

Socio-economic impacts:

- Additional employment will be created
- Additional livestock will be made available to markets
- Economic advantages
- Stock theft and illegal hunting might increase during construction
- Noise and dust pollution from construction operations
- Community health issues - transmission of diseases from construction team and support staff to local community
- Increase in criminal activities
- Cultural/heritage impacts

These impacts and others which will be investigated during the environmental scoping procedures and the contributions of the interested and affected parties will be considered and evaluated in order to determine the significance of impact and if and how these impacts can be mitigated.

9. Public Involvement Program

As an important part of the Environmental Impact Assessment process you as stakeholder or interested member of the public are invited to find out more about what is being proposed, the implications thereof on the environment and/or to raise any issues or concerns.

Public meetings are scheduled at the following venues, dates and times:

Traditional Authority/ Community/Farmers Union:	Meeting Town/Village:	Venue:	Date:	Time:
Kavango West Regional Farmers Union	Nkurenkuru (Kavango West Region)	Nkurenkuru Town Council Community Hall	16 December 2019 (Monday)	11:00
Kavango East Farmers Union	Rundu	Kavango Regional Council Auditorium	16 December 2019 (Monday)	18h00
Ou Cordon (Woma and Mpenzo Village Communities to be invited), Mpora, Katjinakatji	Katjinakatji Village	Katjinakatji Community Hall	17 December 2019 (Tuesday)	9:00
Satotwa Communities	Satotwa Village	Satotwa Constituency Office	17 December 2019 (Tuesday)	14h30
Mangetti Farmers Association and Oshikoto Community	Omuthiya	Okashana Rural Development Centre Conference Hall	18 December 2019 (Wednesday)	18h00
Antoni Community	Antoni Village	Antoni Village Community Tree	19 December 2019 (Thursday)	9h00
Elavi Community	Elavi Village	Elavi Village Community Tree	19 December 2019 (Thursday)	14h30

Should you have any questions regarding the project, please contact ***GREEN EARTH Environmental Consultants*** at the contact details provided on *Page 1* of this document. The closing date for any questions, comments, inputs or information is 24 January 2019.

Comments from Interested and Affected Parties

PERSONAL PARTICULARS	
Name and Surname:	
Organization:	
Postal Address:	
Telephone Number:	Email Address:
Fax Number:	Cellphone Number.:
INTEREST IN PROJECT	
COMMENTS ON PROJECT	
Signature:	Date:

4.5.6 Spacing between double fences

As per OIE requirements, the double fencing will be 10m apart from each other.

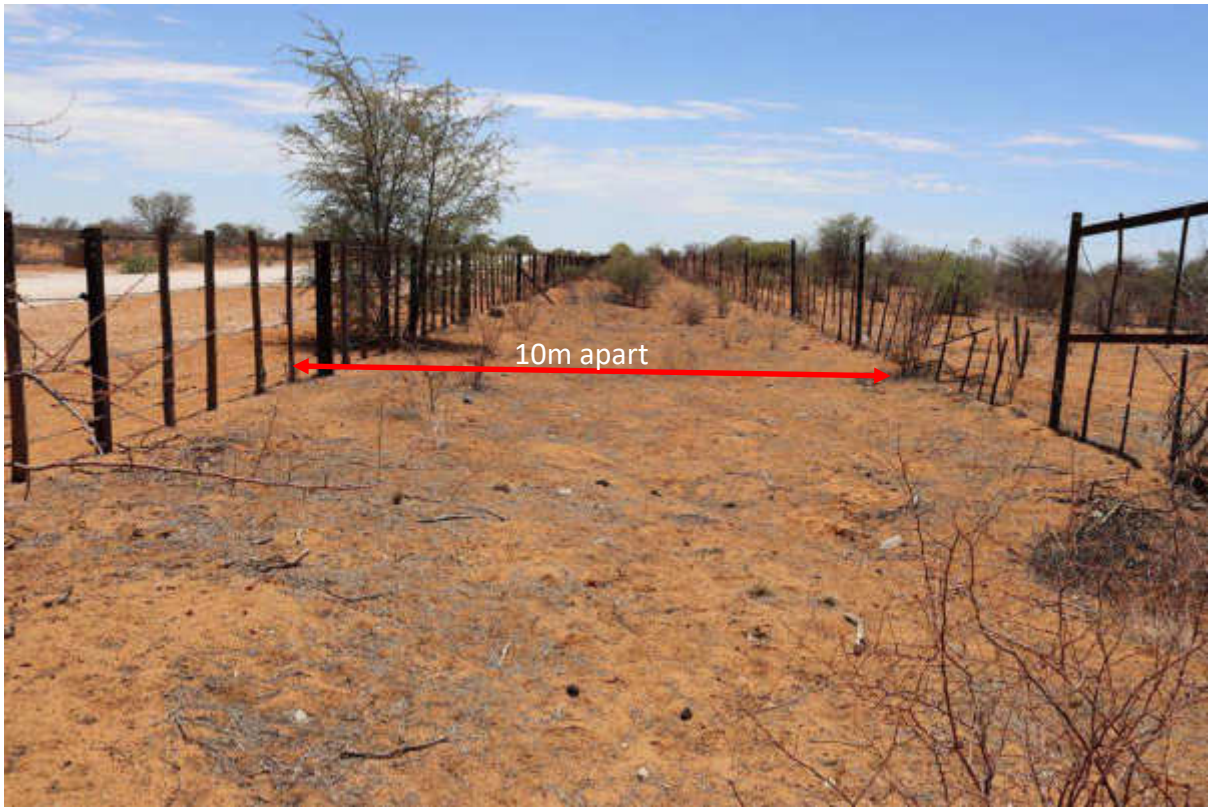


Figure 1: Double fencing of 10m apart from each other.

4.5.7 Height of the fence

The outer fence will be 2.4m high to prevent game animals

Figure 2: Outline fence-line with 2.4m height.

The inner fence will be 1.5m high for stock proof

Figure 3: Inner fence-line with 1.5m height.

4.5.8 Gap between wires

Outer fence will use three winch wires and gaps between the wires of 0.4m apart.

Figure 4: Outer fence with four winch wires and gaps between the wires of 0.6m apart.

Inner fence will use six still wires and gaps between the wires of 0.25m.

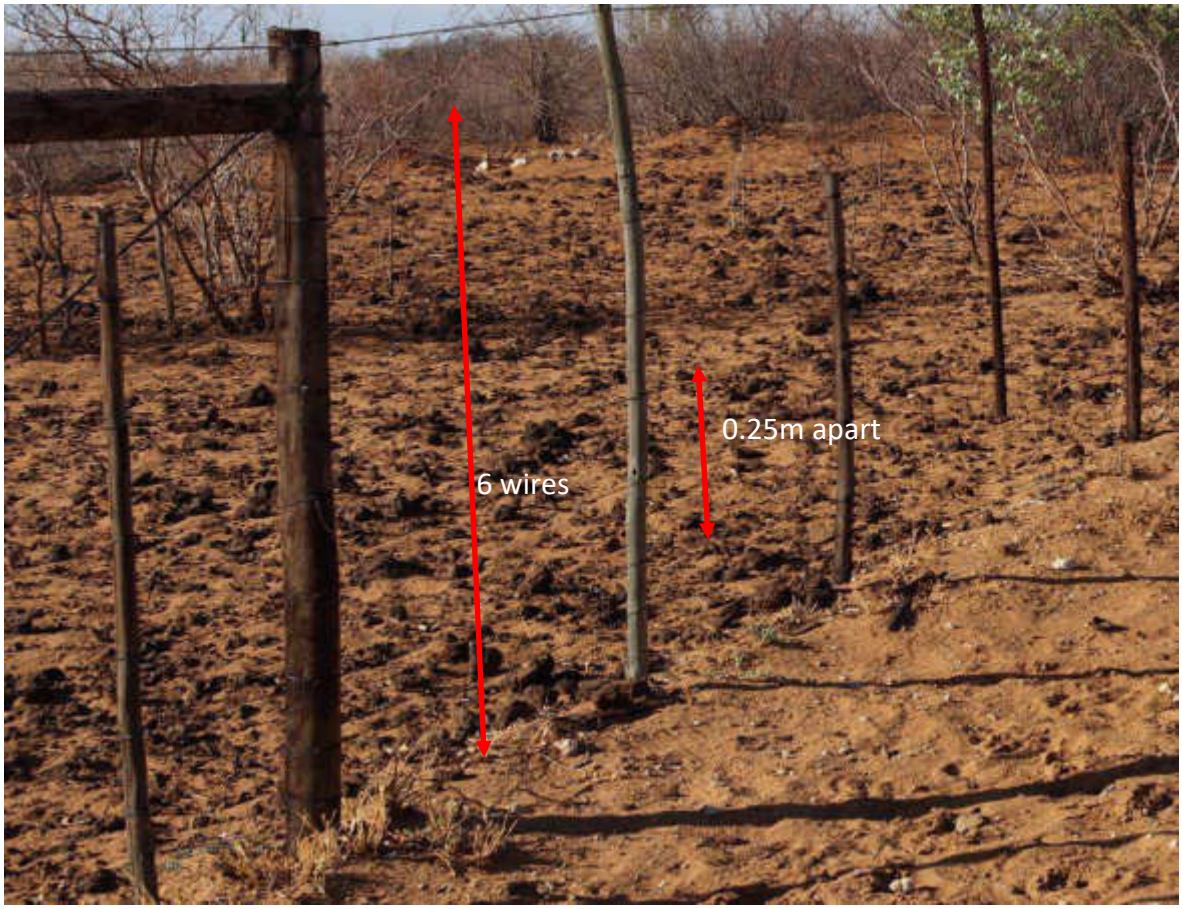


Figure 5: Six still wires and 0.25m gaps between the wires.

4.5.9 Mesh wires

Mesh wire will be used for both inner and outer fence for small stock protection. It will be 1.2m high from the ground to prevent small stock such as goats and sheep from passing through wires.

Figure 6: Mesh wire of 1.2m high.

4.5.10 Electric wire

It is proposed for the use of electric fence as barrier that can shock and deter elephant from crossing and destroying the fence. The voltage of the shock must be sufficient to cause discomfort not death. The top 3 lines are suggested to have electric lines.

Figure 7: Three (3) top fence-lines with electric fence.

4.5.11 Gap between posts

Outer gaps between the posts will be 1m apart while main post will be 5m apart. Hard iron post will be used throughout as poles in between and corner post.

Figure 8: Outer gaps between the posts with 1m apart while main post is 5m apart.

Outer gaps between the posts will be 0.5m apart while main post will be 10m apart. Iron pole will be used as main poles and corner posts while wooden poles to be used in between.

4.5.12 Post depth

Since the soil is sand, a depth of 0.5m is proposed for the both corner post and main poles in between.

We don't have photo for this but I hope it's clear otherwise we can explain

Anchoring system using metal post and concrete underneath

Figure 9: Anchoring system using metal post.

We don’t have a pic for concrete underneath

FEASIBILITY STUDY

For

CREATING NEW FOOT AND MOUTH DISEASE (FMD) FREE ZONE IN THE FMD PROTECTION ZONE OF THE NORTHERN COMMUNAL AREAS (NCA)

Prepared

By

Consultant: Burmeister & Partners
Sub-consultant: Meatco Foundation

on behalf of

Ministry of Agriculture, Water, and Forestry (MAWF).

EXECUTIVE SUMMARY

BACKGROUND

Burmeister and Partners (PTY) Ltd, and Meatco Foundation (MF) was contracted by the Ministry of Agriculture, Water and Land Reform (MAWLR) to conduct a feasibility study for the creation of Foot and Mouth Disease (FMD) free zone, or Mangetti block compartmentalisation in the central north of Namibia. Namibia has a Veterinary Cordon Fence (VCF) almost dividing Namibia into two (south and north). The southern part (SVCF) of the VCF is a FMD free zone, while the northern part (NVCF) is a FMD protection and infected zone. Beef products from the NVCF are not allowed to cross the VCF to the Southern parts of the country, because the SVCF area is an FMD free zone, while the NVCF area is a FMD protection and infected zones. Furthermore, the current Namibia international beef markets do not allow import of fresh beef products from the NVCF-FMD protection and infected zones (there is an exception with certain processed beef products that can be transported to markets domestic and international). As a result, farmers from the NVCF lament that the current situation deny them benefits from the export of beef to the lucrative markets which are enjoyed by farmers in the South.

Moreover, statistics from the last 5 years indicate that more than 64% of cattle in Namibia reside in the NVCF (MAWF, 2019). However, these 64% of cattle do not have access to the formal domestic and international beef markets. Northern Communal Areas (NCA) do not have a sufficient beef market to cater for these cattle. There is a general outcry for lack of market uptake for livestock and beef products from the NCA. Namibia as a country could benefit significantly, if FMD in the NCA is eradicated. The country could benefit through direct foreign income and the expansion of the Gross Domestic Product (GDP) from beef products if the FMD situation in the NCA is improved. It is against this background that the government of Namibia is considering creation of a new FMD free zone, or compartment in the NCA. Therefore, Burmeister and Partners (PTY) Ltd, and Meatco Foundation (MF) were contracted to conduct a feasibility study focused on evaluating the three options, namely, 1) creation of FMD free zone, 2) compartmentalisation, and 3) maintaining of the FMD protection zone.

METHODOLOGY

The study used both primary and secondary data. Secondary data was obtained from existing information and comprehensive literature reviews, while primary data was collected from the field. Five (5) site visits of more than a week each were conducted for data collection and stakeholders' consultations. The study was designed to compare three options which include creation of a FMD free zone, compartmentalisation, and maintaining of the FMD protection zone. The assessment focused on the construction work, risk assessment, financial proposal and Cost-Benefit Analysis (CBA). Microsoft Excel was used to conduct the CBA of the project by means of estimating the viability of the project using the Benefit-Cost Ratio (BCR), Net Present Value (NPV), Internal Rate of Return (IRR), and payback period. The study used risk impact matrix developed by the project team to calculate the total risk impacts of the quantitative risk assessment and risk allocation steps. Funding options for the projects were assessed and recommendations were made.

RESULTS

Demarcation and Construction Work

The proposed Mangetti compartment fence-line length is about 368km while the size is 1 058 550.42ha (Figure 1). The Mangetti block area covers part of Kavango West and Oshikoto regions. The proposed FMD free zone fence-line length is 949km while the size area is 3 047 954.92ha. The area covers part of Oshikoto, Ohangwena, Kavango West and Kavngo East (Figure 2).

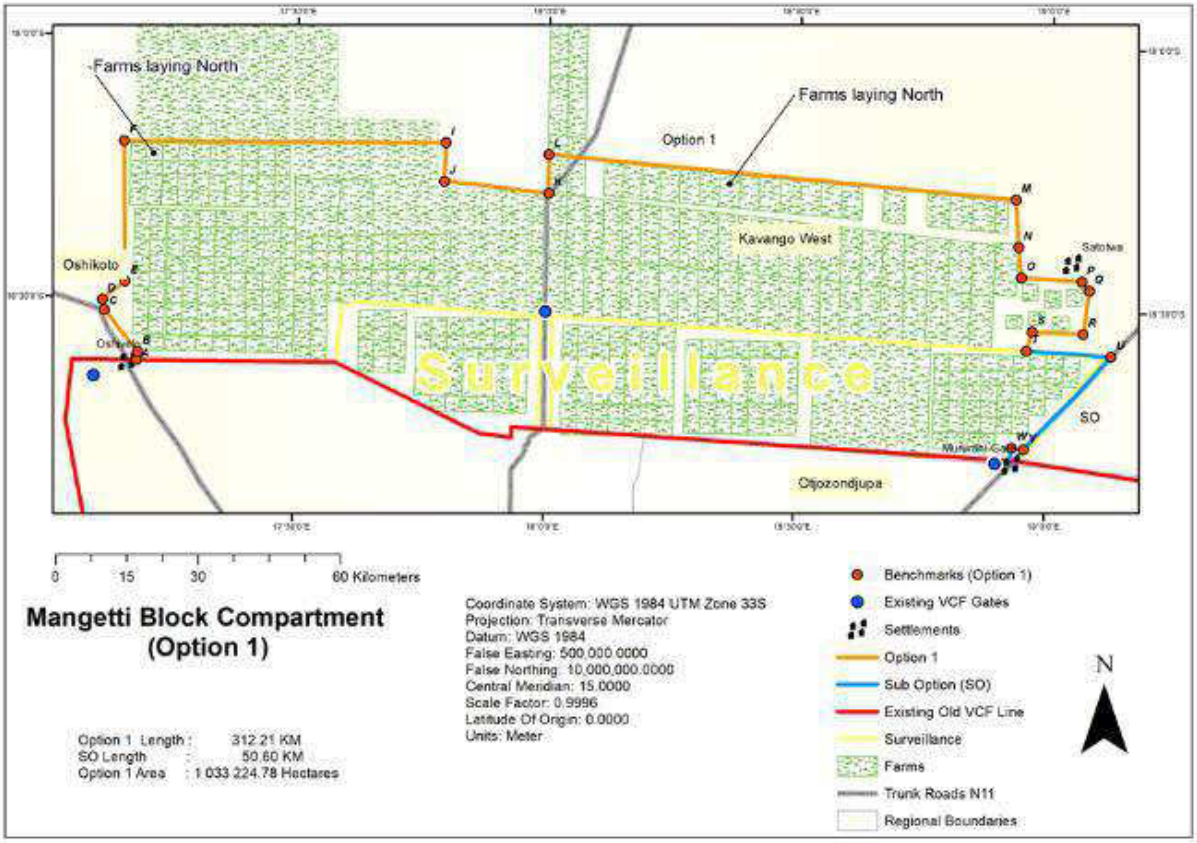


Figure 1: Proposed Mangetti Block Compartment map.

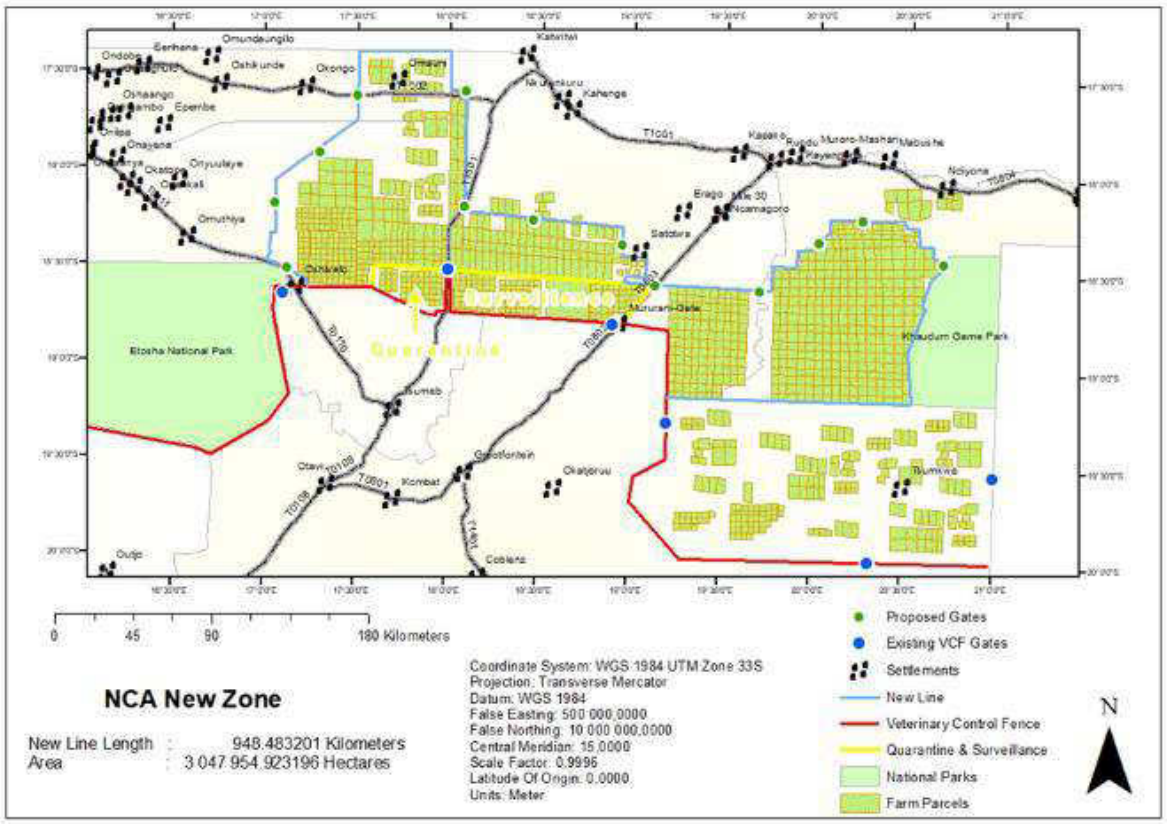


Figure 2: Map showing the proposed FMD free zone.

The proposed demarcation and scope of the construction work for both compartment and zone was informed by in-depth social and financial analysis, and technical inputs from experts and stakeholders including local communities. Requests by communities and their leadership for the fence-lines to include only small-scale commercial farms and not to traverse through settlements were considered. Provision for gates were made based on ground assessments and inputs from the stakeholders. The proposed materials for the construction of the fence line are the best possible durable and elephant proof.

Stakeholders recommended that the demarcated area for the zone or compartment must be fenced with two fence-lines running parallel to each other, 10m apart from each other. One line should be game proof while the other one should be stock proof. The game proof will be on the exterior 2.4m high while the stock proof will be interior and 1.5m high. Winch wire strand should be used on the outer line to withstand game animals such as elephants while hard iron posts should be used throughout as poles in between and corner posts. Still wires should be used for stock-proof while wooden poles should be used between posts. Steel poles should be used as main poles and corner posts. The proposed compartment and zone areas focus on cattle production although the area has small stock such as goats. Therefore, mesh wire should be used for both inner and outer fence for small stock control. It should be 1.2m high from the ground to prevent small stock such as goats and sheep from passing through the fence.

The outer fence should use three winch wires and gaps between the wires should be 0.4m apart while the inner fence should use six still wires and the gaps between the wires should be 0.25m. It is proposed to use an electric fence to deter elephants from crossing and destroying the fence. The top 3 wire strands are suggested to have electric lines. Four (4) and thirteen (13) gates are proposed for the compartment and the FMD free zone respectively. In addition, both inner and outer fence-lines of the compartment and zone should have two trail roads alongside for easy inspection and maintenance by veterinarian staff. The gap between the roads should also be cleared to allow a drive-through for inspection. The gap between the fences should be 10m wide while the road alongside the inner fence should be 4m wide. De-bushing will be needed for clearing 10m gap between

the double fencing, and two trail roads alongside the fence. De-bushing can either be done with a bulldozer, or manpower followed by grading afterwards.

Schedule

It is estimated the Mangetti block compartment would take about 15 months to be finalised (Table 1), while FMD free zone is about 25 months (Table 2).

Sustainability Risks

Risks identified for the both compartment and FMD free zone include potential community rejection and cutting of the fence, elephant destroying fence-lines, illegal movement of livestock inside the compartment or zone, overstocking of the compartment or zone due to market incentives that can result in overgrazing of the compartment or zone, and unexpected outbreak of FMD within the compartment or zone. The risk rating ranged from high to low. For an example, community rejection and cutting of the fence and unexpected outbreak of FMD within the compartment or zone were identified as a low risk, while elephants destroying fence-line was identified as higher risk due to their prevalence in the area as well as existing evidence of their damage to the existing fences in the area. However, mitigation measures were identified for each risk hence construction work for compartmentalisation or zone can be considered low risk. Risks identified can be averted or managed if recommendations in this report are followed. The approach of creating a new zone, or compartment does not pose a risk to the existing FMD free zone. The current FMD free zone will remain safe, if the outbreak happens in the new zone, or compartment since it will still be segregated by the existing VCF fence. Similarly, the new compartment, or zone will be safe if the FMD outbreak happens in the current FMD free zone.

Financial Proposal

The financial proposal covers all the costs needed to complete the construction work. Additionally, the study included the cost for inspection and maintenance. MAWLR through DVS will cover the cost for the process of clearing and obtaining the freedom status for the compartment and zone. The estimated total cost for the compartment construction work is N$ 240 million, while for the FMD free zone is N$ 600 million. The total cost for maintenance and inspection cost for Mangetti Block compartment for ten (10) years is NAD 23, 500, 000.00, while for the zone is about NAD 38,000,000.00.

Best Option

Among the three options of creating the new FMD free zone, compartmentalisation, and maintaining of the FMD protection zone, the finding of the study clearly demonstrated that FMD free zone was the best option followed by the compartmentalisation. Continual maintenance of the FMD protection zone is the last option. The results of this study showed that neglecting to create a new FMD free zone, or compartment could be expensive in the long term as the cost of vaccination would exceed the cost of creating and maintaining of a new FMD free zone. Creating FMD free zone will also reduce the cost of control during FMD outbreak in the NCA and it will effectively spread the risk.

The other consideration is the cost of control during the outbreak of the FMD. The successful creation of new FMD free zones in the NCA will avoid or reduce the cost of controlling FMD as most of the areas will be in the FMD free zones, hence the cost of operation for MAWF will be less, if the outbreak happens in a few areas that will be left out.

Additionally, creating a FMD free zone will help to change the perception of the farmers and communities in the NCA regarding the existing VCF. Currently, most of the communities in the NCA view the current VCF as a relic of the colonial era discriminating against them and exclude them from benefits accrued by farmers and communities in the SVCF. Many see the VCF as a symbol of continued apartheid in an independent Namibia. This is based on the view that during apartheid, the VCF was used to control movements of the human population by the military. Therefore, creating a new FMD free zone will help change the public perception as farmers will understand the benefit and need to guard the fence.

Moreover, creating another FMD free zone will serve as a buffer between a FMD risk area and the fence line for the current VCF. Therefore, farmers in the current FMD free zone should be forefront in promoting the creation of the new FMD free zone in the NCA. The current FMD free zone will remain safe if the outbreak happens in the new zone or compartment. Similarly, the new compartment or FMD free zone will be safe if the FMD outbreak happens in current FMD free zone.

In addition to the unfavourable CBA performance of the compartment compared to the free zone, the compartment was found to have other further limitations not attributed to the zone. As per the literature review and inputs from experts, a compartment cannot be cleared by the OIE to have a FMD free status. The creation of market depends on the bilateral agreement between two countries - with an Owner of a compartment reaching an agreement with a country willing to buy livestock from the compartment. This is unlike zone which can be cleared by OIE to have FMD free status so beef products from FMD free zone can access international lucrative market. Also, the compartment is smaller in general compared to zone, hence economics of scale becomes an important factor when comparing the two.

The findings show that the creation of a new FMD free zone would bring significant benefits of increased cattle prices, which would eventually lead to increased revenue for farmers. This finding is confirmed by various studies, which also reported that the benefits of good prices and revenue from international export markets is the main reason countries create FMD free zones (Otte et al., 2004; Leslie et al., 1997; James & Rushton, 2002; Scoones & Woolmer, 2007; McGahey, 2011). The study also highlighted non-monetary benefits of creating FMD free zone such as employment and the creation of new markets. Therefore, it is concluded that the benefits of the FMD free zone outweigh the costs and it will improve the socioeconomic conditions of the communal farmers in the study area and Namibia at large.

In terms of the funding option, it is concluded that creation of FMD free zone, or the compartment is to be 100% funded by the government. The alternative option is a co-financing by government (70%), donors (20%) and 30% repayment by farmers. This option suggests borrowing 30% of capital investment to be repaid by farmers.

Recommendations

Based on the findings of this feasibility study, we recommend the following:

- A new FMD free zone in the NCA be created since the study has concluded that such an investment is feasible and economically viable.

- Roads passing through proposed gates of the FMD free zone should be gravelled to improve mobility in the area because currently farmers struggle to access their farms due to heavy sand roads.

- The gravelling of the roads should be funded by Road Authority with contribution from other stakeholders such as donors if possible.

- As a first option, the creation of the FDM free zone in the NCA should be 100% funded by the Government of the Republic of Namibia.

- If the government is not able fund the initiative 100%, a co-financing model which involves government (70%), repayment by farmers (30%) and donors (20%) should be considered as an alternative option. Since contributing 30% of capital investment to be covered by the farmer's levy within the two years of fence-line of contraction, the government should borrow funds or bring in investors.

- The agreement will then for each farmer within the zone to be levied NAD2.00 per kg per cattle whenever ever they sell their cattle.

- In the event of the second option is adopted, the government should set up a Special Purpose Vehicle (SPV) (Figure 32) structure to fund and manage the FMD free zone for a period of at least 10 years until the borrowed funds are repaid from proceeds of the farmer's levy.

LIST OF ACRONYMS

CBA	Cost-Benefit Analysis
CBPP	Contagious Bovine Pleuropneumonia
CIV	Common Industry Vision
DAPEES	Directorate of Agriculture Production, Extension and Engineering Services
DCF	Discounted cash flow
EDF11	11th European Development Fund
EIA	Environmental Impact Assessment
EU	European Union
FMD	Foot and Mouth Disease
GDP	Gross Domestic Product
IRR	Internal Rate of Return
MBN	MeatBoard of Namibia
MEATCO	Meat Corporation
MF	Meatco Foundation
NAMSIP	Namibia Agricultural Mechanisation and Seed Improvement Project
NCAs	Northern Communal Areas
NE	North-East
NNFU	Namibia National Farmers' Union
NPV	Net Present Value (NPV)
NSA	Namibia Statistic Agency
NUST	Namibia University of Science and Technology
NVCF	Northern Veterinary Cordon Fence
OIE	World Organisation for Animal Health
SE	South-East
SIAPAC	Social Impact Assessment and Policy Analysis Corporation
SSA	Sub-Saharan Africa
SVCF	Southern Veterinary Cordon Fence
UNAM	University of Namibia
USA	United States of America
VCF	Veterinary Cordon Fence

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ORGANISATION OF THE REPORT

This document is organized into four (4) sections:

SECTION 1: Introduction and background

This section provides a brief introduction and background of the feasibility study, the rationale for the proposed study and the purpose and objectives of the study.

SECTION 2: Study Area

The study area section presents the geographical location of the feasibility study and the description of the proposed project area.

SECTION 3: Methodology

Section 3 describes the methodology used which includes aspects of data collection, stakeholders' consultations, and data analysis.

SECTION 4: Results of the study

This section presents the feasibility study findings. The section starts with briefly explaining the procedure and the arrangement of the results. The section then presents the results of the construction work, risk assessment, financial proposal, and Cos-Benefit Analysis.

SECTION 5: Conclusions and Recommendations

The last section of this report presents the conclusions and recommendations of the feasibility study.

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SECTION 1:
INTRODUCTION

Burmeister and Partners (PTY) Ltd and Meatco Foundation (MF) were contracted by the Ministry of Agriculture, Water and Land Reform (MAWLR) to conduct a feasibility study for the creation of the new Foot and Mouth Disease (FMD) free zone, or compartment in the FMD protection zone of the Northern Communal Areas (NCAs). Therefore, this report presents the findings of the feasibility study. The report is comprised of an introduction and background, description of the study area, methodology, results of the study, conclusion and recommendations.

1.1. Background

Veterinary Cordon Fence (VCF) is a large-scale fence-line constructed to control livestock contagious diseases such as FMD (McGahey, 2011). In southern Africa, VCFs are used in Namibia, South Africa, Botswana, and Zimbabwe to control movement of livestock within these countries. The Namibian VCF which is commonly referred to as Red-Line was originally created in 1896 by the imperial German administration to contain a Rinderpest outbreak in cattle (Herbert, 2012). Since the 1960s, it served to prevent the spread of FMD and Contagious Bovine Pleuropneumonia (CBPP) from FMD infected and protection zones in the NCA to FMD free zone in SVCF.

The Namibian VCF is approximately 1,347km running across the country from east to west almost dividing the country in the middle (Meatco Foundation [MF], 2019). The regions in the north of the Northern Veterinary Cordon Fence (NVCF) include the Zambezi, Kavango West, Kavango East, Ohangwena, Oshikoto, Oshana, Omusati and Kunene-north, while regions in the south of the Southern Veterinary Cordon Fence (SVCF) are Otjozondjupa, Omaheke, Khomas, Hardap, //Karas, Erongo and Kunene south (Figure 3). The regions highlighted in green are FMD protection zone, while the Zambezi region highlighted in red is a FMD infected zone (Figure 3). The southern part of Namibia without colour is considered as FMD free zone (Figure 3).

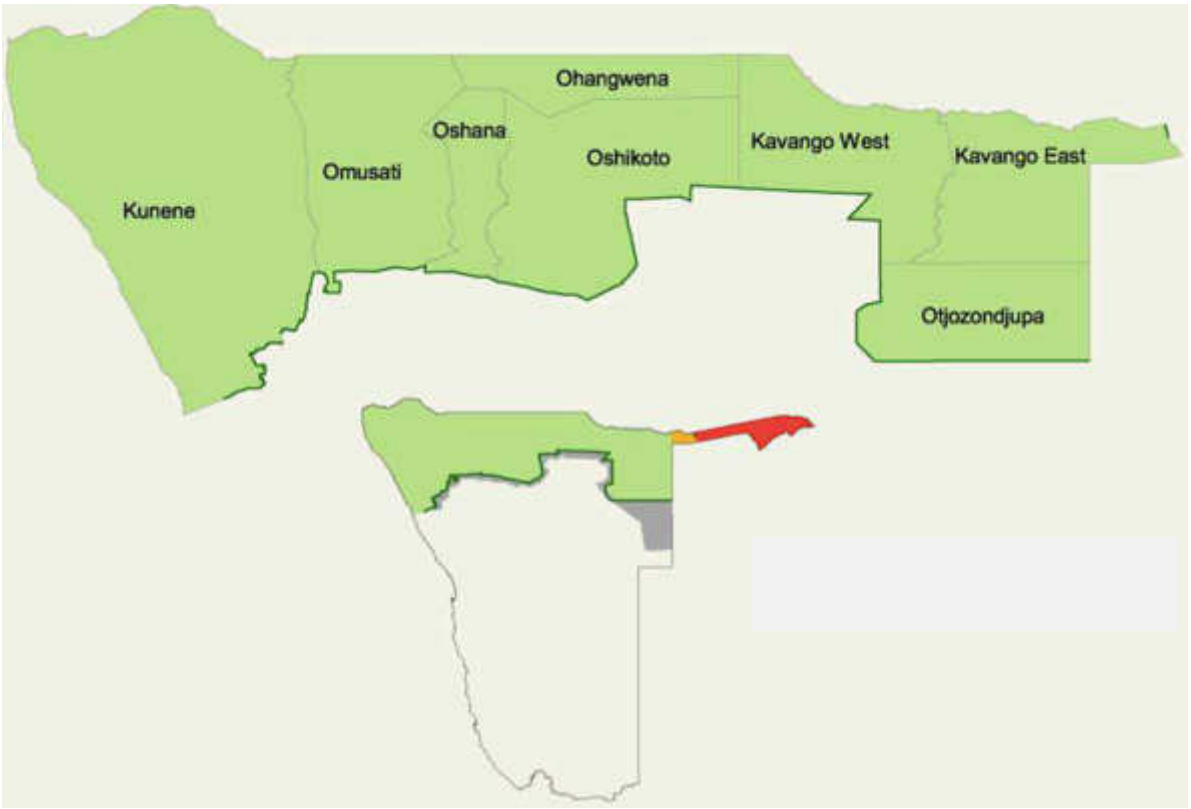

Figure 3: Namibia map shown FMD protection zone in green and infected zone in red. (Source; MAWF 2014)

The beef products from the northern regions are not allowed to cross the VCF into the southern parts of the country (Herbert, 2012) to ensure that FMD does not end breaking in the South. Furthermore, the current Namibia international beef markets do not allow the import of meat products from the NVCF-FMD protection and infected zones (MAWF, 2014). As a result, farmers from the north lament that the current situation prevent them from benefitting from the international lucrative beef market that are enjoyed by farmers in the south. This scenario is corroborated by Bishi and Kamwi (2008) who observed that areas south of the veterinary cordon fence enjoy relatively unrestricted access to international markets, particularly to the lucrative markets of the European Union (EU), Switzerland and Norway (European Free Trade Area countries).

Moreover, statistics from the last 5 years shows that more than 64% of cattle in Namibia resides on northern side of VCF, in the areas considered as FMD protection and infected zone. However, these 64% do not have access to adequate formal markets. Generally, farmers from the northern FMD invested regions are disgruntled by the lack therein of access to lucrative international markets for their

livestock and associated beef products. Therefore, the Namibian farmers in the north, and the Namibia economy at large, could benefit significantly if FMD could be eradicated in the NCA. The Namibian economy could benefit significantly through foreign income which could increase the livestock contribution to the GDP if the FMD situation in the NCA could improve. It is against this background that key stakeholders in the beef industry including the Namibian government proposed that the Namibia government should consider creating a new FMD free zone, or compartment in the NCA.

The proponents of a disease-free zone in the NCA proposed two options: either through creating a new independent FMD free zone, or compartment into the low risk block north of the current VCF. A third option which advocated for shifting of the VCF to the border between Namibia and Angola received resentment from the majority of farmers and stakeholders arguing that shifting VCF to Angola border will pose a risk for the whole country, and that could lead to lose of access to lucrative international beef markets (MAWF, 2014). Concerned people argued that due to uncontrolled movement of cattle between the border of Angola and Namibia, it would be very difficult to control FMD since some of the farmers in Namibia take their cattle for grazing into Angola during drought periods. Those against the idea further contend that the likelihood of such a fence being vandalised would be extremely high, particularly during drought periods. One of the major farmers' concern and fear is that cattle herds in Angola are in constant contact with buffaloes that are carriers of FMD.

Meanwhile, the MAWF (2018) also supported the zoning and compartment approach during the second land conference, maintaining that the zoning, or compartmentalisation approach is safer as it allows for piloting small-scale areas, starting with the low-risk blocks. Previous studies on this issue focused on the possibility of shifting the VCF to the border between Namibia and Angola. Therefore, this feasibility study focused on assessing three options: 1) creation of FMD free zone, 2) compartmentalisation, and 3) maintaining of the FMD protection zone.

1.2. Purpose and objective of the feasibility study

The main purpose of this study is to assess the feasibility of creating a new FMD free zone, or compartment into the NCA of Namibia in order to improve market access for NCAs livestock. The specific objectives for this feasibility study are:

1. To compare and determine best economical and least risk option between FDM free zone, compartment and maintaining protection zone.
2. To demarcate and determine the best practical construction work for the new FMD free zone and compartment in the NCA.
3. To determine and propose financial cost for the construction work of the new FMD free zone and compartment.
4. To recommend the proposed operational structure and sustainability of the new FMD free zone, or compartment.

SECTION 2:
STUDY AREA

2.1 Geographical Location

The feasibility study focused on the proposed compartment and free zone in the central north of Namibia covering some parts of Kavango East, Kavango West, Oshikoto and Ohangwena regions (Figure 4). The map on the left side (Figure 4) shows the proposed new FMD free zone in blueline north of the existing VCF (redline). The map on the right side (Figure 5) shows the proposed area for compartment in blue line.

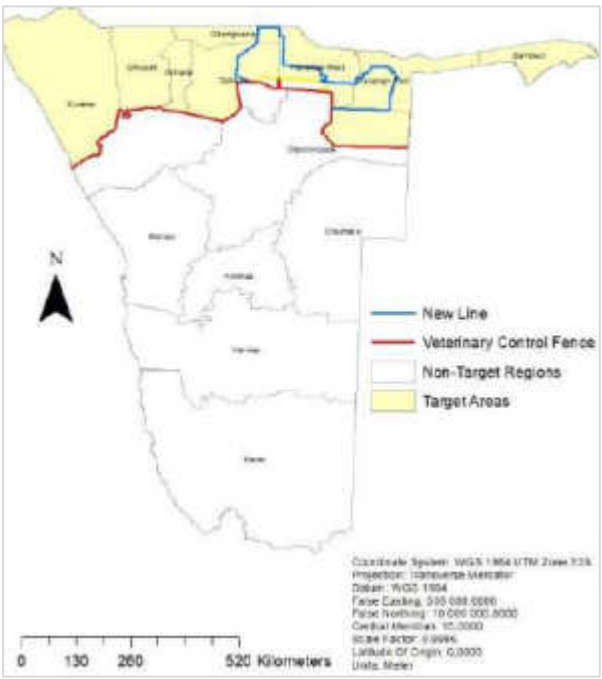

Figure 4: Location of the propose FMD free zone Figure 5: Location of the proposed compartment

2.2 Description of the proposed project area

The proposed project area is characterized by sandy soil falling in the geological division of the Kalahari group of Namibia (Mendelsohn et al, 2015). The Kalahari sands are part of the greater Kalahari Group, which covers most of the northern and eastern parts of Namibia and extends across the Namibian border into Botswana and Angola. The project area is a flat with an altitude level ranging 1000 to 12000 m above the sea level. The area lies within the Tree Savanna and Dry Woodland vegetation (Mendelsohn et al, 2015). The woodlands constitute an important supply of essential resources for the local communities. The proposed project area is predominantly a cattle farming area. The Government of the Republic of Namibia has demarcated farms in commercial units and provided leaseholds to farm owners and these farmers are able to access financial support from financiers.

SECTION 3:
METHODOLOGY

3.1 The design of the study

The study assessed and compared the following options:

1. Creation of FMD free zone in the central north of Namibia
2. Compartmentalisation of Mangetti block
3. Maintaining of FMD protection zone in the above two areas

3.1.1 Construction work

This part assessed both the free zone and compartment to establish the feasibility of the construction work.

3.1.2 Risk assessment

The study assessed the risks associated with the three options in terms of social, financial, and environmental impacts.

3.1.3 Cost-Benefit Analysis

The study included a Cost-Benefit Analysis (CBA), comparing the three options (creation of FMD free zone, compartmentalisation, and maintaining of the FMD protection zone).

3.2 Data Collection procedures

The study used both primary and secondary data. Primary data was collected from the field in north part of Namibia. Secondary data was obtained through comprehensive review of available literature on previous similar projects and engagement of relevant stakeholders. Secondary data sources included agricultural government-mandated institutions (Directorate of Agriculture Production, Extension and Engineering Services (DAPEES), Directorate of Veterinary Service (DVS), government agencies (Namibia Statistic Agency (NSA), MeatBoard of Namibia (MBN), Meat Corporation (Meatco) and private sector institutions' such as libraries and websites of the University of Namibia (UNAM) and the Namibia University of Science and Technology (NUST).

Five site visits of more than a week each were conducted at the proposed project area for reconnaissance and primary data collection. The site visits focused on

collecting data on the length of the proposed zone and compartment, their sizes, biophysical information, soil and geology baseline, and elephant migration routes. Data on the number of cattle within the proposed project area was collected from the MAWLR office within Kavango East, Kavango West, Ohangwena and Oshikoto regions. The site visits also included studying the community village set-up in relation to the proposed project area. Additionally, the field reconnaissance included site visits of Omutambo Omawe Quarantine and Etosha Park for visual assessment of the existing elephant proof fences. The consultant team joined the Environmental Impact Assessment (EIA) team for stakeholders' consultations. A total of nine (19) meetings were conducted with farmers unions, honourable governors, communities and chiefs/kings. The findings of the study were shared with stakeholders for their inputs. Figure 6 to 13 shows photos of participants on various occasion of meetings.

Figure 6: Meeting with Oshikoto King and his Traditional Authority members.

Figure 7: Meeting with Oshikoto region general stakeholders.

Figure 8: Meeting with Ohangwena Queen and her Traditional Authority members.

Figure 9: Meeting with Kavango West region general stakeholders.

Figure 10: Meeting with Kavango East region general stakeholders.

Figure 11: Participants during the community meeting at Katjinakatji village.

Figure 12: Meeting with community members in Oshikoto region

Figure 13: Meeting with Ohangwena region general stakeholders.

3.3 Data procedure and analysis

3.3.1 Construction work

The analysis on the construction work focused on demarcations, conceptual drawings, infrastructure equipment and material requirements. Social aspects such as village and livelihood set-up were considered.

3.3.2 Risk assessment

The risk assessment examined the risk elements related to the acceptance of the project, fitness of the fence and its sustainability. The study considered both the likelihood of a risk occurring and the consequences of it occurring. Data were entered into a risk impact matrix developed by the project team to determine the risk rating. Possible mitigation per identified risk was provided.

3.2 Cost-Benefit Analysis

The variables measured for Cost-Benefit Analysis (CBA) of the three options were Benefit - Cost-Ratio (BCR), Net Present Value (NPV), Internal Rate of Return (IRR), Payback Period (PBP), Cattle Prices, and Revenue.

a) Number of cattle

As per data provided by MAWF, the numbers of cattle in the proposed zone and Mangetti block in 2020 were 177,500 and 81,450, respectively. The over 30 years data shows that cattle herds increased by 3% on average in Namibia. Since an average increase per annum was 3%, it was assumed that the cattle population in year 1 of the project would increase by 2%. The population would increase by 3% in year 2 to year 7 before decreasing to 2% in year 8 and 1% in year 9, reaching the maximum carrying capacity of their land. Thereafter, the farmers would not increase the numbers of cattle, but rather maintain maximum threshold. Therefore, farmers would then apply commercial farming principles and recognise that by exceeding the maximum carrying capacity numbers, would be detrimental to their rangeland and consequently, their farming business prospects.

b) Offtake percentage

An average offtake percentage was used to determine the number of cattle to be sold annually. As per inputs from Livestock Marketing Cooperatives in the NCA, Meat Board staff in the NCA and Meatco representatives in the NCA, it was estimated that the current small-scale commercial farms under the proposed FMD free zone and compartment had an average of 15% annual offtake. The offtake percent was assumed to increase if lucrative markets for cattle and beef products were created in the proposed new FMD-free zone. The average offtake percent was assumed to increase from 15% in year 1, 25% in year 5, depending on the level of success achieved with the new FMD free zone. The 25% offtake would remain unchanged in the future. This was based on the benchmark, showing that an average conservative offtake percentage in the FMD free zone in the southern parts of Namibia was about 25%. Given that the focused project area in the NCA was already in a semi-commercial operation, establishing better markets by creating FMD free zone would encourage farmers to increase their offtake by 25% over 5 years, as is the case for SVCF farms.

The assumption for compartment showed that the offtake will reach 22% in the 13th year and then remain constant thereafter.

The scenario for maintaining the status quo of FMD protection zone indicated that offtake percent will be slow, reaching 20% offtake in the 15th year. The 20% offtake would remain constant thereafter.

c) Cattle weight

The average cattle live weight used was 400kg. This was based on data from Meatco, which has shown that cattle bought from the proposed new FMD free zone and compartment, were 400kg on average (Meatco, 2020). In addition, this is the recommended conservative Namibia national average semi-commercial weight per cattle.

a) Cattle price

The 10-year series data on prices per kg for live cattle was obtained from Meatco and Livestock Marketing Cooperatives (LMCs), operating in the FMD protection zone in the NCA. The prices from the SVCF FMD free zone were obtained from Meatco and the Namibian Meat Board. The calculations showed that the price from FMD protection zone had an average annually increase of 8%, while those from the SVCF FMD free zone increased by 11%. The information on average increase for prices was used to determine the increase projection into the future, for both FMD protection zone and FMD free zone (Tietenberg & Lewis, 2009).

SECTION 4:
FEASIBILITY STUDY RESULTS

4.1 Construction Work

4.1.1 Demarcation

a) Mangetti Block Compartment Demarcation

Based on the ground assessment and mapping with stakeholders, the proposed Mangetti compartmentalization fence-line length is about 1 033 224 ha, while the size area is 1 058 550.42ha. The area cover parts of Kavango West and Oshikoto regions (Figure 14).

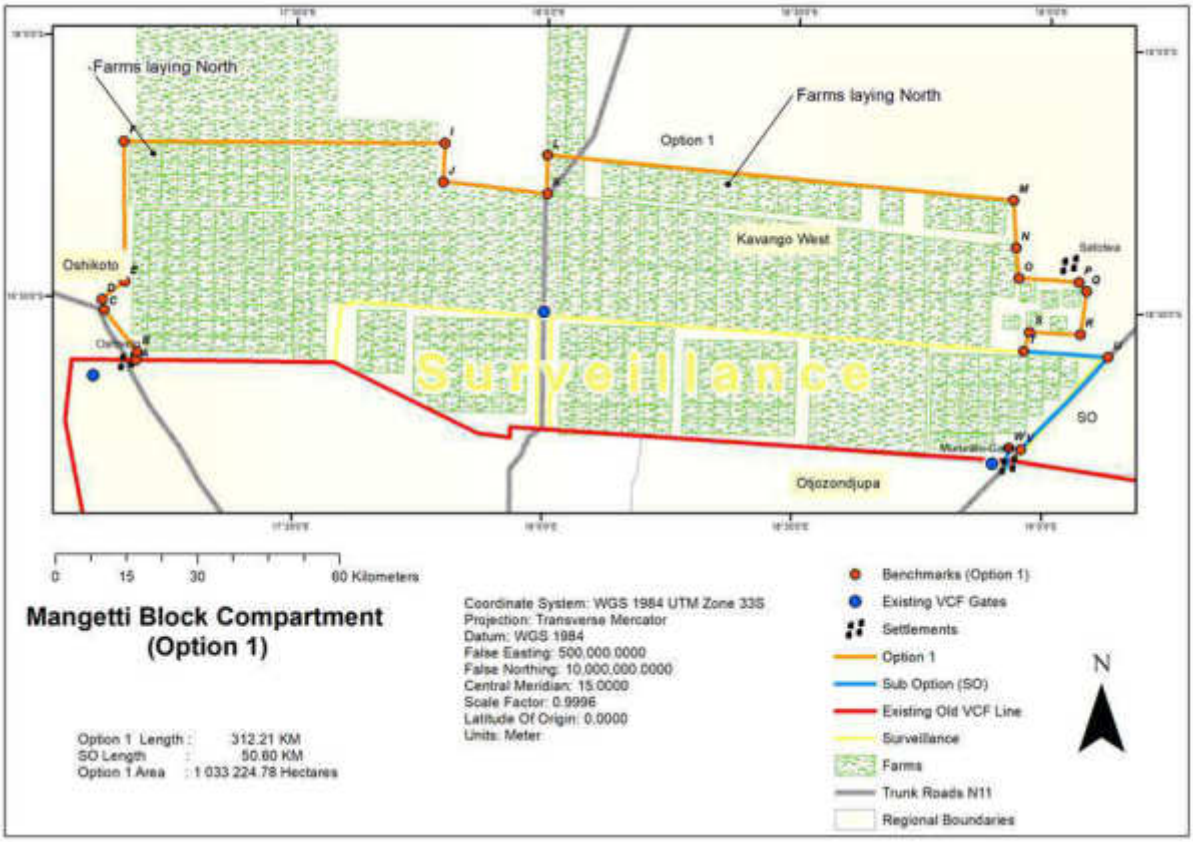

Figure 14: Map showing the demarcation of the proposed Mangetti Block Compartment.

b) Demarcation for FMD free zone in the central north

Based on the assessment and mapping with stakeholders, the proposed FMD free zone fence-line length is about 949km, while the size area is 3 047 954.92ha (Figure 15). The area cover parts of Oshikoto, Ohangwena, Kavango West and Kavango East (Figure 15).

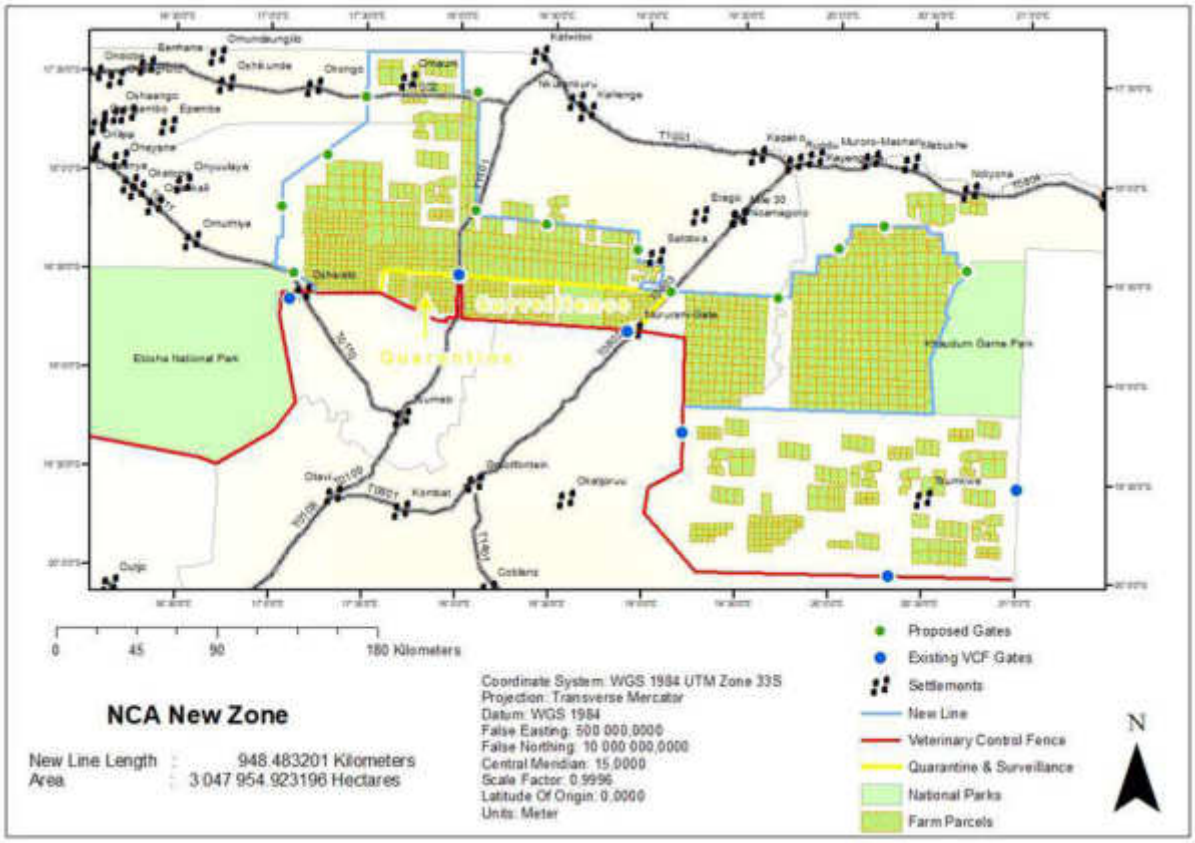

Figure 15: Map showing the demarcation of the proposed FMD free zone area in the central north.

c) Justification for the demarcations

The proposed areas and fence lines for both compartment and FMD free zone demarcations were decided based on the technical, financial and social considerations. In terms of social perspective, both the free zone and the compartment will mainly accommodate small scale commercial farms, as per request by communities and their leaderships. This will encourage the communities and their leadership to protect the fence-line. In terms of economic perspective, it is cost-effective to include small scale commercial farms since they are farming commercially (not subsistence farming), hence they will derive meaningful benefits from compartment, or zone. The zigzag parts on the line are not preferred from technical and financial perspective. However, this was necessary to avoid the fence line passing through areas where communities' livelihood activities do not concern cattle farming. These areas are characterized by settlements including services such as clinics, schools, government offices, crop production and shops. Including these areas, will cause the communities to travel long distances and will require the project to compensate communities for shifting their households and properties. Furthermore, except the zone part of Ohangwena region, both zone and compartment were further inland, far away from the border

between Angola and Namibia which is considered FMD high risk.

4.1.2 Construction Standard and Techniques

a) Fence-lines

The OIE require that a barrier to be created between FMD infected zone and FMD free zone. As per DVS determination of the existing VCF, the demarcated area for the zone/compartment must be fenced with two fence-lines (double fencing) running parallel to each other (Figure 16). The legal perimeter consists of a double wire fence to prevent any type of contact with or entry of other animals. One line is for game proof while the second one is for stock proof. The game proof will be outside while the stock proof will be inside as shown in the diagram below.

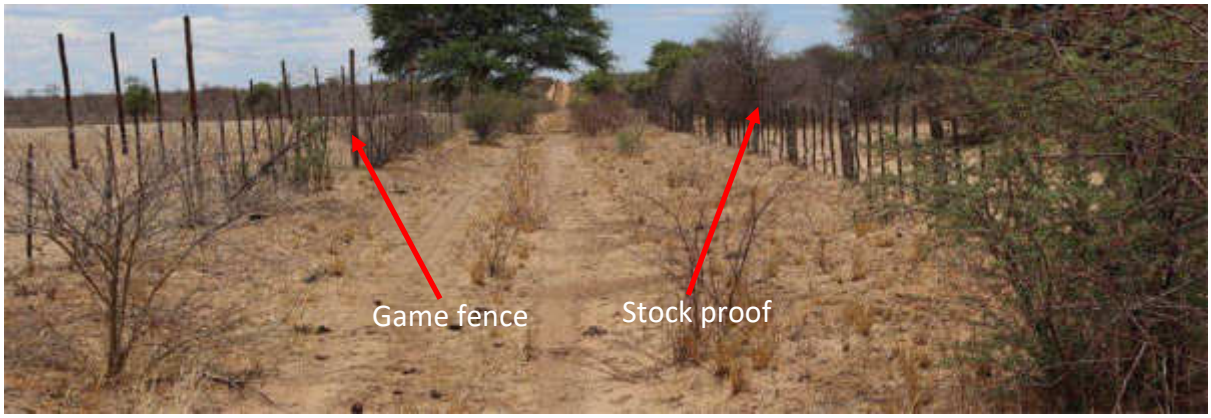

Figure 16: An example of a double fence with game fence outside and stock proof inside.

b) Outer Fence Materials

Winch wire strands should be used on the outer line to withstand game animals such as elephants while hard iron posts should be used throughout as poles in between and corner posts.

c) Inner Fence Materials

Still wires should be used for stock-proof, while wooden poles should be used between posts. Iron poles should be used as main poles and corner posts.

d) Mesh wire

The proposed compartment and zone area focus on cattle, although the area has small stock such as goats. Therefore, mesh wire should be used for both inner and outer fence for small stock control.

e) Spacing between double fences

As shown in Figure 17 below, the double fencing should be 10m apart from each other.

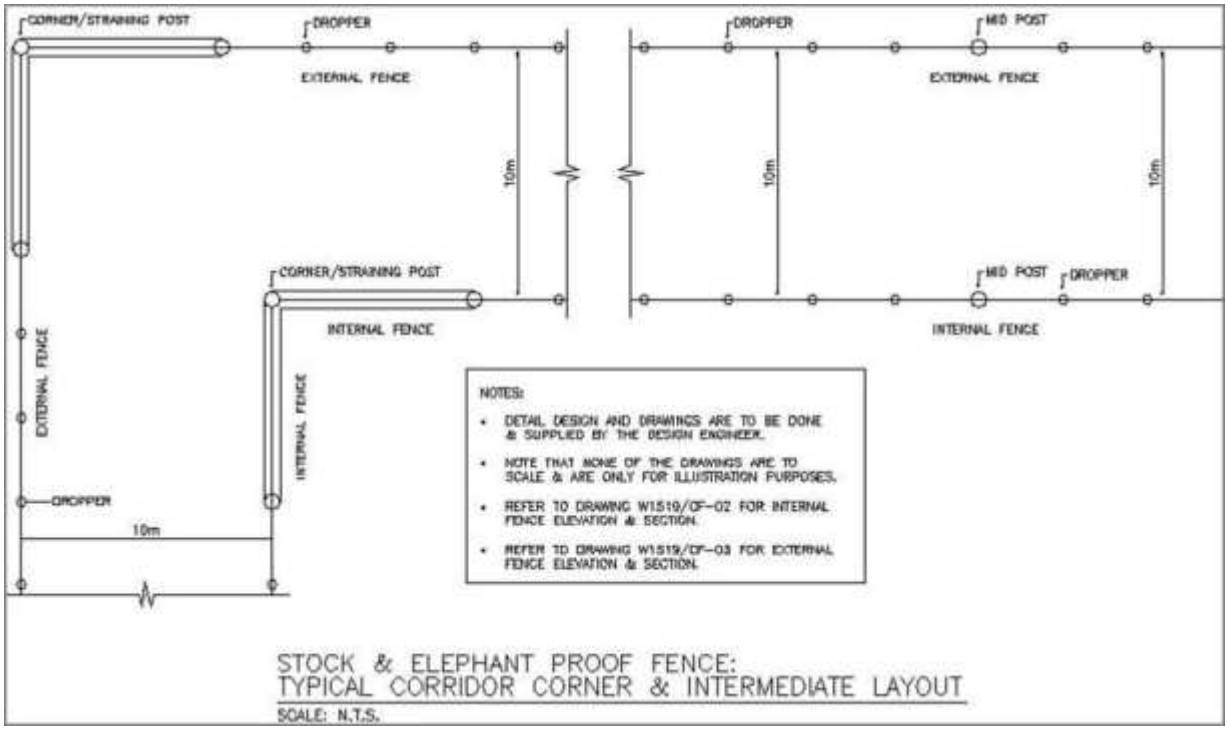

Figure 17: Double fencing of 10m apart from each other.

f) Height of the fence

The exterior fence must be 2.4 m high, to avoid game, while the interior fence must be 1.5 m high for livestock resistance.

g) Gap between wires

The exterior fence should use three winch wires and the gaps between the wires should be 0.4m apart, while the interior fence should use six still wires and the gaps between the wires should be 0.25m (Figure 18).

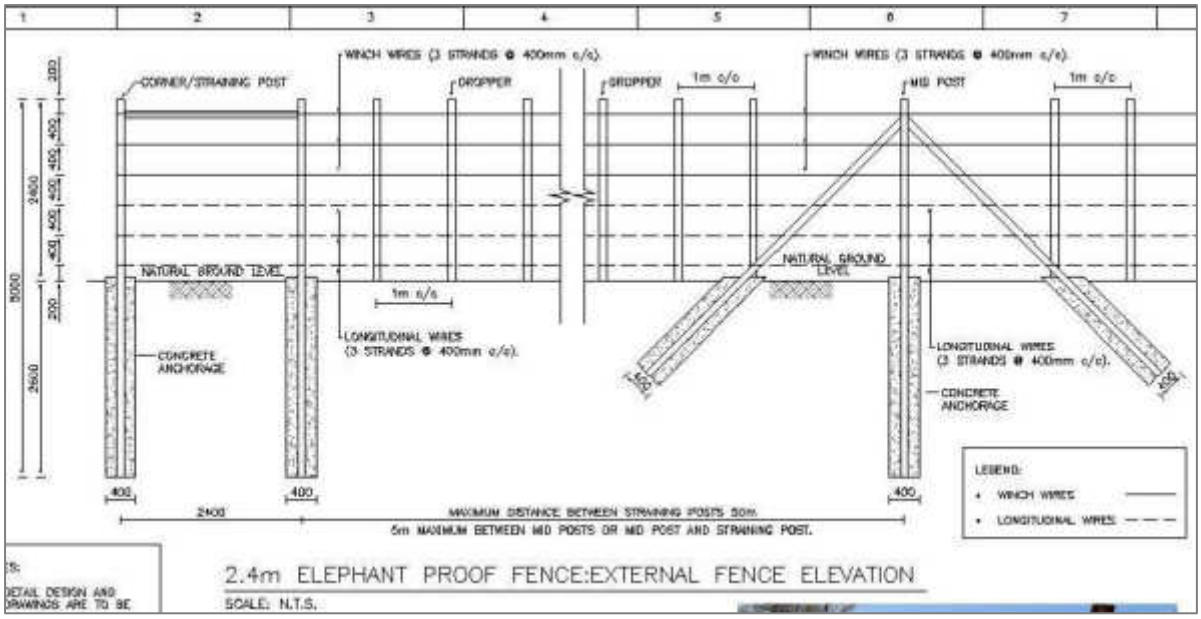

Figure 18: Outer fence with three winch wires and gaps between the wires of 0.4m apart.

h) Mesh wires

Mesh wire should be used for both inner and outer fence for small stock control (Figure 19). It should be 1.2m high from the ground to prevent small stock such as goats and sheep from passing through wires.

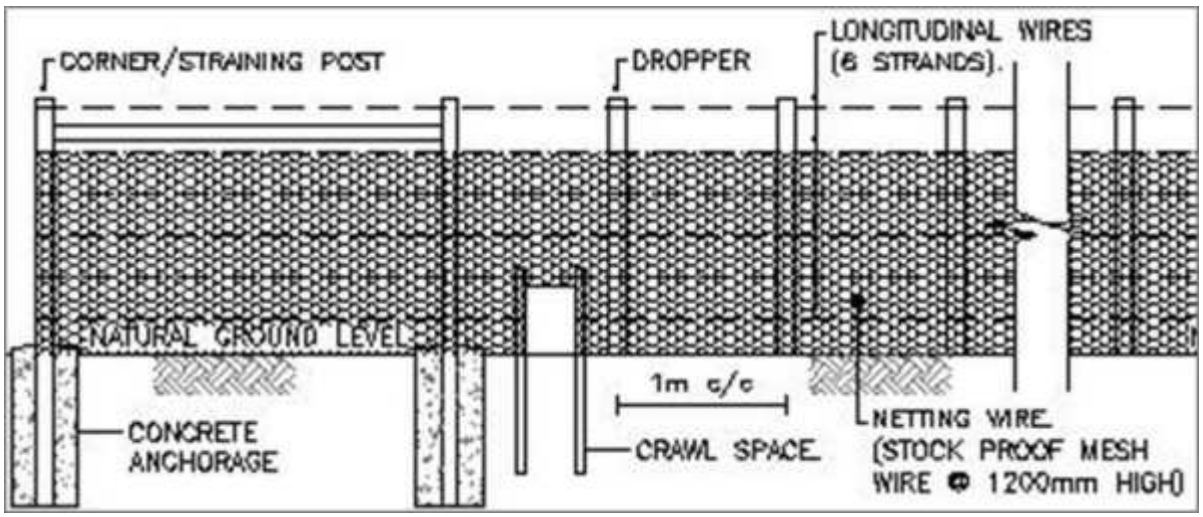

Figure 19: Mesh (netting) wire of 1.2m high.

i) Electric wire

It is proposed to use an electric fence as a barrier that can deter elephants from crossing and destroying the fence. The voltage of the electrical fence must be sufficient to cause discomfort, and it should not be fatal. The top 3 lines are suggested to have electric lines (Figure 20).

Figure 20: Three (3) top fence-lines with electric fence.

j) Gap between posts

The gaps between the posts for the outer fence should be 1m apart, while the main post should be 5m apart. Hard iron posts should be used throughout as poles in between and corner posts (Figure 21).

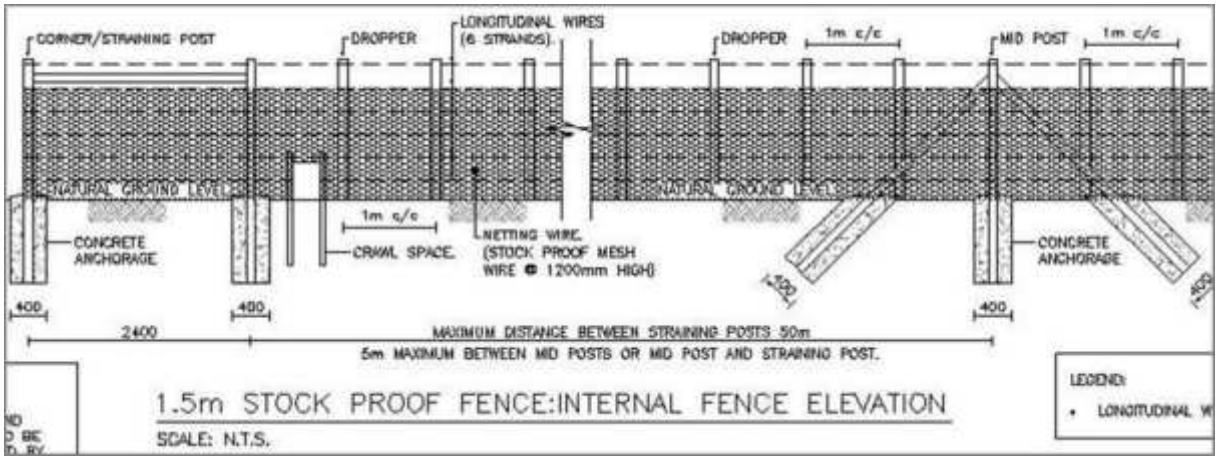

Figure 21: Outer gaps between the posts with 1m apart while the main post is 5m apart.

As for the inner fence, the gaps between the posts should be 0.5m apart, while the main post should be 10m apart. Iron poles should be used as main and corner poles, whereas wooden poles should be used in between (Figure 22).

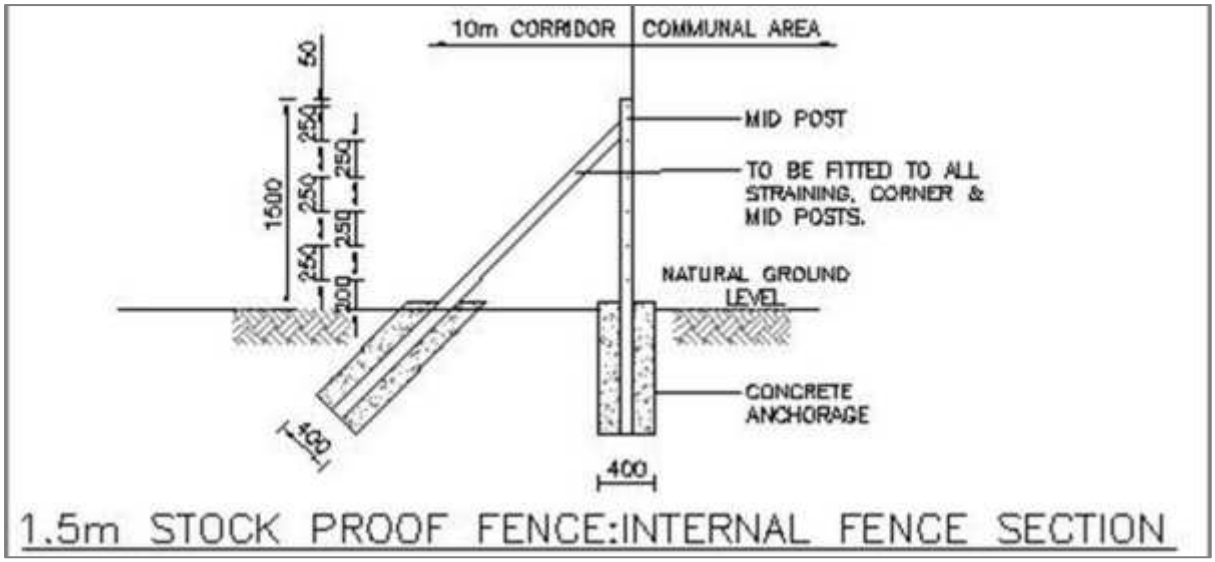

Figure 22: Features of stock proof fence

k) Post depth

Since sandy soils are prevalent in the areas under consideration, a depth of 0.5m is proposed for corner poles and main poles in between. Anchoring system using metal post and concrete underneath (Figure 23).

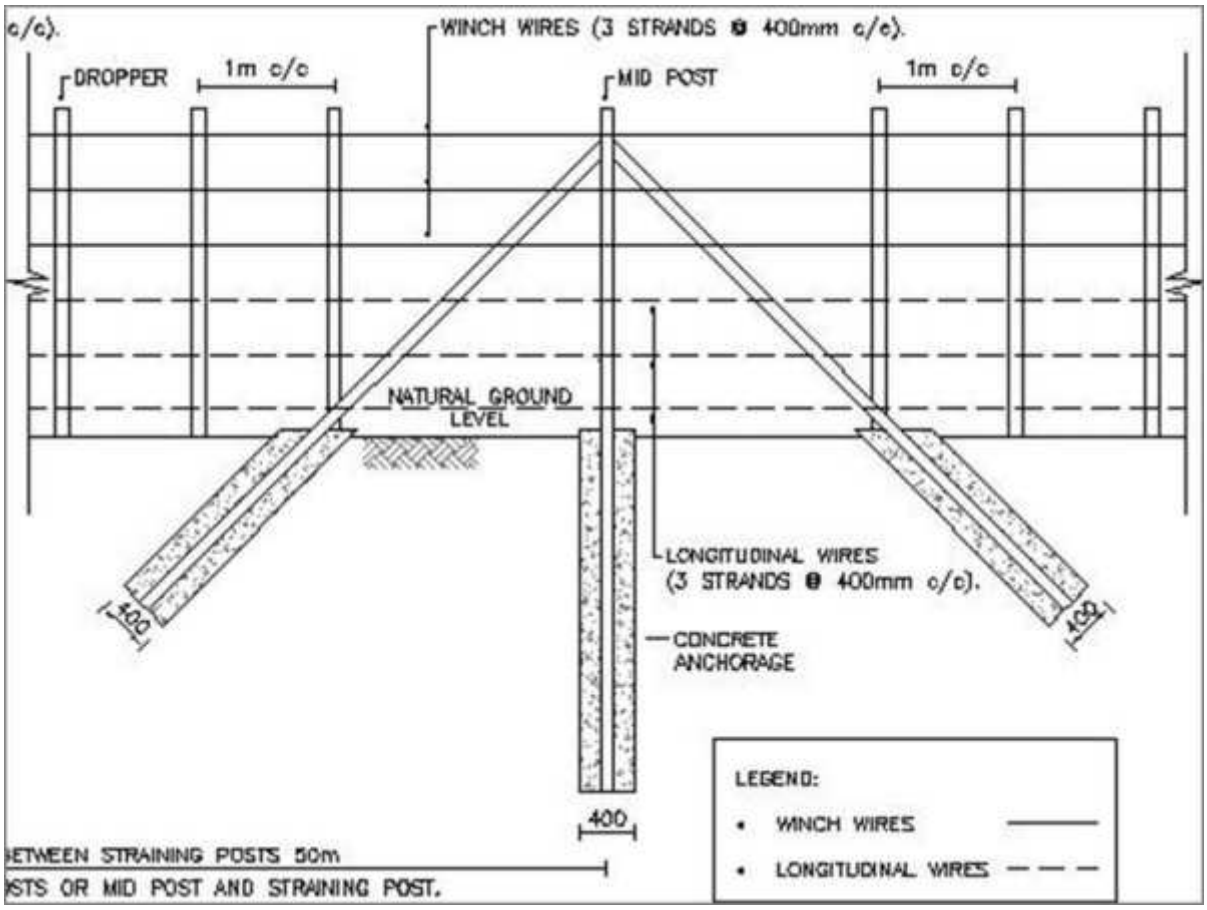

Figure 23: Anchoring system using metal post and concrete underneath.

l) Gates

Four (4) and thirteen (13) gates are proposed for the compartment and the free zone respectively. The provision is based on ground assessment, and the need for farmers to access the farms, and DVS for inspection. Despite the need, we could not suggest more gates as they are costly. Each gate is estimated to cost about N$2.5 million to construct and requires the government to avail veterinarian and police staff to protect the gates. A typical example of exiting VCF gate at Mangetti block area is shown in Figure 24. The cost for the VCF gate includes police and veterinarian staff and their housing. It includes services such as provision for water and veterinarian office.

Figure 24: An existing VCF gate at Mangetti block as an example.

m) Roads

There are sandy roads used by farmers and communities within the area. The proposed gates are located at the entrance/exit of the main roads in the compartment and zone. It is suggested that these roads be gravelled and should be 8m wide. These roads are used more often and become rugged and sandy, hence vehicles that are not 4x4 cannot go through (Figure 25). In fact, the photograph was taken while the area received little rainfall, hence the road was a bit compacted. It gets worse during heavy rainfall or dry time when sand becomes thicker. If proper roads are not provided the impact of the fenced off areas will be dampened, since farmers will continue to struggle to market their cattle due to inaccessibility factors. To get the most value, the road network needs to be fixed as well.

Figure 25: Sandy road in the proposed compartment and zone area.

In addition, both inner and outer fence-lines of the compartment and zone should have two trail roads alongside for easy inspection by veterinarian staff. The road along the outer fence-line (game proof) should be outside alongside the fence, while for the inner fence-line (stock proof) should be inside alongside the fence. The gap between the roads should also be cleared to allow a drive-through for inspection. The gap between the fences should be 10m wide, while the road alongside the inner fence should be 4m wide.

n) De-bushing

De-bushing will be required for clearing a 10m gap between the double fencing, and two trail roads alongside the fence. De-bushing can either be done with a bulldozer or manpower, followed by grading afterwards.

o) Implementation Timeline

It is estimated the Mangetti block compartment would take about 15 months to be finalised (Table 1), while FMD free zone is about 25 months (Table 2).

Table 1: Implementation Timeline for the free zone

Schedule	Site verification and commissioning	Surveying	De-bushing	Fence construction	Roads construction
Month 1					
Month 2					
Month 3					
Month 4					
Month 5					
Month 6					
Month 7					
Month 8					
Month 9					
Month 10					
Month 11					
Month 12					
Month 13					
Month 14					
Month 15					
Month 16					
Month 17					
Month 18					
Month 19					
Month 20					
Month 21					
Month 22					
Month 23					
Month 24					
Month 25					

Table 2: Implementation Timeline for compartment

Schedule	Site verification and commissioning	Surveying	De-bushing	Fence construction	Roads construction
Month 1					
Month 2					
Month 3					
Month 4					
Month 5					
Month 6					
Month 7					
Month 8					
Month 9					
Month 10					
Month 11					
Month 12					
Month 13					
Month 14					
Month 15					

4.2 Environmental consideration

The impact of the construction work on the environment will be of minimum risk since its mainly on bush clearing and fence obstruction which are minor environmental concerns. Some parts of the line where the fence-line will follow is

already cleared, hence clearing effort will be of minimal. The detailed environmental assessment for the construction was outsourced to Green Earth Environmental Consultants, and the report is available on request.

4.3 Sustainability Risks

As far as the sustainability of the project is concerned, risks and respective mitigations were identified (Table 3). Risks identified for both the compartment and the free zone include potential community rejection and cutting of the fence, elephant destroying fence-line, illegal movement of livestock inside the compartment, overstocking of the compartment due to market incentive that can result in overgrazing of the compartment, and unexpected outbreak of FMD within the compartment. The risk rating ranged from high to low (Table 3). For an example, community rejection and vandalising of the fence and unexpected outbreak of FMD within the compartment were identified as a low risk, while elephants destroying fence-line (Figure 26) was identified as higher risk due to their prevalence in the area as well as their active activities of breaking fences.

Figure 26: Elephants destroying fence. (Source: Republikein, 2021).

Mitigation measures were identified for each risk hence, construction work and compartmentalisation can be considered low risk. Risks identified can be averted or managed if recommendations in this report are followed. The approach of creating a

new zone or compartment does not risk the existing FMD free zone. The current FMD free zone will remain safe if the outbreak happens in the new free zone, or compartment. Similarly, the new compartment, or free zone will be safe, if the FMD outbreak happens in current FMD free zone.

Table 3: Identified risks and their mitigations.

Risk identified	Rating	Mitigation
Community rejection and cutting of the fence	Low	Community interest is taken care of by distancing the fence-line from their livelihood and economic activities. Request by farmers and leaders to include only small-scale commercial farms was considered.
Elephant destroying fence-line	High	Elephant proof fencing is recommended because the area have elephants. Use of best possible construction techniques and materials. Use of electric fence to deter the elephant from crossing and destroying the fence.
Illegal movement of livestock inside the compartment	Medium	Enforcement and tighten inspection and protection by the Department of Veterinary Services (DVS) and police staff. Education programme for the surrounding communities on rules and regulations of the compartment. Involvement of local leadership including traditional authority in resolving issues related to compartment.
Overstocking of the compartment due to market incentive that result in overgrazing of the compartment	Medium	MAWF should continue to educate and support farmers within a compartment or free zone on sustainable rangeland management. Stocking rate and carrying capacity to be adhered to.
Unexpected outbreak of FMD within the compartment	Low	The compartment, or free zone will be under surveillance until cleared by OIE when satisfied. DVS to implement best modality to prevent any outbreak of FMD. The compartment or FMD free zone will be closed off, if any FMD case is identified within the compartment or zone. This will not affect the current FMD free zone south of the current VCF, since this compartment or zone will be north of the current VCF. The current VCF will remain intact until cleared by OIE. If a FMD case is identified

within the compartment or zone, the compartment or zone will be closed off and all livestock will be vaccinated against FMD. The observation will continue until considered cleared.

4.4 Financial Proposal

The financial proposal covers all the costs that will be incurred to complete the construction work. As per indication by MAWLR, the cost for the process of clearing and obtaining the freedom status will be covered by DVS and does not have to be included under fund raising for this project. The prices for materials and labour are based on the quotations obtained in August 2020, hence the budget should be reviewed, if the implementation of the project is to be done after two years after the submission of this report. However, the contingency budget can cater for inflation, assuming that the project will be implemented after a year, or within two years. The detailed budgets are presented in Table 4 and Table 5. The estimated total cost for the compartment construction work is about N$ 240 million (Table 4).

Table 4: Budget for the compartmentalisation construction work.

Items	Unit	Qty	Unit rate	Total Cost (N$)
Debushing				
Debushing road outerline of fence	Per km	368	1,850	680,800
Debushing road innerline of fence	Per km	368	1,850	680,800
Debushing for gap between double fencing	Per km	368	5,000	1,840,000
Sub-total				**3,201,600**
Road grading and gravelling				
Establishment cost	Sum	1	25,000	25,000
De-establishment cost	Sum	1	25,000	25,000
Grading road outerline of fence	Per km	368	110	40,480
Grading road innerline of fence	Per km	368	110	40,480
Grading for gap between double fencing	Per km	368	330	121,440
Sub-total				**252,400.00**
Surveying				
Survey	Per km	368	3000	**1,104,000.00**
2.4m high Elephant fence Material & labour				
Excavation				
Corner Post	No	63	125	7,875.00
Straining Post	No	14720	125	1,840,000.00
Mid Post	No	7360	125	920,000.00
Concrete				-
Corner Post	No	63	2500	157,500.00
Straining Post	No	14720	2500	36,800,000.00
Mid Post	No	7360	2500	18,400,000.00
Material & labour				-
3 strand winch wires @ 400mm c/c (electrical wire)	Per km	1104	13200	14,572,800.00
3 strands Longitudinal wires @ 400mm c/c	Per km	1104	4600	5,078,400.00

Post corner Iron	No	63	290	18,270.00
Post straining Iron	No	14720	230	3,385,600.00
Post mid post Iron	No	7360	260	1,913,600.00
Dropper (iron) @ 1000mm c/c	No	368000	50	18,400,000.00
1.2m mesh wire	Per km	368	15000	5,520,000.00
Sub-total				**107,014,045.00**
1.5m STOCK FENCE				
Excavation				
Corner Post	No	63	100	6300
Straining Post	No	14720	100	1472000
Mid Post	No	7360	100	736000
Concrete				
Corner Post	No	63	1800	113400
Straining Post	No	14720	1800	26496000
Mid Post	No	7360	1800	13248000
Material & labour				
Longitudinal wires @ 250mm c/c	Per km	1104	4600	5078400
Post corner Iron	No	63	290	18270
Post straining Timber	No	14720	100	1472000
Post mid post Timber	No	7360	100	736000
Dropper (wood) @ 1000mm c/c	No	368000	15	5520000
1.2m mesh wire	Per km	368	15000	5520000
Sub-total				**60,416,370.00**
Gate				
Gate material	Per gate	4	20,000	80,000
Housing and office cost	Per gate	4	2,500,000	10,000,000
Sub-total				**10,080,000**
SUB-TOTAL				**182,068,415**
Add: 1% for Preliminary & General Costs				1,820,684
SUB-TOTAL				**183,889,099**
ADD: 5% Provisional Sum for Price Adjustment (escalation)				9,194,455
ADD: Sum for Contingency				3,600,000
Professional fees 6.5%				11,952,791
SUB-TOTAL				**208,636,346**
ADD: 15% VAT to Sub-Total				31,295,452
GRAND TOTAL				**239,931,797**

The estimated total cost for the FMD free zone construction work is N$ 600 million (Table 5).

Table 5: Budget for the construction work of creating FMD free zone.

Items	Unit	Qty	Unit rate	Total Cost (N$)
Debushing				
Debushing road outer line of fence	Per km	949	1,850	1,755,650
Debushing road inner line of fence	Per km	949	1,850	1,755,650
Debushing for gap between double fencing	Per km	949	5,000	4,745,000
Sub-total				**8,256,300**
Road grading and gravelling				
Establishment cost	Sum	1	25,000	25,000
De-establishment cost	Sum	1	25,000	25,000
Grading road outer line of fence	Per km	949	110	104,390

Grading road inner line of fence	Per km	949	110	104,390
Grading for gap between double fencing	Per km	949	330	313,170
Sub-total				**571,950.00**
Surveying cost	Per km	949	3000	2,847,000.00
Sub-total				**2,847,000.00**
2.4m high Elephant fence Material & labour				
Excavation				
Corner Post	No	198	125	24,750.00
Straining Post	No	37960	125	4,745,000.00
Mid Post	No	18980	125	2,372,500.00
Concrete				-
Corner Post	No	198	2500	495,000.00
Straining Post	No	37960	2500	94,900,000.00
Mid Post	No	18980	2500	47,450,000.00
Material & labour				-
3 strand winch wires @ 400mm c/c (electrical wire)	Per km	2847	13200	37,580,400.00
3 strands Longitudinal wires @ 400mm c/c	Per km	2847	4600	13,096,200.00
Post corner Iron	No	198	290	57,420.00
Post straining Iron	No	37960	230	8,730,800.00
Post mid post Iron	No	18980	260	4,934,800.00
Dropper (iron) @ 1000mm c/c	No	949000	50	47,450,000.00
1.2m mesh wire	Per km	949	15000	14,235,000.00
Sub-total				**276,071,870.00**
1.5m STOCK FENCE				
Excavation				
Corner Post	No	198	100	19800
Straining Post	No	37960	100	3796000
Mid Post	No	18980	100	1898000
Concrete				
Corner Post	No	198	1800	356400
Straining Post	No	37960	1800	68328000
Mid Post	No	18980	1800	34164000
Material & labour				
Longitudinal wires @ 250mm c/c	Per km	2847	4600	13096200
Post corner Iron	No	198	290	57420
Post straining Timber	No	37960	100	3796000
Post mid post Timber	No	18980	100	1898000
Dropper (wood) @ 1000mm c/c	No	949000	15	14235000
1.2m mesh wire	Per km	949	15000	14235000
Sub-total				**155,879,820.00**
Gate				
Gate material	Per gate	8	30,000	240,000
Housing and office cost	Per gate	8	2,500,000	20,000,000
Sub-total				**20,240,000**
SUB-TOTAL				**463,866,940**
Add: 1% for Preliminary & General Costs				4,638,669
SUB-TOTAL				**468,505,609**
ADD: 5% Provisional Sum for Price Adjustment (escalation)				23,425,280
ADD: Sum for Contingency				8,700,000
Professional fees 4.5%				21,082,752
SUB-TOTAL				**521,713,642**
ADD: 15% VAT to Sub-Total				78,257,046
GRAND TOTAL				**599,970,689**

In addition to construction cost, the maintenance and inspection cost was included in the project's cost. This is important to ensure the project is not comprised. The identified items, activities and costs includes vehicles, the maintenance of vehicles, inspection cost (mainly fuel), maintenance of the fence and reads, salaries and per diems for the two staff members responsible for the activities. As indicated above, the cost for clearing process to achieve FMD free status will be covered by DVS within MAWLR. The total cost for maintenance and inspection cost for Mangeti Block compartment for ten (10) years is about NAD 23, 500, 000.00 (Table 6).

Table 6: Budget for the maintenance and inspection cost for Mangeti Block compartment.

Items	Unit	QTY	Unit rate	Total Cost (N$)	Number of years	Total Cost (N$)
Vehicles purchase	Each	1	500,000	500,000		500,000
Vehicle maintenance	Per annum	1	20,000	20,000	10	200,000
Inspection cost by DVS	Per annum	10	3,000	30,000	10	300,000
Maintenance of fence	Per annum	10	50,000	500,000	10	5,000,000
Maintenance of road	Per annum	2	202,400	404,800	10	4,048,000
Salaries for FMD surveillance 2 staff	Per annum	2	500,000	1,000,000	10	10,000,000
S&T and camping	Per annum	10	30,000	300,000	10	3,000,000
Research/external consultancy	lumpsum	1	500,000	500,000		500,000.00
TOTAL						**23,548,000**
Total price per annum						**2,354,800**

The total cost for maintenance and inspection cost for the zone for ten (10) years is NAD 38,000,000.00 (Table 7).

Table 7: Budget for the maintenance and inspection cost of the proposed FMD free zone.

Items	Unit	QTY	Unit rate	Total Cost (N$)	Number of years	Total Cost (N$)
Vehicles purchase	Each	2	500,000	1,000,000		1,000,000
Vehicle maintenance	Per annum	2	30,000	60,000	10	600,000
Inspection cost by DVS	Per annum	12	5,000	60,000	10	600,000
Maintenance of fence	Per annum	10	100,000	1,000,000	10	10,000,000
Maintenance of road	Per annum	2	521,950	1,043,900	10	10,439,000
Salaries for FMD surveillance 2 staff	Per annum	2	500,000	1,000,000	10	10,000,000
S&T and camping	Per annum	10	40,000	400,000	10	4,000,000
Research/external consultancy	lumpsum	1	500,000	500,000		500,000.00
TOTAL						**37,139,000**
Total price per annum						**3,713,900**

4.4.1 Compensation

One area was identified for potential compensation. The area with potential compensation is indicated with a red dot in the map below (Figure 27). This is

about 300m section where the fence line will intersect with B1 tar road. This section stretches from the end of north west corner of Mangetti park to B1 tar road. This section passes in the middle of the households, hence will require relocating the fence further south. However, the cost of relocation further south might be the same as compensation. Relocating the fence further south will also mean moving a gate a bit further south, which is not ideal in terms of the logistics and control of traffic. Given the above background, compensation is required hence this is the reason for increased contingency and risk factors to cover compensation cost.

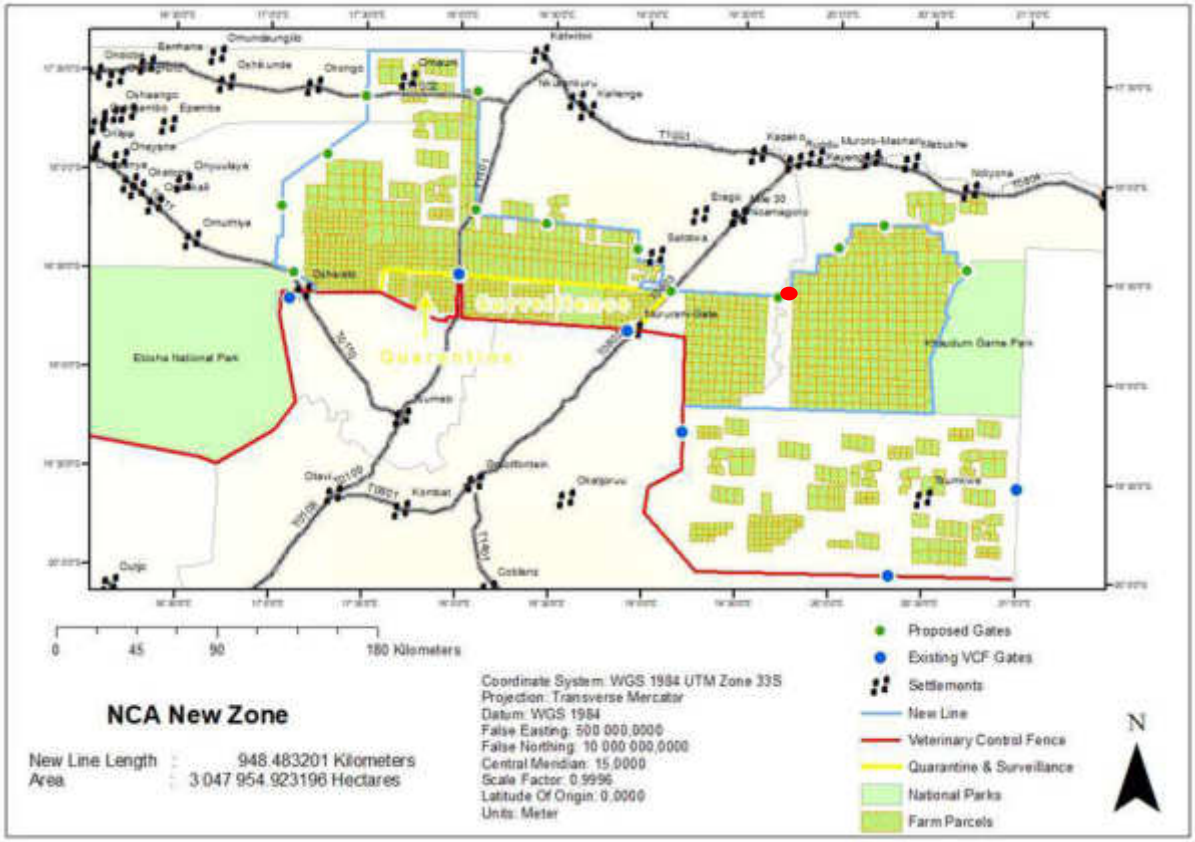

Figure 26: Red dot on the map showing the area that will require compensation.

4.5 Cost-Benefit Analysis

As described in the methodology section, three options were considered: creating an FMD-free zone, compartmentalization, and maintaining a protected zone. CBA also assessed the funding options. The first funding option was for the government to obtain a loan from the financiers for the total capital investment of the project, including the maintenance costs that would be repaid by the farmers through a levy per cattle sold in the project area. The second funding option was for the costs to be shared among the stakeholders such as the government (50%), the donor (20%) and obtain a (30%) loan that would be repaid by the farmers through a levy.

The third option is for the government to finance the project. The variables measured for cost benefit analysis (CBA) were Benefit - Cost-Ratio (BCR), Net Present Value (NPV), Internal Rate of Return (IRR), and Payback Period (PBP). The analysis for both options was done at 10, 15, and 20 years respectively. The levy per kg per cattle by farmers was tested on N$1.00, N$2.00, and N$3.00 respectively. Similarly, the CBA variables were calculated at different interest rates (4%, 6%, and 8%) based on inflation rate in Namibia at the time when the study was conducted (Namibia Macro-economic outlook, 2020). Therefore, the results of Cost-Benefit Analysis (CBA) are presented accordingly.

The detail assumptions regarding the cattle number, offtake percent, cattle weight and cattle prices are provided under section 3.2 in the methodology. The number of cattle in the proposed zone and Mangetti block were 177,500 and 81,450, respectively. Based on the trend, the assumption was that the cattle population in year 1 of the zone would increase by 2%. The population would increase by 3% in year 2 to year 7 before decreasing to 2% in year 8 and 1% in year 9, reaching the maximum carrying capacity of their land. Thereafter, the farmers would not increase the numbers of cattle, but rather maintain maximum threshold.

In terms of offtake percent, it was estimated that the current small-scale commercial farms under the proposed FMD free zone and compartment had an average of 15% annual offtake. The average offtake in the zone was assumed to increase from 15% in year 1, 25% in year 5. The 25% offtake would remain unchanged in the future. The assumption for compartment showed that the offtake will reach 22% in the 13th year and then remain constant thereafter. The scenario for maintaining the status quo of FMD protection zone indicated that offtake percent will be slow, reaching 20% offtake in the 15th year. The 20% offtake would remain constant thereafter. The average cattle live weight used was 400kg. The calculations showed that the price from FMD protection zone had an average annually increase of 8%, while those from the SVCF FMD free zone increased by 11%. The information on average increase for prices was used to determine the increase projection into the future, for both FMD protection zone and FMD free zone.

4.5.1 CBA for the full amount of capital investment to be repaid by farmers.

The results for the first funding option show that BCR, NPV, IRR and PBP were not viable for the compartmentalisation. The BCR was less than 1 at all three interest rates and category years. The NPV would only be positive in 20 years if the repayment interest is 4% while IRR was 5% (Table 8).

The BCR less than 1 shows that the costs outweigh the benefits of implementing the project (Tietenberg & Lewis, 2009). Interventions with higher BCR are preferred, and there is a strong claim that interventions with BCR less than 1 should be rejected (Boardman et al., 1996; Cohn, 1972; Gittinger, 1982). The NPV principle states that positive and high NPV is worthwhile to be pursued while lower NPV is undesirable. Therefore, the negative NPV needs to be rejected (Jenkins & Harberger, 1992). The IRR rule states that if the IRR on a project or an investment is greater than the minimum required rate of return, typically the cost of capital, then the project or investment should be pursued (Jenkins & Harberger, 1992). Therefore, the result of the first funding option shows that the CBA for full costs of creating compartment outweighs the benefits if the repayments is to be done by farmers.

An analysis of the first funding option shows FMD free zone was also not viable if the farmers have to repay NAD1.00 per kg per cattle at all three-interest rate and category years, except an option of levying farmers based on NAD2.00 at the 6% interest rate over 20 years, which showed a positive result of 1.03 BCR (Table 8).

Table 8: The CBA analysis results comparing compartment against zone on the repayment of full capital investment by farmers.

20 years			
NAD3.00			
Mangetti Block compartmentalisation			
Interest rate	8%	6%	4%
NPV BCR IRR	-NAD 54,135,500.95 0.77 5%	-NAD 22,270,488.97 0.91	NAD 21,252,164.96 0.08
FMD free zone			
NPV BCR IRR	-NAD 72,154,015.45 0.87 6%	NAD 17,828,693.64 1.03	NAD 139,264,835.28 1.23

The results for the first funding option shows that farmers would not be able to repay the full initial capital investment of the compartment. The first funding option demonstrates that creation of a new FMD free zone whose loan is to be repaid entirely by farmers would be a big challenge. Unless farmers are prepared to

pay NAD2.00 per kg per cattle for the zone over 20 years, either of the project cannot repay the full amount of the investment.

4.5.2 CBA option for capital investment to be covered by the government (50%), donors (20%) and 30% loan repayment by farmers through levy.

The cost-benefit-analysis for the second funding option shows that compartment is only viable in 10 years if the farmers are to repay NAD2.00 per kg per cattle at an interest rate of 6% (Table 9). However, the repayment is viable in ten years at NAD2.00 for the FMD free zone, even if the interest rate is 8%. The results shows the BCR for zone is higher than the compartment.

Table 9: The CBA analysis results comparing compartment against zone on the joint funding of full capital investment by government, donor, and farmers.

10 years			
NAD 2.00			
Mangetti Block compartmentalisation			
Interest rate	8%	6%	4%
NPV BCR IRR	-NAD 6,662,433.70 0.91 6%	-NAD 106,061.97 1.00	NAD 7,877,397.86 1.09
FMD free zone			
NPV BCR IRR	NAD 23,373,913.60 1.13 11%	NAD 45,304,490.87 1.24	NAD 71,785,603.62 1.37

The CBA for the second funding option proved, to be economically viable for both compartment and zone, especially if farmers accept to repay NAD2.00 per kg per cattle. It shows that farmers could repay the 30% initial investment contribution for the FMD free zone within ten years even if the interest rate were higher at 8%, while repayment for the compartment only if the interest rate were higher at 6%. This shows the zone performed better than compartment as the positive NPV, BCR and IRR for zone will be achieved in 10 years at 8% interest rate, while the compartment at 6% interest rate or lower.

a) Payback period

The payback period for the option of capital investment to be covered by the government (50%), donors (20%) and 30% loan repayment by farmers through a levy was compared between compartment and FMD free zone. The results show that it would take 6 years before a positive cash flow is realised for the FMD free zone if the costs were to be recouped by the project at NAD2.00 per kg per cattle (Table 10). The year when the payback period starts is shown in bold in Table 10

below. The levy of NAD1.00 per kg per cattle or less was unlikely to generate positive cash flow even at 20 years.

Table 10: FMD free zone cash flow based on joint funding of capital investment at NAD2.00.

Year	Cashflow	Cumulative Cashflow
Year 0	-125993844.6	
Year 1	-53997361.98	-179991206.6
Year 2	23139436	-156851770.6
Year 3	28554858.76	-128296911.8
Year 4	34271038.88	-94025872.95
Year 5	37040774.01	-56985098.94
Year 6	38263414.23	-18721684.71
Year 7	39522733.66	20801048.95
Year 8	40387466.33	61188515.28
Year 9	40828479.99	102016995.3
Year 10	40828479.99	142845475.3

The payback period for the repayment of the loan based on what the three stakeholders in the project contribute (Government 50%, donors 20% and farmers 30%) shows that the positive cash flow for the compartmentalisation is achievable in the 7th year by repaying NAD2.00 (Table 11). The two comparison shows FMD free zone has shorter payback period compared to compartment. Therefore, the FMD free zone is attractive based on this finding. As a rule of the thumb, the shorter the payback period, the better. Any investments with longer payback periods are generally not enticing because they tend to be less accurate and not attractive to investors (Ardalan, 2012).

Table 11: Compartment cash flow for capital investment to be covered by government, donors and farmers at NAD2.00.

Year	Cashflow	Cumulative Cashflow
Year 0	-50385677.45	
Year 1	-21593861.76	-71979539.22
Year 2	8598335.36	-63381203.86
Year 3	8926929.421	-54454274.43
Year 4	9991642.635	-44462631.8
Year 5	10362035.91	-34100595.89
Year 6	11514031.64	-22586564.25
Year 7	11930096.59	-10656467.66
Year 8	13025271.99	2368804.331
Year 9	13179072.71	15547877.04
Year 10	13996644.96	29544522

The trend for the payback period results were similar for other funding options,

with FMD free zone performing better than compartmentalisation. However, it is important to note that the payback period does not account for the time value of money, which is a theory that states that money received today is worth more than money received tomorrow. As a result, the payback period is best used in conjunction with other metrics (Jonathan et al., 2012; Brealey et al., 2012). Therefore, this result of payback period should be read together with results of BCR, NPV and IRR. Nevertheless, the payback period results for this study are consistence with BCR, NPV and IRR.

4.5.3 CBA for the full amount of capital investment to be covered by government.

The CBA for this option compared the full amount of capital investment financed by government against the additional revenue that will be generated by farmers as a result of the project. The option further assessed the revenue generated by farmers without the project scenario then compared to scenario if the project is implemented. This option focused on the role of the government in providing public goods, versus the benefit the intended beneficiaries will receive. The government should be satisfied if the revenue generated by the target beneficiaries outweigh the costs incurred by the government. Furthermore, the government should be satisfied if the revenue generated by the project outweigh the "without" the project scenario.

a) Mangetti Block compartmentalisation

The BCR for "without" compartmentalization at ten years shows a positive BCR at all three interest rates. This implies that one NAD invested in providing vaccination by government without creating compartment will yield about N$23.63 for the farmers at 8% interest rate in ten years. This represents a total net present value of NAD 2,209,177,999.93 (Table 12).

The result "with" compartment indicated BCR of 11.48 at 8% interest rate in ten years. This represents a net present value of NAD 2,406,661,086.44 (Table 12). That is, every Namibian dollar invested in the creation of compartment will generate about N$ 11.48 for the farmers.

The results show that maintaining the protection zone by vaccination has a high BCR compared to creating compartment. This is because the cost of creating compartment is significantly higher compared to the cost of the vaccination in

maintaining FMD protection zone. However, the NPV for compartment is higher than the one protection zone. This is due to a better price and market advantage for compartment as compared to FMD protection zone.

Table 12: The CBA analysis results comparing "with" and "without" compartment based on government funding.

10 years			
NAD 1.00			
"without" compartment scenario			
Interest rate	8%	6%	4%
NPV BCR	NAD 2,209,177,999.93 23.63	NAD 2,497,210,188.44 23.83	NAD 2,839,232,721.58 24.02
"with" compartment scenario			
NPV BCR	NAD 2,406,661,086.44 11.48	NAD 2,754,632,388.67 12.65	NAD 3,169,602,953.79 13.99

The analysis to determine the revenue to be generated by farmers for both scenarios of a newly created compartment or maintaining the FMD protection zone is presented in Figure 28. Regardless of higher cost, the results show that farmers can generate slightly more revenue from compartment as compared to maintaining the FMD protection zone (Figure 28).

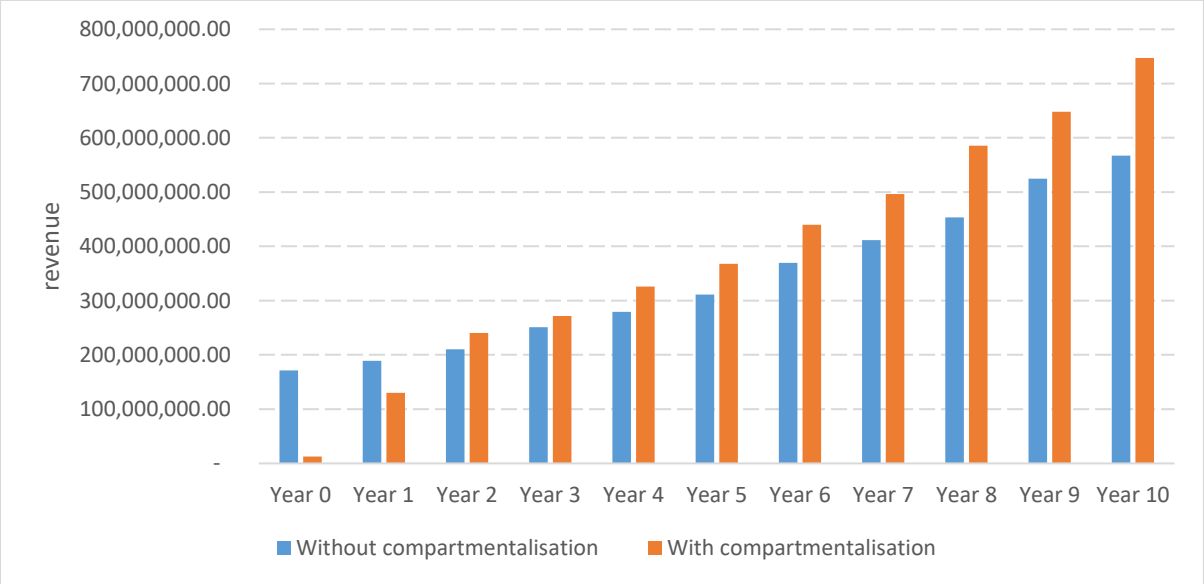

Figure 27: A comparison of a revenue between the proposed compartment versus maintaining FMD protection after expenses of vaccination and creation of the compartment.

b) FMD free zone

The results of "with" and "without" FMD free zone shows the farmers will still benefit in each of the case (positive BCR and NPV for both scenario). Like compartment, the BCR for "without" FMD free zone scenario is higher compared to

"with" FMD free zone scenario, while NPV is opposite, "with" FMD free zone scenario indicating higher NPV than "without" scenario (Table 13).

The BCR indicates the benefit cost ratio (benefits divided by costs), while NPV indicates benefit after cost (benefits minus costs). The results imply that creating FMD free zone will be more beneficiary for farmers compared to maintaining the current FMD protection zone. Maintaining FMD protection zone is cost effective but minimal benefit for farmers. Therefore, it is worth for the government to invest more funds in a project that will significantly generate revenue for farmers in the long term.

Table 13: The CBA analysis results comparing "with" and "without" creating FMD free zone based on government funding.

10 years			
NAD 1.00			
"without" zone scenario			
Interest rate	8%	6%	4%
NPV	NAD 4,814,353,529.63	NAD 5,442,047,985.87	NAD 6,187,400,958.63
BCR	23.63	23.83	24.02
"with" zone scenario			
NPV	NAD 9,612,855,427.51	NAD 11,052,561,830.32	NAD 12,771,374,716.00
BCR	18.07	20.09	22.44

The results of cost and income analysis shows that the revenue for farmers from the FMD free zone is significantly higher than maintaining the FMD protection zone by the government. The "without" FMD free zone scenario outweighs the FMD free zone scenario in the first two years, but the FMD free zone is significant better in the long-term run (Figure 29). By deducting capital investment and maintenance costs from the FMD free zone, and vaccination costs from FMD projection zone, the result shows that the farmers will generate a revenue of about 3 billion Namibian dollars in FMD free zone by the10th year as compared to 1.5 billion dollars in the FMD protection zone.

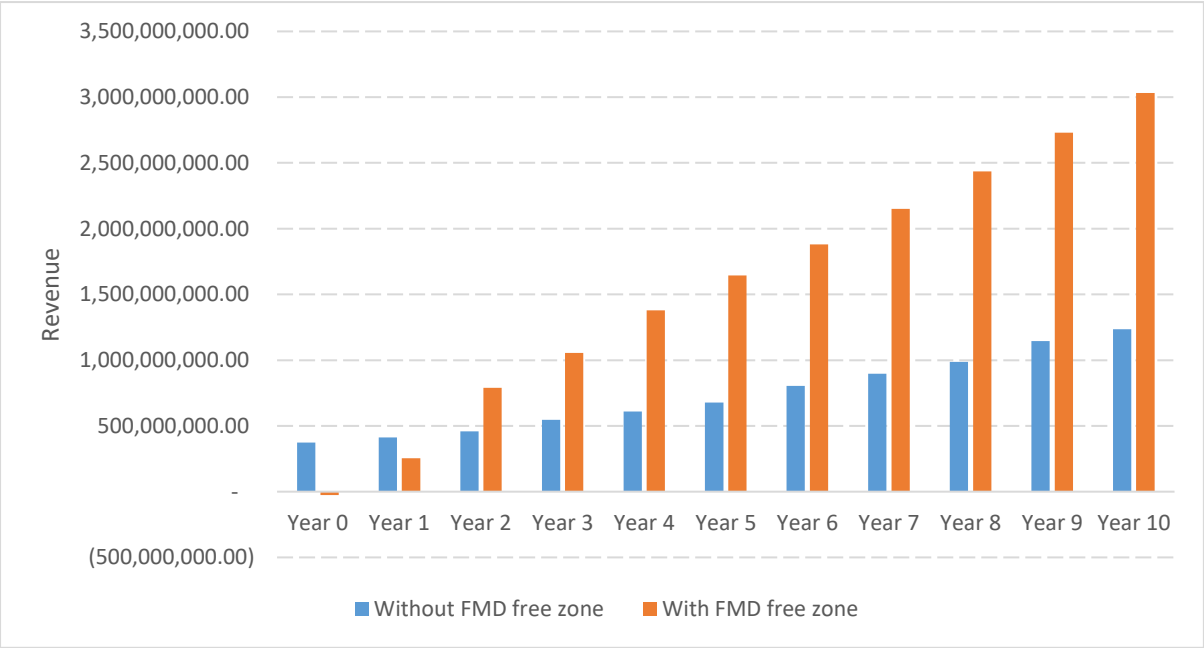

Figure 28: A comparison of a revenue between the proposed FMD free zone versus maintaining FMD protection after expenses of vaccination and creation of FMD free zone.

The increased revenue in FMD free zone is influenced by increased cattle prices as indicated under 4.5.4 section below. The increased revenue is further influenced by an increase cattle offtake percent in the FMD free zone as compared to conditions of maintaining the FMD protection zone. Farmers will increase their cattle stocks and offtake when they know there is a good market demand for their cattle. Moreover, increased revenue will be influenced by market share as cattle from FMD free zone would find international lucrative markets.

4.5.4 Cattle prices

Using previous data to determine the average annual percentage price increase of cattle in a FMD protection zone and FMD free zone cattle prices from SVCF, the price projection showed that the price per annum in the new FMD free zone would increase by 11% as shown by the upward rise of the blue curve (Figure 30). The price of cattle in the FMD protection zone would increase by 8% if the FMD free zone is not created. The results show a difference of 3% between the two scenarios, and that the difference in prices between the FMD protection zone and FMD free zone would expand over time, with prices in the FMD free zone increasing more and further away from those of the FMD protection zone (Figure 30).

The results in Figure 30 and its description above shows the benefits of achieving high prices if the proposed project area is successfully converted to a FMD free zone. This is confirmed by literature review from various studies on the same subject which reveals that the high paying international export markets are the main reason countries create and protect FMD free zones (Otte et al., 2004; Leslie et al., 1997; Knight-Jonesa & Rushtonba, 2013; James and Rushton, 2002; Scoones & Woolmer, 2007; McGahey, 2011).

Price benefit is not guaranteed in compartment since a good market is not guaranteed. The market determines the price. Unlike FMD free zone, the compartment is not cleared by OIE, hence international markets are more hesitant to buy livestock from the compartments. Therefore, FMD free zone outweigh compartment and protection zone status in terms of prices, provided process of achieving FMD free zone is achieved and cleared by OIE.

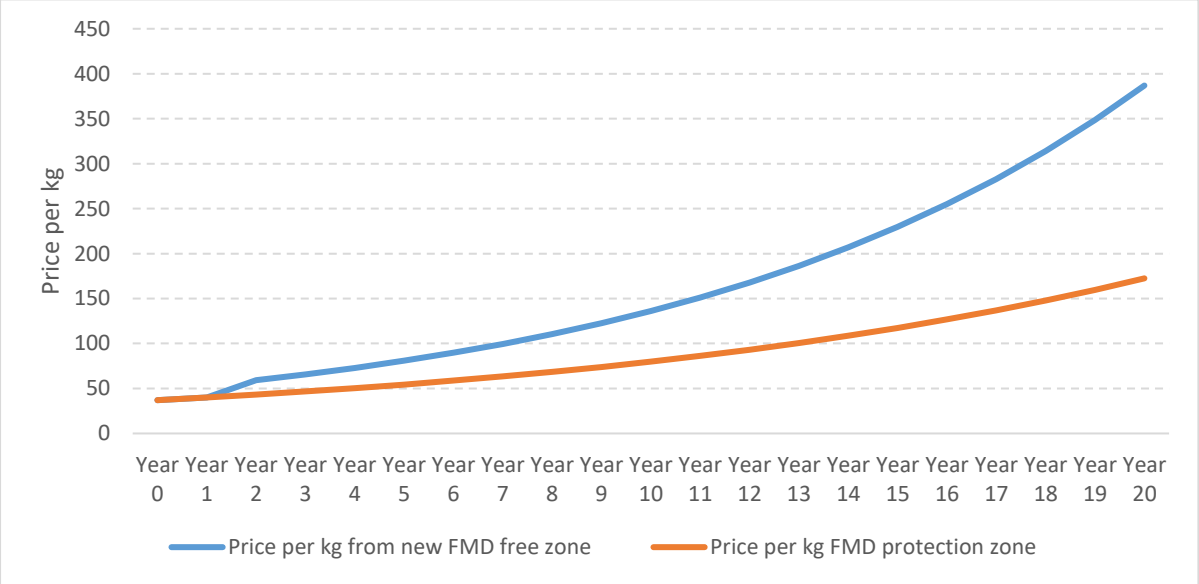

Figure 29: Comparison of an average live weight price per kg beef between a new FMD free zone and FMD protection zone

The average live weight price per kg of beef between a new FMD free zone and an FMD protection zone were compared, and the bar graph with an error bar were analysed (Figure 31). The bar graph represents the mean and the error bar of 95% confidence interval. Furthermore, the statistical analysis of the t-test was performed to determine the statistical difference between cattle prices in FMD protection zone and the proposed new FMD free zone. The error bar confirmed by the t-test results showed that the cattle prices were significantly different ($P<0.05$), with FMD free zone having significantly high price. This is similar to CBA results

that shows that the benefit of creating FMD free zone is more compared to maintaining the FMD protection zone.

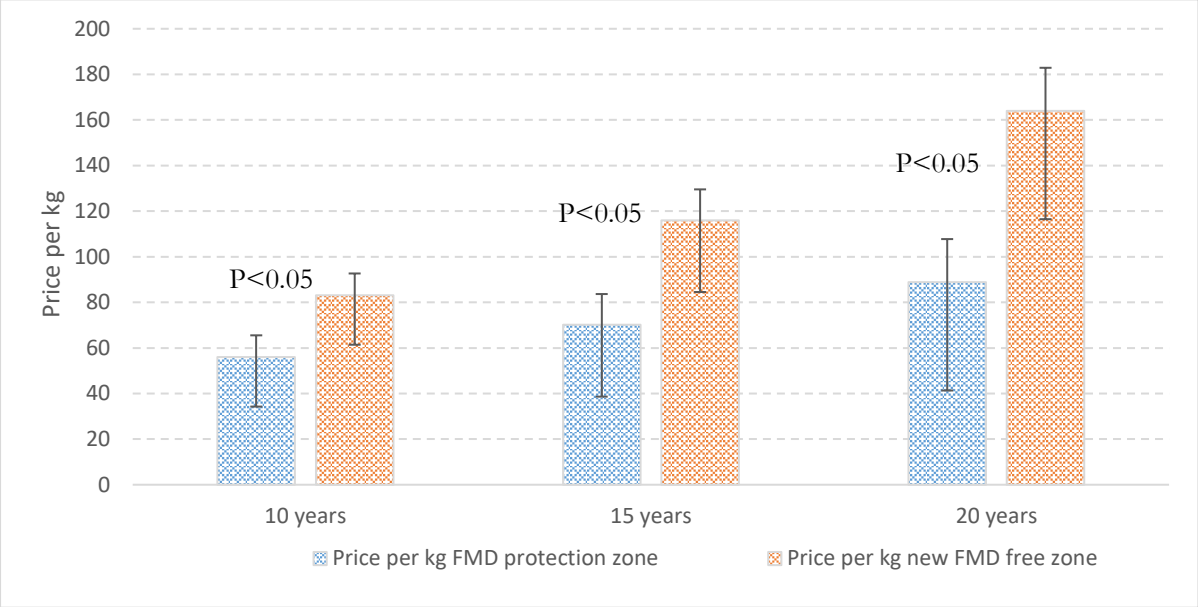

Figure 30: Bar error and P values from the t-test comparing price per kg between a new FMD free zone and FMD protection zone.

Besides income generation for both the FMD free zone and compartmentalisation, there are also non-monetary benefits that are created. The non-monetary benefits are in the form of direct and indirect benefits, such as jobs created by farmers when their wealth grows as a result of increased revenue from selling their cattle. Farmers would be in a position to employ more workers on their farms and contribute to direct job creation, to alleviate the current high unemployment rates in Namibia for example. The benefits of creating a new FMD free zone can result in new markets creation and can translate into an increased market share. The study shows that the prices and revenue will increase, due to the opening up of international markets to allow more volumes but also pay good prices.

Other considerations not included in this study are the cost of control during the outbreak of the FMD. The statistics show that there is an occasional outbreak in the vicinity of the area proposed for the FMD free zone (Schneider, 1994). The statistics show that the FMD outbreak happened in the central north during the following years: 1945; 1945; 1949; 1958; 1962; 1967; 1968; 1969; 1970; 1992; 2015 and 2020 (Schneider, 1994). The literature review shows that Namibia spends significant funds in controlling FMD during these outbreaks (Bishi & Kamwi, 2008; Katunahange, 2015). In 2015, an update from MAWF reported that the funds

utilised in FMD control during 2015 outbreak was approximately N$180 million (MAWF, 2016). The largest portion was spent on procuring FMD vaccine (3,7 million). The vaccine procured was used for three rounds of vaccination, covering an estimated 1,1 million cattle, including those in Angola, from Namibia (MAWF, 2016). Therefore, successful creation of new FMD free zones in the NCA will avoid or reduce the cost of controlling FMD as most of the areas will be in the FMD free zones hence, the cost of operation for MAWF will be less if the outbreak happens in a few areas that will be left out.

4.5.5 Other benefits of creating a new FMD free zone

Additionally, creating a FMD free zone will help to change the perception of the farmers and communities in the NCA regarding the existing VCF. Currently, most of the communities in the NCA view the current VCF as a relic of the colonial era discriminating against them and exclude them from benefits accrued by farmers and communities in the SVCF. Many see the VCF as a symbol of continued apartheid in an independent Namibia. This is based on the view that during apartheid, the VCF was used to control movements of the human population. Therefore, creating a new FMD free zone will help change the perception as farmers will understand the benefit and the need to guard the fence. Moreover, creating FMD free zone will serve as a buffer zone between a FMD risk area and the fence line for the current VCF. Therefore, farmers in the current FMD free zone should be forefront in promoting the creation of the new FMD free zone in the NCA. The current FMD free zone will be safe if the outbreak happens in the new free zone, or compartment. Similarly, the new compartment or FMD free zone will be safe if the FMD outbreak happens in current FMD free zone.

In addition to poor CBA performance of the compartment compared to the free zone, the compartment was found to have other further limitations. As per literature review and inputs from experts, a compartment cannot be cleared by OIE to have a FMD free status. The creation of a market depends on the bilateral agreement between a country with a compartment with a country willing to buy livestock from the compartment. This is unlike a free zone, which can be cleared by OIE to have FMD free status so beef products from FMD free zone can access international lucrative markets. Lastly, a compartment is smaller in general compared to a free zone, hence the economy of scale of the free zone is superior to a compartment.

SECTION 5:
CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

Base on the results of some in-depth analysis, the best compartment and zone demarcation options have been identified, and the proposed construction work is considered feasible. The proposed demarcation and construction work for both compartment and zone was informed by a comprehensive, social and financial analysis, and technical inputs from experts and stakeholders including communities. Request by communities and their leadership for the fence-lines to include only small-scale commercial farms and not to traverse through settlements were considered. Provision for gates were made based on ground assessment and inputs from the stakeholders. The proposed materials for the construction of the fence line are the best possible durable and elephant proof materials. However, inspection and maintenance will be required periodically once the fence line is constructed.

A comprehensive and robust risk analysis successfully identified critical risks worth considering for both compartment and zone. These critical risks include potential community rejection and vandalism of the fence, elephant destroying fence-line, illegal movement of livestock inside the compartment or zone, overstocking of the compartment or zone due to market incentive that can result in overgrazing of the compartment or zone, and unexpected outbreak of FMD within the compartment or zone. The risk rating ranged from high to low. For an example, community rejection and vandalism of the fence and unexpected outbreak of FMD within the compartment or zone were identified as a low risk, while elephants destroying fence-line was identified as higher risk due to their prevalence in the area. However, appropriate mitigation measures were identified for all risks, hence construction work for compartmentalisation or zone can be considered feasible and viable provided all recommended risk management and mitigation protocols are fully implemented. The approach of creating a new zone or compartment does not pose any threat to the existing FMD free zone. The current FMD free zone will remain safe if the outbreak happens in the new zone or compartment. Similarly, the new compartment or zone will be safe if the FMD outbreak happens in current FMD free zone.

This feasibility study developed a feasible construction work schedule and realistic financial proposal which covers all the costs needed to complete the construction work. Additionally, the study included the cost for inspection and maintenance. The study concluded that the MAWF through DVS will cover the cost for the process of clearing and obtaining the freedom status for the compartment and zone.

Among the three options for of creating a FMD free zone, compartmentalisation, and maintaining of the FMD protection zone, the study clearly demonstrated that FMD free zone is the best option followed by the compartmentalisation. The continued maintenance of the FMD protection zone is the last option, and not considered attractive. The study also concluded that in addition to the poor CBA results, compartment has other limitations which include the fact that it cannot be cleared by OIE to be FMD free, and the area is general smaller compared to a zone. Furthermore, this study noted that neglecting the creation of a new FMD free zone or compartment could be expensive in the long term, as the cost of vaccination would exceed the cost of creating and maintaining of a new FMD free zone. Creating FMD free zone will also reduce the cost of control during FMD outbreak in the NCA.

This study revealed that the creation of a new FMD free zone in the central north of Namibia would lead to increased cattle prices, which would eventually lead to increased revenue for farmers. Several other studies reported similar results, maintaining that the benefits of good prices and revenue from international export markets is the main reason countries create FMD free zones. The study also highlighted non-monetary benefits of creating FMD free zone such as employment and new markets creation. Therefore, this study concludes that the benefits of the FMD free zone outweigh the costs, and that the socio-economic status of the communal farmers in the north, and Namibia at large will ultimately improve due possible increase in the return on investment on cattle production in the north courtesy to access to lucrative beef markets.

In terms of the best funding option, the study concluded that creation of FMD free zone, or compartment is to be funded by the government. The alternative option is a joint funding by government (70%), donors (20%) and 30% repayment by farmers.

This option suggests borrowing 30% of capital investment to be repaid by farmers as indicated in the recommendation below.

5.2 Recommendations

Based on the findings of this feasibility study, we recommend the following:

- A new FMD free zone in the NCA be created since the study has concluded that such an investment is feasible and economically viable.

- Roads passing through proposed gates of the FMD free zone should be gravelled to improve mobility in the area because currently farmers struggle to access their farms due to heavy sand roads.

- The gravelling of the roads should be funded by Road Authority with contribution from other stakeholders such as donors if possible.

- As a first option, the creation of the FDM free zone in the NCA should be 100% funded by the Government of the Republic of Namibia.

- If the government is not able fund the initiative 100%, a co-financing model which involves government (70%), repayment by farmers (30%) and donors (20%) should be considered as an alternative option. Since contributing 30% of capital investment to be covered by the farmer's levy within the two years of fence-line of contraction, the government should borrow funds or bring in investors.

- The agreement will then for each farmer within the zone to be levied NAD2.00 per kg per cattle whenever ever they sell their cattle.

- In the event of the second option is adopted, the government should set up a Special Purpose Vehicle (SPV) (Figure 32) structure to fund and manage the FMD free zone for a period of at least 10 years until the borrowed funds are repaid from proceeds of the farmer's levy.

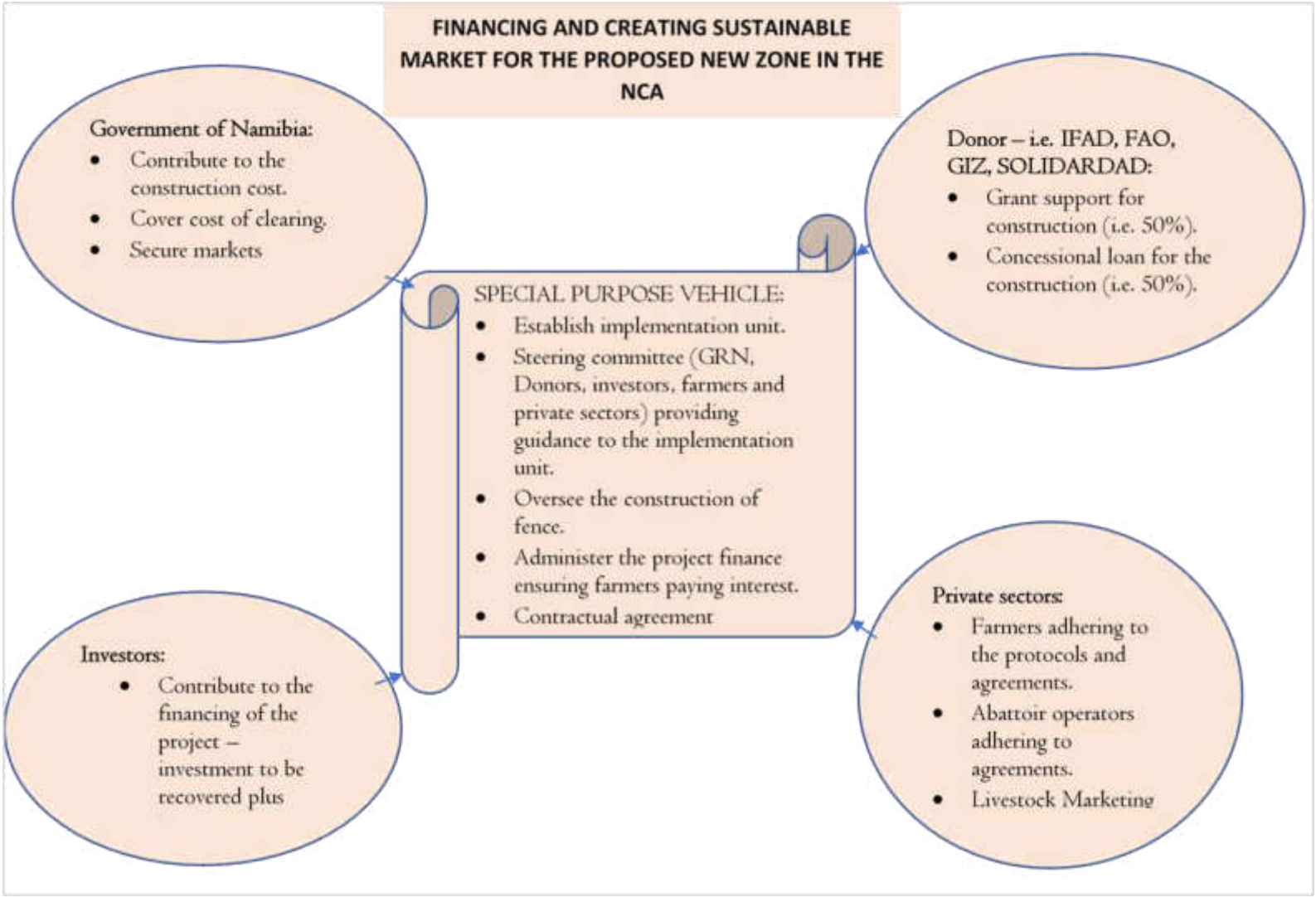

Figure 31: Schematic diagram that shows the proposed SPV framework.

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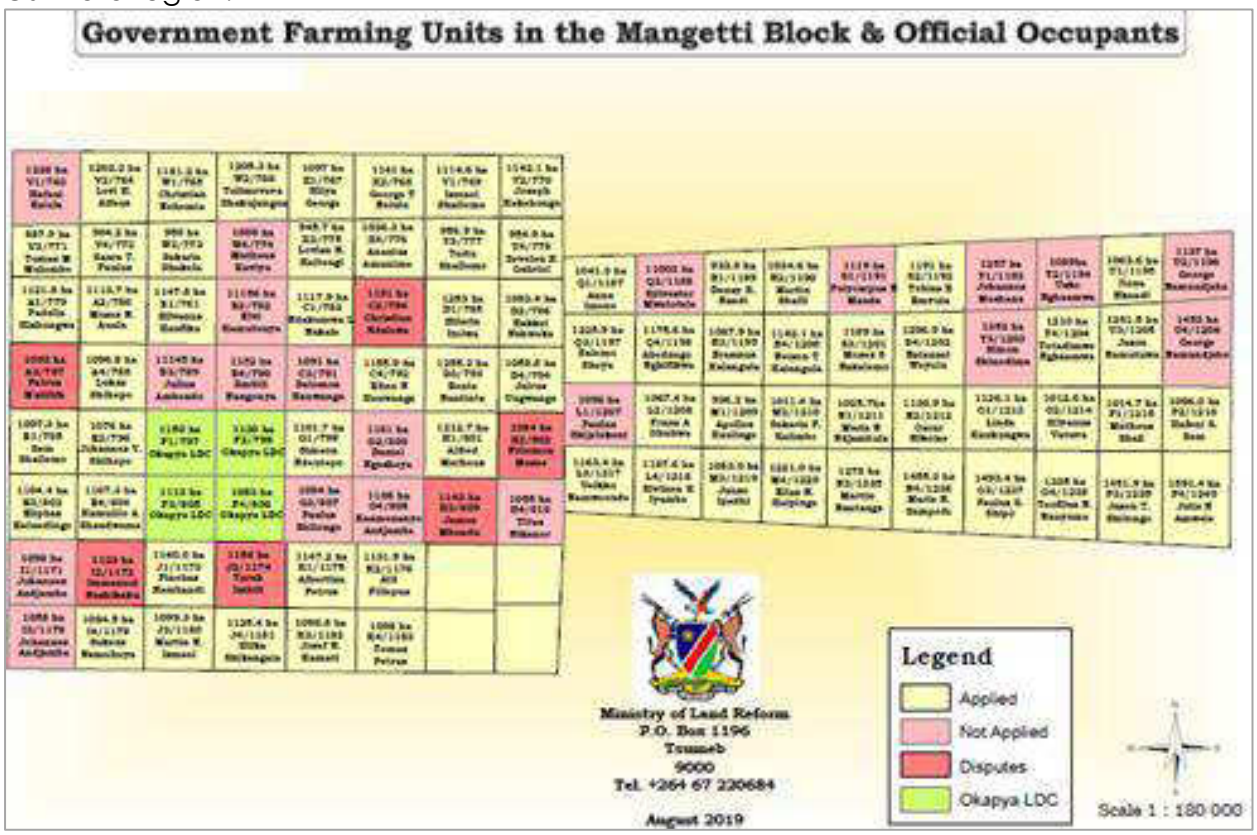
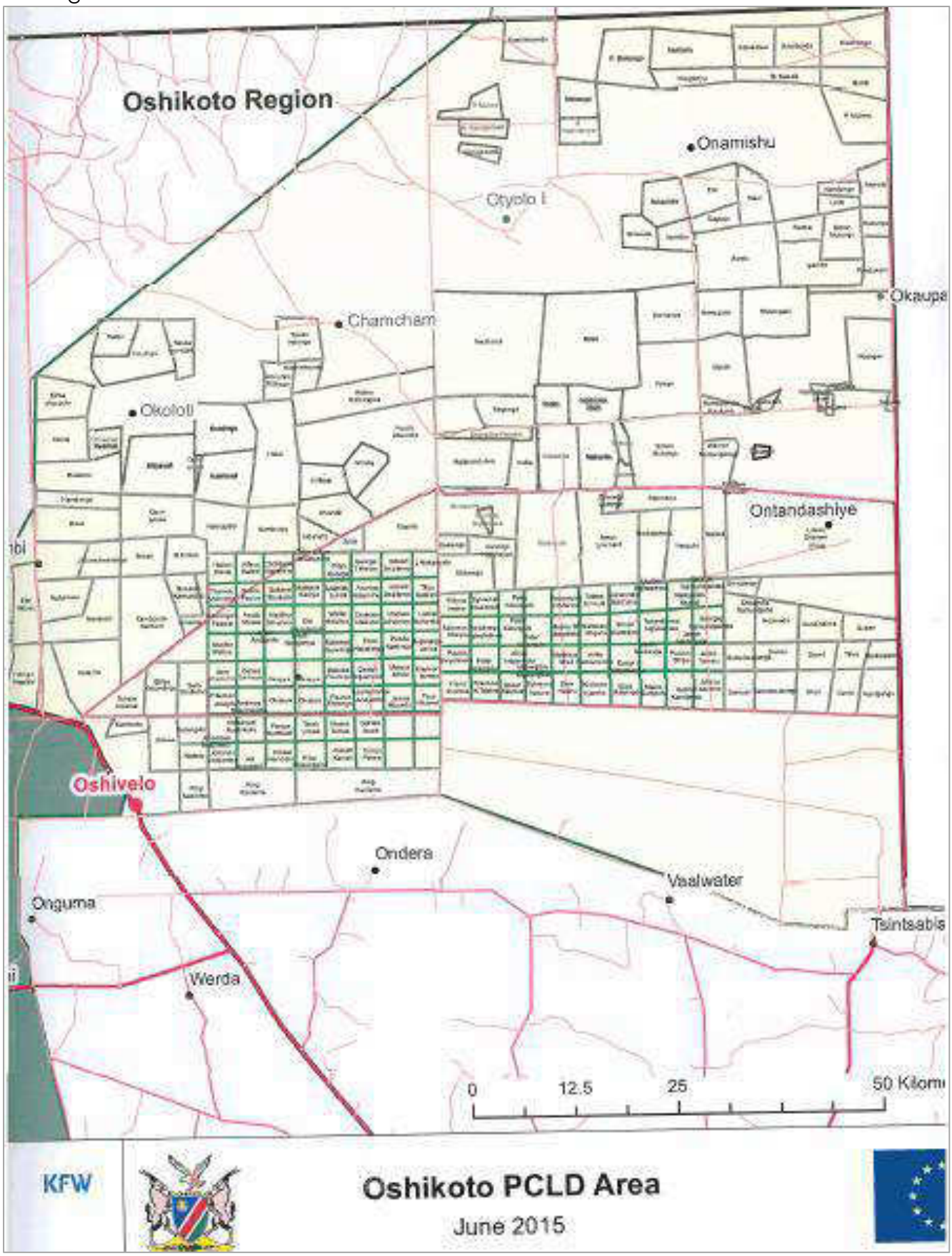
ANNEXES

Annex 1: Government farming units in the Mangetti block and official occupants for Oshikoto region.



Annexure 2: Mangetti block farms in Oshikoto region from designated and undesignated areas.



Annexure 3: Mangetti block farms in Kavango West region from designated and undesignated areas.

Annexure 4: Waypoints for Namibia VCF.

Description	Long E	Lat S	Long E	Lat S
Quara	20.998504	-20.000715	20° 59' 54.6''	-20° 0' 2.6''
Nama Pan Gate	20.72965	-20.000382	20° 43' 46.7''	-20° 00' 01.4''
Nama Pan 1	20.292776	-20.000713	20° 17' 34.0''	-20° 00' 02.6''
Driehoek Quarantine Southern corner	19.289046	-20.002185	19°17'20.6''	-20°00'07.9''
Driehoek & Gam Corner	19.159226	-20.00242	19°09'33.2''	-20°00'08.7''
Driehoek Quarantine Corner 1	19.002468	-19.849911	19°00'08.9''	-19°50'59.7''
Driehoek Quarantine Northern Corner	19.005003	-19.720874	19°00'18.0''	-19°43'15.1''
DirhookQuarantine Northern Corner1	19.001249	-19.680544	19°00'04.5''	-19°40'50.0''
Driehoek Quarantine Corner 2	19.007699	-19.572598	19°00'27.7''	-19°34'21.4''
Driehoek Quarantine Corner 3	19.085447	-19.52618	19°05'07.6''	-19°31'34.2''
Driehoek Quarantine Corner 4	19.214292	-19.494778	19°12'51.5''	-19°29'41.2''
Driehoek Quarantine Corner 5	19.202601	-19.413447	19°12'09.4''	-19°24'48.4''
Driehoek Quarantine Corner 6	19.208884	-19.355391	19°12'32.0''	-19°21'19.4''
Rooidag gate	19.202866	-19.284205	19°12'10.3''	-19°17'03.1''
Middle Point Morurani Gate	19.203502	-18.904953	19°12'12.6"	-18°54'17.8"
Corner for Game and Mangeti Fence Proof	19.203347	-18.806936	19°12'12.0"	-18°48'25.0"
Morurani Gate corner	18.93139	-18.791388	18°55'53.0"	-18°47'29.0"
Mururani Gate Corner 2	18.930989	-18.791729	18°55'51.6"	-18°47'30.2"
Mururan Gate Corner 3	18.930714	-18.791435	18°55'50.6"	-18°47'29.2"
MururaniGate Corner 4	18.930619	-18.791462	18°55'50.2"	-18°47'29.3"
Mururani Gate Corner 5	18.930752	-18.791166	18°55'50.7"	-18°47' 28.2"
Mururani Gate Corner 6	18.930654	-18.791124	18°55'50.4"	-18°47'28.0"
Mururani Gate Check Point	18.928474	-18.794055	18°55'42.5"	-18°47'38.6"
Mururani Gate Corner 7	18.928639	18.794111	18°55'43.1"	-18°47'38.8"
Mururani Gate Corner 8			18°55'41.18"	-18°47'37.9"
Mururani Gate Corner 9			18°55'56.1"	-18°45'32.1"
Mururani old cordon	18.957824	-18.761877	18°57'28.2"	-18°45'42.8"
Old Cordon	19.127216	-18.582892	19°07'38.0"	-18°34'58.4"
Old Cordon 1	19.126564	-18.582375	19°07'35.6"	-18°34'56.5"
Old Cordon 2	19.126513	-18.582347	19°07'35.4"	-18°34'56.4"
Old Cordon 3	18.863494	-18.570028	18°51'48.6"	-18°34'12.1"
Mangeti Quarantine	18.622061	-18.558445	18°37'19.4"	-18°33'30.4"
Mangeti East Quarantine	18.533378	-18.554124	18°32'00.2"	-18°33'14.8"
NDC Farm	18.216127	-18.538263	18°12'58.1"	-18°32'17.7"
Ntsintsabis	17.99898	-18.527553	17°59'56.3"	-18°31'39.2"
Ntsintsabis 1	17.99903	-18.527431	17°59'56.5"	-18°31'38.8"
Ntsintsabis 2	17.998423	-18.527418	17°59'54.3"	-18°31'38.7"
Ntsintsabis Old line pole	17.998424	-18.527424	17°59'54.3"	-18°31'38.7"
Bravo pole	17.998348	-18.527247	17°59'54.1"	-18° 31'38.1"
Bravo Landhill Pole	17.998306	-18.527278	17°59'53.9"	-18° 31'38.2"
Bravo pole 698	17.99848	-18.52823	17°59'54.5"	-18°31'41.6"
Bravo & Tsinsabis Corner	17.998472	-18.619	17°59'54.5"	-18°37'08.4"
Tsinsabis Oshivilo Quarantine 2	17.96512	-18.63	17°58'08.7"	-18°37'49.2"
Tsinsabis Oshivelo quarantine 1	17.969097	-18.630335	17°57'54.4"	-18°37'48.0"
Tsitsabis Oshivelo Quarantine3	17.956035	-18.633095	17°57'21.7"	-18°37'59.1"
Tsinsabis Oshivelo Quarantine 4	17.920605	-18.62704	17°55'14.2"	-18°37'37.3"
Tsinsabis Oshivelo Quarantine 5	17.91475	-18.625138	17°54'53.1"	-18°37'30.5"
Tsinsabis Oshivlo Quarantine 6	17.910531	-18.625128	17°54'37.9"	-18°37'30.5"
Tsinsabis Oshivelo Quarantine 7	17.837441	-18.611052	17°50'14.8"	-18°36'39.8"
Tsinsabis OSHIVELO Quarantine 8	17.83805	-18.579426	17°50'17.0"	-18°34'45.9"
Tsinsabis Oshivelo Quarantine 9	17.767532	-18.574555	17°45'53.5"	-18°34'28.4"
Ntsintsabis Oshivelo Quarantine 10	17.764873	-18.57347	17°46'03.1"	-18°34'24.5"
Tsinabis shivelo Quarantine 11	17.760454	-18.572417	17°45'37.6"	-18°34'20.7"
Tsinsabis Oshivelo Quarantine 12	17.724235	-18.568544	17°43'27.2"	-18°34'06.8"
Tsinsabis Oshivelo Quarantine 13	17.72313	-18.568727	17°43'23.3"	-18°34'07.4"
Tsinsabis Oshivelo Quarantine 13	17.72186	-18.568124	17°43'18.7"	-18°34'05.2"
Tsinabis Quarantine 15	17.663869	-18.561788	17°39'49.9"	-18°33'42.4"
Oshivelo Quarantine 1	17.664199	-18.509743	17°39'51.1"	-18°30'35.1"
Oshivelo Quarantine 2	17.664147	-18.509804	17°39'50.9"	-18°30'35.3"
Oshivelo Quarantine 3	17.664142	-18.509757	17°39'50.9"	-18°30'35.1"
Conner Oshivelo Quarantine west	17.49911	-18.500845	17°29'56.8"	-18°30'03.0"
Oshivelo Quarantine Corner West	17.498415	-18.515678	17°29'54.3	-18°30'56.4"
Oshivelo Quarantine Corner West	17.498906	-18.515693	17°29'56.1"	-18°30'56.5"
Oshivelo Quarantine comer West 3	17.499067	-18.517259	17°29'56.6"	-18°31'02.1"
Oshivelo Quarantine Corner West 4	17.498424	-18.517225	17°29'54.3"	-18°31'02.0"
Oshvelo Quarantine END	17.494726	-18.603709	17°29'41.0"	-18°36'13.4"

Oshivelo Quarantine Pre South	17.494683	-18.603718	17°29'40.9"	-18°36'13.4"
Oshivelo Quarantine south	17.494462	-18.60383	17°29'40.1"	-18°36'13.8"
Oshivelo Quarantine south 1	17.494398	-18.603857	17°29'39.8"	-18°36'13.9"
Oshivelo Quarantine South corner 2	17.494278	-18.603917	17°29'39.4"	-18°36'14.1"
Oshivelo East corner 1	17.171493	-18.62034	17°10'17.4"	-18°37'13.2"
Oshielo East Corner A	17.171617	-18.620324	17°10'17.8"	-18°37'13.2"
Oshivelo south East2	17.171468	-18.622788	17°10'17.3"	-18°37'22.0"
Oshivelo south East 3	17.171305	-18.622737	17°10'16.7"	-18°37'21.9"
Oshivelo power station north 1	17.168653	-18.622893	17°10'07.2"	-18°37'22.4"
Oshivelo Power Station 2	17.168619	-18.622888	17°10'07.0"	-18°37 22.4"
Oshivelo power station 3	17.168222	-18.622929	17°10'05.6"	-18°37'22.5"
Oshivelo power Station 4	17.168255	-18.622905	17°10'05.7"	-18°37'22.5"
Oshivelo power station 5	17.167345	-18.6229	17°10'02.4"	-18°37'22.4"
Oshivelo south corner gate	17.167248	-18.622804	17°10'02.1"	-18°37'22.1"
Oshivelo East Corner	17.166821	-18.620612	17°10'17.3"	-18°37'22.0"
Onguma Etosha corner	17.144801	-18.62077	17°10'16.7"	-18°37'21.9"
Onguma Etosha corner 1	17.027935	-18.620297	17°10'07.2"	-18°37'22.4"
Etosha middle point 2	17.027261	-18.731022	17°10'07.0"	-18°37'22.4"
Etosha corner 3	17.038776	-18.764908	17°10'05.6"	-18°37'22.5"
Namutoni Gate (Von Lindequist gate)	17.042474	-18.803431	17°10'05.7"	-18°37'22.5"
Namutoni Gate1	17.042419	-18.803444	17°10'02.4"	-18°37'22.4"
Von Lindequist Gate2	17.043262	-18.803341	17°10'02.1"	-18°37'22.1"
Von Lindequist Gate 3	17.043288	-18.803496	17°02'35.8"	-18°48'12.6"
Von Lindequist Gate 4	17.043252	-18.803543	17°02'35.7"	-18°48'12.8"
Etosha Mokuti Lodge corner fence	17.043372	-18.803686	17°02'36.1"	-18°48'13.3"
Etosha corner 4	17.027183	-18.748289	17°01'37.9"	-18°44'53.8"
Lion Drink North Corner	17.061462	-18.881733	17°03'41.3"	-18°52'54.2"
Nudabib North 1	17.077427	-18.940087	17°04'38.7"	-18°56'24.3"
Etosha south 1	17.124541	-19.163867	17°07'28.3"	-19°09'49.9"
Etosha south 2	17.127316	-19.175789	17°07'38.3"	-19°10'32.8"
Etosha south 3	17.127312	-19.175907	17°07'38.3"	-19°10'33.3"
Etosha souh 4	17.127257	-19.176012	17°07'38.1"	-19°10'33.6"
Etosha south 5	17.127176	-19.17612	17°07'37.8"	-19°10'34.0"
Etosha souh 6	17.114737	-19.189507	17°06'53.1"	-19°11'22.2"
Etosha south 7	17.115847	-19.205268	17°06'57.0"	-19°12'19.0"
Etosha south middle point	17.034552	-19.297621	17°02'04.4"	-19°17'51.4"
Etosha south 8	16.990682	-19.346782	16°59'26.5"	-19°20'48.4"
Etosha south midpoint 2	16.894735	-19.389431	16°53' 41.0"	-19°23'22.0"
Etosha south 9	16.701655	-19.486848	16°42'25.1"	-19°29'02.8"
Etosha south 10	16.599434	-19.436566	16°35'58.0"	-19°26'11.6"
Etosha south 11	16.485402	-19.43549	16°29'07.4"	-19°26'07.8"
Etosha south 12	16.40952	-19.418655	16°24'34.3"	-19°25'07.2"
Etosha south 13	16.355937	-19.416949	16°21'21.4"	-19°25'01.0"
Etosha south 14	16.230687	-19.388243	16°13'50.5"	-19°23'17.7"
Etosha south 15	16.184361	-19.36957	16°11'03.7"	-19°22'10.5"
Etosha south 16	16.134737	-19.365918	16°08'05.1"	-19°21'57.3"
Etosha south 17	16.060522	-19.347466	16°03'37.9"	-19°20'50.9"
Etosha south 18	15.99331	-19.336246	15°59'35.9"	-19°20'10.5"
Ombka Gate 2	15.940901	-19.330697	15°56'27.2"	-19°19'50.5"
Ombika Western corner	15.937392	-19.330236	15°56'14.6"	-19°19'48.8"
Ombika West corner1	15.850556	-19.283917	15°51'02.0"	-19°17'02.1"
Corner sonop and Tiervlei	15.70217	-19.273688	15°42'07.8"	-19°16'25.3"
Middle Point Obika west corner 2	15.628235	-19.257905	15°37'41.6"	-19°15'28.5"
Ombika west corner 3	15.560451	-19.245714	15°33'37.6"	-19°14'44.6"
Ombike west corner 4	15.550816	-19.235892	15°33'02.9"	-19°14'09.2"
Middle point stillerus farm	15.522844	-19.242532	15°31'22.2"	-19°14'33.1"
Ombike West 5	15.420228	-19.239132	15°25'12.8"	-19°14'20.9"
Ombike West 6	15.369801	-19.247824	15°22'11.3"	-19°14'52.2"
Ombike West 7	15.31418	-19.246168	15°18'51.0"	-19°14'46.2"
Ombike West 8	15.317289	-19.191497	15°19'02.2"	-19°11'29.4"
Ombike West 9	15.201605	-19.224494	15°12'05.8"	-19°13'28.2"
Ombike 10	15.090014	-19.205425	15°05'24.1"	-19°12'19.5"
Ombike 11	15.030934	-19.208529	15°01'51.4"	-19°12'30.7"
Ombike 12	14.648166	-19.234364	14°54'48.8"	-19°14'04.9"
Middle point poinier farm	14.687573	-19.234487	14°41'15.3"	-19°14'04.2"
Kaross Corner FARM	14.536198	-19.246789	14°32'10.3"	-19°14'48.4"
Karooss1	14.538537	-19.329044	14°32'18.7"	-19°19'44.6"
Helmo Karross south corner	14.594109	-19.326709	14°35'38.8"	-19°19'36.2"
Karrooss south east corner	14.587199	-19.417415	14°35'13.9"	-19°25'02.7"
Karrooss south middle point	14.4819	-19.417582	14°28'54.8"	-19°25'03.3"

Karrooss middle point 1	14.467863	-19.416636	14°28'04.3"	-19°24'59.9"
Karoos South West middle corner	14.449528	-19.414472	14°26'58.3"	-19°24'52.1"
Stillerus farm corner	15.51042	-19.245743	15°30'37.5"	-19°14'44.7"
Wildeck and Marienhohe farm corner	14.474658	-19.417568	14° 28' 28.8"	-19° 25' 3.2"
Sonop & Tiervlei corner	15.761744	-19.284672	15°45'42.3"	-19°17'04.8"
Grenswag Vlakwater corner	14.913509	-19.234963	14° 54' 48.6"	-19° 14' 5.9"
Kaross west	14.455639	-19.38875	14° 27' 20.3"	-19° 23' 19.5"
Karooss West 2	14.455982	-19.387222	14° 27' 21.5"	19°23'13.9 "
Kaross West 3	14.456106	-19.385551	14° 27' 21.9"	-19° 23' 8.0"
Kaross West 4	14.456097	-19.385395	14° 27' 21.9"	-19° 23' 7.4"
Kaross west 5	14.456081	-19.385301	14° 27' 21.9"	-19° 23' 7.1"
Kaross west 6	14.456038	-19.385129	14° 27' 21.7"	-19° 23' 6.5"
Kaross west 7	14.456036	-19.385099	14° 27' 21.729"	-19° 23' 6.4"
Kaross west 8	14.455971	-19.384976	14° 27' 21.5"	-19° 23' 5.9"
Kaross west 9	14.455965	-19.38489	14° 27' 21.5"	-19° 23' 5.6"
Kaross west 10	14.455967	-19.384625	14° 27' 21.5"	-19° 23' 4.6"
Kaross west 11	14.456051	-19.38438	14° 27' 21.8"	-19° 23' 3.8"
Kaross west 12	14.456049	-19.383977	14° 27' 21.8"	-19° 23' 2.3"
Kaross west 13	14.45595	-19.383195	14° 27' 21.4"	-19° 22' 59.5"
Kaross west 14	14.456051	-19.38306	14° 27' 21.8"	-19° 22' 59.0"
Kaross west 15	14.455915	-19.382733	14° 27' 21.3"	-19° 22' 57.8"
Kaross west 16	14.45568	-19.379402	14° 27' 20.4"	-19° 22' 45.8"
Kaross west 17	14.455788	-19.379043	14° 27' 20.8"	-19° 22' 44.6"
Kaross west 18	14.455771	-19.378708	14° 27' 20.8"	-19° 22' 43.3"
Kaross west 19	14.456183	-19.377067	14° 27' 22.3"	-19° 22' 37.4"
Kaross west 20	14.458464	-19.372068	14° 27' 30.5"	-19° 22' 19.4"
Kaross west 21	14.458725	-19.371996	14° 27' 31.4"	-19° 22' 19.2"
Kaross west 22	14.459096	-19.371372	14° 27' 32.	-19° 22' 16.9"
Kaross west 23	14.459406	-19.370719	14° 27' 33.9"	-19° 22' 14.6"
Kaross west 24	14.459348	-19.370458	14° 27' 33.7"	-19° 22' 13.6"
Kaross west 25	14.460262	-19.36929	14° 27' 36.9"	-19° 22' 9.4"
Kaross west 26	14.46149	-19.368157	14° 27' 41.4"	-19° 22' 5.4"
Kaross west 27	14.465424	-19.365478	14° 27' 55.5"	-19° 21' 55.7"
Kaross west 28	14.465703	-19.365428	14° 27' 56.5"	-19° 21' 55.5"
Kaross west 29	14.465768	-19.36524	14° 27' 56.8"	-19° 21' 54.9"
Kaross west 30	14.470459	-19.362064	14° 28' 13.7"	-19° 21' 43.4"
Karooss west 31	14.471118	-19.361534	14° 28' 16.0"	-19° 21' 41.5"
Karooss west 32	14.472199	-19.360299	14° 28' 19.9"	-19° 21' 37.1"
Kaross west 33	14.480229	-19.346837	14° 28' 48.8"	-19° 20' 48.6"
Kaross west34	14.480921	-19.345347	14° 28' 51.3"	-19° 20' 43.2"
Kaross west 35	14.481299	-19.343917	14° 28' 52.7"	-19° 20' 38.1"
Kaross west 36	14.482863	-19.329773	14° 28' 58.3"	-19° 19' 47.2"
Kaross west 37	14.482859	-19.329686	14° 28' 58.3"	-19° 19' 46.9"
Otjovasandu1	14.482699	-19.326999	14° 28' 57.7"	-19° 19' 37.2"
Koabendes farm corner	14.482285	-19.317232	14° 28' 56.2"	-19° 19' 2.0"
Otjovasandu 2	14.481665	-19.315806	14° 28' 54.0"	-19° 18' 57.0"
Otjovasandu 3	14.477127	-19.306662	14° 28' 37.7"	-19° 18' 24.0"
Otjovasandu 4	14.47391	-19.299497	14° 28' 26.1"	-19° 17' 58.2"
Otjovasandu 5	14.47354	-19.298379	14° 28' 24.7"	-19° 17' 54.2"
Otjovasandu 6	14.473309	-19.297215	14° 28' 23.9"	-19° 17' 50.0"
Otjovasandu 7	14.473214	-19.296114	14° 28' 23.6"	-19° 17' 46.0"
Otjovasandu 9	14.473171	-19.293376	14° 28' 23.4"	-19° 17' 36.2"
Otjovasandu 9	14.473259	-19.293265	14° 28' 23.7"	-19° 17' 35.8"
Otjovasandu 10	14.473155	-19.292886	14° 28' 23.4"	-19° 17' 34.4"
Otjovasandu 11	14.472955	-19.284243	14° 28' 22.6"	-19° 17' 3.3"
Otjovasandu 12	14.472787	-19.283881	14° 28' 22.0"	-19° 17' 2.0"
Otjovasandu 13	14.472492	-19.283412	14° 28' 21.0"	-19° 17' 0.3"
Otjovasandu 14	14.471914	-19.282984	14° 28' 18.9"	-19° 16' 58.7"
Otjovasandu 15	14.471245	-19.282481	14° 28' 16.5"	-19° 16' 56.9"
Otovasandu 16	14.468321	-19.281139	14° 28' 6.0"	-19° 16' 56.9"
Otjovasandu 17	14.467723	-19.280508	14° 28' 3.8"	-19° 16' 49.8"
Otjovasandu 18	14.467386	-19.280196	14° 28' 2.6"	-19° 16' 48.7"
Otjovasandu 19	14.466993	-19.278993	14° 28' 1.2"	-19° 16' 44.4"
Otjovasandu 20	14.466276	-19.272241	14° 27' 58.6"	-19° 16' 20.1"
Otjovasandu 21	14.466092	-19.272055	14° 27' 57.9"	-19° 16' 19.4"
Otjovasandu 22	14.465202	-19.270429	14° 27' 54.7"	-19° 16' 13.5"
Otjovasandu 23	14.464104	-19.269867	14° 27' 50.8"	-19° 16' 11.5"
Otjovasandu 24	14.459262	-19.269235	14° 27' 33.3"	-19° 16' 9.2"
Otjovasandu 25	14.458415	-19.268735	14° 27' 30.3"	-19° 16' 7.4"
Otjovsandu 26	14.455793	-19.265804	14° 27' 20.9"	-19° 15'56.9"

Otjovasandu 27	14.447685	-19.257432	14° 26' 51.7"	-19°15'26.8"
Otjovasandu 28	14.447635	-19.256973	14° 26' 51.5"	-19°15'25.1"
Otjovasandu 29	14.446985	-19.25629	14° 26' 49.1"	-19°15'22.6"
Otjovasandu 30	14.446084	-19.255753	14° 26' 45.9"	-19°15'20.7"
Otjovasandu 31	14.439933	-19.249627	14° 26' 23.8"	-19°14'58.7"
Otjovasandu 32	14.439443	-19.248898	14° 26' 22.0"	-19°14'56.0"
Otjovasandu 33	14.438706	-19.248386	14° 26' 19.3"	-19°14'54.2"
Otjovasandu 34	14.436485	-19.246596	14° 26' 11.3"	-19°14'47.7"
Otjovasandu 35	14.436171	-19.245969	14° 26' 10.2"	-19°14'45.5"
Otjovasandu 36	14.434959	-19.245289	14° 26' 5.9"	-19°14'43.0"
Otjovasandu 37	14.434261	-19.245074	14° 26' 3.3"	-19°14'42.3"
Otjovasandu 38	14.433141	-19.244841	14° 25' 59.3"	-19°14'41.4"
Otjovasandu 39	14.425375	-19.24476	14° 25' 31.4"	-19°14'41.1"
Otjovasandu 40	14.422575	-19.244615	14° 25' 21.3"	-19°14'40.6"
Otjovasandu 41	14.42117	-19.244376	14° 25' 16.2"	-19°14'39.8"
Otjovasandu 42	14.42032	-19.244025	14° 25' 13.2"	-19°14'38.5"
Otjovasandu 43	14.419471	-19.243347	14° 25' 10.1"	-19°14'36.0"
Otjovasandu 44	14.418328	-19.242251	14° 25' 6.0"	-19°14'32.1"
Otjovasandu 45	14.418333	-19.24225	14° 25' 6.0"	-19°14'32.1"
Otjovasandu 46	14.419472	-19.243333	14° 25' 10.1"	-19°14'36.0"
Werda gate	14.417827	-19.241007	14° 25' 4.2"	-19°14'27.6"
Werda 2	14.417761	-19.241038	14° 25' 3.9"	-19°14'27.7"
Werda 3	14.417917	-19.242344	14° 25' 4.5"	-19°14'32.4"
Werda corner 4	14.419269	-19.24402	14° 25' 9.4"	-19°14'38.5"
Werda corner 5	14.416804	-19.244773	14° 25' 0.4"	-19°14'41.2"
Werda corner 6	14.416818	-19.244792	14° 25' 0.5"	-19°14'41.3"
Werda corner 7	14.387537	-19.247593	14° 23' 15.1"	-19°14'51.3"
Werda corner 8	14.385278	-19.247538	14° 23' 7.0"	-19°14'51.1"
Werda corner 9	14.383058	-19.246013	14° 22' 59.0"	-19°14'45.6"
Werda corner 10	14.361617	-19.256843	14° 21' 41.8"	-19°15'24.6"
Werda middle point	14.34165	-19.339519	14° 20' 29.9"	-19°20'22.3"
Werda corner 12	14.34008	-19.346572	14° 20' 24.3"	-19°20'47.7"
Werda corner13	14.338886	-19.348068	14° 20' 20.0"	-19°20'53.0"
Werda corner 14	14.337278	-19.349602	14° 20' 14.2"	-19°20'58.6"
Werda corner 15	14.33569	-19.351799	14° 20' 8.5"	-19° 21' 6.5"
Werda corner 16	14.33417	-19.353144	14° 20' 3.0"	-19° 21' 11.3"
Werda corner 17	14.332165	-19.356683	14° 19' 55.8"	-19° 21' 24.1"
Werda corner 18	14.33685	-19.36215	14° 20' 12.7"	-19° 21' 43.7"
Werda crner 18	14.33109	-19.392625	14° 19' 51.9"	-19° 23' 33.4"
Werda corner 19	14.332086	-19.401457	14° 19' 55.5"	-19° 24' 5.2"
Werda corner 20	14.329718	-19.414526	14° 19' 47.0"	-19° 24' 52.3"
Werda corner 21	14.329687	-19.420746	14° 19' 46.9"	-19° 25' 14.7"
Werda corner22	14.330167	-19.420633	14° 19' 48.6"	-19° 25' 14.3"
Werda corner 23	14.329528	-19.423536	14° 19' 46.3"	-19° 25' 24.7"
Kamdescha corner 1	14.326804	-19.428691	14° 19' 36.5"	-19° 25' 43.3"
Kamdescha 2	14.321602	-19.429336	14° 19' 17.8"	-19° 25' 45.6"
Kamdescha 3	14.318041	-19.426065	14° 19' 4.9"	-19° 25' 33.8"
Kamdscha 4	14.312565	-19.424837	14° 18' 45.2"	-19° 25' 29.4"
Kamdescha 5	14.306178	-19.440868	14° 18' 22.2"	-19° 26' 27.1"
Kamdescha 6	14.308707	-19.44622	14° 18' 31.3"	-19° 26' 46.4"
Kamdescha 7	14.30974	-19.448925	14° 18' 35.1"	-19° 26' 56.1"
Kamescha 8	14.312822	-19.45193	14° 18' 46.2"	-19° 27' 6.9"
Kamdescha 9	14.310517	-19.457194	14° 18' 37.9"	-19° 27' 25.9"
Kamdescha 10	14.3081	-19.457934	14° 18' 29.2"	-19° 27' 28.6"
Kamdesca 11	14.3062	-19.45961	14° 18' 22.3"	-19° 27' 34.6"
Kamdescha 12	14.306369	-19.463519	14° 18' 22.9"	-19° 27' 48.7"
Kamdescha 13	14.307067	-19.46529	14° 18' 25.4"	-19° 27' 55.0"
Kamdescha 14	14.306213	-19.466521	14° 18' 22.4"	-19° 27' 59.5"
Kamdescha 15	14.305054	-19.473075	14° 18' 18.2"	-19° 28' 23.1"
Kamddcha 16	14.307771	-19.481009	14° 18' 28.0"	-19° 28' 51.6"
Kamdscha 17	14.307975	-19.482508	14° 18' 28.7"	-19° 28' 57.0"
Kamdescha 18	14.307773	-19.484862	14° 18' 28.0"	-19° 29' 5.5"
Kamdescha 19	14.306724	-19.487163	14° 18' 24.2"	-19° 29' 13.8"
Kamdescha 20	14.305924	-19.490982	14° 18' 21.3"	-19° 29' 27.5"
Kamdescha 21	14.306073	-19.494448	14° 18' 21.9"	-19° 29' 40.0"
Kamdescha22	14.306776	-19.497139	14° 18' 24.4"	-19° 29' 49.7"
Kamdecha 23	14.305748	-19.502906	14° 18' 20.7"	-19° 30' 10.5"
Kamescha 24	14.303626	-19.504142	14° 18' 13.1"	-19° 30' 14.9"
Kamdescha 25	14.303558	-19.506017	14° 18' 12.8"	-19° 30' 21.7"
Kamdscha 26	14.298714	-19.513659	14° 17' 55.4"	-19° 30' 49.2"

Kamdescha 27	14.296462	-19.517953	14° 17' 47.3"	-19° 31' 4.6"
Kamdescha 28	14.299279	-19.532362	14° 17' 57.4"	-19° 31' 56.5"
Kamdescha 29	14.29894	-19.535201	14° 17' 56.2"	-19° 32' 6.7"
Kamdscha 30	14.300497	-19.537266	14° 18' 1.8"	-19° 32' 14.2"
Kamdescha 31	14.303929	-19.543676	14° 18' 14.1"	-19° 32' 37.2"
Kamdescha 32	14.303634	-19.546142	14° 18' 13.1"	-19° 32' 46.1"
Kamdescha 33	14.302416	-19.548513	14° 18' 8.7"	-19° 32' 54.6"
Kamdescha 34	14.30327	-19.552846	14° 18' 11.8"	-19° 33' 10.2"
Kamdescha 35	14.30081	-19.558454	14° 18' 2.9"	-19° 33' 30.4"
Kamdescha 36	14.29993	-19.562545	14° 17' 59.7"	-19° 33' 45.2"
Kamdescha 37	14.297395	-19.568914	14° 17' 50.6"	-19° 34' 8.1"
Kamdescha 38	14.295244	-19.578601	14° 17' 42.9"	-19° 34' 43.0"
Kmdesha 39	14.293223	-19.585307	14° 17' 35.6"	-19° 35' 7.1"
Kamdescha 40	14.290748	-19.588878	14° 17' 26.7"	-19° 35' 20.0"
Kamdescha41	14.290483	-19.592146	14° 17' 25.7"	-19° 35' 31.7"
Kamdescha 42	14.291172	-19.592918	14° 17' 28.2"	-19° 35' 34.5"
Kamdescha 43	14.288813	-19.598629	14° 17' 19.7"	-19° 35' 55.1"
Kamdescha 44	14.285452	-19.604382	14° 17' 7.6"	-19° 36' 15.8"
Kamdescha45	14.285012	-19.608122	14° 17' 6.0"	-19° 36' 29.2"
Kamdescha 46	14.285078	-19.609775	14° 17' 6.3"	-19° 36' 35.2"
Kamdescha 47	14.28477	-19.613423	14° 17' 5.2"	-19° 36' 48.3"
Kamdescha 48	14.285818	-19.61714	14° 17' 8.0"	-19° 37' 1.7"
Kamdescha 49	14.286463	-19.620347	14° 17' 11.3"	-19° 37' 13.2"
Kamdescha 50	14.285691	-19.621505	14° 17' 8.5"	-19° 37' 17.4"
Kamadesch 51	14.284347	-19.629002	14° 17' 3.6"	-19° 37' 44.4"
Kamescha 52	14.283111	-19.630714	14° 16' 59.2"	-19° 37' 50.6"
Kamdescha 53	14.283178	-19.633066	14° 16' 59.4"	-19° 37' 59.0"
Kamdescha 54	14.280545	-19.636514	14° 16' 49.9"	-19° 38' 11.4"
Kamdecha 55	14.279099	-19.639047	14° 16' 44.8"	-19° 38' 20.7"
Kamescha 56	14.275104	-19.643538	14° 16' 30.4"	-19° 38' 36.7"
Kamdescha 57	14.270906	-19.649792	14° 16' 15.3"	-19° 38' 59.3"
Kamdescha parmfontein corner	14.26888	-19.661348	14° 16' 8.0"	-19° 39' 40.9"
Parmfontein 1	14.260678	-19.66144	14° 15' 38.4"	-19° 39' 40.9"
Palmfontein 2	14.256113	-19.659404	14° 15' 22.0"	-19° 39' 33.9"
Palmfontein 4	14.25662	-19.659729	14° 15' 23.8"	-19° 39' 35.0"
Palmfontein 3	14.254499	-19.657398	14° 15' 17.0"	-19° 39' 26.6"
Palmfontein 5	14.253479	-19.656551	14° 15' 12.5"	-19° 39' 23.6"
Palmfontein 6	14.253316	-19.656828	14° 15' 11.9"	-19° 39' 24.6"
Palmfontein 7	14.251439	-19.656068	14° 15' 5.8"	-19° 39' 21.8"
Palmfontein 8	14.248268	-19.664724	14° 14' 53.8"	-19° 39' 53.0"
Palmfontein 9	14.248268	-19.655656	14° 14' 53.8"	-19° 39' 20.4"
Palmfontein 10	14.247449	-19.664724	14°14'50.8"E	-19°39'53"
Palmfontein 11	14.242604	-19.680795	14°14'53.8"E	-19°39'20.4"
Palmfontein 12	14.243622	-19.676967	14° 14' 37.0"	-19° 40' 37.1"
Plmfontein13	14.232183	-19.684838	14° 13' 55.9"	-19° 40' 37.1"
Makalani gate	14.207583	19.740944	14°12'27.3"E	-19°44'27.4"
Makalani 1	14.192523	-19.741325	14° 11' 33.1"	-19° 44' 28.8"
Makalani 2	14.1911	-19.745243	14° 11' 28.0"	-19° 44' 28.8"
Makalani 3	14.19125	-19.746923	14° 11' 28.5"	-19° 44' 48.9"
Makalani 3	14.19187	-19.749701	14° 11' 30.7"	-19° 44' 58.9"
Makalani 5	14.190703	-19.753821	14° 11' 26.5"	-19° 45' 13.8"
Makalani 6	14.190309	-19.757049	14° 11' 25.1"	-19° 45' 25.4"
Makalni 7	14.187954	-19.759862	14° 11' 16.6"	-19° 45' 35.5"
Makqlani 8	14.188959	-19.760752	14° 11' 20.3"	-19° 45' 38.7"
Makalani 9	14.188402	-19.7629	14° 11' 18.2"	-19° 45' 46.4"
Makalani 10	14.184434	-19.772917	14° 11' 4.0"	-19° 46' 22.5"
Makalani 11	14.184088	-19.776881	14° 11' 2.7"	-19° 46' 36.8"
Makalani 12	14.184735	-19.7798	14° 11' 5.0"	-19° 46' 47.3"
Makalani 13	14.184485	-19.781179	14° 11' 4.1"	-19° 46' 52.2"
Makalani 14	14.184581	-19.783866	14° 11' 4.5"	-19° 47' 1.9"
Makalani 15	14.185389	-19.784783	14° 11' 7.4"	-19° 47' 5.2"
Makalani 16	14.184744	-19.787063	14° 11' 5.1"	-19° 47' 13.4"
Makalani 17	14.185058	-19.789682	14° 11' 5.1"	-19° 47' 13.4"
Makalani 18	14.184916	-19.79191	14° 11' 5.7"	-19° 47' 30.9"
Makalani 19	14.184266	-19.792873	14° 11' 3.4"	-19° 47' 34.3"
Makalani 20	14.184681	-19.793925	14° 11' 4.9"	-19° 47' 38.1"
Makalani 21	14.182597	-19.796528	14° 10' 57.3"	-19° 47' 47.5"
Makalani 22	14.181297	-19.796745	14° 10' 52.7"	-19° 47' 48.3"
Humor Grootberg fence resume	14.0951	-19.841817	14° 5' 42.4"	-19° 50' 30.5"
Makalani 23	14.178931	-19.800478	14° 10' 44.2"	-19° 48' 1.7"

Maklani 24	14.175493	-19.801382	14° 10' 31.8"	-19° 48' 5.0"
Makalani 25	14.174546	-19.802039	14° 10' 28.4"	-19° 48' 7.3"
Makalani 26	14.172626	-19.808189	14° 10' 21.5"	-19° 48' 29.5"
Makalani 27	14.173207	-19.809473	14° 10' 23.5"	-19° 48' 34.1"
Makalani 28	14.170012	-19.813076	14° 10' 12.0"	-19° 48' 47.1"
Humor corner	14.165865	-19.822141	14° 9' 57.1"	-19° 49' 19.7"
Humor corner 2	14.156516	-19.82698	14° 9' 23.5"	-19° 49' 37.1"
Humor 2	14.148176	-19.831261	14° 8' 53.4"	-19° 49' 52.5"
Hmor 3	14.147672	-19.831603	14° 8' 51.6"	-19° 49' 53.8"
Humor Grootberg corner	14.140483	-19.835396	14° 8' 25.7"	-19° 50' 7.4"
Grootberg	14.089029	-19.846293	14° 5' 20.5"	-19° 50' 46.7"
Grootberg 1	14.088088	-19.849476	14° 5' 17.1"	-19° 50' 58.1"
Grootberg 2	14.083324	-19.852349	14° 4' 06.0"	-19° 51' 8.5"
Grooterg 3	14.081489	-19.852312	14° 4' 53.4"	-19° 51' 8.3"
Grootberg 4	14.080191	-19.85236	14° 4' 48.7"	-19° 51' 8.5"
Grootberg 5	14.077168	-19.852546	14° 4' 37.8"	-19° 51' 9.2"
Grootberg 6	14.07363	-19.852676	14° 4' 25.1"	-19° 51' 9.6"
Grootberg 7	14.071891	-19.852111	14° 4' 18.8"	-19° 51' 7.6"
Grootberg 8	14.070079	-19.851739	14° 4' 12.28"	-19° 51' 6.3"
Grootberg 9	14.061551	-19.849177	14° 3' 41.6"	-19° 50' 57.0"
Grootberg 10	14.057881	-19.848506	14° 3' 28.4"	-19° 50' 54.6"
Grootberg 11	14.053489	-19.844481	14° 3' 12.6"	-19° 50' 40.1"
Grootberg 12	14.047612	-19.844046	14° 2' 51.4"	-19° 50' 38.6"
Grootberg 13	14.045546	-19.844763	14° 2' 44.0"	-19° 50' 41.15"
Grootberg 14	14.042777	-19.844737	14° 2' 34.0"	-19° 50' 41.1"
Grootberg 15	14.036842	-19.842021	14° 2' 12.6"	-19° 50' 31.3"
Grootberg 16	14.0316	-19.842591	14° 1' 53.8"	-19° 50' 33.3"
Grootberg 17	14.031187	-19.842415	14° 1' 52.3"	-19° 50' 32.7"
Grootberg 18	14.029705	-19.842997	14° 1' 46.9"	-19° 50' 34.8"
Grootberg 19	14.02913	-19.843402	14° 1' 44.9"	-19° 50' 36.2"
Grootberg 20	14.027848	-19.843676	14° 1' 40.3"	-19° 50' 37.2"
Grootberg 21	14.023887	-19.84366	14° 1' 26.0"	-19° 50' 37.2"
Grootberg 22	14.020975	-19.844314	14° 1' 15.5"	-19° 50' 39.5"
Grootberg 23	14.019505	-19.843813	14° 1' 10.2"	-19° 50' 37.7"
Grootberg 24	14.017036	-19.845537	14° 1' 1.3"	-19° 50' 43.9"
Grootberg 25	14.016286	-19.845672	14° 0' 58.629"	-19° 50' 44.4"
Grootberg 26	14.011733	-19.846076	14° 0' 42.2"	-19° 50' 45.9"
Grootberg 27	14.008551	-19.846446	14° 0' 30.8"	-19° 50' 47.2"
Grooterg 28	13.989569	-19.847975	13° 59' 22.4"	-19° 50' 52.7"
Grootveg29	13.983959	-19.849025	13° 59' 2.3"	-19° 50' 56.5"
Grootberg	13.983329	-19.849932	13° 58' 60.0"	-19° 50' 59.8"
Grootberg 31	13.981824	-19.849991	13° 58' 54.7"	-19° 50' 60.0"
Grootberg 32	13.979443	-19.84946	13° 58' 46.0"	-19° 50' 58.1"
Grootberg33	13.977688	-19.851728	13° 58' 39.7"	-19° 51' 6.2"
Grootberg 34	13.976304	-19.853796	13° 58' 34.7"	-19° 51' 13.7"
Grootberg 35	13.97559	-19.856419	13° 58' 32.1"	-19° 51' 23.1"
Grootberg 36	13.97223	-19.857513	13° 58' 20.0"	-19° 51' 27.0"
Grootberg 37	13.968852	-19.85761	13° 58' 7.9"	-19° 51' 27.4"
Grootberg 38	13.966536	-19.859183	13° 57' 59.5"	-19° 51' 33.1"
Grootberg 39	13.961235	-19.866784	13° 57' 40.4"	-19° 52' 0.4"
Grootbrg 40	13.950778	-19.874293	13° 57' 2.8"	-19° 52' 27.5"
Grootberg 41	13.949245	-19.880247	13° 56' 57.3"	-19° 52' 48.9"
Grootberg 42	13.949061	-19.883055	13° 56' 56.6"	-19° 52' 59.0"
Palmvag Gate	13.948957	-19.88407	13° 56' 56.2"	-19° 53' 2.7"
Palmvag gate1	13.948749	-19.884253	13° 56' 55.5"	-19° 53' 3.3"
Palmvag 2	13.943622	-19.888799	13° 56' 37.0"	-19° 53' 19.7"
Palmwag3	13.933218	-19.89658	13° 55' 59.6"	-19° 53' 47.7"
Palmwag4	13.921106	-19.896488	13° 55' 16.0"	-19° 53' 47.4"
Palmwag5	13.910343	-19.902004	13° 54' 37.2"	-19° 54' 7.2"
Palmwag6	13.908447	-19.901862	13° 54' 30.4"	-19° 54' 6.7"
Almwag7	13.906441	-19.898723	13° 54' 23.2"	-19° 53' 55.4"
Almwag8	13.904201	-19.896757	13° 54' 15.1"	-19° 53' 48.3"
Palmwag9	13.897371	-19.896649	13° 53' 50.5"	-19° 53' 47.9"
Almwag10	13.892874	-19.897883	13° 53' 34.3"	-19° 53' 52.4"
Almwag11	13.89066	-19.899674	13° 53' 26.4"	-19° 53' 58.8"
Palmwag12	13.888409	-19.902616	13° 53' 18.3"	-19° 54' 9.4"
Palmwag13	13.882545	-19.904468	13° 52' 57.2"	-19° 54' 16.1"
Palmwag14	13.879978	-19.903357	13° 52' 47.9"	-19° 54' 12.1"
Palmwag15	13.877922	-19.903628	13° 52' 40.5"	-19° 54' 13.1"
Palmwag16	13.877943	-19.911679	13° 52' 40.6"	-19° 54' 42.0"

Palmwag17	13.872843	-19.917281	13° 52' 22.2"	-19° 55' 2.2"
Palmwag18	13.867233	-19.918615	13° 52' 2.0"	-19° 55' 7.0"
Palmwag19	13.864503	-19.920286	-19° 55' 13.0"	-19° 55' 13.0"
Palmwag20	13.863475	-19.921267	13° 51' 48.5"	-19° 55' 16.6"
Palmwag21	13.860181	-19.9288	13° 51' 36.7"	-19° 55' 43.7"
Palmwag22	13.859528	-19.932105	13° 51' 34.3"	-19° 55' 55.6"
Palmwag23	13.855648	-19.933334	13° 51' 20.3"	-19° 56' 0.0"
Palmwag24	13.845023	-19.93775	13° 50' 42.1"	-19° 56' 15.9"
Palmwag25	13.833425	-19.932712	13° 50' 0.3"	-19° 55' 57.8"
Palmwag26	13.829552	-19.932505	13° 49' 46.4"	-19° 55' 57.0"
Palmwag27	13.826583	-19.933528	13° 49' 35.7"	-19° 56' 0.7"
Palmwag28	13.822158	-19.93321	13° 49' 19.8"	-19° 55' 59.6"
Palmwag29	13.821196	-19.933721	13° 49' 16.3"	-19° 56' 1.4"
Palmwag30	13.820529	-19.938137	13° 49' 13.9"	-19° 56' 17.3"
Palmwag31	13.816792	-19.944899	13° 49' 0.5"	-19° 56' 41.6"
Palmwag32	13.816894	-19.948737	13° 49' 0.8"	-19° 56' 55.5"
Palmwag33	13.819826	-19.952171	13° 49' 11.4"	-19° 57' 7.8"
Palmwag34	13.826889	-19.957311	13° 49' 36.8"	-19° 57' 26.3"
Palmwag35	13.838327	-19.972301	13° 50' 17.0"	-19° 58' 20.3"
Palmwag36	13.841604	-19.974589	13° 50' 29.8"	-19° 58' 28.5"
Palmwag37	13.846266	-19.992081	13° 50' 46.6"	-19° 59' 31.5"
Humor Grootberg fence end	14.137367	-19.835383	14° 8' 14.5"	-19° 50' 7.4"
Otjihavera (grootberg mountain) fence resu	14.0951	-19.841817	14° 5' 42.4"	-19° 50' 30.5"
Makalani 1	14.192523	-19.741325	14° 11' 33.1"	-19° 44' 28.8"
Makalani 2	14.1911	-19.745243	14° 11' 28.0"	-19° 44' 28.8"
Makalani 3	14.19125	-19.746923	14° 11' 28.5"	-19° 44' 48.9"
Makalani 3	14.19187	-19.749701	14° 11' 30.7"	-19° 44' 58.9"
Makalani 5	14.190703	-19.753821	14° 11' 26.5"	-19° 45' 13.8"
Makalani 6	14.190309	-19.757049	14° 11' 25.1"	-19° 45' 25.4"
Makalni 7	14.187954	-19.759862	14° 11' 16.6"	-19° 45' 35.5"
Makqlani 8	14.188959	-19.760752	14° 11' 20.3"	-19° 45' 38.7"
Makalani 9	14.188402	-19.7629	14° 11' 18.2"	-19° 45' 46.4"
Makalani 10	14.184434	-19.772917	14° 11' 4.0"	-19° 46' 22.5"
Makalani 11	14.184088	-19.776881	14° 11' 2.7"	-19° 46' 36.8"
Makalani 12	14.184735	-19.7798	14° 11' 5.0"	-19° 46' 47.3"
Makalani 13	14.184485	-19.781179	14° 11' 4.1"	-19° 46' 52.2"
Makalani 14	14.184581	-19.783866	14° 11' 4.5"	-19° 47' 1.9"
Makalani 15	14.185389	-19.784783	14° 11' 7.4"	-19° 47' 5.2"
Makalani 16	14.184744	-19.787063	14° 11' 5.1"	-19° 47' 13.4"
Makalani 17	14.185058	-19.789682	14° 11' 5.1"	-19° 47' 13.4"
Makalani 18	14.184916	-19.79191	14° 11' 5.7"	-19° 47' 30.9"
Makalani 19	14.184266	-19.792873	14° 11' 3.4"	-19° 47' 34.3"
Makalani 20	14.184681	-19.793925	14° 11' 4.9"	-19° 47' 38.1"
Makalani 21	14.182597	-19.796528	14° 10' 57.3"	-19° 47' 47.5"
Makalani 22	14.181297	-19.796745	14° 10' 52.7"	-19° 47' 48.3"
Palmwag38/1	13.8491667	-19.9919444	13° 50' 56.6"	19° 59' 31.5"
Palmwag/2	13.8463889	-19.9922222	13° 50' 46.6"	19° 59' 31.5"
Rhino desert	13.872281	-20.041892	13° 52' 20.2"	-20° 2' 30.8"
Rhino desert 1	13.879718	-20.045014	13° 52' 47.0"	-20° 2' 42.0"
Rhino desert 2	13.895924	-20.042074	13° 53' 45.3"	-20° 2' 31.5"
Rhino desert 3	13.900595	-20.041769	13° 54' 2.1"	-20° 2' 30.4"
Rhino desert 4	13.903179	-20.039514	13° 54' 11.4"	-20° 2' 22.3"
Rhino desert 5	13.905762	-20.039288	13° 54' 20.7"	-20° 2' 21.4"
Rhino desert 6	13.909529	-20.039851	13° 54' 34.3"	-20° 2' 23.5"
Rhino desert 7	13.909735	-20.039939	13° 54' 35.0"	-20° 2' 23.8"
Rhino desert 8	13.9188	-20.037038	13° 55' 7.7"	-20° 2' 13.3"
Rhino desert 9	13.923977	-20.036314	13° 55' 26.3"	-20° 2' 10.7"
Rhino desert 10	13.927199	-20.036669	13° 55' 37.9"	-20° 2' 12.0"
Rhino desert 11	13.931559	-20.037938	13° 55' 53.6"	-20° 2' 16.6"
Rhino desert 12	13.934201	-20.039079	13° 56' 3.1"	-20° 2' 20.7"
Rhino desert 13	13.938193	-20.040507	13° 56' 17.5"	-20° 2' 25.8"
Rhino desert 14	13.942359	-20.040636	13° 56' 32.5"	-20° 2' 26.3"
Rhino desert 15	13.944899	-20.044131	13° 56' 41.6"	-20° 2' 38.9"
Rhino desert 16	13.947432	-20.044178	13° 56' 50.8"	-20° 2' 39.0"
Rhino desert 17	13.949174	-20.04484	13° 56' 57.0"	-20° 2' 41.4"
Rhino desert 18	13.95004	-20.048087	13° 57' 0.1"	-20° 2' 53.1"
Rhino desert 19	13.949939	-20.049599	13° 56' 59.8"	-20° 2' 58.6"
Rhino desert 20	13.950201	-20.054009	13° 57' 0.7"	-20° 3' 14.4"
Rhino desert 21	13.946799	-20.056912	13° 56' 48.5"	-20° 3' 24.9"

Rhino desert 22	13.946283	-20.058872	13° 56' 46.6"	-20° 3' 31.9"
Rhino desert 23	13.943773	-20.061331	13° 56' 37.6"	-20° 3' 40.8"
Rhino desert 24	13.941951	-20.064881	13° 56' 31.0"	-20° 3' 53.6"
Rhino desert 25	13.94541	-20.067691	13° 56' 43.5"	-20° 4' 3.7"
Rhino desert 26	13.94818	-20.077911	13° 56' 53.4"	-20° 4' 40.5"
Rhinodesrt 27	13.947153	-20.088199	13° 56' 49.8"	-20° 5' 17.5"
Rhinodesert 28	13.947108	-20.088166	13° 56' 49.6"	-20° 5' 17."
Rhino desert 29	13.944876	-20.100291	13° 56' 41.6"	-20° 6' 1.0"
Rhino desert 30	13.943682	-20.102973	13° 56' 37.3"	-20° 6' 10.7"
Rhino desert 31	13.943569	-20.108918	13° 56' 36.8"	-20° 6' 32.1"
Rhino desert 32	13.943885	-20.113341	13° 56' 38.0"	-20° 6' 48.0"
Rhino desert 33	13.942181	-20.115217	13° 56' 31.9"	-20° 6' 54.8"
Rhino desert 34	13.939078	-20.11568	13° 56' 20.7"	-20° 6' 56.4"
Rhino desert 35	13.924259	-20.120322	13° 55' 27.3"	-20° 7' 13.2"
Rhino desert 36	13.915308	-20.116429	13° 54' 55.1"	-20° 6' 59.1"
Rhino desert 37	13.913259	-20.117017	13° 54' 47.7"	-20° 7' 1.3"
Rhino desert 38	13.912272	-20.119521	13° 54' 44.2"	-20° 7' 10.3"
Rhino desert 39	13.910635	-20.120297	13° 54' 38.3"	-20° 7' 13.1"
Rhino desert 40	13.90815	-20.121232	13° 54' 29.3"	-20° 7' 16.4"
Rhino desert 41	13.907178	-20.123045	13° 54' 25.8"	-20° 7' 23.0"
Rhino desert 42	13.90401	-20.123097	13° 54' 14.4"	-20° 7' 23.1"
Rhino desert 43	13.903098	-20.123339	13° 54' 11.2"	-20° 7' 24.0"
Rhino desert 44	13.90116	-20.125971	13° 54' 4.2"	-20° 7' 33.5"
Rhino desert 45	13.901714	-20.128689	13° 54' 6.2"	-20° 7' 43.3"
Rhinodesert 46	13.902574	-20.133129	13° 54' 9.3"	-20° 7' 59.3"
Rhino desert 47	13.901039	-20.1346	13° 54' 3.7"	-20° 8' 4.6"
Rhino desert 48	13.90172	-20.136161	13° 54' 6.2"	-20° 8' 10.2"
Rhino desert 49	13.902116	-20.136975	13° 54' 7.6"	-20° 8' 13.1"
Rhino desert 50	13.902964	-20.137561	13° 54' 10.7"	-20° 8' 15.2"
Rhinodesert51	13.903456	-20.138319	13° 54' 12.4"	-20° 8' 17.9"
Rhino desert 52	13.904478	-20.139152	13° 54' 16.1"	-20° 8' 20.9"
Rhino desert 53	13.905458	-20.139903	13° 54' 19.6"	-20° 8' 23.7"
Rhino desert 54	13.905537	-20.140638	13° 54' 19.9"	-20° 8' 26.3"
Rhino desert 55	13.907574	-20.142906	13° 54' 27.3"	-20° 8' 34.5"
Rhino desert 56	13.905152	-20.145062	13° 54' 18.5"	-20° 8' 42.2"
Rhino desert 57	13.903173	-20.14836	13° 54' 11.4"	-20° 8' 54.1"
Rhino desert 58	13.903453	-20.151241	13° 54' 12.4"	-20° 9' 4.5"
Rhino desert59	13.903382	-20.151981	13° 54' 12.2"	-20° 9' 7.1"
Rhino desert 60	13.905379	-20.153868	13° 54' 19.4"	-20° 9' 13.9"
Rhino desert 61	13.90797	-20.155176	13° 54' 28.7"	-20° 9' 18.6"
Rhino desert 62	13.911114	-20.153307	13° 54' 40.0"	-20° 9' 11.9"
Rhino desert 63	13.916827	-20.152692	13° 55' 0.6"	-20° 9' 9.7"
Rhino desert 64	13.91948	-20.154441	13° 55' 10.1"	-20° 9' 16.0"
Rhinodesert 65	13.921715	-20.154418	13° 55' 18.2"	-20° 9' 15.9"
Rhino desert 66	13.925988	-20.155525	13° 55' 33.6"	-20° 9' 19.9"
Rhino desert 67	13.931979	-20.155423	13° 55' 55.1"	-20° 9' 19.5"
Rhino desert 68	13.933947	-20.155896	13° 56' 2.2"	-20° 9' 21.2"
Rhino desert 69	13.935667	-20.15838	13° 56' 8.4"	-20° 9' 30.2"
Rhino desert 70	13.934153	-20.162727	13° 56' 3.0"	-20° 9' 45.8"
Rhinodsert 71	13.933957	-20.165484	13° 56' 2.2"	-20° 9' 55.7"
Rhinodesert 72	13.934061	-20.167445	13° 56' 2.6"	-20° 10' 2.8"
Rhino desert 73	13.929664	-20.167991	13° 55' 46.8"	-20° 10' 4.8"
Rhino desert 74	13.928456	-20.169965	13° 55' 42.4"	-20° 10' 11.9"
Rhinodesert 75	13.926969	-20.170081	13° 55' 37.1"	-20° 10' 12.3"
Rhino desert 76	13.927951	-20.17223	13° 55' 40.6 "	-20° 10' 20.0"
Rhino desert 77	13.927975	-20.174044	13° 55' 40.7"	-20° 10' 26.5"
Rhino78	13.928786	-20.175365	13° 55' 43.6"	-20° 10' 31.3"
Rhino dsert79	13.930766	-20.177084	13° 55' 50.8"	-20° 10' 37.5"
Rhino desert 80	13.932063	-20.180121	13° 55' 55.4"	-20° 10' 48.4"
Rhinodesert81	13.933542	-20.181234	13° 56' 0.8"	-20° 10' 52.4"
Rhino desert 82	13.934493	-20.183756	13° 56' 4.2"	-20° 11' 1.5"
Rhino83	13.934485	-20.186054	13° 56' 4.1"	-20° 11' 9.8"
Rhino84	13.93793	-20.18768	13° 56' 16.5"	-20° 11' 15.6"
Rhino85	13.941384	-20.190606	13° 56' 29.0"	-20° 11' 26.2"
Rhino desert 86	13.943448	-20.194703	13° 56' 36.4"	-20° 11' 40.9"
Rhino desert 87	13.941677	-20.19549	13° 56' 30.0"	-20° 11' 43.8"
Rhino desert 88	13.936338	-20.196515	13° 56' 10.8"	-20° 11' 47.5"
Rhino desert 89	13.935325	-20.198906	13° 56' 7.1"	-20° 11' 56.1"
Rhino91	13.933336	-20.199313	13° 56' 0.0"	-20° 11' 57.5"
Rhino92	13.931331	-20.200317	13° 55' 52.8"	-20° 12' 1.1"

Rhino93	13.927963	-20.201787	13° 55' 40.7"	-20° 12' 1.1"
Rhino94	13.926778	-20.204568	13° 55' 36.4"	-20° 12' 16.4"
Rhino95	13.926071	-20.209433	13° 55' 33.9"	-20° 12' 34.0"
Rhino96	13.926227	-20.211656	13° 55' 34.4"	-20° 12' 42.0"
Rhino96	13.926744	-20.213281	13° 55' 36.3"	-20° 12' 47.8"
Rhino98	13.919771	-20.218117	13° 55' 11.2"	-20° 13' 5.2"
Rhino99	13.918116	-20.224032	13° 55' 5.2"	-20° 13' 26.5"
Rhino100	13.90627	-20.231072	13° 54' 22.6"	-20° 13' 51.9"
Rhino102	13.891212	-20.233079	13° 53' 28.4"	-20° 13' 59.0"
Rhino103	13.883775	-20.232971	13° 53' 1.6"	-20° 13' 58.7"
Rhino104	13.883218	-20.231565	13° 52' 59.6"	-20° 13' 53.6"
Rhino105	13.876977	-20.232928	13° 52' 37.1"	-20° 13' 58.5"
Rhino106	13.863969	-20.232868	13° 51' 50.3"	-20° 13' 58.3"
Rhino107	13.851829	-20.2324	13° 51' 6.6"	-20° 13' 56.6"
World end108	13.834433	-20.232011	13° 50' 4.0"	-20° 13' 55.2"
World end109	13.83044	-20.232427	13° 49' 49.6"	-20° 13' 56.7"
World end110	13.825355	-20.23317	13° 49' 31.3"	-20° 13' 59.4"
World end111	13.806822	-20.233544	13° 48' 24.6"	-20° 14' 0.8"
World end112	13.803615	-20.232635	13° 48' 13.0"	-20° 13' 57.5"
World end113	13.749426	-20.257312	13° 44' 57.9"	-20° 15' 26.3"
World end114	13.742633	-20.257066	13° 44' 33.5"	-20° 15' 25.4"
World end115	13.735446	-20.254419	13° 44' 7.6"	-20° 15' 15.9"
World end116	13.681397	-20.280837	13° 40' 53.0"	-20° 16' 51.0"
World end 117	13.658638	-20.299647	13° 39' 31.1"	-20° 17' 58.7"
ersection skeleton coast park and VET Codon	13.609241	-20.322046	13° 36' 33.3"	-20° 19' 19.4"
Springbok water	13.579341	-20.335473	13° 34' 45.6"	-20° 20' 7.7"
Springbok water 1	13.573561	-20.33673	13° 34' 24.8"	-20° 20' 12.2"
Spring bockwater2	13.550324	-20.343095	13° 33' 1.2"	-20° 20' 35.1"
springbok water 3	13.548237	-20.343526	13° 32' 53.7"	-20° 20' 36.7"
Spring bock water4	13.538925	-20.349033	13° 32' 20.1"	-20° 20' 56.6"
springbok water 5	13.534468	-20.351904	13° 32' 4.1"	-20° 21' 6.9"
Spring bock water 6	13.532266	-20.35308	13° 31' 56.2"	-20° 21' 11.1"
Springbok water7	13.52503	-20.355567	13° 31' 30.1"	-20° 21' 11.1"
Springbok water8	13.5211	-20.353163	13° 31' 16.0"	-20° 21' 11.4"
Springbok water9	13.519905	-20.353129	13° 31' 11.7"	-20° 21' 11.3"
Springbok water10	13.514543	-20.354755	13° 30' 52.4"	-20° 21' 17.1"
Springbok water11	13.504487	-20.353606	13° 30' 16.2"	-20° 21' 13.0"
Springbok water12	13.477128	-20.351807	13° 28' 37.7"	-20° 21' 6.5"
Springbok fence end	13.474565	-20.35257	13° 28' 28.4"	-20° 21' 9.3"
Torrabay	13.243194	-20.358639	13° 14' 35.5"	-20° 21' 31.1"
End point near Torrabay is approximately 1347 km				
Adopted point near Torrabay is approximately 24 km				

Green Earth
ENVIRONMENTAL CONSULTANTS

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PO Box 6871, Ausspannplatz, Windhoek

ENVIRONMENTAL IMPACT ASSESSMENT FOR THE CREATION OF A NEW FREE ZONE IN THE NORTHERN COMMUNAL AREAS

Introduction:

- Appointment to obtain an ECC for the creation of new FMD compartment or zone in the NCA.
- Legal Obligations:

  Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012) of the Environmental Management Act (No. 7 of 2007), the following activities may not be undertaken without an ECC:

  FORESTRY ACTIVITIES

  The clearance of forest areas, deforestation, afforestation, timber harvesting or any other related activity that requires authorisation in term of the Forest Act (No. 12 of 2001) or any other law.

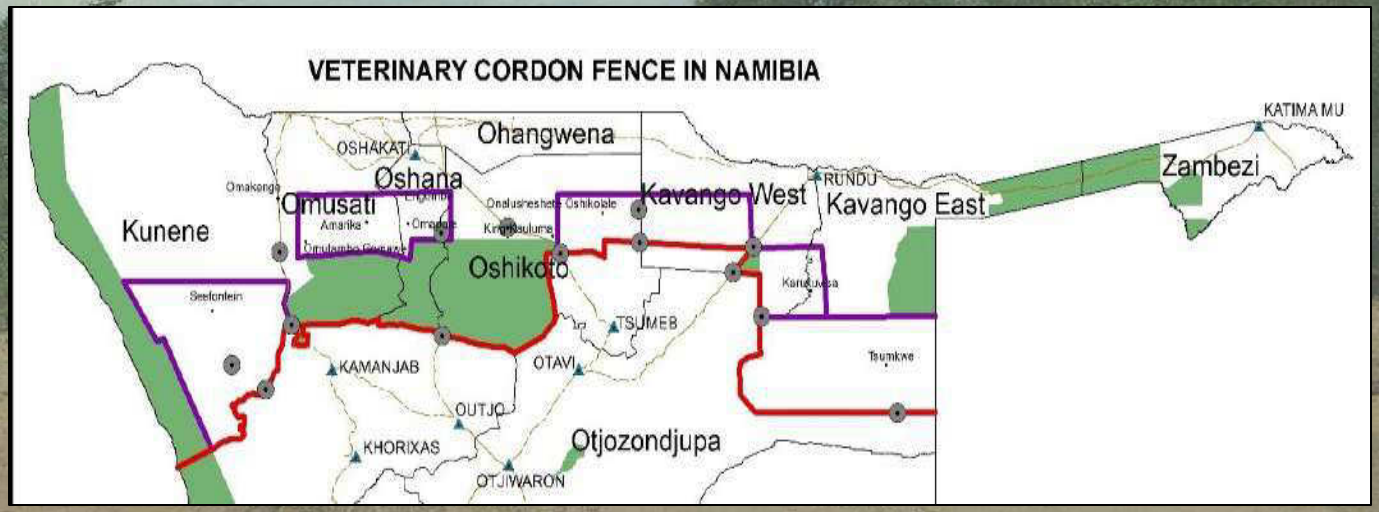
  LAND USE AND DEVELOPMENT ACTIVITIES

  Construction of veterinary protected area or game proof and international boundary fences.

Background Information

- Areas in the NCA were identified in the Second Land Conference (1st - 5th October 2018) by community leaders, the local authorities, farmers associations and farmers to obtain disease-free status.

- Identified areas are regarded as low risk in terms of FMD and CBPP, however are not declared as disease-free.



Options Investigated:

- The creation of a new disease-free compartment;
- The creation of a ‘new’ disease-free zone;
- The no-go option.

Option 1:
The creation of a disease-free compartment

- A compartment is a disease-free area created by enclosing an area with a veterinarian cordon fence.
- Access to the area is further controlled by the responsible organ of state. Movement of people and animals to and from the compartment is only allowed via controlled gates.
- The animals enclosed in the area is then inspected, monitored to detect diseases to be treated (vaccinated) and to be cleared from FMD and CBPP over a period until the OIE requirements are met and the compartment is certified disease-free for the marketing of animals as per OIE requirements.
- Once this is achieved, the compartment has a disease-fee status which allows the marketing of animals and products to markets subject to the OIE standards.

Option 2:
The creation of a 'new' disease-free zone

- The creation of a 'new' disease-free zone is an option where a disease-free area is created by fencing in an animal subpopulation defined primarily on a geographical basis (NCA) which is neighbouring a disease-free area.
- The area to become the free zone is initially fenced in with a veterinarian cordon fence as a compartment. This new area then becomes a surveillance area.
- Access to the area is further controlled by the responsible organ of state. Moving of people and animals to and from the compartment is only allowed via controlled gates.
- The animals enclosed in the new area is inspected, monitored to detect diseases and then treated (vaccinated) and to be cleared from FMD and CBPP over a period of time until the OIE requirements are met, and the compartment is certified disease-free for the marketing of animals as per OIE requirements. The veterinary cordon fence separating the new free zone from the existing disease-free area may be removed once the organ of state is content that the area is disease-free as per the OIE requirements.
- Once this is achieved, the compartment has a disease-fee status which allows the marketing of animals and products to markets subject to the OIE standards.
- The fence may also be retained to be used to create buffer zones once there is a breakout of FMD or CBPP in the new zone or outside the zone.

Option 3:
The no-go option

Under the no-go option, no new disease-free zone is created. The area thus remains an FMD area and animals may only be marketed out of the area under the OIE Protocols. The World Organisation for Animal Health (OIE) provides standards for the non-geographical approach to FMD, in other words, providing standards for trade in beef from areas not free from FMD.

Three options exist for trade in beef from areas not free from FMD:

1. Management of FMD along individual value chains to enable marketing of FMD virus free products;
2. Processing of beef to inactivate any FMD virus that may be present;
3. Compartmentalization involving integrated biosecurity measures (through quarantining, inspection and vaccination);

The abovementioned standards are contained in Article 8.8.22, Article 8.8.31 and Article 8.8.4 of the Terrestrial Animal Health Code, respectively.

Conclusion and Resolution:

After studying the OIE - Terrestrial Animal Health Code, risks, advantages and disadvantages associated with the above options/alternatives, consultation with the Department of Veterinary Services of the MAWLR, affected farmers in the NCA, the Meat Board and the Health Committee of the Meat Board:

- The creation of a new free zone is the best
- This option is in line with the TOR of the MAWLR
- A phased approach (though the introduction of 'compartments') should be followed for creating the new free zone.

PROPOSED NEW FREE ZONE IN THE NCA

The key issues considered by the Proponent for the creation of a new disease-free area in the NCA is based on the following principles:

- The protection of the existing disease-free area. The new zone to be created must not endanger or negatively impact on the existing disease-free area south of the existing VCF and the agreements with existing trading partners.
- The new free zone must be created by following the recommendations on the principles of zoning or compartmentalization as per the OIE - *Terrestrial Animal Health Code* of the World Health Organization.

Based on these principles, the Proponent proposed two options for the phased creation of a new disease-free area in the NCA.

- The creation of compartments
- The creation of a new free zone

Public Consultation - Nov 2019 to Nov 2020

- Meatco Foundation
- Namibian National Farmers Union
- Namibian Farmers Union
- Kavango West Regional Farmers Union
- Kavango East Farmers Union
- Mangetti Farmers Association
- Division of Veterinary Services
- Ministry of Agriculture, Water and Land Reform
- Meatco
- Meat Board of Namibia
- Ministry of Environment, Forestry and Tourism
- Ministry of Lands and Resettlement
- Roads Authority
- Namibia Industrial Development Agency
- NamPower
- Kavango West Traditional Authority
- Kavango Regional Council
- Kavango East Regional Council
- Ondonga Traditional Authority
- Oukwanyama Traditional Authority
- Oshikoto Farmers Union
- Griciriku Traditional Authority
- Shambyu Traditional Authority
- Mbunza Traditional Authority
- Nyae Nyae Conservancy
- Na Jaqna Conservancy
- Farmers in the Project Area
- Community Members
- Members of the General Public who registered as I&APs

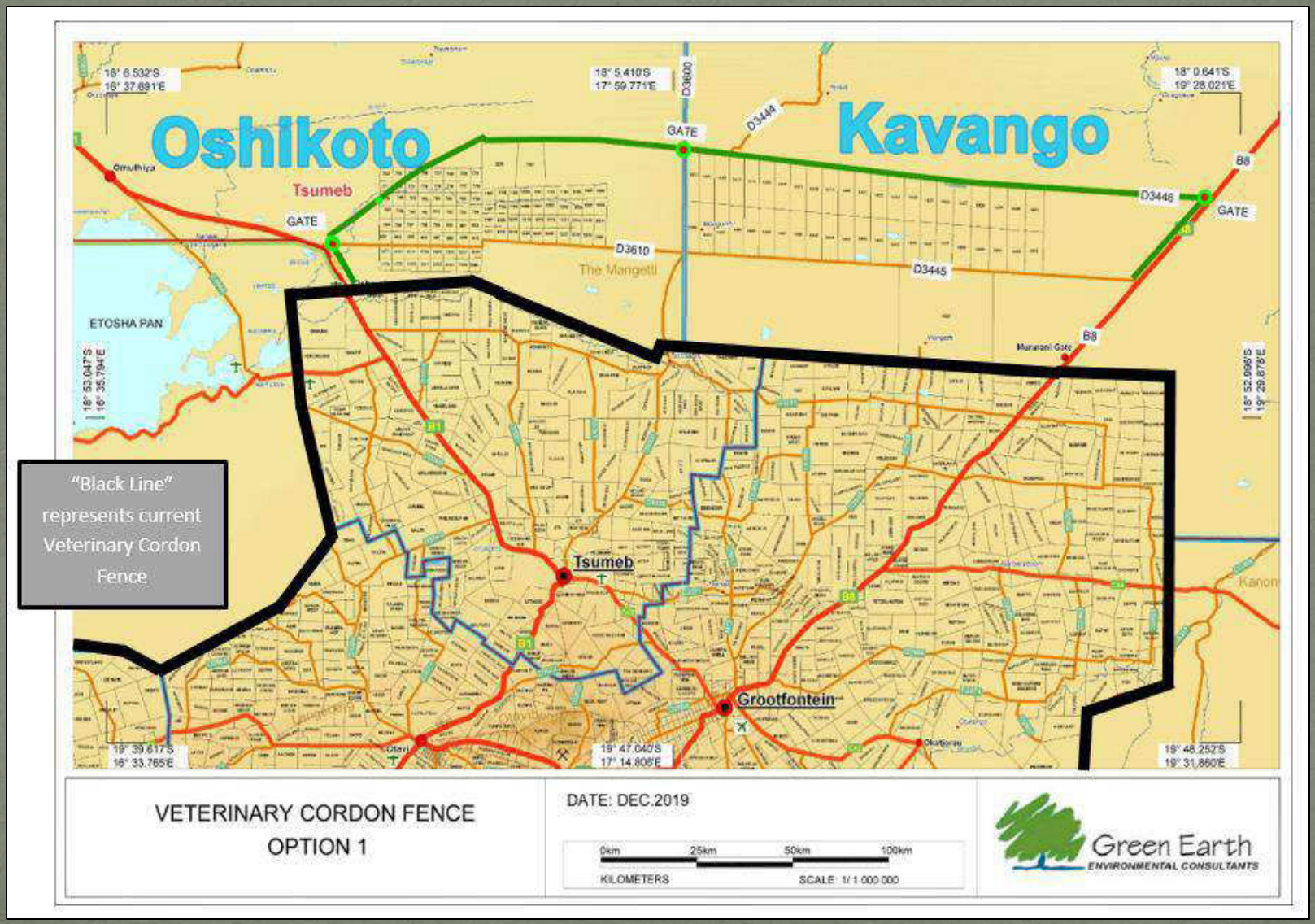
OPTION A – THE CREATION OF COMPARTMENTS

- The introduction of a compartment including the demarcated farms in the Mangetti Area and immediate surroundings.

- The first round of direct consultations took place during November and December 2019 when the Option was investigated through field surveys, engagement with community leaders and I&APs, MAWLR officials as well as the DVS.

From these investigations, two options were proposed for the alignment of the proposed compartment's veterinary cordon fence. See below *Options 1 and 2*:

Option 1


Oshikoto
Kavango
Tsumeb
GATE
GATE
GATE
D3600
D3444
D3446
D3610
D3445
The Mangetti
ETOSHA PAN
B8
B1
Tsumeb
Grootfontein
Otavi
Okahandja
Murarani Gate
"Black Line" represents current Veterinary Cordon Fence
VETERINARY CORDON FENCE
OPTION 1
DATE: DEC.2019
0km 25km 50km 100km
KILOMETERS
SCALE: 1/ 1 000 000
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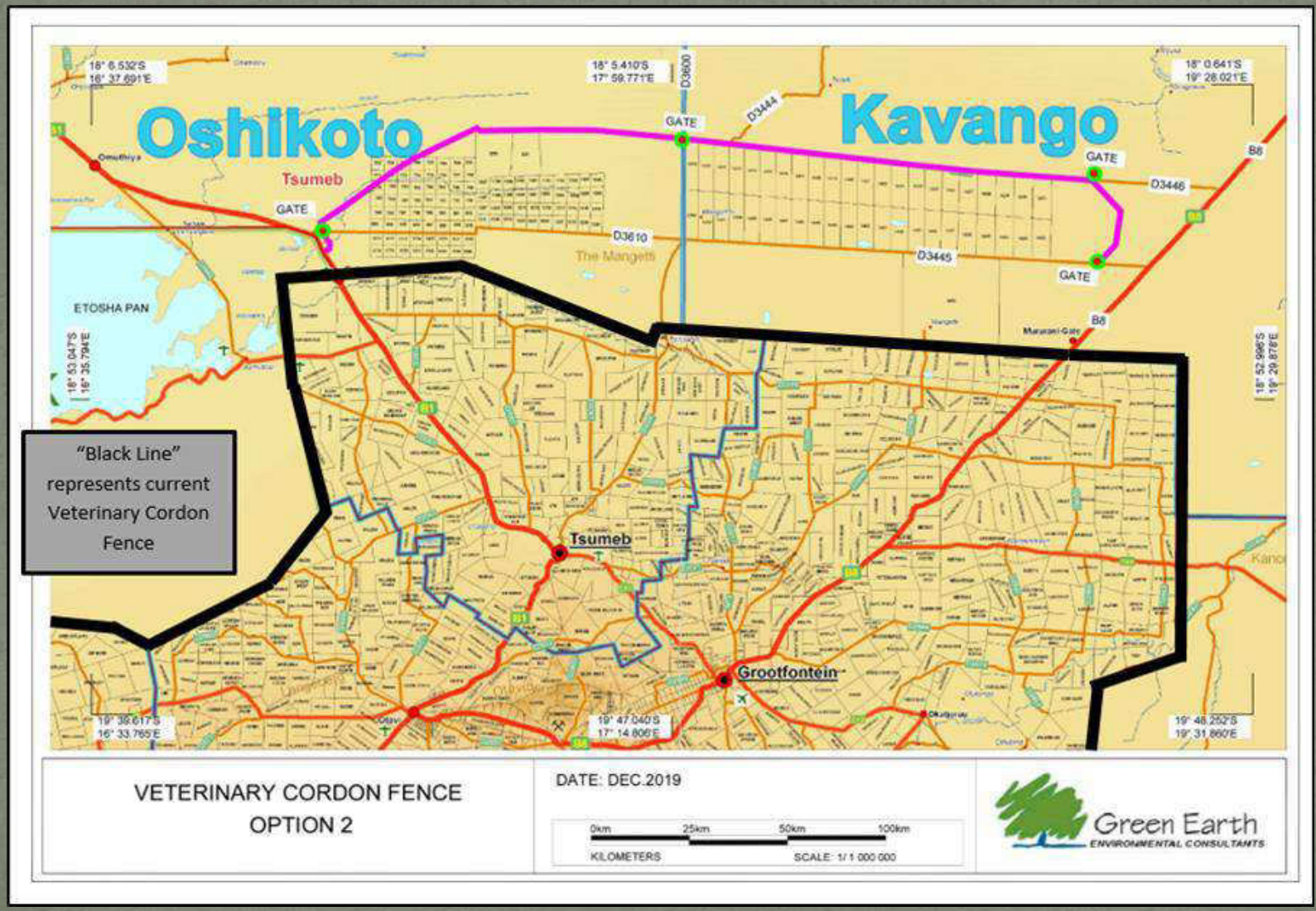
Option 2


Oshikoto
Kavango
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D3600
D3444
D3446
D3610
D3445
The Mangetti
ETOSHA PAN
B8
B8
"Black Line" represents current Veterinary Cordon Fence
Tsumeb
Grootfontein
VETERINARY CORDON FENCE
OPTION 2
DATE: DEC.2019
0km
25km
50km
100km
KILOMETERS
SCALE: 1/ 1 000 000
Green Earth
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Alignment of Compartment Boundary

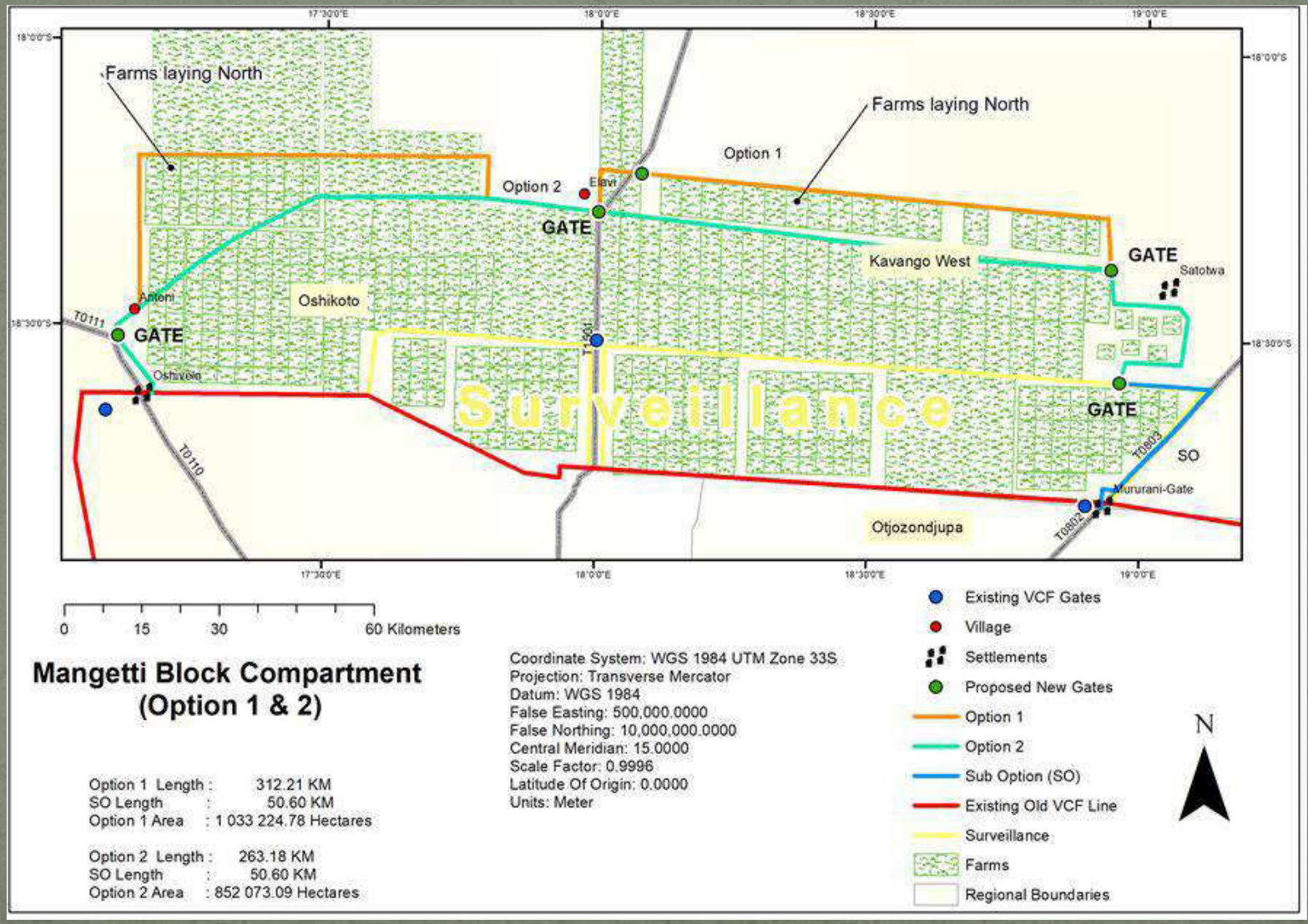
The options were discussed with the I&APs and from the discussions, the alignment of the proposed boundary for the creation of the compartment for Option A, Phase One (1) was agreed upon.

The following criteria were considered in deciding where the proposed new position of the fence will be:

- The requirements and standards of the World Organisation for Animal Health (OIE) to ensure that an area is free from CBPP and FMD;
- The inclusion (into the compartment) of existing demarcated farms which are being farmed 'commercially' under long term lease agreements from the Ministry of Lands and Resettlement;
- Impact on settlements should be minimized. The new fence should not divide settlements or cut them off from essential services like schools, clinics, churches or community halls, water sources or access to public transport;
- Road access to the proposed compartment;
- To ensure that the existing free zone is not affected and remain protected;
- The availability of resources like funds as well as the capacity of the DVS to ensure the disease-free status of the proposed new compartment;
- The feasibility of achieving the OIE requirements in the shortest possible time.

See below the map showing how Options 1 and 2 were combined to propose the boundary for the compartment to be created under Option A, Phase One:

Option 1 and Option 2 proposed



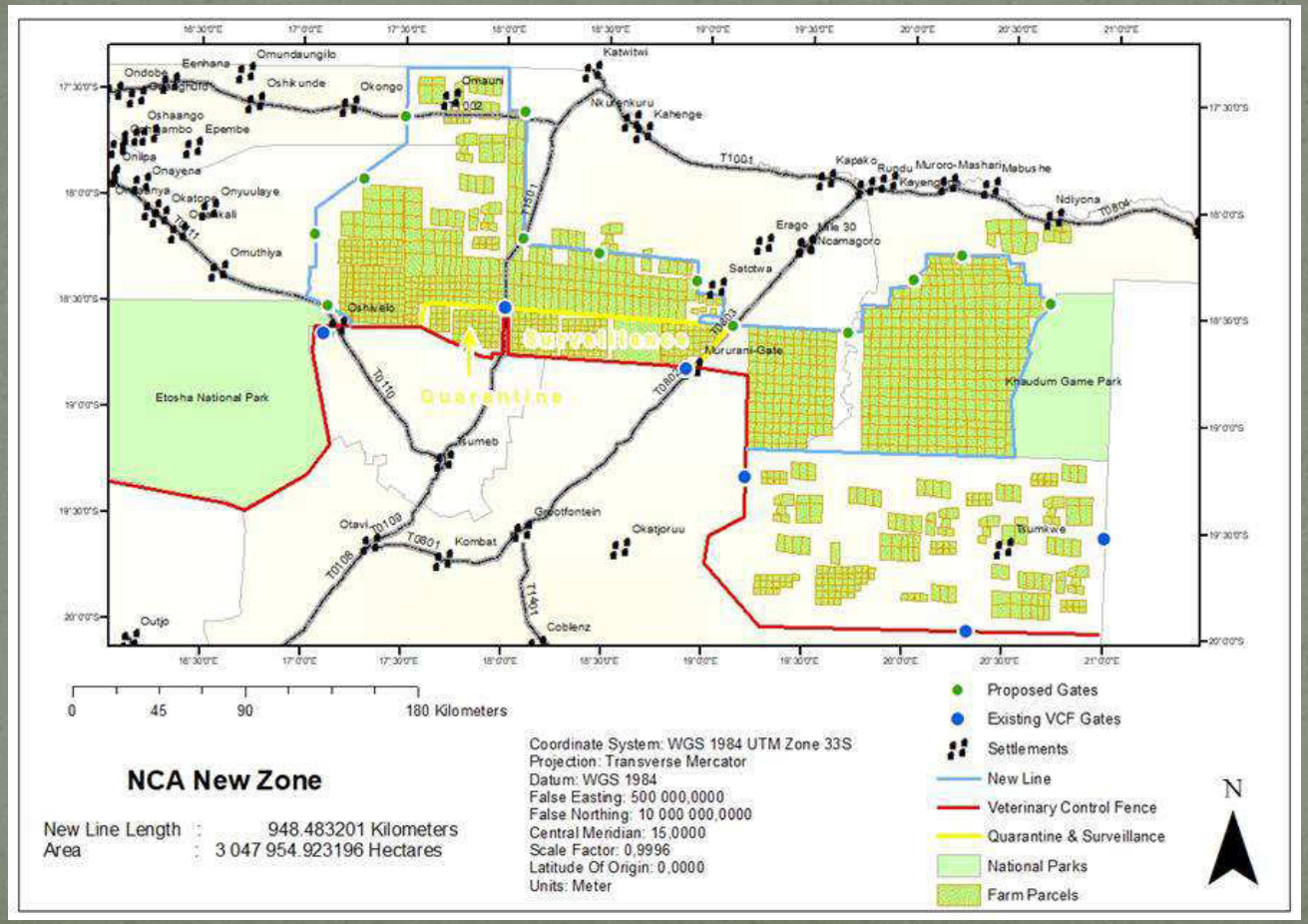
OPTION B – THE CREATION OF A NEW FREE ZONE

Under Option B, the Proponent intends to introduce a new disease-free zone to the north of the existing VCF to include the bulk of the demarcated farms in the NCA:

- Oshikoto
- Ohangwena
- Kavango West
- Bushman Land Areas

The Map below shows the Target Areas of the NCA in yellow, the areas already included in the current disease-free in white and the National Parks in green.

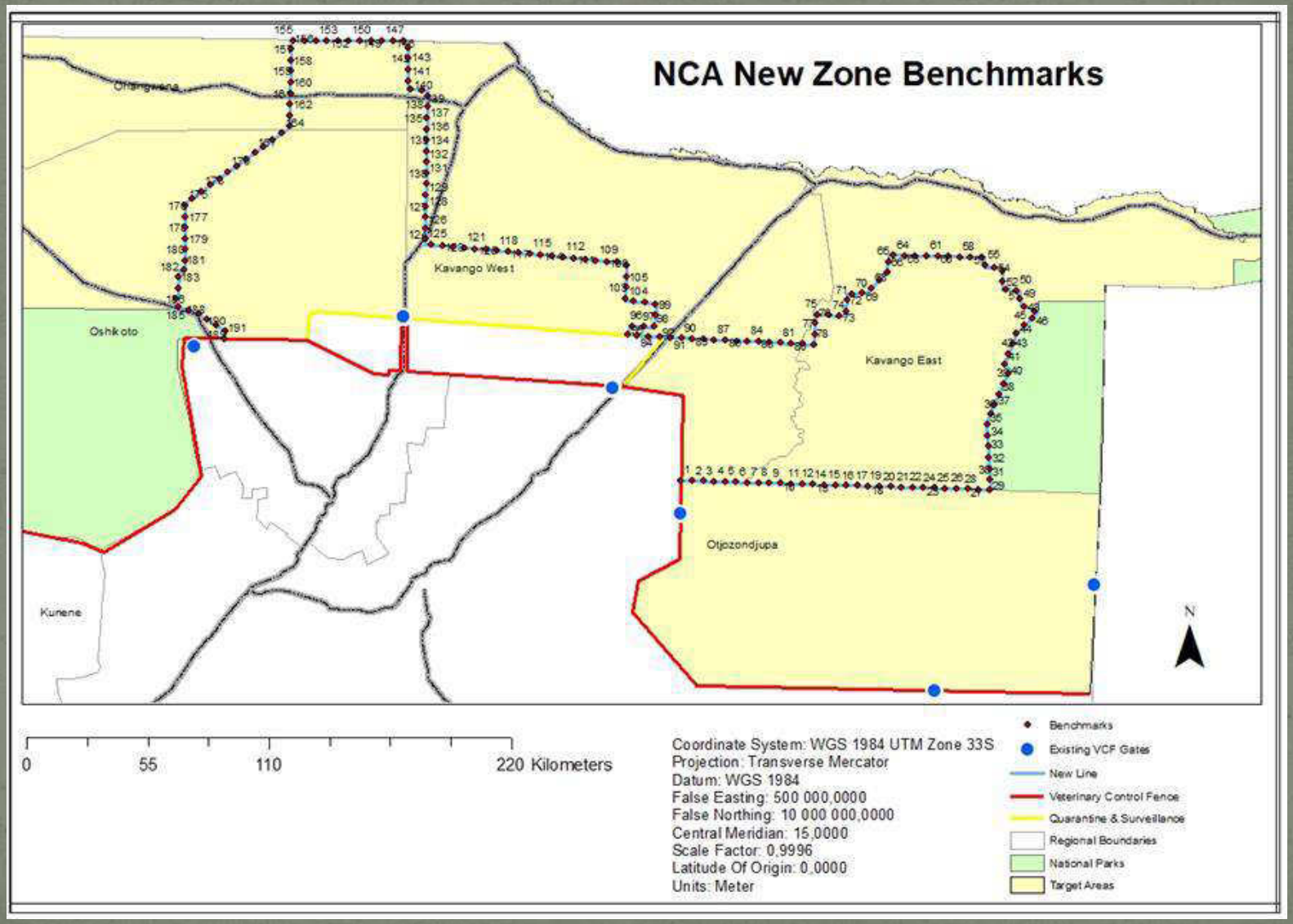
The Map below shows the locality of the demarcated farms (the green parcels) as obtained from the Ministry of Land and Resettlement and its locality in relation to the proposed free zone:



Alignment of Free Zone Boundary

- Small teams nominated by the attendees at Public Meetings representing farmers unions, the DVS/Meat Board/Meatco Foundation were put together to confirm the proposed alignment of the new free zone boundary in its specific area.
- The proposed alignment of the boundary of the new free zone is based on the fieldwork, visits, and inputs of these teams.
- The demarcated farms excluded from the proposed zone were excluded based on the advice and inputs from the affected I&APs in the area as well as the practical field visits by the teams.
- The Map below shows the proposed new free zone boundary:

Free Zone Boundary



Feedback from Public Meetings:

- The meetings were well attended and conducted in a good spirit;
- The communities affected by proposed new free zone are overwhelmingly supporting the project;
- Implementation of the project is long overdue and urgent;
- Communities consulted understands that the project will be phased, due to budgetary or practical considerations. They requested that they be informed on the timeline and areas to be included in the following respective phases;
- It was observed that sections of the roads servicing the area to be included in the free zone are sandy and narrow. Because of this, cattle must be transported from the farms to markets by 4X4 vehicles with small trailers (capacity limited to 3 – 4 animals pending on size). This adds huge costs to the marketing of the animals and has a negative effect on the profit margin of the farmer. These roads will have to be upgraded to improve access to the new free zone and to maximise the benefits from including this area in the new zone;
- In case where the alignment of the proposed boundary of the new free zone separates communities from supporting infrastructure like water supply points, schools, clinics, churches etc. access to this infrastructure should be provided by installing a gate (to be manned 24hours) or by duplicating the infrastructure on both sides of the fence. This should be avoided as it will add unnecessary costs to the project.

Feedback: MeatBoard (Animal Health Committee)

- The Directorate Veterinary Services (DVS) form an integral and central part of the formulation of proposals – the DVS is the only organ responsible for the certification of the animal disease status and meat hygiene status of Namibia;
- The creation of a new disease-free compartment should be accompanied by a diligent and detailed feasibility study incorporating the views of all stakeholders;
- That no infrastructural amendment to the existing free zone be made to ensure sustained compliance with the OIE and importing country requirements – In no way should Namibia's export markets be tampered with;
- That the intended future "new" free zone be affordable to GRN in terms of capital investment and maintenance by DVS – keeping in mind financial resources are limited;
- That the "new" compartment accommodates most of the commercial and semi-commercial farmers of the Oshikoto and Kavango Mangetti;
- Should communal areas be included, that sufficient provision be made rangeland management, livestock control, accessibility to waterpoints, availability of marketing infrastructure, and supporting services – roads, etc. Only a restricted number of livestock could be accommodated in such an opened zone;
- That the integrity of the new compartment be guaranteed/maintained by GRN/DVS – besides for FMD other diseases such as CBPP are also applicable;
- That the "advantaged" producers be under no illusion that benefits derived from the creation of a new disease-free compartment will result immediately.

Key environmental issues that may arise:

Since the goal of the assignment is to create a new disease-free compartment, it is crucial that:

- The Directorate Veterinary Services (DVS) form an integral and central part of the formulation of proposals – the DVS is the only organ responsible for the certification of the animal disease status and meat hygiene status of Namibia;
- The creation of a new disease-free compartment should be accompanied by a diligent and detailed feasibility study incorporating the views of all stakeholders;
- That no infrastructural amendment to the existing free zone be made to ensure sustained compliance with the OIE and importing country requirements – In no way should Namibia's export markets be tampered with;
- That the intended future "new" free zone be affordable to GRN in terms of capital investment and maintenance by DVS – keeping in mind financial resources are limited;
- That the "new" compartment/zone accommodates most of the commercial and semi-commercial farmers of the Oshikoto and Kavango Mangetti;
- Should communal areas be included, that sufficient provision be made to rangeland management, livestock control, accessibility to waterpoints, availability of marketing infrastructure, and supporting services – roads, etc. Only a restricted number of livestock could be accommodated in such an opened zone;
- That the integrity of the new compartment be guaranteed/maintained by GRN/DVS – besides for FMD, other diseases such as CBPP are also applicable;
- That the "advantaged" producers be under no illusion that benefits derived from the creation of a new disease-free compartment will result immediately.

Areas to be excluded

- The exclusion of the Mukwe Constituency

The Kavango East Regional Council requested the inclusion of the Mukwe Constituency in the new free zone. This request was discussed at length at the meeting with the representatives of the Kavango East Regional Council as well as of the Kavango East Regional Farmers in Rundu and it was concluded **that this area cannot be included** as it is in the 'infected zone' and subject to high volumes of seasonal elephant movement. Buffaloes are also frequent in the area.

- The exclusion of the Nyae Nyae and Na Jaqna Conservancies

The Nyae Nyae and Na Jaqna Conservancies (Bushman Land Area) requested **that these conservancy areas be excluded from the new free zone** as the free movement of wild animals between the conservancy area and the Khaudum National Park act as an important feeder of animals into the Conservancy Area. The members of these Conservancies are dependent on these animals both traditionally and for trophy hunting.

Comments/Questions/ Discussions

The way forward:

- Obtaining consent letter from MAWLR
- Submission of EIA and EMP to Commissioner
- Await Commissioner's resolution
- Time Frame ± 3 months

Conclusion